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# PROCEEDING

"Information Technology and Global Risk Impacts on  
Economics and Business Education"

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## FOREWORD OF CHAIRMAN

Dear all participants,

On behalf of Conference Chairman, we would like to welcome to the International Conference on Ethics of Business, Economics, and Social Science (ICEBESS 2018) held August 31<sup>st</sup> - September 1<sup>st</sup>, 2018 in Yogyakarta, Indonesia. This event is organized by Faculty of Economics, Yogyakarta State University providing a highly competitive forum for reporting the latest research and ideas in various issues of ethics in Business, Economics, Social Sciences. We are pleased to present the proceedings of the conference as its published record. ICEBESS 2018 is a conference in the areas of both conceptual and empirical analysis of integrated social science challenges.

The conference program represents the efforts of many people. We want to express our gratitude to Rector of Yogyakarta State University, Dean of Economics Faculty, the members of the program Committee and the Senior Program Committee, and the reviewers for their hard work in reviewing papers.

We also thank the invited speakers, Douglas Streeter Rolph, Ph.D, Singapore University of Technology and Design; Jane S.C., Liu, Ph.D, Chaoyang University of Technology, Taiwan; Prof. Dr. Moh. Nazari Ismail, Universiti Malaya, Malaysia; and Setyabudi Indartono, Ph.D, Universitas Negeri Yogyakarta, for sharing their insights with us. Finally, the conference would not be possible without the excellent papers contributed by authors. We thank all the authors for their contributions and their participation in ICEBESS 2018.

We hope that this program will further stimulate empirical and conceptual research in Social Science, and provide better views on the social science development. Have an enjoyable conference.

Yogyakarta, August 31<sup>st</sup>, 2018  
Chairman of ICEBESS

Dr. Sutirman, M.Pd

## FOREWORD OF DEAN

Dear all participants,

By the grace of God Almighty, guide nook of ICEBESS (International Conference on Ethics of Business, Economics, and Social Science) which contain 59 articles can be issued on the scheduled time. This book is arranged as a summary of the international seminar results under the theme "Information Technology and Global Risk Impacts on Economics and Business Education" held by Faculty of Economics, Yogyakarta State University, Indonesia.

The ICEBESS is designed to provide a discussion spot among those who have interest in the current issues of ethics, business and economics. We are delighted and honored to be given an opportunity to hold this international event. This theme represents FE UNY's commitment to participate in solving the problems of the theme.

We recognize that the proceedings could not be realized without the tremendous support of many parties, especially the authors and the committee that had worked to review and compile. Our big gratitude goes to all those who have strived and participated in the preparation of these proceedings. We apologize for the errors and weaknesses you might notice in the product. I hope you will enjoy the conference and have a fruitful time during your stay in Indonesia.

Yogyakarta, August 31<sup>st</sup>, 2018  
Dean of Faculty of Economics

Dr. Sugiharsono, M.Si

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# Students' Perceptions of Crossword Puzzles Media Implementation in Accounting Learning

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## Abstract

This classroom action research (CAR) aims to know students perceptions of learning evaluation on crossword puzzles media at senior high school in accounting service company competence. The researcher used an accounting crossword puzzle media containing 10 essay questions and consists of 5 vertical columns and 5 horizontal columns. This CAR was done collaboratively with the teacher consisted of three cycles. The subjects of the research were 30 students of senior high school. The data were collected by questionnaire, observation, and documentation. The data were analyzed using description analysis data. The procedure of analysis data consisted of data reduction percentage, presenting the data, and making conclusions. The analysis descriptive data using percentage consisted of students' learning scores. The result of this research showed that 97% student agree that implementation of crossword puzzles can be used to learning evaluation. The student were delighted with the implementation of crossword puzzles because it can create an active learning.

**Keywords:** crossword puzzles, media implementation, accounting learning

## 1. Introduction

Evaluation of learning is important thing in accounting teaching and learning activities. Evaluation used to improve less effective learning. With the evaluation of the teacher becomes aware of the development students in absorbing learning materials. Evaluation is not only about value but also meaning. Evaluation is a process for describing an evaluation and judging its merit and worth (Guba & Lincoln, 2011). Evaluation of learning relate to three measured aspects of cognitive, affective, and psychomotoric. Teachers need an evaluation to measure students' abilities. The student's ability is the understanding of the material presented by the teacher. Evaluation able to describe ability of student in mastering subject matter of accounting. Teacher plays an important role in selecting the evaluation used. The accuracy of selection of evaluation tools can measure how far the mastery of the material by students.

Evaluation to be effectiveness if successful and appropriate in the learning process. Indicator of effectiveness is the achievement of a predetermined goal or goal is a measurement where a target has been achieved in accordance with goal which has been planned. The effectiveness of evaluation is the relationship between output and objectives, greater the contribution of output to the achievement of goals, the more effective (Mahmudi, 2005). In this study the evaluation of learning by using crossword puzzles to be effective when it reaches a predetermined goal. Evaluation in this case measures the students students' knowledge, students' attitudes, and psychomotoric of the students in the group while doing the questions given by the teacher.



Teachers give 30 minutes to work on accounting questions in the form of crossword puzzles media. In group activities students are required to express opinions, respond, and ask questions during group activities. This is in appropriate with the purpose of active learning. At the time of group activities researchers measure the affectiveness and psychomechanical aspects of students. This is in appropriate with the implementation of the 2013 curriculum on the current learning process.

The implementation of 2013 curriculum requires students to take an active role in learning process. The learning process becomes focused on the students. In learning process, students are given the opportunity to play an active role. The role of students in learning is to provide material-related responses, ask questions, or refute statements. Learning to be good when learning involves students in the learning process because the process is more important more than the outcome. Good process will produce good value too. The evaluation of 2013 curriculum not only measures the cognitive domain but also the affective and psychomotor aspect. The type of evaluation that can measure the cognitive, affective, and psychomotor domains is the type of problem combined with the games. Therefore in this study the researchers chose crossword puzzles media as an evaluation tool to measure students' knowledge, students' attitude, and students' psychomotor. Crossword puzzles is a games that can be used as an evaluation tool for accounting learning. This game is flexible and can be modified according to the related material. The accounting crossword puzzles consists of vertical and horizontal columns which filled by students. Crossword puzzles can be done individually or in groups. Group formation can be tailored to the learning objectives. By working on the problem on crossword puzzles, teachers can simultaneously observe students' attitudes and students' psychomotoric during the learning process.

The accounting material contain a matter of counting with interrelated material. Students are required to focus in the learning process. Evaluations used by teachers should also be able to measure students' cognitive, student' affective, and students' psychomotor aspects. Therefore, a test type evaluation tool that combined with an accounting crossword puzzles game is required. By using a crossword puzzles teacher can simultaneously observe the behavior of students in groups and measure students' knowledge through the student's answer density. In this study, researchers measure the effectiveness of the implementation crossword puzzles as an evaluation learning in the students' perceptions. Students who can determine the application of learning or evaluation tool suitable to apply or not. Students as assessors of the use of crossword pazzles are effectively used or not in learning. Evaluation tool is appropriate when able to measure students 'ability and students' understanding of the subjects being pursued. The effectiveness of the use of crossword puzzles in service company accounting competence is measured by comparing the data obtained at the time of research with the objective standards to be achieved. Facts in the school show that teachers of SMA Negeri 1 Wonosari used essay test in measuring ability of student in comprehending problem. Esay test is made in two different problems. The teacher gives the essay and the student answers with the set time range. This indicates that the type of evaluation which teachers used less varied. Seeing this phenomenon, researchers apply crossword puzzles as an evaluation tool that can measure students' cognitive, students' affective, and students' psychomotor aspects at once. Researchers choose crossword puzzles because crossword puzzles are flexible and adaptable in various questions. The type of problem applied

can be either words or numbers. Crossword puzzles are flexible and demands the creativity of making questions that match the material of accounting learning. The problem used in this research is 10 problems essay by guessing on the columns of answers that have been made. The columns are presented in a horizontal and vertical shape. Crossword puzzles are fun games to measure students' abilities.

## **2. The Effectiveness of Media Implementation**

Effectiveness indicates the level of achievement of a goal, an effort is said to be effective if the business reaches its goal ideally. Effectiveness can be said with definite measures such as business X is 60% effective in achieving goals Y. Effectiveness is a measure that states the extent to which the goal of quality, quantity, and time has been achieved (Komariah & Tratna, 2005). Effectiveness is an assessment made in relation to individual, group, achievement closer to achievement expected to be more effective. Effectiveness is a state of the extent to which the benefits and achievement of objectives have been achieved. The effectiveness of teaching can be viewed from two aspects (Wena, 2009) namely; (1) the effectiveness of teachers' teaching, planned learning activities can be done well. By itself this principle must take into account the ability of teachers so that improvement efforts to complete each program need to get attention (2) the effectiveness of student learning with learning objectives that are expected to be achieved through teaching and learning activities that are pursued. Improvement efforts are generally done by choosing the type of methods and tools deemed the most powerful to be used in order to achieve the desired goals. Effectiveness is everything that is done properly and correctly so that the desired goal can be achieved with predefined standards. Effectiveness is measured by achievement and compared to goal plan. A learning evaluation is said to be effective if the process has been encouraging and favored by students. The accuracy of effectiveness in the use of evaluation tools depends on the objectives of the evaluation, the learning materials, and the conditions of the students (Sardiman, 2004). Criteria of effectiveness evaluation of learning based on student response to the use of crossword puzzles as an evaluation tool in accounting service companies (Muhli, 2012) namely; (1) learning completeness, learning can be said to be complete if at least 75% of the students have scores = 60 (2) learning methods used when students show the difference between initial understanding and understanding after learning (3) the use of evaluation tools is said to be effective if able to increase interest and motivation and students learn in a state of fun. In understanding the effectiveness of each room gives different mean according to the point of view and the interests of each so that the effectiveness is the suitability between the students who perform the task with the objectives of the evaluation of learning (Mulyasa, 2004).

## **3. Learning Evaluation**

Evaluation is a systematic collection of facts to determine whether in fact there is a change in students and to determine the extent to which the degree of change in the student's personal (Bloom, 2001). Evaluation is a process of describing, obtaining, and presenting useful information for assessing decision alternatives. The purpose of evaluation is different from the purpose of the examination. Simply evaluate is used to improve the system by giving an assessment based on data taken from group of objects. In this research, 30 students XI

Matematika dan Ilmu Alam were tested. While in the exam can be done without any purpose to improve the value. Testing also has been done just to filter and specify the classes of the object set. The main functions of evaluation in learning can be grouped into four functions, namely: (1) formative function, evaluation can provide feedback for teachers as a basis for improving teaching and learning process and held remedial program for students who have not fully understand the material learned of accounting (2) summative function, evaluation can know the level of mastery of students to the subject matter, determining the value of value as a matter of decision of class increase with the existence of student learning progress report and can increase student learning motivation (3) diagnostic function, evaluation show the background of student having difficulty learn (4) the selection and placement of evaluation functions can serve as a basis for selecting and placing students according to their interests and abilities. The objectives of the learning evaluation include: (1) to see the productivity and effectiveness of teaching and learning activities (2) to improve and refine teachers' activities (3) to improve, refine and develop teaching, and learning programs (4) to find out what difficulties faced by students during the learning activities and find a way out (5) to put students in appropriate teaching and learning situations in appropriate with their abilities. Learning outcomes can be grouped into three domains: cognitive, affective, and psychomotor (Bloom, 2001). The cognitive domain consists of knowledge, understanding, application, analysis, synthesis, and evaluation. Affective domain consists of willingness to accept, willingness to respond, assess, and organization. Psychomotor domains consist of muscular or motor skills, manipulations of materials or objects, and neuromuscular coordination. form of learning evaluation consists of 5 forms (Bloom, 2001). Form of evaluation of product learning, evaluation forms that assess the outcome and process. Portfolio evaluation forms an assessment through a systematic collection of work (student work) ranging from data collection through student work, ongoing collection and assessment and reflection on the development of various competencies, the level of progress of the student progress, and an integral part of the learning process for one period and achievement of diagnostic goals.

Development of evaluation tools can know the assessment of both product activity and learning process how a student managed to get the learning result (product) it self (Lile & Bran, 2014). Evaluation tools can complete the assessment by the teacher how important the evaluation and responsibilities of a teacher in the development of student abilities. Nowadays evaluation is no longer dominant to cognitive domain only, but also affective and psychomotor aspect, not only focus into learning result but also pay attention to the process (Calendra & Tamarow, 2015). Approach and evaluation tool itself is classified into three namely; (1) social competence that can be replicated by self-assessment, expert-assessment, or by psychognostic tests (2) axiological competences that can be measured by rating ratings according to educational discipline, expert judgment, questionnaire, and self-assessment 3) communication and information competencies that can be measured by rating ratings according to educational discipline, expert judgment, and analysis of activity outcomes (Berestneva, et al, 2015).

#### **4. Crossword Puzzles**

As university teachers we have the responsibility of trying to promote interest and learning and to find ways to reach students, which is not very easy, especially in large classes. Crosswords have been shown to have several adjectives that are active adjunct to the repertoire of active

strategic learning (Serna, 2011). Crossword puzzles honing students' thinking skills. Aspects that can be measured with this crossword puzzle are cognitive, affective, and psychomotor aspects. With a crossword puzzle game, students will experience the process of thinking. Crossword puzzles can influence the value of a student's test as a proof of a successful learning (Davis, et al, 2009). This game can be used as an evaluation tool. Problem-solving with crossword puzzles can various and be able to hone teachers' ability to make problems. Students can answer questions on the crossword by filling the columns flat or down. Teachers can create matters with a level of creativity. Use of crossword puzzles provides a simple and creative way to incorporate learning (Shah, et al, 2010). Crossword puzzles make better results on student achievement and are able to explain techniques that emphasize information (Keshta & Al-Faleet, 2013). Crossword puzzles improve learning and lead to important topics and serve as a good tool in learning. The use of crosswords provides a simple, creative, and effective way to incorporate active learning (Mohan, 2017). Many professors assume students are actively engaged when they take notes and ask questions (Partridge, 2011).

## 5. Method

The research method used is classroom action research (CAR) by applying crossword puzzles media to accounting subjects with adjusting journal material. Subjects in this study were as many as 30 students of class XII Matematika dan Ilmu Alam 1 of SMA Negeri Wonosari. Implementation have been done in three cycles. The researchers measured the students perceptions of crossword puzzles by comparing the results in cycle I, cycle II, and cycle III. Analytical technique used is descriptive analysis. Data is processed and presented in terms of percentages, tables, and graphs. The students perceptions in this research is the use of crossword puzzles as an evaluation tool on the accounting material of service companies.

## 6. Results

Crossword puzzles media in accounting learning are made based on the accounting material of service companies competence. The problem consists of 10 questions with 5 horizontal colums and 5 downhill colums. The questions consists of 5 questions of words and 5 questions of numbers. Students are required to work on a number problem by calculating in accordance with the concept of accounting. Students are given the opportunity to answer questions in groups. So at the time of the group of researchers can observe the cognitive, affective, and psychomotor aspects of students.

Students work together in groups to answer the questions contained in crossword puzzles media. The implementation of crossword pauzzles media can create active learning. Students do the problem on crossword puzzles media in groups. Working in groups directly will train students to argue, ask, and explain to friends. Students are required to work in teams in solving problems given by teachers. Based on the questionnaire the use of crossword puzzles as a learning evaluation tool shows that 30 students have a good response. Students agree and eager with the implementation of crossword puzzles media as an evaluation of accounting learning.

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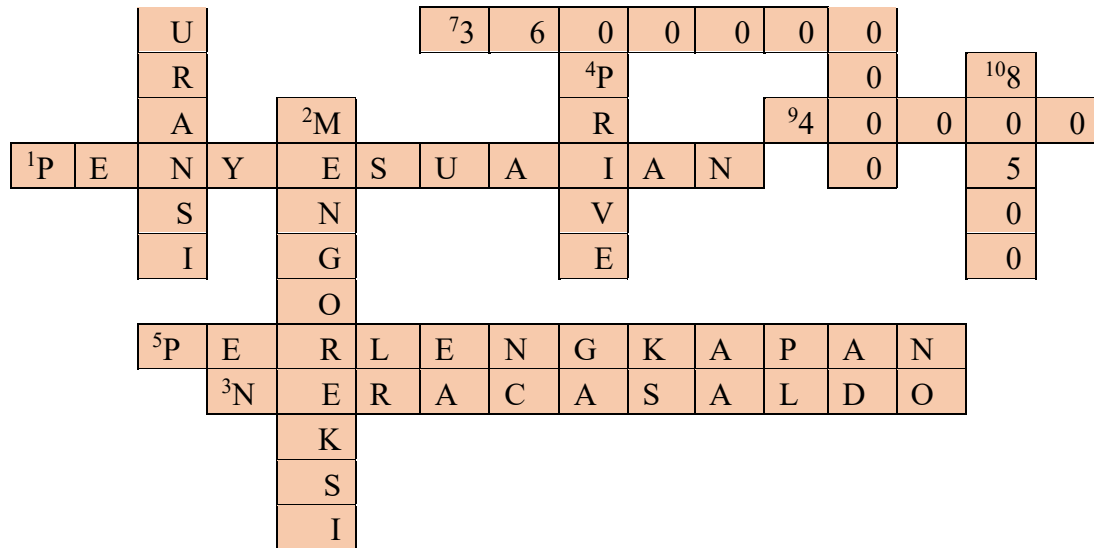


Figure 1. Accounting Crossword Puzzles

Table 1. Students' Perception of the Implementation of Crossword Puzzles in Accounting Learning

Indicator	Percentage
1. Students are eager to follow the learning with crossword puzzles media implementation	87,50%
2. Students understand the accounting material described by crossword puzzles media in learning	80,83%
3. Students are interested in accounting material explanations with crossword puzzles media in learning	85,00%
4. Students more easily understand the accounting material in the presence of assignments done in groups	81,67%
5. Students get information related to accounting material while doing group work	80,83%
6. Students are eager to do exercise problem on crossword puzzles media	89,17%
7. Students try to answer the problem modified by crossword puzzles media	91,67%
8. Students work together in groups to solved the problem in the form of crossword puzzles media	88,33%
9. Students enjoy working in groups using crossword puzzles media	85,00%
10. Students are eager to ask a groups in understanding the accounting material	80,00%
11. Students can exchange opinions with frinds while working on assignments with crossword puzzles media	85,00%
12. Students try to explain the accounting material in learning by using crossword puzzles media	85,00%

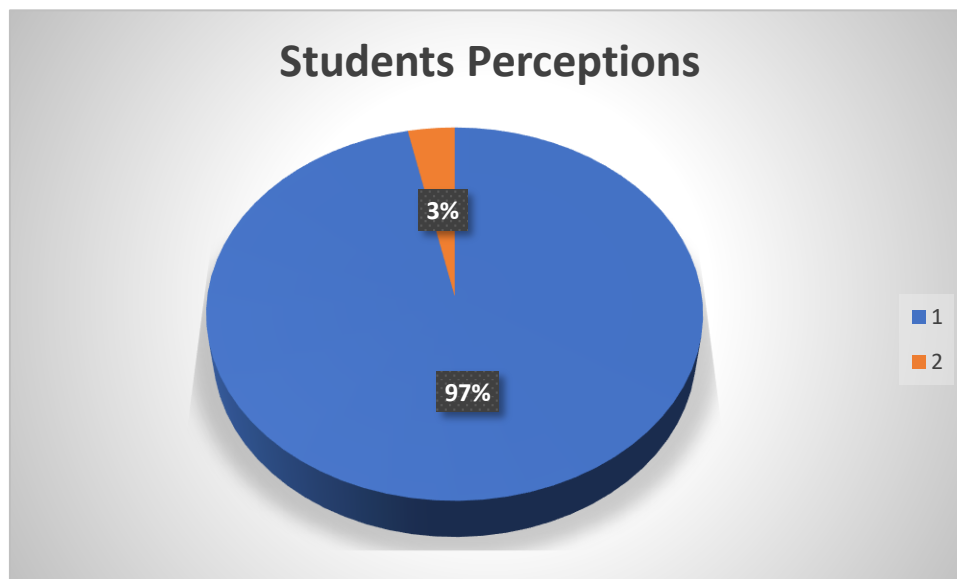


Figure 2. Students' Perceptions

The above diagram shows that as many as 97% of students of grade XII Matematika dan Ilmu Alam of SMA Negeri 1 Wonosari agree and satisfied with the implementation of crossword puzzles media as a tool of evaluation on the journal material adjustment accounting services company. This shows that the use of crossword puzzles as a means of evaluation is favored by students and students not feel bored during the learning process takes place. Students eagerly follow the accounting learning. Students are easy in understanding the accounting material. The implementation of crossword puzzles media can create active learning.

## 7. Results

Crossword puzzles can be implementation to accounting learning service company competence. Students are eager to follow the learning with crossword puzzles media implementation amount 87,50%. Students understand the accounting material described by crossword puzzles media in learning 80,83%. Students are interested in accounting material explanations with crossword puzzles media in learning 85,00%. Students more easily understand the accounting material in the presence of assignments done in groups 81,67%. Students get information related to accounting material while doing group work 80,83%. Students are eager to do exercise problem on crossword puzzles media 89,17%. Students try to answer the problem modified by crossword puzzles media 91,67%. Students work together in groups to solved the problem in the form of crossword puzzles media 88,33%. Students enjoy working in groups using crossword puzzles media 85,50%. Students are eager to ask a groups in understanding the accounting material 80,00%. Students can exchange opinions with frinds while working on assignments with crossword puzzles media 85,00%. Students try to explain the accounting material in learning by using crossword puzzles media 85,00%. Suggestions (1) schools should improve the learning process by motivating teachers to implement varying learning evaluations (2) teachers are expected to develop appropriate and appropriate instructional evaluations with student skills and encourage students to take an active role in learning (3) in both teaching questions to teachers or friends during the process of group activities (4) similar researchers are expected to

develop a more in-depth classroom action research on other competencies, so as to contribute insights in the field of education.

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# Effect Foreign Direct Investment on the GDP of Asean Countries

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## Abstract

Foreign Direct Investment (FDI) occurs when a company from a country invests in a long period of time to a company in another country. This study uses quantitative methods with panel data secondary from 2012-2016 by combining 10 ASEAN countries (Indonesia, Malaysia, Singapore, Thailand, Philippines, Vietnam, Myanmar, Brunei, Laos, Cambodia). The result of the partial t test is obtained that the t-statistical probability value is 0.0026. Then the statistical probability  $\alpha = 5\%$  is  $0.0000 < 0.05$ . So it can be concluded that the FDI variable partially influences the positive significance of the GDP variable. From the calculation of the F value, it is known that  $F_{count} > F_{table}$  ( $1480.07 > 4.03$ ) then  $H_0$  is rejected and  $H_1$  is accepted (F count is in the  $H_1$  reception area). Then also the probability (prob.) Of the table above is equal to  $0.000 > 0.005$ , then  $H_0$  is rejected and  $H_1$  is accepted. So that simultaneously or together the independent variables have a significant effect on the dependent variable. Efforts to increase the interest of foreign investors to invest in ASEAN countries are needed. Some policy strategies that can be considered to improve economic growth are 1) Increasing FDI growth shows that the potential of foreign financing sources is relatively large and still open. This is in line with the capabilities and advantages that are proven to contribute to the acceleration of development in a country. Therefore countries in ASEAN need to improve infrastructure, streamline bureaucracy to attract foreign investors. 2) Economic integration in the form of trade, investment and financial liberalization encourages increased activity of the Multi National Company.

**Keywords:** Investment, FDI, GDP, ASEAN

## 1. Introduction

Economic theory defines investment as an expenditure to purchase capital goods and production equipment with the aim of replacing and especially adding capital goods in the economy that will be used to produce goods and services in the future. Investment is the purchase of goods that will later be used to produce more goods and services (Mankiw, 2006) in (Igamo, 2015). The definition of investment as an expenditure by the producer sector (private) for the purchase of goods and services to increase the stock used or for the expansion of the plant. Foreign direct investment (FDI) occurs when a company from a country invests in its capital long term to companies in other countries. The country of origin of the company that invests is called the host country while the country where the investment is addressed is called a home country. According to Krugman (1988) in (Igamo, 2015), what is meant by direct foreign investment is international capital flows where companies from one country expand or establish a company. Therefore, not only the transfer of resources, but also the control of foreign companies. Direct

investment means that companies from investment countries directly supervise assets planted in capital importing countries. Foreign direct investment can take several forms, namely: the establishment of a company in which the investor's state has a majority shareholding in the formation of a company in the country importing capital or placing fixed assets in another country by a national company from the investment country (Jinghan, 2012 ) in (Igamo, 2015). According to Athukorala (2003) in (Jufrida, 2016), foreign investment has a positive impact on the economy of the host country because through foreign investment can increase the availability of funds for the host country (recipient country). But the results of research conducted did not find a significant relationship between FDI and economic growth, especially for developing countries. Liu and Su (2016) in (Jufrida, 2016) also conducted research on the impact of FDI and human capital on economic growth in China by using panel data of cities in China from 1991 to 2010. They tested the determinants of economic growth with a focus on the role of FDI and human capital with the human capital-augmented Solow model. The results show that the GDP growth rate per capita is negatively related to the rate of population growth and is positively related to the level of investment in physical capital and human capital. They also found that FDI had a positive effect on GDP per capita growth and this effect was intensified by ownership of urban human capital. The total foreign investment and domestic investment both government and private is one of the variables in the calculation of national income which is a benchmark of economic growth, therefore investment should be maintained in its development stability and continued efforts to increase. Based on the background of these problems, researchers are interested in conducting research on the influence of FDI on economic growth in countries in ASEAN. This research is more focused on national time series data on economic growth and FDI.

## **2. Method**

### *2.1 Identification of Variables*

Research variables are independent and dependent. for the independent variables in this study is FDI (X) while the dependent variable GDP (Y).

### *2.2. Data Analysis*

The analytical method used in this study is a quantitative technique that uses mathematical and statistical models that are classified in certain categories to facilitate analysis using the Eviews program. While the analysis technique used is multiple linear regression analysis techniques to see the relationship between the independent variable and the dependent variable. The data used is the panel data there are three kinds of data panel estimation techniques, namely pooled least square, fixed effect model, and random effect model. Test the suitability of the model to determine the most appropriate model is to use the Chow test and Hausman test. After that, the classic assumption test is normality test, autocorrelation test and also hypothesis testing, namely partial t test, simultaneous F test, test of the coefficient of determination.

### *2.3 Econometry Models*

The analysis technique in this study is panel data regression analysis, while the regression model in the form of logs can be written as follows:

$$\ln Y_{it} = \beta_0 + \beta_1 \ln X_{1it} + \epsilon_{it}$$

Where:

$$Y = \text{GDP}; X1 = \text{FDI}, i = \text{Country}; \text{ and } t = \text{time.}$$

### 3. Result

There are three estimations of panel data regression, namely common effects (OLS), fixed effect models (FEM) or Random Effect (REM) models. Determining the panel model that will be used in this study, several tests must be carried out. Chow Test and Hausman Test are tests that can be used to determine whether the panel data model can be regressed with common effect models (OLS), fixed effect models (FEM) or Random Effect (REM) models. Chow test is used to determine whether the panel data model is regressed with the Common Effect model or with the Fixed Effect model.

H0: The best model is Common Effect

H1: The best model is Fixed Effect

Table 1. Chow Test

Redundant Fixed Effects Tests  
Equation: Untitled  
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1393.111561	(9,39)	0.0000
Cross-section Chi-square	288.803185	9	0.0000

The table above shows that the best model is the fixed effect because the Chi-square probability value is below 0.05, this means that H0 is accepted.

Table 2. Hausman Test

Correlated Random Effects - Hausman Test  
Equation: Untitled  
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.926209	1	0.0475

The table above shows the results that Cross Section Random is worth 0.0475 which indicates that H0 is accepted. The most appropriate model used in this study is Fixed Effect Model.

Table 3. Fixed Effect Model

Dependent Variable: GDP  
Method: Panel Least Squares  
Date: 09/08/18 Time: 09:23  
Sample: 2011 2015  
Periods included: 5  
Cross-sections included: 10  
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	1.94E-09	6.03E-10	3.216922	0.0026
C	220.4385	7.753376	28.43129	0.0000

Effects Specification

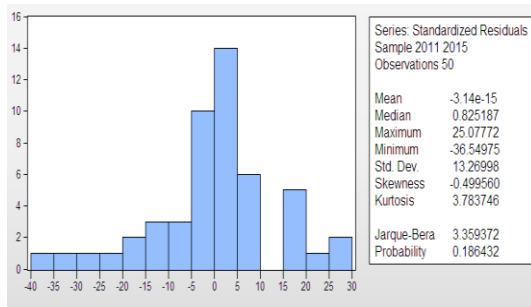
Cross-section fixed (dummy variables)			
R-squared	0.997372	Mean dependent var	244.4450
Adjusted R-squared	0.996698	S.D. dependent var	258.8520
S.E. of regression	14.87428	Akaike info criterion	8.428683
Sum squared resid	8628.523	Schwarz criterion	8.849328
Log likelihood	-199.7171	Hannan-Quinn criter.	8.588867
F-statistic	1480.077	Durbin-Watson stat	1.047322
Prob(F-statistic)	0.000000		

From the results of panel data regression with the selected model is the Fixed Effect model, the regression model equation is obtained as follows:

$$\text{GDP} = 1.9 (\text{FDI}) + e$$

## Normality test

Figure 1. Normality Test



From the output that has been tested, it states that the histogram form is distributed symmetrically so that the residuals are distributed normally. Based on the JB statistical test, the value is 3.3593 with a probability of 0.1864 while the chi-square value with significance ( $\alpha = 5\%$ ) is 0.05, so  $JB < Chi\ Square$ , then  $H_0$  is rejected and  $H_1$  is accepted meaning that the residual is normally distributed.

## Autocorrelation test

Table 4. Autocorrelation Test

Dependent Variable: D(FDI)  
 Method: Panel Least Squares  
 Date: 09/08/18 Time: 09:31  
 Sample (adjusted): 2012 2015  
 Periods included: 4  
 Cross-sections included: 10  
 Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP)	98851746	45435532	2.175648	0.0379
C	4.24E+08	5.94E+08	0.713273	0.4814

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.320383	Mean dependent var	8.08E+08
Adjusted R-squared	0.086033	S.D. dependent var	3.76E+09
S.E. of regression	3.59E+09	Akaike info criterion	47.06926
Sum squared resid	3.74E+20	Schwarz criterion	47.53370
Log likelihood	-930.3852	Hannan-Quinn criter.	47.23719
F-statistic	1.367110	Durbin-Watson stat	2.509937
Prob(F-statistic)	0.243975		

Autocorrelation test can be seen from the Chi-Square probability value, if it is greater than 0.05, the data does not contain autocorrelation problems. If the probability of chi-square is smaller than 0.05, the data contains autocorrelation problems. The results of the research output indicate that there is an autocorrelation problem, for that researchers use Differential which is used to correct autocorrelation problems.

From the output of the Differential method, the DW is 2.5099 where the DW value passed the test in the autocorrelation problem. With the DL value of 1.5035 and DU of 1.58499, the DW value is 2.5099 so that if  $DL < DW > DU$  ( $1.5035 < 2.5099 > 1.58499$ ) it can be concluded that there is no autocorrelation problem.

## T test

Table 5. T test

Dependent Variable: GDP  
 Method: Panel Least Squares  
 Date: 09/08/18 Time: 09:23  
 Sample: 2011 2015  
 Periods included: 5  
 Cross-sections included: 10  
 Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	1.94E-09	6.03E-10	3.216922	0.0026
C	220.4385	7.753376	28.43129	0.0000

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.997372	Mean dependent var	244.4450
Adjusted R-squared	0.996698	S.D. dependent var	258.8520
S.E. of regression	14.87428	Akaike info criterion	8.428683
Sum squared resid	8628.523	Schwarz criterion	8.849328
Log likelihood	-199.7171	Hannan-Quinn criter.	8.588867
F-statistic	1480.077	Durbin-Watson stat	1.047322
Prob(F-statistic)	0.000000		

Based on the results above as follows:

### Influence of FDI on GDP

The t-statistical probability value obtained is 0.0026. Then the statistical probability  $<\alpha = 5\%$  is 0.0000  $< 0.05$ . So it can be concluded that the FDI variable partially influences the positive significance of the GDP variable.

### F Test

R-squared	0.997372	Mean dependent var	244.4450
Adjusted R-squared	0.996698	S.D. dependent var	258.8520
S.E. of regression	14.87428	Akaike info criterion	8.428683
Sum squared resid	8628.523	Schwarz criterion	8.849328
Log likelihood	-199.7171	Hannan-Quinn criter.	8.588867
F-statistic	1480.077	Durbin-Watson stat	1.047322
Prob(F-statistic)	0.000000		

From the calculation of the F value, it is known that  $F_{count} > F_{table}$  ( $1480.07 > 4.03$ ) then  $H_0$  is rejected and  $H_1$  is accepted ( $F_{count}$  is in the  $H_1$  reception area). Then also the probability (prob.) Of the table above is equal to  $0.000 > 0.005$ , then  $H_0$  is rejected and  $H_1$  is accepted. So that simultaneously or together the independent variables have a significant effect on the dependent variable.

### Koefisein Determination

Based on the table above, the Adjusted R-Square value is 0.9973. This shows that the model is able to explain 99.73% of the dependent variable, while the remaining 0.27 is influenced by other factors outside the regression model.

## 4. Discussion

The influence of FDI on GDP growth of ASEAN countries is good, in accordance with Athukorala's research in (Jufrida, 2016) by using cointegration econometric models and time series data from 1959 to 2012 to analyze the relationship between FDI and GDP in Sri Lanka. The results show that FDI has a positive effect on GDP and that there is a causal relationship between FDI and GDP in Sri Lanka.

(Kholis, 2012) Efforts to increase the interest of foreign investors to invest in ASEAN countries are needed. Some policy strategies that can be considered to improve economic growth are:

1. Increasing FDI growth shows that the potential for foreign financing is relatively large and still open. This is in line with the capabilities and advantages that are proven to contribute to the acceleration of development in a country. Therefore countries in ASEAN need to improve

infrastructure, streamline bureaucracy to attract foreign investors.

2. Economic integration in the form of trade, investment and financial liberalization encourages the increase of Multi National Company activities.

## 5. Conclusion.

This study aims to analyze the relationship of FDI to GDP growth of ASEAN countries in the period 2011-2005 using panel data regression analysis techniques. Based on the results of statistical tests, the following conclusions can be drawn:

1. The result of the partial t test is obtained that the t-statistical probability value is 0.0026. Then the statistical probability  $\alpha = 5\%$  is  $0.0000 < 0.05$ . So it can be concluded that the FDI variable partially influences the positive significance of the GDP variable.
2. From the calculation of the F value, it is known that  $F_{count} > F_{table}$  ( $1480.07 > 4.03$ ) then  $H_0$  is rejected and  $H_1$  is accepted ( $F_{count}$  is in the  $H_1$  reception area). Then also the probability (prob.) Of the table above is equal to  $0.000 > 0.005$ , then  $H_0$  is rejected and  $H_1$  is accepted. So that simultaneously or together the independent variables have a significant effect on the dependent variable.

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# The Effect of Company Size, Company Age, and Profitability on the Level of Islamic Social Reporting (ISR) Disclosure on Companies Listed in Jakarta Islamic Index (JII) For the Period 2012-2016

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## Abstract

This research aims to analyze the effect of company size on the level of ISR disclosure, the effect of company age on the level of ISR disclosure, the effect of profitability on the level of ISR disclosure, and the effect of company size, company age, and profitability simultaneously on the level of ISR disclosure. The research design is a causative research. The data population in this research are taken from companies that issued sharia stock listed in the Jakarta Islamic Index (JII) in 2012-2016. A purposive sampling method is used as a sampling method and 60 companies are selected as the sample researches. The data analysis techniques is simple regression analysis and multiple linear regression analysis. The results of this research indicate that company size has a positive effect on the level of ISR disclosure company age has a positive effect on the level of ISR disclosure, profitability has a negative effect on the level of ISR disclosure, company size, company age, and profitability simultaneously has a positive effect on the level of ISR disclosure.

**Keywords:** Level of ISR Disclosure, Company Size, Company Age, Profitability

## 1. Introduction

### *1.1 Problem Background*

The environmental damage that has occurred in recent years suggests that environmental management is a matter to be aware of. By 2015, a company is proven to dump mining waste into the Ajkwa River which can cause river pollution and the destruction of river ecosystems ([www.republika.co.id](http://www.republika.co.id)). The environmental damage which has adverse impacts on the environment and people, can affect the value of the company in the stakeholders' view. Investors tend to decide to invest in companies that have good social performance (Utami, 2017). The performance of corporate social is inseparable from the company's existence in this era. The company that operates its business has a social responsibility to the community related to its business operations covering economic aspects (profit), social (people), and the environment (planet) or well known as triple bottom line (3P). The implementation of 3P is realized in the form of Corporate Social Responsibility (CSR) (Fauziah & Jayanto, 2013).

According to Siregar (2015) Corporate social responsibility (CSR) in Islamic perspective is a business practice that has an ethical responsibility in Islam. The Company incorporates Islamic religious norms that are marked by a sincere commitment to safeguarding social contracts

within its operations. The way to manage a company is limited by the law of *halal* and *haram* by sharia. CSR conducted in the perspective of Islam should aim to create virtue that is done not through activities that contain elements of usury, but with practices that are commanded by Allah in the form of *zakat*, *infak*, alms, and *waqf*. Islam advises that the turnover of wealth is not only centered on a group of people and evenly on all groups.

In accordance with the commandment of Allah Surah Al-Hashr verse 7:

... كُنِيَ لَا يَكُونُ دُولَةً بَيْنَ الْأَغْنِيَاءِ مِنْكُمْ ...

"... that the treasure should not circulate among the rich among you ..." (Al-Hashr: 7).

Further Siregar (2015) explained that CSR in the sharia perspective should also prioritize the value of generosity and sincerity.

Muslim as part of the stakeholder hope that the companies can disclose certain information (which is sharia) even though the disclosure is a voluntary disclosure. It is intended to help Muslim fulfill their spiritual need. Most disclosure of social responsibility by companies has not disclosed sharia information, it can influence the decisions of Muslim as stakeholders that also adversely affect their spiritual side (Haniffa, 2002). Sharia disclosure has not been widely practiced by companies in general, most sharia disclosures are conducted by sharia banks that hold "titles" of sharia in their entities. The concept of CSR in Islam is closely related to the companies that operate its business in sharia, through the implementation of sharia business is expected the companies, it can also perform corporate social responsibility in accordance with the concept of sharia. The development of Islamic economics in Indonesia is growing significantly. It is evidenced by the increasing number of sharia shareholder investors amounting to 203 thousand investors as of November 2017 which increases 100 percent compared to the year 2015 which is only 100 thousand investors ([www.republika.co.id](http://www.republika.co.id)).

Sharia capital market in Indonesia has an important role in increasing the market share of sharia-based companies in Indonesia (Raditya, 2012). There are two types of stock indexes in the Sharia capital market that present the stock development of sharia in Indonesia. The stock index that contained all Sharia stock which is listed on DES is the Indonesia Sharia Stock Index (ISSI) and the Jakarta Islamic Index (JII). Othman and Thani (2010) in his research, reveal that the rapid development of sharia makes companies listed in the List of Sharia Effect (DES) expected to present a religious dimension in the disclosure of annual reports in order to provide benefits to Muslim stakeholders. Therefore, it is needed a standard to measure the level of corporate sharia disclosure that is included in DES in disclosing its social responsibility in the religious dimension as the fulfillment of corporate obligation in complying with sharia aspects. To fulfill it, Othman et al. (2009) subsequently developed a relevant disclosure index related to the disclosure of corporate social responsibility in sharia, known as "Islamic Social Reporting" (ISR).

ISR was firstly conceived by Haniffa (2002) and then developed by Othman et al. (2009) to research influential factors in the ISR disclosure of companies listed on Malaysia Exchange. According to Haniffa (2002), there are limitations in conventional social reporting, so she puts forward a conceptual framework of social reporting in sharia, called Islamic Social Reporting. Its function is not only to help muslim decision maker but also to help companies, especially companies with Sharia provisions, in fulfillment of obligations to Allah SWT and the people.



In the case of disclosure report, the condition of the company may affect the performance and the extent of the annual report presentation including the company's voluntary report (Putri, 2014). The conditions of the company that will be studied in this research are company size, company age, and profitability. However, some empirical studies were found on the development and use of disclosures index with ISR. One of the previous research conducted by Andaru (2015) analyze the factors that affect the disclosure of Islamic Social Reporting (ISR) in sharia-based companies listed in the Jakarta Islamic Index (JII) and variables that used in the research are company size, profitability, and age of the company. The results showed that profitability had a significant positive effect on the level of ISR disclosure. While company size and company age have no significant influence in ISR disclosure level. Moreover, in research conducted by Raditya (2012) showed that company size and profitability have a significant positive effect on the level of ISR disclosure, whether age of the company is not a significant determinant factor in influencing the ISR disclosure rate. Similarly, some previous research conducted by Dewi (2012), Rahayu (2015) and Novrizal & Fitri (2016) showed that company size have a significant positive effect on the level of ISR disclosure. This research aims to identify and develop the result of previous researchers by using ISR as an index that measures the level of social responsibility disclosure for companies that include in Jakarta Islamic Index (JII) for the period 2012-2016. This research focus only on company listed consistently in JII with time series since 2012-2016.

## *1.2 Conceptual Framework*

### *1.2.1 The Effect of Company Size on The Level of ISR Disclosure*

According to Rahayu (2015), the larger size of the company usually will disclose more available information to investors in connection with an investment in the company. Larger companies tend to have higher public demand for information than smaller companies. If associated with agency theory, larger companies with greater agency costs will disclose more information to reduce agency costs. In addition, large corporations are highlights, a bigger disclosure is a form of corporate social responsibility to the environment (Sembiring, 2005: 381). Based on the description above, it can be formulated hypothesis as follows:

H<sub>1</sub>: There is a positive effect of company size on the level of ISR disclosure.

### *1.2.2 The Effect of Company Age on The Level of ISR Disclosure*

Companies with younger age are predicted to spread more information than older companies, with the purpose of reducing uncertainty in operating risks and to boosting their confidence in investors (Raditya, 2012). On the opposite side, companies with older age likely to disclose more information than younger companies (Owusu & Ansah, 2012). Because older companies have more information to disclose to investors. Based on the above description, it can be formulated hypothesis as follows:

H<sub>2</sub>: There is a positive effect of company age on the level of ISR disclosure.

### *1.2.3 The Effect of Profitability on The Level of ISR Disclosure*

The relationship between the disclosure of corporate social responsibility and corporate profitability has been believing can reflect the view that social reactions require managerial styles by the management to make a profit. According to Giannarakis (2014), a positive relationship between profitability and disclosure of social responsibility can attribute to the fact that a profit-driven company has the freedom and flexibility to expose its social performance

practices more broadly to corporate stakeholders. Based on the above description it can be formulated hypothesis as follows:

H<sub>3</sub>: There is a positive effect of profitability on the level of ISR disclosure.

#### 1.2.4 The Effect of Company Size, Company Age, and Profitability Simultaneously on The Level of ISR Disclosure

The large and small size companies have an influence on the level of corporate social performance in sharia. The age of older companies affects the tendency to disclose more information, as well as the opposite, the companies with young age have reason to disclose more information to attract more investors. While large profitability will affect companies disclose more information to attract more investors. A large company usually in line with the old company and in line with high profitability. Therefore, company size, company age, and profitability are believed can positively affect the level of ISR disclosure. Based on the above description can be formulated hypothesis as follows:

H<sub>4</sub>: There is a positive effect of company size, company age, and profitability simultaneously on the level of ISR disclosure

## 2. Method

### 2.1 Types of Research

This research uses a quantitative approach. A quantitative approach is a method to examine a particular population or sample where data collection is using research instruments and data analysis is quantitative, aims to test predefined hypothesis (Sugiyono, 2016: 11). The type of investigation in this research is the causal relationship. In a causal study, there are independent variables (variables that effect) and dependent (variables that are affected) (Sugiyono, 2016: 37). The formulation of the problem used is the associative problem formulation.

### 2.2 The Place and Time Research

This research is conducted on companies that issued about sharia securities listed in the Jakarta Islamic Index (JII). The Company data is obtained through JII stock list that is issued by the Indonesia Stock Exchange (IDX) which can be seen in [www.idx.co.id](http://www.idx.co.id). The collection process of company data which be the sample is also gotten from IDX website and the company website. The data collection is conducted in December 2017-February 2018 and collected from annual reports and sustainability reports (if the company published) publishing in 2012-2016 and obtained through the official website of IDX and the other company websites. In March-June 2018, the researcher analyzed the data and prepare the research reports.

### 2.3 Population and Sample Research

The population of this research is a company that issued Sharia shares listed in the Jakarta Islamic Index (JII) in 2012-2016. The sample in this research is a company that is selected based on purposive sampling technique. Purposive sampling is a technique for determining the samples with a certain deliberation (Sugiyono, 2016: 85). This technique aims to get a sample in accordance with the expected criteria. Sample criteria that is used in this research are:

- a. Companies that is included in the list of Jakarta Islamic Index (JII) in period 2012-2016 continuously. List of Sharia Securities will be updated once in six months, as well as shares listed in JII. So, the sample used in this research is a company is registered continuously in JII for five periods.

- b. Companies publish an annual report in the period 2012-2016.
- c. The Companies that use Rupiah currency as the unit of currency in the company's financial statements aim to provide equal treatment to all samples of corporate financial statements. So it makes the results are not biased.

Based on the selection results with the above criteria, the number of samples show in Table 1.

Table 1. The Selection Results of Purposive Sampling

Sample	Total
The companies that listed in JII on the period 2012-2016	150
Elimination of non-continuous companies listed in JII in the period 2012-2016	80
The companies elimination that uses currencies except Rupiah	10
The summary of the sample that matches with the criteria	60

## 2.4 Operational Variable Definition

### 2.4.1 The Level of ISR Disclosure

Islamic Social Reporting or ISR is a special framework form used for appropriate social responsibility reporting (CSR) with a sharia perspective. The assessment of sharia corporate social responsibility disclosure level can be measured by the conformity of annual report with the index of ISR consisting of 6 themes of disclosure from each theme, there is a sub-theme of disclosure which amounted up to 43 sub-themes. The ISR Index Scoring has been done by giving scores on each item that expressed on the company's annual reports. If any items disclosed will get score "1", and if there is no item revealed, it will get score "0". If all item is fully disclosed, the maximum score will be 43.

To find out how much the level of cumulative ISR index disclosure, it can be used the following formula:

$$\text{Index ISR} = \frac{(\text{Number of points disclosed})}{(\text{Total score maximum})} \times 100 \%$$

### 2.4.2 Company Size

According to Suwito and Herawaty (2005) Company Size is a scale that can classify as a small or large company according to various ways. In this research used total assets as a proxy to calculate the company size. Total assets is obtained from the statement of financial position at the end of the period in the company's annual report. Company size is changed to natural logarithm (ln) to equate with other variables to form formula:

$$\text{SIZE} = \ln (\text{Total Assets})$$

### 2.4.3 Company Age

According to Dewi (2012), Company Age reflects how long the company is able to survive. Company Age is calculated from the difference between the year of research and the year of establishment of the company.

### 2.4.4 Profitability

Profitability is the ability of a company to earn profits in relation to sales, total assets, and own capital (Sartono, 2014: 122). Profitability in this research is measured by Return On Equity

(ROE).

The formula for calculating profitability is:

$$\text{ROE} = \frac{\text{(Net profit)}}{\text{(common equity)}}$$

(Source: Brigham & Houston, 2012).

### *2.5 Data Collection Technique*

The data collection technique that is used is secondary data. This research concerns the data that has been collected and scores using the ISR Index. The scoring is used to assess CSR disclosure items in the sharia perspective on companies listed in JII on the period 2012-2016. The instrument in this research contains a list of ISR scores, where the ISR component uses an adjustment of previous studies which researcher finds the relevant to apply to companies that issue sharia shares. The ISR index in this research uses 6 (six) disclosure themes, namely Finance and Investment, Products and Services, Employees, Society, Environment and Corporate Governance. The content analysis methods which used in this research are to identify the disclosure type of ISR by reading and analyzing the company's annual reports and sustainable reports (if only the company publishes it). Disclosure characteristics the form of words, sentences, representation or graphics are encoded according to their disclosure. Disclosures which are contained in annual or sustainable reports are not counted from the number of disclosures that arise, provided that at least one item is disclosed in any form, the subject of disclosure is declared available.

### *2.6 Data Analysis Technique*

In this research used some data analysis techniques to test and process the data. Data analysis techniques used in this research are as follows:

#### *2.6.1 Descriptive Statistic*

Descriptive statistic is statistic used to analyze data by describing data that has collected without intending to make general conclusions or generalizations (Sugiyono, 2016: 147). Descriptive statistic provide descriptions of data viewed from minimal-maximal values, mean values, and standard deviations. This test used to to make the variables that used in the research is easier to understand.

#### *2.6.2 Classic Assumption Test*

The classical assumption test aims to determine the feasibility of using the regression model so as not cause bias in the data analysis (Rahayu, 2015). The classical assumption test in this research are consisted of the normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test.

#### *2.6.3 Hypothesis Test*

##### *2.6.3.1 Simple Linear Regression Analysis*

This simple regression analysis bases on the causal relationship between an independent variable (X) and a dependent variable (Y). The researcher uses simple regression analysis to predict the influence of the independent variable (X) on the dependent variable (Y). Simple linear regression equation in this research is obtained by using the formula:

$$Y = a + bX$$

Information:

- Y = the level of ISR disclosure
- a = constanta
- b = regression coefficient
- X = company size/company age/profitability

### 2.6.3.2 Multiple Linear Regression Analysis

Multiple linear regression analysis is an analysis that used to measure the influence of two or more independent variables ( $X_1, X_2, X_3$ ) on one dependent variable (Y).

Multiple linear regression equation in this research is as follows:

$$ISR = \beta_0 + \beta_1 SIZE_{it} + \beta_2 AGE_{it} + \beta_3 ROE_{it} + \epsilon_{it}$$

Information:

- ISR = the level of ISR disclosure index
- SIZE = natural logarithm of total assets
- AGE = difference between a year of research with a year of establishment of a company
- ROE = ratio of net income to total equity
- I = sample company (i = 1, 2, 3, ...)
- t = year 2012-2016
- $\beta_0$  = constanta
- $\beta_1 - \beta_3$  = regression coefficient
- $\epsilon$  = error

## 3. Results

### 3.1 Descriptive Statistical Analysis

Table 2. Data Descriptive Statistics Company Size, Company Age, and Profitability on Companies Registered in JII for The Period 2012-2016

Variable	N	Minimum	Maximum	Mean	Std. Deviation
SIZE	60	29.65	33.20	31.0328	0.97027
AGE	60	22.00	110.00	50.6667	22.65561
ROE	60	0.05	1.36	0.2635	0.30899
ISR	60	55.81	88.37	70.8525	8.40639
Valid N (listwise)	60				

#### 3.1.1 The Level of Islamic Social Reporting Disclosure(ISR)

The Level of Islamic Social Reporting Disclosure indicated by ISR proxy. Based on the above table, it can be seen that from 60 existing data, the variable of ISR has a minimum value of 55.81 and a maximum value of 88.37. The lowest ISR is owned by PT. Lippo Karawaci (LPKR) of 55.81 and PT. AKR Corporindo (AKRA), while the highest ISR is owned by PT. Astra International (ASII) of 88.37. The mean score of ISR is 70.8525 and the standard deviation of ISR is 8.40639. The greater mean than the standard deviation of  $70.8525 > 8.40639$  indicates that the distribution of ISR is good.

#### 3.1.2 Company Size

Company size indicated by SIZE proxy. Based on the above table, it can be seen that from 60 existing data, the variable of SIZE has a minimum value of 29.65 and a maximum value of 33.20. The lowest SIZE is owned by PT. PP London Sumatera Indonesia (LSIP) of 29.65, while the highest SIZE is owned by PT. Astra International (ASII) of 33.20. The mean score of SIZE is 31.0328 and the standard deviation of SIZE is 0.97027. The greater mean than the standard deviation of  $31.0328 > 0.97027$  indicates that the distribution of SIZE is good.

### 3.1.3 Company Age

Company age indicated by AGE proxy. Based on the above table, it can be seen that from 60 existing data, the variable of AGE has a minimum value of 22 and a maximum value of 110. The lowest AGE is owned by PT. Lippo Karawai (LPKR) of 22.00 while the highest AGE is owned by PT. PP London Sumatera Indonesia of 110. The mean score of AGE is 50.6667 and the standard deviation of AGE is 22.65561. The greater mean than the standard deviation of  $50.6667 > 22.65561$  indicates that the distribution of AGE is good.

### 3.1.4 Profitability

Profitability indicated by ROE proxy. Based on the above table, it can be seen that from 60 existing data, the variable of ROE has a minimum value of 0.05 and a maximum value of 1.36. The lowest ROE is owned by PT. Lippo Karawaci (LPKR) of 0.05, while the highest ROE is owned by PT. Unilever Indonesia (UNVR) of 1.36. The mean score of ROE is 0.2635 and the standard deviation of ROE is 0.30899.

The smaller mean of the standard deviation of  $0.2635 < 0.30899$  indicates a large fluctuation of ROE values in the sample company.

## 3.2 Classic Assumption Test

Classic assumption test were used in this research are:

### 3.2.1 Normality Test

Table 3. The Result of Normality Test

Variable	Asymp. Sig.	Conclusion
Res_1	0.200	Normal

The result of the normality test shows that the research variable has a significant value. The value greater than 0.05 at ( $0.200 > 0.05$ ), so it can be concluded that the residual is normally distributed.

### 3.2.2 Heteroscedasticity Test

Table 4. The Result of Heteroscedasticity Test

Variable	Asymp. Sig.	Conclusion
SIZE	0.768	Normal
AGE	0.474	Normal
ROE	0.151	Normal

Based on Glejser test which has been done from Table 5 shows that significance value of SIZE, AGE and  $ROE > 0.05$  so it can be concluded there is no heteroscedasticity.

### 3.2.3 Multicollinearity Test

Table 5. The Result of Multicollinearity Test

Variable	Tolerance	VIF
SIZE	0.730	1.370

AGE	0.624	1.603
ROE	0.832	1.202

Table 7 shows that all variables have tolerance values >0.10 and VIF values <10. So it can be concluded that all variables have not multicollinearity, or there is no correlation between independent variables.

### 3.2.4 Autocorrelation Test

Table 6. The Result of Autocorrelation Test

Variable Dependent	Durbin-Watson	dU
The Level of ISR Disclosure	2.328	1.6723

Based on autocorrelation test shows that Durbin Watson's value is 2.328 and the value is between  $du < dw < 4 - du$ , where  $du = 1.6723$  and  $4 - du = 4 - 1.6723 = 2.3277$ . If it is concluded then  $1.6723 < 1.940 < 2.3277$  and indicates there is no autocorrelation.

### 3.3 Hypothesis Testing

#### 3.3.1 First Hypothesis

The first hypothesis states that "Company size (SIZE) positively influences the level of ISR disclosure". Below is the result of the hypothesis testing with the simple regression:

Table 7. The Result of Simple Regression Analysis  $X_1$  to Y

Variable	Const.	Reg. Coeff	R <sup>2</sup>	t	Sig.
SIZE	-52.582	5.646	0.263	4.099	0.000

Based on the Table 9 above, the equation of the regression line can be expressed in the equation:

$$Y = -52.582 + 5.646X_1$$

The equation shows that the  $X_1$  coefficient value of 5.646, which means that if Company Size ( $X_1$ ) increase 1 point then The Level of ISR Disclosure (Y) will increase 5.646 points. The result of the SIZE variable estimate is  $t = 4.099$  with the probability of 0.000. The significance value of 0.000 is smaller than 0.05. Based on the explanation above can be concluded that the first hypothesis accepted and indicate if in this research Company size (SIZE) positively affect the level of ISR disclosure.

#### 3.3.2 Second Hypothesis

The second hypothesis states that "Company age (AGE) positively influences the level of ISR disclosure (ISR)". Below is the result of the hypothesis testing with the simple regression:

Table 8. The Result of Simple Regression Analysis  $X_2$  to Y

Variable	Const.	Reg. Coeff	R <sup>2</sup>	t	Sig.
AGE	0.405	0.120	0.196	3.387	0.01

Based on the Table 10 above, the equation of the regression line can be expressed in the equation:

$$Y = 0.405 + 0.120X_2$$

The equation shows that the  $X_2$  coefficient value of 0.120, which means that if Company Age ( $X_2$ ) increase 1 point then The Level of ISR Disclosure (Y) will increase 0.120 points. The

result of the AGE variable estimate is  $t = 3.387$  with the probability of 0.01. The significance value of 0.01 is smaller than 0.05. Based on the explanation above can be concluded that the first hypothesis accepted and indicate if in this research Company age (AGE) positively affect the level of ISR disclosure.

### 3.3.3 Third Hypothesis

The third hypothesis states that "Profitability (ROE) positively influences the level of ISR disclosure (ISR)". Below is the result of the hypothesis testing with the simple regression:

Table 9. The Result of Simple Regression Analysis  $X_3$  to Y

Variable	Const.	Reg. Coeff	R <sup>2</sup>	t	Sig.
ROE	35.787	3.531	0.001	0.183	0.855

Based on the Table 11 above, the equation of the regression line can be expressed in the equation:

$$Y = 35.787 + 3.531X_3$$

The equation shows that the  $X_3$  coefficient value of 3.531, which means that if Profitability ( $X_3$ ) increase 1 point then The Level of ISR Disclosure (Y) will increase 3.531 points. The result of the ROE variable estimate is  $t = 0.183$  with the probability of 0.855. The significance value of 0.855 is greater than 0.05. Based on the explanation, it can be concluded that the third hypothesis is rejected and indicated if in this research Profitability (ROE) has no effect on the level of ISR disclosure.

### 3.3.4 Fourth Hypothesis

The fourth hypothesis states that "Company Size (SIZE), Age of Company (AGE) and Profitability (ROE) simultaneously have a positive effect on The level of ISR Disclosure (ISR)". Data analysis is used to test the fourth hypothesis is multiple regression analysis.

Below is the result of multiple regression analysis:

Table 10. The Result of Simple Regression Analysis  $X_1, X_2, X_3$ , to Y

Variable	Regression Coefficient	R <sup>2</sup>	F	Sig.
Cons.	-34.825			
SIZE	4.199	0.336	7.605	0.000
AGE	0.297			
ROE	-15.330			

Based on the Table 12 above, the equation of the regression line can be expressed in the equation:

$$Y = -34.825 + 4.199\text{SIZE} + 0.297\text{AGE} - 15.330\text{ROE} + e$$

Based on the test results F value of 7.605 with a significance of 0.000. The significance value of 0.000 is smaller than 0.05, it can be concluded that the fourth hypothesis is accepted. Can be interpreted if, in this research Company size (SIZE), Company Age (AGE) and Profitability (ROE) simultaneously have a positive influence on The Level of ISR Disclosure in Jakarta Islamic Index (JII) period 2012-2016. The result of the R<sup>2</sup> test in this research is 0.336, showing that the ISR (Y) Disclosure Rate is influenced by Company's Size (SIZE), Age of Company (AGE) and Profitability (ROE) of 33.6%; there is still 66.4% influenced by factors or other variables that are not examined in this research



## **4. Discussion**

### *4.1 The Effect of Company Size (SIZE) on The Level of ISR Disclosure*

The result of significance value of company size (SIZE) is 0.000 and that is smaller than 0.05. It can be concluded that company size (SIZE) positively affect the Level of ISR Disclosure. According to Rahayu (2015), the larger company will provide the available information to investors in decision-making in connection with investment activities in the company. Larger companies tend to have higher public demand for information than smaller companies. Companies with larger size will disclose more about their companies information because they have a large number of stakeholders and also under pressure to provide much information to disclosure their legitimacy due to the business activities (Giannarakis, 2014).

Thus, the size of the company can be used as one of measure in assessing how large the company in disclosing its social responsibility in sharia. Specifically, the bigger company will make the Muslim stakeholders influence or be influenced by the company's business activities (Rahayu, 2015). Companies with large sizes will tend to disclose social responsibility in sharia more broad than smaller size companies.

### *4.2 The Effect of Company Age (AGE) on The Level of ISR Disclosure*

The result of significance value of company age (AGE) is 0.01 and that is smaller than 0.05. It can be concluded that company age (AGE) positively affect the Level of ISR Disclosure. Older companies tend to have more experience in identifying internal and external circumstances. Specifically, companies with older age are able to recognize their investors. Thus, if most of these investors are Muslims, then companies will tend to disclose more of their social performance in sharia. Nadlifiyah and Laila (2017) explains that if it is associated with stakeholder theory and Sharia Enterprise Theory (SET) then the company with older age will better understand the needs and responsibilities vertically (to Allah SWT) and horizontally (to humans and nature/environment)

### *4.3 The Effect of Profitability (ROE) on The Level of ISR Disclosure*

The result of significance value of profitability (ROE) is 0.855 and that is greater than 0.05. It can be concluded that profitability (ROE) is rejected and indicated if in this research Profitability (ROE) has no effect on the level of ISR disclosure

In this case indicates that companies with high ROE level not necessarily allocate funds to social and environmental awareness. Haniffa (2002), states that in the view of Islam, companies that have the intention to do full disclosure will not consider whether the company is profitable or loss. When companies earn a low profit, there is a perception that the stakeholders are interesting to read good news about the company's performance in the social field. Companies that have high rates of profit assume do not need to report things that may disrupt information about the company's financial success. On the contrary, when the profitability level is low, the companies expect the stakeholders to read "good news" about the company's social performance (Rahayu, 2015). Furthermore, companies that do not disclose information about social responsibility in sharia may be more profit-oriented or have already felt enough not to disclose much of their social performance.

### *4.4 The Effect of Company Size (SIZE), Company Age (AGE), and Profitability (ROE) simultaneously on The Level of ISR Disclosure*

The significance value of this hypothesis show that Company size (SIZE), Company Age (AGE)

and Profitability (ROE) simultaneously have a positive influence on The Level of ISR Disclosure in Jakarta Islamic Index (JII) period 2012-2016.

The Larger size of companies tends to disclose more information about its sharia social responsibilities. If associated with agency theory, larger companies with greater agency costs will disclose more information to reduce agency costs. In addition, large companies are highlights, an extensive disclosure is a kind of corporate social responsibility to the environment (Sembiring, 2005: 381). The larger size of companies will affect the Muslim stakeholders' influence or be influenced by the company's activities. In spite of, the company age is a variable to be noticed, the existence of companies in the community will be wider if the company has an older age. Older companies have more experience in managing internal and external corporate relationships. In conducting social responsibility in sharia the company needs funds to realize it. Therefore, profitability has an important role in terms of allocating funds for social responsibility activities in sharia. Without profit, the company can not realize its sharia social activities to the maximum.

## **5. Conclusion**

Based on the results of research and the discussion in the previous chapter, it can be concluded as follows.

### *5.1 Company size has a positive effect on the level of ISR disclosure.*

It indicates that the increase in company size can influence on the level of ISR disclosure. It occurs because larger companies attempt to have higher public demand for information than smaller companies and also make the Muslim stakeholders influence or be influenced by the company's business activities.

### *5.2 Company age has a positive effect on the level of ISR disclosure.*

It indicates that the increase in company age can influence the level of ISR disclosure. It occurs because older companies attempt to have more experience in identifying internal and external circumstances. Thus, if most of these investors are Muslims, then the companies will attempt to disclose some of their social responsibility in sharia.

### *5.3 Profitability has a negative effect on the level of ISR disclosure.*

It indicates that the increase in profitability has no effect on the level of ISR disclosure. It occurs because company management will continue to report the company's activities in the social field, even though the profitability of the company increases or decreases. In other hand, companies that do not reveal the social responsibility information in sharia may be more profit-oriented or already felt enough to not disclose much of their social performance than the company which low ROE.

### *5.4 Company size, company age, and profitability simultaneously have a positive effect on the level of ISR disclosure.*

It occurs because company size, company age, and profitability are the factors that influence the level of ISR disclosure.

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# Where Do Brick and Mortar Travel Agent Customers go? Acceptance of Technology Innovation Theory in the Context of Online Shopping in Surabaya, Indonesia

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## Abstract

The rapid development of the internet has opened up so many opportunities for companies to provide the consumers for something more. In Marketing Aspects, marketers today are more oriented to digital coupons in mobile phones or computers, so it will not waste the consumers' time to actually go to the store and make purchases (Jayasingh and Eze, 2009). In addition to this, the newer system built will help the consumers to get everything more quickly, efficiently and effectively. Therefore, companies are competing to provide a better and sophisticated system so that consumers will feel helped and loyal to the company. One method to determine whether the system built by the company to the consumer is accepted or not is by using Acceptance of Technology Innovation model (ATI) (Amelia, et al., 2018). One company that uses the ATI system in operating and maintaining its company is Traveloka.

The online-based company, Traveloka, was founded in 2012 by Ferry Unardi, Derianto Kusuma and Albert. Initially this company only serves as an airline ticket search engine, so that consumers can compare flights fare from each airline. In 2013, Traveloka changed its focus to be a web serving online ticket reservation. Innovation from Traveloka not only stops there, by 2014, Traveloka begins to expand on the online reservation of hotel rooms. This makes it easier for travelers to directly book flight tickets and hotels practically, easily, quickly and efficiently (www.dailysocial.net is downloaded on the January 12, 2018).

Therefore, this study aims understand the factors that affect the actual usage of online travel agent through Technology Acceptance Model (perceived usefulness, perceived ease of use), Diffusion of Innovation (Compatibility) and perceived value as research variables. Research method used in this research is quantitative method and SPSS 22.0 is used to analyze the data. The type of this research is causal research and 150 respondents in Surabaya is used as the research sample.

There are seven hypothesis proposed in this research. Based on the results of the study, it showed that there are five significant hypotheses and two hypotheses that are not significant. Perceived ease of use and compatibility has no direct significant effect on the actual usage of online consumer in Surabaya. But positive regression coefficient indicates a positive relationship but not significant.

**Keywords:** Travel Agent, Actual Usage, Technology Acceptance Model, Acceptance of Technology Innovation, and Perceived Value

## 1. Introduction

The Internet is one of the most advanced technological developments worldwide. With the existence of the internet, it makes easier for people to access any possible information quickly and easily. The Internet seems to be a "food" of the community anytime because of the many conveniences obtained from the internet. Adding insight/ knowledge, facilitate communication, facilitate shopping, job search, and doing business (www.nesabamedia.com downloaded on June 29, 2015) are some of the examples. With the presence of internet, and also the technology that facilitate the public, many companies are using the internet as a way to ease the public to make online purchases, such as Zalora, Amazon, e-bay and others marketplace.

The rapid development of the internet has opened up so many opportunities for companies to provide the consumers something more. In Marketing Aspects, marketers today are more oriented to digital coupons in mobile phones or computers so it will not waste the consumers' time to actually go to the store and make purchases (Jayasingh and Eze, 2009). Meanwhile, when the company refuses to make changes (technology), then the company have a hard time to keep up and most likely will not survive. One of the main reasons is because internet has changed the needs and desires of consumers. One of the most common forms of technological change is to improve and present a good system. A well established and updated system will provide added value to the company and can increase the company's advantage and superiority compared to its competitors. In addition to this, the system built by a company will help the consumers to obtain everything more quickly, efficiently and effectively. Therefore, companies are competing to provide a better and sophisticated system so that consumers will feel helped, and also loyal to the company. One method to determine whether the system built by the company is accepted or not is by using Acceptance of Technology Innovation model (ATI) (Amelia, et al., 2018).

In accordance with the Acceptance of Technology Innovation model (ATI), the behavior to use is influenced by perceived value and behavioral intention. Cronin et al., (2000) states perceived value as an overall assessment of the utility of a product based on what perceptions are received and what is given. Perceived value is an important part of understanding the field of technology adoption behavior in marketing and information systems aspects (Yu et al., 2015; Kim et al., 2007; Chen and Dubinsky, 2003; Dodds and Monroe, 1985; Dodds et al., 1991 ; Parasuraman et al., 1985; Wood and Scheer, 1996; Zeithaml, 1988). Kim et al., (2007) developed a value-based model for the adoption model of mobile data services from a customers' value perspective. Research conducted by Yu et al. (2015) and Kim et al. (2007) produced a significant influence on perceived value of interest in the use of potential customers, therefore it is important to make potential consumers fully perceived value for convincing use of media tablet.

In the end, actual usage is very important aspect in understanding the context of online shopping. Taylor and Todd (2001) define actual usage as a reflection of feelings of liking or dislike in behavior. Based on a research conducted by Lin (2007); Yousafzai and Yani (2012); Moon and Kim (2001); Lu et al., (2009); Amelia (2015); Sambasivan et al., (2010) states that actual usage is the main determinant of online purchases. The online purchase is currently experiencing a major development of online service provider (Turban et al., 2015). One of the companies that uses the ATI system in operating and maintaining its company is Traveloka.

The online-based company, Traveloka, was founded in 2012 by Ferry Unardi, Derianto Kusuma and Albert. Initially this company only serves as an airline ticket search engine, so that

consumers can compare flight prices from each airline selected. In 2013, Traveloka changed its focus to be a web serving online ticket reservation. Innovation from Traveloka not only stops there, by 2014, Traveloka begins to expand on the online reservation of hotel rooms, making it easier for travelers to directly book flight tickets and hotel rooms more practically, easily, quickly and efficiently (www.dailysocial.net is downloaded on the January 12, 2018). In addition to hotel access, Traveloka facilitate consumers by creating smartphone applications. Within a week, this app became the first choice when smartphone users are searching for airline tickets and book hotel rooms (www.swa.co.id downloaded on January 12, 2018).

Traveloka itself has other competitors such as tickets, pegipegi and wego. But compared to competitors, Traveloka is a travel site that most accessed and popular by the user. The timing is precise for Traveloka. Traveloka saw a way of lifestyle changes in a practical society, and the company focuses on technology advancement more than its' competitors. One of the technological advancement is by creating a Traveloka app that gives a positive response when it was launched (www.id.techinasia.com downloaded on January 12, 2018). The Traveloka users are increasing every month. When Traveloka has penetrated 7 million users, the other competitors still have an average user 1 million users. This is interesting phenomenon, because although Traveloka has several competitors, this company has a huge user range. Traveloka itself on its website also provides discounted airline tickets and guidance on how to travel somewhere easily (www.blog taveloka.com downloaded on January 12, 2018). This provides a more advantage where Traveloka always provide technology, promotion, and more information than its' competitors. Therefore, this study uses Traveloka as the object of research.

## **2. Literature Review**

### *2.1 Perceived Usefulness*

Perceived usefulness is the first belief, which is significance for computer acceptance. Davis (1989) defined perceived usefulness as 'the degree to which a person believes that using a particular system would enhance his or her job performance.' Tan dan Teo (2000) stated that perceived usefulness is 'an important factor in determining the adaptation of innovations.' Similarly, Guriting and Ndubisi explains perceived usefulness as 'strongly associated' with productivity. Yu et al., (2015) states that perceived usefulness have a significant positive effect on perceived values. Kim et al., (2007) identifies that usability as perceived benefit affects the overall size of the value, and suggests that usefulness plays a key role in the intentions of adoption. The perceived value is dominated mainly by the emotional value. Perceived usefulness affects use because performance expectations are embedded in the definition of usefulness (Venkatesh et al., 2003) whereas performance expectations provide extrinsic motivation which is key to encouraging usage behavior (Vallerand, 1997). Thus, we tested the following hypotheses:

H<sub>1</sub>: Perceived of usefulness has a positive effect on consumer value of service provider.

H<sub>4</sub>: Perceived of usefulness has a positive effect on actual usage of service provider.

### *2.2 Perceived Ease of Use*

The second belief is perceived ease of use. Davis (1989) defined that perceived ease of usefulness is 'the degree to which a person believes that using a particular system would be free

of effort.’ Davis (1989) also defined that perceived ease of usefulness is ‘a major factor that affects acceptance of information system.’ Davis (1989) stated that ‘an application that easier to use than another is more likely to be accepted by users.’ Liao et al. (2007) found that ‘a user who perceives a higher ease of use of mobile commerce also has a stronger attitude for adoption.’ Consumers in making decisions to adopt online media, consumers will need to experience relative benefits such as ease of use compared to traditional media that already exist (Carlson et al., 2015; Choudhury and Karahanna, 2008; Yang et al., 2013). According to Kushwaha and Shankar (2013), consumers who adopt some of the same retail media will adopt retail media that offer consumers the convenience to save time and money when consumers shop all they want. The model of mobile adoption behavior, based on TRA, TAM, suggests that expressive feel, perceived pleasure, PU, and PEOU are factors that affect use. These factors are emphasized normatively in determining users to use mobile phones and mobile services (Nysveen et al., 2005a; Nysveen et al., 2005b). The ease of use has a positive and significant influence on the use of CRM systems (Karahanna et al., 2006). From these statements, we can make hypotheses that:

H<sub>2</sub>: Perceived ease of use has a positive effect on consumer value of service provider.

H<sub>5</sub>: Perceived ease of use has a positive effect on actual usage of service provider.

### *2.3 Compatibility*

Another factor that also considered has an effect to behavioral intention is compatibility. According Moore and Benbasat (1991), compatibility is ‘the degree of how far innovation is consistent with the values that exist, needs, and past experiences from potential adopter. Mallat et al. (2006) explain that compatibility has a direct effect to the intention of the usage of technology. Tornatzky and Klein (1982) state that compatibility becomes a crucial innovation characteristic that refers to customer/consumer acceptance.

When technology is compatible with values, it will also be compatible with previous individual experience possessed relative to the limits that values are stable and lasting in determining the elective period of experience to be involved (Karahanna et al., 2006). The business model is an important part to consider in the adoption of digital services as well as diffusion when discussing consumer-based information systems and one of the most influencing variables perceived value is the compatibility felt by consumers (Baird and Raghu, 2015). The service compatibility is overlooked, especially by those who have no personal experience about the service, and therefore may be less open to experimenting with services (Chin, 1998; Grove et al., 2012; Williamson, 2009). Tornatzky and Klein (1982) in Schierz et al., (2010) also stated that compatibility is a characteristic of crucial innovation that directs consumer acceptance. From these statements, we can conclude hypotheses as follows:

H<sub>3</sub>: Compatibility has a positive effect on consumer value of service provider.

H<sub>6</sub>: Compatibility has a positive effect on actual usage of service provider.

### *2.4 Consumer Value*

Cronin et al., (2000) states perceived value as an overall assessment of the utility of a product based on what perceptions are received and what is given. Perceived value is defined as the exchange between benefits, and sacrifices perceived by the customer (Ulaga and Chacour, 2001; Woodal, 2003 in Milfelner et al., 2009). Perceived value can also be interpreted as the value of the total bid or in other words, the maximum price paid by the customer for a series of economic



and non-economic attributes attached to a product (Reddy, 1991 in Johanna, 2006). Slater (1997); Parasuraman (1997) states that perceived value is important in understanding customer behavior, because the customer's perception of value affects purchasing decisions. Based on the research of Sweeney and Soutar (2001) there are 4 dimensions of perceived value that can be used to measure better perceived value.

Perceived value plays an influential role in the market. While customers feel the value of products and services, satisfaction and intent to buy will increase. Value and actual usage are closely related, in relation to real-life contexts that present various external factors whether encouraging or limiting the use of certain products (including games) (Hamari and Nousiainen, 2015). Previous research has shown that teachers consider external factors to be a major barrier to technological integration (Ertner et al., 2016). The use of services in activities has been influenced by the extent to which they deem the service valuable and useful for learning and productivity (Bourgonjon et al., 2013). Thus, the following hypothesis is proposed:

H<sub>7</sub>: Consumer value has a positive effect on actual usage of service provider.

### *2.5 Actual Usage*

Actual usage is user's self-reported frequency and volume of use (Moon and Kim, 2001). Information System usage is a frequently suggested measure of Information System success (Ndubisi and Jantan, 2003; Igbaria et al., 1997) and a key dependent variable (Delone and Mclean, 1992). Serenko (2008) explain actual usage as 'the extent to which an individual employs interface agents in his or her email application.' Also, Igbaria et al., (1997) defined actual usage as 'the actual degree of agent utilization given that the use of the system is voluntary.

## **3. Research Issue and Methodology**

### *3.1 Research Issue*

In this study, the target of population are consumers in Surabaya who accessed and used Traveloka. The characteristics are as follow: men and women, residing in Surabaya, well-educated and have used or currently using Traveloka to purchase Traveloka's product. This research uses primary data that is the data obtained from the distribution of questionnaires to the respondents in accordance with the characteristics of populations. Data collection procedure is a questionnaire given to a sample that meets the characteristics of the sample that has been determined (purposive sampling) such as male and female workers, housewives with small children where these characteristics indicate the limited time available to be able to purchase in a regular offline shop. The questionnaires were given in the form of one sheet of back and forth questionnaires, and the questionnaires were given outside office hours or busy times such as at 17:00 to 19:00 or on Saturdays and Sundays. From 165 questionnaires distributed, 150 questionnaires were returned and can be used for data formulation.

From the questionnaire completed by respondents, the indicators to measure were built from previous researches. For perceived usefulness, perceived ease of use, and Compatibility from researches by Luarn and Lin (2005), Lin (2007), Jayasingh and Eze (2009), Kuo and Yen (2009), and Sweeney dan Soutar (2001). There were 26 indicators for 5 variables tested, and these can be seen from the following research model:

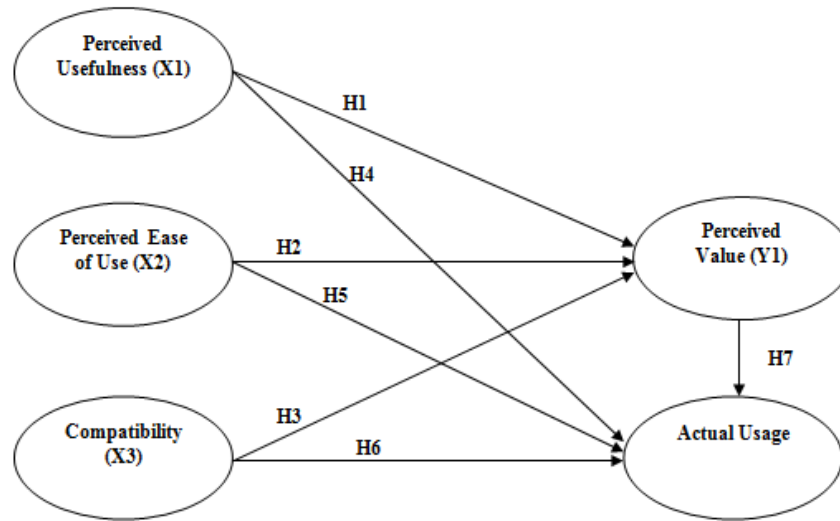


Figure 1. Research Model

Source: Analysis, 2018

### 3.2 Methodology

Aras which was used within this research were interval level measurement. Type of scale used was Summated Likert, a statement which has a range from 1 = disagree to 5 = agree, the scale represent the respondents' opinion for the questions regarding the objects being studied. In which the highest the score or number selected indicated the higher of ratings, and vice versa.

## 4. Finding and Discussion

### 4.1 Findings

This study used Multiple Regression in testing between the variables. Statistical analysis tool used to answer the problem formulation of this research is SPSS 22.0. Once the questionnaires were returned, the next step that must be conducted is descriptive statistic-analysis.

In Table 1, it shows that respondents who fill out questionnaires are mostly done by women, this can be seen from 87 respondents (58%) of respondents who are online travel agent site users are women while 63 respondents (42%) are men. This indicates that the online travel agent sites that exist today are better to able to attract the attention of female users.

Tabel 1. Respondents Characteristic by Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	63	42.0	42.0	42.0
	Female	87	58.0	58.0	100.0
	Total	150	100.0	100.0	

Source: data, compiled by researcher

From the results in Table 2, it can be seen that the characteristics of respondents based on age are dominated by age group 22-35 which is 79 respondents (52.7%), followed by 18-22 age group which is 43 respondents (28.7%), and last age group which is online travel agent users and become respondents ie age group 35-50 which is 28 respondents (18.7%). This shows that

the majority of online travel agent users are in the age subgroup of generation X and Y and the last proportion of baby boomers, but none of the respondents are from the senior age group.

Table 2. Respondents Characteristic by Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-22	43	28.7	28.7	28.7
22-35	79	52.7	52.7	81.3
35-50	28	18.7	18.7	100.0
Total	150	100.0	100.0	

Source: data, compiled by researcher

Table 3. Descriptive Statistics

	N	Mean	Std. Deviation
PU1	150	3.727	.9041
PU2	150	3.887	.7645
PU3	150	3.807	.8646
PU4	150	3.707	.8789
PU5	150	3.800	.9123
PU6	150	3.813	.8622
PU	150	3.79000000000	.771033667056
		0001	456
PEOU1	150	3.873	.7535
PEOU2	150	3.847	.8252
PEOU3	150	3.727	.8346
PEOU4	150	3.640	.8050
PEOU5	150	3.727	.8018
PEOU6	150	3.593	.8362
PEOU	150	3.73444444444	.692211024479
		4446	628
COM1	150	3.393	.8584
COM2	150	3.467	.8721
COM3	150	3.393	.8662
COM4	150	3.560	.9231
COM	150	3.4533	.76763
PV1	150	3.680	.7265
PV2	150	3.667	.7111
PV3	150	3.333	.8874
PV4	150	3.673	.8151
PV5	150	3.667	.7915
PV6	150	3.593	.7951
PV7	150	3.513	.7395
PV	150	3.58952380952	.633125805526
		3808	022

AU1	150	3.507	.7212
AU2	150	3.460	.8405
AU3	150	3.473	.8800
AU	150	3.4800000000	.735262867257
		0000	139
Valid N (listwise)	150		

Source: data, compiled by researcher

Based on the results from data processing in table 3, it shown that the average score of the mean for overall indicator is 3.61. This shows that all indicators of variables that tested can be perceived by all respondents. In addition, the standard deviation is under 2.0. this shows that the answers given by respondents are homogeneous or relatively the same. It is known that the highest mean average is perceived usefulness is 3.79. This may indicate that the indicators of perceived usefulness are best perceived by the respondents than other variables. Perceived usefulness has the highest score for standard deviation, that is 0.77. This may indicate that the respondents give answers for perceived usefulness least homogeneous compared with other variables.

Before going for Single Regression and Multiple Regression testing, first steps that must be conducted is the testing of the validity and reliability to prove that the data from the questionnaire is valid, reliable and able to be used for the next analysis.

#### 4.2 Validity Test

The criteria is if the value of the factor loading is higher than 0.160, then the statement is considered valid, however, if the value of the factor loading is less than the 0.160, then the statement is considered invalid or failed. Based on the test of the data validity, it is prove that all indicators used to estimate each variable are valid, since the value of the factor loading for every questions are more than 0.160.

Table 4. Validity Test

Indicator	FL	Indicator	FL	Indicator	FL	Indicator	FL	Indicator	FL
<b>Perceived Usefulness:</b>		<b>Perceived Ease of Use:</b>		<b>Compatibility:</b>		<b>Perceived Value:</b>		<b>Actual Usage:</b>	
PU1	.774	PE1	.855	CO1	.897	PV1	.856	AU1	.690
PU2	.820	PE2	.762	CO2	.778	PV2	.597	AU2	.813
PU3	.839	PE3	.803	CO3	.759	PV3	.615	AU3	.837
PU4	.874	PE4	.812	CO4	.650	PV4	.796		
PU5	.900	PE5	.788			PV5	.758		
PU6	.843	PE6	.706			PV6	.782		
						PV7	.754		

Source: data, compiled by researcher

#### 4.3 Reliability Test

Reliability test is do by comparing cronbach's alpha value, if the value is higher than 0.6, then the statement is considered reliable.

Table 5. Reliability Test

Variable	Cronbach's Alpha Based on Standardized Items

Perceived Usefulness	0.948
Perceived Ease of Use	0.927
Compatibility	0.895
Perceived Value	0.914
Actual Usage	0.883

Source: data, compiled by researcher

From the table 5, it is proven that the variable of perceived usefulness, perceived ease of use, compatibility, perceived value, and actual usage having the Cronbach alpha value higher than 0.60. So, it can be concluded that the statements develop the variables can be said to be consistent/reliable and can be used for further analysis.

#### 4.4 Results of Coefficient Determination

Table 6. Coefficient Determination 1

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.771 <sup>a</sup>	.594		.586	.407414027461 173

a. Predictors: (Constant), COM, PU, PEOU

Table 7. Coefficient Determination 2

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.572 <sup>a</sup>	.327		.309	.611339558634 915

a. Predictors: (Constant), PV, COM, PU, PEOU

#### 4.5 Results of Multiple Regression

##### 1. Perceived Usefulness, Perceived Ease of Use, and Compatibility to Perceived Value

The results of multiple regression are as follows:

Table 8. Coefisien Regression Model 1

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.351	.281		-1.250	.213
	PU	.397	.044	.483	9.099	.000
	PEOU	.461	.049	.504	9.485	.000
	COM	.207	.044	.251	4.737	.000

a. Dependent Variable: PV

Source: data, compiled by researcher

From table 8, the regression equation can be written as follows:

$$pV = b_1PU + b_2PE + b_3CO$$

$$pV = 0.483PU + 0.504PE + 0.251CO$$

Based on table 8, all the independent variables have positively influence towards perceived value. Perceived usefulness has the greatest regression coefficient compare to other variables, that is 0.504. Therefore, perceived usefulness is the most influential variable to perceived value. In the other side, compatibility has the smallest effect on perceived value, that is 0.251.

## 2. Perceived Usefulness, Perceived Ease of Use, Compatibility and Perceived Value to Actual Usage

Based on table 9, all the independent variables have positively influence towards actual usage. Perceived value has the greatest regression coefficient compare to other variables, that is 0.350. Therefore, perceived value is the most influential variable to actual usage. In the other side, compatibility has the smallest effect on actual usage, that is 0.048.

From table 9, the regression equation can be written as follows:

$$AC = b_4PU + b_5PE + b_6CO + b_7PV$$

$$AC = 0.253PU + 0.066PE + 0.048CO + 0.350PV$$

Table 9. Coefisien Regression Model 2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.688	.424		1.624	.107
	PU	.242	.082	.253	2.951	.004
	PEOU	.070	.093	.066	.754	.452
	COM	.046	.070	.048	.646	.519
	PV	.406	.124	.350	3.270	.001

a. Dependent Variable: AU

## F-test

Based on the calculation of SPSS, the significance of F test value in the model 1 and model 2 are 0.000, this mean H0 is rejected, so it can be concluded each model's independent variables together influencing dependent variable significantly.

Table 10. Result of F-test 1

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.492	3	11.831	71.276	.000 <sup>b</sup>
	Residual	24.234	146	.166		
	Total	59.726	149			

- a. Dependent Variable: PV
- b. Predictors: (Constant), COM, PU, PEOU

Table 11. Result of F-test 2

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.359	4	6.590	17.632	.000 <sup>b</sup>
	Residual	54.192	145	.374		
	Total	80.551	149			

- a. Dependent Variable: AU
- b. Predictors: (Constant), PV, COM, PU, PEOU

**t-test**

**1. Perceived Usefulness, Perceived Ease of Use, and Compatibility to Perceived Value**

The t test used to determine whether the independent variables of perceived usefulness, perceived ease of use and Compatibility partially (independently) have significant influence on perceived value. If the value of t test is below 0.05, then it can be stated that the variable is significantly influenced by partially. From table 12, it can be seen that perceived usefulness, perceived ease of use and Compatibility partially (independently) have significant influence on perceived value.

Table 12. Result of t-test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.351	.281		-1.250	.213
	PU	.397	.044	.483	9.099	.000
	PEOU	.461	.049	.504	9.485	.000
	COM	.207	.044	.251	4.737	.000

- a. Dependent Variable: PV

**2. Perceived Usefulness, Perceived Ease of Use, Compatibility and Perceived Value to Actual Usage**

The t test used to determine whether the independent variables of perceived usefulness, perceived ease of use, Compatibility and perceived value partially (independently) have significant influence on actual usage. If the value of t test is below 0.05, then it can be stated that the variable is significantly influenced by partially. From table 13, it can be seen that perceived usefulness and perceived value partially (independently) have significant influence on actual usage. However, perceived ease of use and compatibility variables have no significant effect on actual usage.

Table 13. Result of t-test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.688	.424		1.624	.107
	PU	.242	.082	.253	2.951	.004
	PEOU	.070	.093	.066	.754	.452
	COM	.046	.070	.048	.646	.519
	PV	.406	.124	.350	3.270	.001

a. Dependent Variable: AU

#### 4.6 Discussion

The results of previous studies showed that the variables which perceived usefulness, perceived ease of use and Compatibility, have positive and significant effects on perceived value. Also, perceived usefulness and perceived value have positive and significant effect on actual usage. In addition, the results also showed that perceived ease of use and compatibility have positive but not significant effects on actual usage of Traveloka. So, it can be concluding that from seven proposed hypotheses, five hypotheses are supported and two hypotheses are not supported.

The first hypothesis stating that perceived usefulness has a positive effect on perceived value of Traveloka is supported. The first hypothesis stating that perceived usefulness has a positive effect on behavioral intention is supported because the t test value is 0.000, below 0.05. This shows the consistency results of this study with Yu et al., (2015) that states that perceived usefulness have a significant positive effect on perceived values.

The second hypothesis stating that perceived ease of use has a positive effect on perceived value of Traveloka is supported. The second hypothesis stating that perceived ease of use has a positive effect on perceived value is supported because the t test value is 0.000, below 0.05. This shows the consistency results of this study with Kushwaha and Shankar (2013), consumers who adopt some of the same retail media will adopt retail media that offer consumers the convenience to save time and money.

The third hypothesis stating that compatibility has a positive effect on perceived value of Traveloka is supported. The third hypothesis stating that compatibility has a positive effect on perceived value is supported because the t test value is 0.000, below 0.05. This shows the consistency results of this study that when technology is compatible with values, all equal, it will also be compatible with previous individual experience possessed relative to the limits that values are stable and lasting in determining the elective period of experience to be involved (Karahanna et al., 2006).

The fourth hypothesis stating that perceived usefulness has a positive effect on actual usage of Traveloka is supported. The fourth hypothesis stating that perceived usefulness has a positive effect on actual usage is supported because the t test value is 0.004, below 0.05. This shows the consistency results of this study with perceived usefulness affects use because performance expectations are embedded in the definition of usefulness (Venkatesh et al., 2003) whereas performance expectations provide extrinsic motivation which is key to encouraging usage behavior (Vallerand, 1997).

The fifth hypothesis stating that perceived ease of use has a positive effect on actual usage of



Traveloka is not supported because the t test value is 0.452, higher than 0.05. This is not consistent with the results of previous researches that ease of use has a positive and significant influence on the use of CRM systems (Karahanna et al., 2006).

The sixth hypothesis stating that Compatibility has a positive effect on actual usage of Traveloka is not supported because the t test value is 0.519, higher than 0.05. This is not consistent with the results of previous research by Tornatzky and Klein (1982) in Schierz et al., (2010) also stated that compatibility is a characteristic of crucial innovation that directs consumer acceptance.

The seventh hypothesis stating that perceived value has a positive effect on actual usage of Traveloka is supported because the t test value is 0.001, below 0.05. shows a consistency of the results with previous researches that the use of services in activities has been influenced by the extent to which they deem the service valuable and useful for learning and productivity (Bourgonjon et al., 2013).

## **5. Conclusion**

From the research and discussion that have been done, this study successfully extends actual usage to the context of travel agent by using perceived value in mediating influence of the three variables perceived usefulness, perceived ease of use and Compatibility.

As the result of this study, it can be concluded that perceived value have positive and significant influence toward actual usage of Traveloka customer. Furthermore, perceived usefulness, perceived ease of use and compatibility have positive and significant influences towards perceived value of Traveloka customer in Surabaya. It can be seen from this research that perceived value has dominant effect in improving actual usage of Traveloka customer in Surabaya. It shows that customer with perceived value tends to become actual user of Traveloka. This study further clarifies the importance of the role of perceived value which directly has the greatest effect on actual usage. Thus, it also becomes a significant mediation to the indirect effect of compatibility and perceived ease of use towards actual usage. In addition, it can be seen also the importance of the influence of perceived ease of use that directly affect the largest perceived value. This refers to the explanation of Kim et al., (2013) perceived value as an antecedent between behavior with utilitarian motivation. This is why the perceived value as a mediating variable can significantly mediate the effect of compatibility which is a utilitarian motivation and can form perceived value before finally forming actual usage. Also, Karahanna and Straub (1999) explaining that the relationship between the perceived ease of use with actual usage is an indirect influence. This is due to the influence of perceived ease of use is mediated by other variables before it ultimately affects the actual usage. This is why the perceived value as a mediating variable can significantly mediate the effect of perceived ease of use.

Perceived ease of use and compatibility have positive but not significant effect on actual usage. This is due to the respondents who are consumers of the online service provider based on the descriptive results of respondent characteristics of age is dominated by the age group of 22-35 with a range for all respondents ie age 18-50. From the dominance and age range of respondents it can be seen that the community groups that use online service provider sites are in the generation of X, Y generation, generation Z, and baby boomer generation (Schiffman and Kanuk, 2008). The community groups have been accustomed to using the internet in daily

activities perceived convenience is not enough to establish the use of an online service provider site for real shopping. Perceived ease of use and compatibility have been considered to be something reasonable when associated with existing information technology with the level of convenience that can be said relatively similar among the various developments in information technology. This is why perceived ease of use and compatibility has no significant effect on actual usage.

From explanation above, it could be seen that perceived value is the most important variable to increase actual usage. Is imperative for Traveloka to increase perceived value of the customers. The indicator with the highest validity value for the perceived value variable is the Traveloka website. The website provides services that can make the respondents enjoy the service (PV1). The first indicator of Perceived Value is an indicator of the perceived value dimension of emotional value (Sweeney and Soutar, 2001). This is consistent with the explanation of Schiffman and Kanuk (2008): emotion by consumer researchers is considered highly evaluative in nature that includes a person's assessment of the object attitude "fun" or "unpleasant", "nice" or "not good". Therefore it is important for online service provider to always try to improve the indicator. Development in the perceived value's indicator that can be done is to ensure that the price listed is the latest updated price of any airline or other service providers. In addition, Traveloka need to always ensure that the price of each product offered is the cheapest price so that consumers will not feel disappointed.

Perceived usefulness is variable that has the second important effect directly to actual usage and perceived value, so it is very important to increase perceived value of Traveloka. The indicator with the highest validity value of Traveloka site that provides facilities in comparing information about the various products offered (PU5). Therefore it is important for Traveloka to always try to improve the indicator. Development in perceived usefulness indicator variable that can be done is to provide facilities in comparing information about various products offered can be done with the addition of new features that contain price comparison of similar products at different times. Products on different days used as a comparison will appear on the bottom screen of the main product that the user is looking for. So the emergence of this comparison web will make it easier for users in searching for references to similar products with the user search.

Although perceived ease of use do not significantly effect actual usage directly, but perceived ease of use would effect actual usage through perceived value. Also, perceived ease of use has dominant effect on perceived value, so it is important to increase perceived ease of use of Traveloka customer. The indicator with the highest validity value of Traveloka website is to provide information that easily understood (PEOU1). Therefore, it is important for online service provider to always try to improve the indicator. Development in perceived variable indicators of ease of use that can be done is to provide information that easily understood. This can be done with the addition of live chat feature in addition to providing many benefits in accessing information about this feature product. Live chat feature will reply to each user's complaint very quickly because the user is served by personalized customer service and any direct complaints are identified immediately. In addition, online service providers can also add language settings (multilingual) on the web display so that all users from various countries can access online service provider sites in Indonesia. online service provider website can also give

the best advice because many cases of user in entering wrong letters for the purpose of a product then in the search engine will not appear the product sought. From here, maybe the online travel agent website can improve the search engine similar with what google would do, which always give suggestions on user intent.

Compatibility also do not significantly effect actual usage directly, but compatibility effect actual usage through perceived value, so it is important to increase compatibility of Traveloka customer. The indicator with the highest validity value of Traveloka site to shop for products that fit the lifestyle of respondents (COM1). This is in accordance with Schiffman and Kanuk (2008) explanation which explains that one of the important factors that shape attitude is lifestyle where attitude is a statement or reflection of lifestyle. Therefore it is important for online service provider to always try to improve the indicator. Development in the indicators of variable compatibility that can be done is to always provide products that are booming in the community such as providing a variety of domestic and foreign ticket tours. In addition, providing domestic and overseas tour packages for tourists can be an alternative.

## **6. Limitation and Research Extention**

There are several limitations within this research, first, this research is only using limited sample in Surabaya. It also can be concluded that researchers and strategists need to consider other issues relating to perceived usefulness, perceived ease of use, perceived value and compatibility to increase actual usage. In further research, it is expected to increase the sample used in order for the data to be more generalized. Secondly, consider other issues such as socio – demographics factors related to actual usage.

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# The Effect of Trust to Users to Use Go-Pay and Grab-Pay as Payment Method

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## Abstract

Nowadays, online transportation has become a viable option for taking people to where they want to go. The various conveniences you get from online transportation, as well as ease of payment, compared to conventional modes of transport. One payment method offered is with the use of a mobile application, but not many people intend to use this service. The aim of this study is to know how trust can affect the intent to use the mobile payment method, namely GO-PAY and GrabPay. Additional variables used in this study include perception, social influence, self-efficacy and risk.

The respondents of this study are users of online transportation services in Makassar, Indonesia. After distributing questionnaires, there were 140 respondents who were chosen to participate in this study. Data was processed by using Structural Equation Method (SEM). The results of this study show that trust negatively affects intent. This study also found that trust is affected by perceived risk and perceived value. The additional variables are used to gauge trust. The results of the additional variables show that social influence and self-efficacy affect trust.

**Keywords:** Mobile Application, trust, intent, perception, social influence, self-efficacy, risk.

## 1. Introduction

### 1.1 Introduce the Problem

Information technology (IT) has rapidly developed and become an integral part of everyday life. The development of innovations have increasingly pampered users by giving them easy and quick access to information. An example of a popular innovation is the Internet, cellular phones, and all sorts of applications. The many cellular phone and active Internet users through their Smartphones have created an opportunity that companies can use to increase their competitive advantage by developing mobile applications to offer their goods and services. The existence of a mobile application is a way for companies to offer their best services in IT to their customers. The benefits of this phenomenon are what have made the transportation industry stay up-to-date with the latest forms of online transportation. Online transportation was first introduced to Indonesia in 2011. Grab Taxi, an online transportation company originating from Singapore, began expanding into Indonesia. This answered the needs of people living in urban areas to travel. Not even one year later, all sorts of services were made and offered to the public with a wide range of different features. In the beginning, two online transportation companies – Grab and GO-JEK – offered transportation services, but they soon began branching out and offering different services unheard of in Indonesia, such as couriers goods, documents, and food.

Users had two payment options to choose from: cash or non-cash.

Non-cash payments soon became known as M-Commerce (mobile commerce). It is an electronic trading system (E-Commerce) which can be done through a portable gadget. Users can engage in transactions through the Internet, private communications networks, Smart Cards, and other digital media. GO-JEK's M-Commerce system was known as GO-JEK Credit but changed to become GO-PAY, whereas Grab's non-cash payment system is GrabPay. Even though these systems offer non-cash methods of paying, most customers decide to pay in cash. The main justification for doing so is security risks. In Indonesia, M-Commerce is fully developed and is currently being used by many customers. However, e-payment methods such as GO-PAY and GrabPay in numerous cities across the archipelago do not use these services but instead opt to use payment methods such as cash payments, ATM transfers, Internet banking, or mobile banking.

Non-cash payment systems have long been developed but require special attention from researchers. The lack of use of such systems is related to trust, or lack thereof, from users since it involves their hard-earned Rupiahs to transact. The intent of customers also plays a significant role in affecting their decision to use or refrain from using these payment systems.

### *1.2. Explore Importance of the Problem*

Based on the explanation above regarding the rare-use of non-cash payment methods, this study will focus on the use of mobile applications to make non-cash payments. Transactions through mobile applications involve the use of virtual money to make and accept payments. The researchers are interested in discussing the use of GO-PAY and GrabPay because these two online transportation service providers were the pioneers of the industry concerning non-cash transactions. Another reason for choosing these mega-corporations is because the nature of their business has long been developed.

Conducting this research requires a theoretical understanding of the foundation cause behind a person's intent to use a mobile application to make payments. The main thing to consider is the trust of users in transferring money to other accounts registered to the online service. The next thing to consider is whether trust can create the intent to continue using these mobile applications as a legitimate form of making payments.

In order to connect the two points, the researchers also include users' perceived value or perceived value, as well as the perceived risk of using such systems. These two things are the moderating variables in gauging the effect of trust on intent. Meanwhile, measuring trust involves gauging the social influence towards users because online transportation services are closely related to the influence of social media. To enhance our measurement of trust, the researchers will also evaluate the self-efficacy of users. This must be done because mobile applications are inseparable from IT users.

### *1.3 Describe Relevant Scholarship*

Research on use of non-cash payment methods have been done in the past. Istiyana and Irawan (2017) examined the effects of trust on intent in the case of joint bank accounts. They found that trust plays a significant role in affecting intent in opening and using a joint bank account. Additional variables used in that study were perceived value, perceived risk, perceived convenience, and antecedents of the trust variable. Another study related to the use of virtual money, specifically the GO-PAY service, was conducted by Wardhani (2016) which analyzed

various influential factors of GO-JEK users on GO-PAY. The study concluded that perceived value, ease of use, supporting circumstances, and trust all played significant roles in affecting GO-JEK users' perception. He also found that the ability of users, social influence, and security were closely related to GO-JEK users' perception.

This study contributes to the literature regarding payment systems facilitated by third parties (mobile application developers). Referring to previous studies, the researchers want to test the effects of trust on intent to use mobile applications as an alternative way of making payments. Moderating variables used in this study include perceived risk and perceived value. Gauging trust was done by adding social influence and users' self-efficacy.

#### *1.4. State Hypthesis and Its Correspondence with the Research Design*

Based on the background described above, this study investigates further how trust affects intent to use mobile applications to make non-cash payments. Perceived value, self-efficacy, social influence, and perceived risk are used as an additional factor to gauge the relationship between the two variables. This study also employs the use of perceived convenience and perceived security as antecedents of the trust variable. The first hypothesis of this study is as follows:

H1: Trust has a positive and significant effect on intent to use mobile applications to make payments.

The first hypothesis is the main problem that the researchers will answer in this study, but there are other issues that are closely related to this problem. When using a service, the perceived value of using a service is important and related to trust. Furthermore, in conducting online activities, risk, security, and convenience can all affect overall trust and intent of using said service. Based on this explanation, the researchers have devised the following hypotheses:

H2: Trust has a positive and significant effect on perceived value;

H3: Perceived value has a positive and significant effect on intent to use mobile applications to make payments;

H4: Trust has a negative and significant effect on intent to use mobile applications to make payments;

H5: Perceived risk has a negative and significant effect on intent to use mobile applications to make payments

H6: Social influence has a positive and significant effect on trust

H7: Self-efficacy has a positive and significant effect on trust.

## **2. Methodology**

This study aims to provide empirical evidence on how the intent to use mobile applications to make payments among online transportation service users is affected by trust. In addition, the perception of users about service providers is just as important in this study so the researchers also aim to find empirical evidence that shows how trust affects perceived value and how perceived value affects intent to use mobile applications to make payments.

This study also aims to obtain empirical evidence regarding the effects of trust on perceived risk and how perceived risk affects intent to use mobile applications as an alternative to make payments. Another aim of this study is to find empirical evidence of the effects of perceived comfort, social influence, self-efficacy, and perceived study on trust in using mobile applications to make payments.

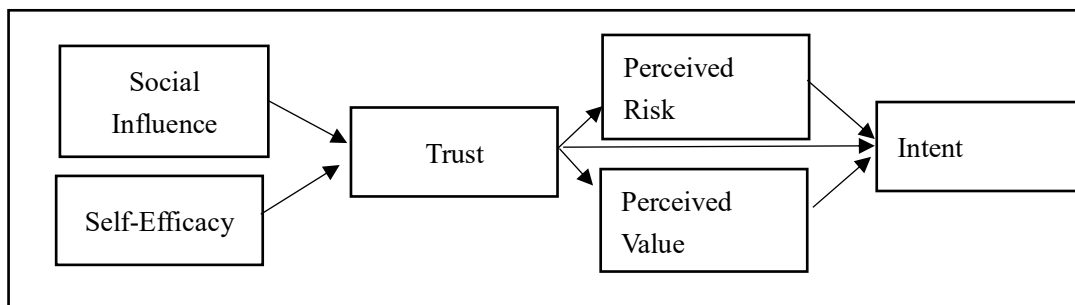


Collecting data for this study was done with the help of surveys to obtain the opinions of employees. Self-administered surveys are a form of primary data collection by asking questions to individual respondents (Jogiyanto, 2005).

The population used in this study consists of online transportation users. The researchers used purposive sampling to determine the final sample of this study. This method of determining the research sample is done by ensuring that the respondents fulfill certain criteria. The criteria used in this sampling method are judgment and quota (Jogiyanto, 2005).

Questionnaires were distributed directly and through online platforms to people living in Makassar. The questionnaire items serve to provide answers regarding the several variables used in the research construct. We can find the construct of this study in the figure below.

Research Model



This study follows the research construct used in several previous studies so the researchers tested the questions used in the questionnaire. Testing the questionnaire items was done by conducting a pilot test which was given randomly to several college students who have experience in using online transportation services. The questionnaire taken for previous studies were in English and then translated into Indonesian by the researchers. The translated questionnaire was corrected and validated by a professional linguistic who determined the language used in the questionnaire was correct.

Of the ten self-administered questionnaires, eight were returned. The results of the pilot test were deemed acceptable because the students understood what the questionnaire items meant and how to answer them.

This study measures the effect of trust on intent to use mobile applications as a media to make payments. This model was developed in a previous study by Istiana and Irawan (2017), but social influence and self-efficacy variables were added to measure trust.

The definitions of the variables used in this study are as follows:

a. Intention

Intent shows the willingness of a user to use a mobile application, i.e. GO-PAY or GrabPay, as a form of paying for his or her purchases. This variable is measured by using four question items adopted from Suh and Han (2003) and Kuat et al. (2008). Each question in this study was answered using a 1 to 5 Likert Scale, ranging from strongly disagree to strongly agree.

b. Trust

The definition of trust used in this study was adopted from Yousafzai et al. (2009). Trust is the willingness of a user to use a mobile application, i.e. GO-PAY or GrabPay, to pay for his or her purchases with the expectation that a mobile application will fulfill his or her needs without being monitored or controlled by the provider of a joint account. Trust is measured by using

five question items adopted from Bhattacharjee (2002), Chellappa (2005), Suh and Han (2002), and Eid (2011). Each question in this study was answered using a 1 to 5 Likert Scale, ranging from strongly disagree to strongly agree.

c. Perceived Value

Perceived value is defined as the value a user's perception about the benefit(s) he or she will receive in exchange for an amount of money spent to receive the expected benefit (Chen and Dubinsky, 2003). Perceived risk is measured by using four question items adopted from Sidersmukh et al. (2002) and Cen and Lee (2008). Each question in this study was answered using a 1 to 5 Likert Scale, ranging from strongly disagree to strongly agree.

d. Perceived Risk

Perceived risk in this study is defined as the uncertainty of an action (Shamsadani et al., 2008) that can cause the possibility of losses (Sweeney et al., 1999). This variable is measured by using three question items adopted from Malhotra et al. (2004) and Luo et al. (2010). Each question in this study was answered using a 1 to 5 Likert Scale, ranging from strongly disagree to strongly agree.

e. Social Influence

Social influence is defined as the extent of an individual's ability to be persuaded to use a new system used by others. Another definition is the effect of a social condition which obligates an individual to use a mobile application, i.e. GO-PAY and GrabPay, as a payment method. This variable was adopted from Whardani (2016). Each question in this study was answered using a 1 to 5 Likert Scale, ranging from strongly disagree to strongly agree.

f. Self-Efficacy

Self-efficacy is the belief in one's own capabilities in doing something. Another definition is how large someone trusts him or herself to use a mobile application, i.e. GO-PAY or GrabPay, to make online payments. This variable was adopted from Wicaksono (2017). Each question in this study was answered using a 1 to 5 Likert Scale, ranging from strongly disagree to strongly agree.

Analyzing the data was done using SEM. SEM is a statistic technique which is commonly used to test a cause-effect model by combining existing theories and quantitative data. SEM can accommodate several statistical techniques such as combining path analysis and factor analysis (Widianti, 2008). The software used to process the statistical data is SPSS 20.0 and Amos 21.0.

### 3. Results

The aim of this study is to know whether trust has an effect on intent to use mobile applications to make payments. Other variables such as perceived security, social influence, and self-efficacy, and perceived convenience were used to measure trust. Antecedents of the trust variable include perceived risk and perceived value on intent. Furthermore, the researchers distributed questionnaires as a cost-effective and time-saving way of obtaining answers from respondents.

Questionnaires were sent through email or administered directly to respondents who have experience in using online transportation mobile applications. A total of 50 questionnaires were sent via email and 40 questionnaires were sent back. 100 questionnaires were directly administered to participants. Of the total number of questionnaires returned to the researchers,

all of them filled the criteria set for this study. In total, 140 questionnaires contained data that was used in this study.

After the questionnaires were returned, they were processed to extract information needed to conduct this study. First, descriptive statistics describe the basic features of the obtained data. The results of descriptive statistics are useful for supporting interpretations through frequency tabulations for expressing the average nominal data trends for each variable.

Construct	Min	Max	Mean	Std Deviation
Intent	1,00	5,00	3,6929	,97281
Trust	1,00	5,00	3,5473	,83824
Perceived Value	1,00	5,00	3,8893	,77464
Perceived Risk	1,00	5,00	3,4623	1,04500
Perceived Convenience	1,00	5,00	3,7891	,83303
Social Influence	1,00	5,00	3,2641	1,04961

From the table above, we can see that the standard deviation is smaller than the mean value. The next step is to test the results of this study. Testing a cause-effect relationship between variables is done using SEM so the researchers first applied the validity and reliability tests on the research instruments. There are two forms of the validity test, namely convergent validity and discriminant validity. Validity and reliability tests on the instruments were done by using SPSS 20.0. The results of these tests can be found in full in the attachment section of this paper.

Whether the instruments of this test were valid or not could be seen from the r-count of each indicator. The research instrument is significant if the correlation value is greater than 0,25. Furthermore, the instrument is categorized as reliable when the correlation value is greater than 0,60 (Ghozali, 2001). The results of the reliability test on each construct can be seen below.

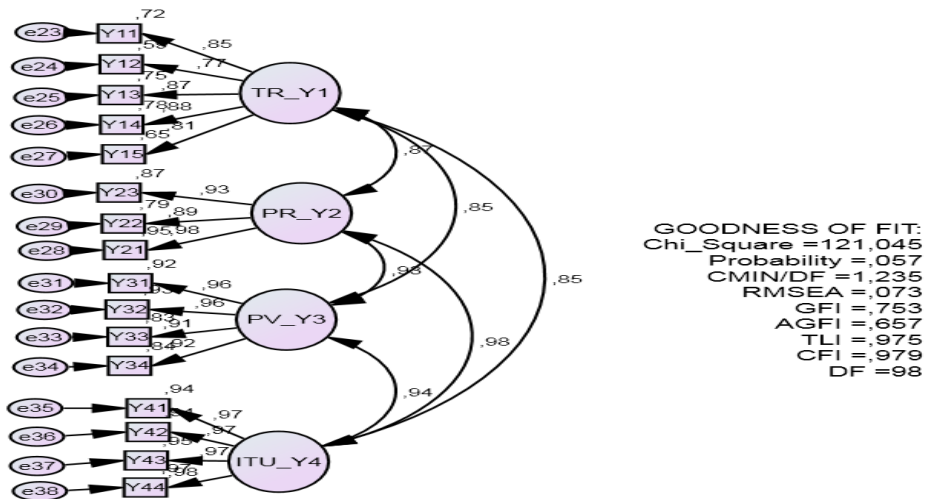
### 3.1 Reliability Test

Konstruk	Cronbach's Alpha	N of Items	Keterangan
Intest	,987	4	Reliable
Trust	,919	5	Reliable
Perceived Value	,964	4	Reliable
Perceived Risk	,957	3	Reliable
Social Influence	,855	3	Reliable
Self-Efficacy	,961	7	Reliable

After doing the validity, reliability, data normality, data outlier, and multicollinearity tests, we concluded that the results are within the normal limits and the research could be continued to the goodness of fit model to test the significance of causality.

### 3.2 Goodness of Fit Test

The results of the SEM analysis in the diagram below was made using AMOS 21. The goodness of fit model needed corrections to connect the errors of each construct (Ghozali, 2001). The goodness of fit for each model in this study can be seen in the table below.



Evaluation Criteria for the Goodness of Fit Index Variables Trust (Y1), Perceived Risk (Y2), Perceived Value (Y) and Intent (Y4)

Goodness of fit index	Cut-off Value	Results*	Remarks
$\chi^2$ – Chi-square	Expected Value	121,045 < (0,05:98= 122,108)	Good
Probability	$\geq 0.05$	0.057	Good
CMIN/DF	$\leq 2.00$	1.235	Good
RMSEA	$\leq 0.08$	0.073	Good
GFI	$\geq 0.90$	0.753	Marginal
AGFI	$\geq 0.90$	0.657	Marginal
TLI	$\geq 0.95$	0.975	Good
CFI	$\geq 0.95$	0.979	Good

The table above shows that the measurement of the Y1, Y2, Y3 and Y4 fit in the model. This is proven from the six variables fit the criteria. Therefore, we can conclude that the model is acceptable.

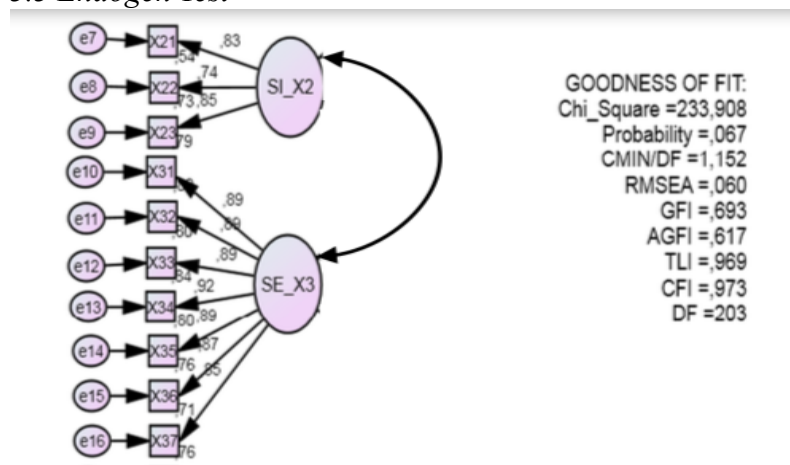
Next, the loading factor value or lambda coefficient ( $\lambda$ ) of each of the variables can determine whether they can be used as indicators. Their values can be seen in the table below.

>Loading faktor ( $\lambda$ ) in Measuring Trust (Y1), Perceived Risk (Y2), Perceived Value (Y3) dan Intent (Y4)

Indikator Variabel	Loading Factor ( $\lambda$ )	Critical Ratio	Probability (p)	Ket
<b>Trust (Y1)</b>				
Y11	0,848	Fix	0,000	Significant
Y12	0,770	6,126	0,000	Significant
Y13	0,868	7,460	0,000	Significant
Y14	0,884	7,702	0,000	Significant
Y15	0,807	6,602	0,000	Significant
<b>Perceived Risk (Y2)</b>				
Y21	0,977	14,501	0,000	Significant
Y22	0,891	10,183	0,000	Significant
Y23	0,931	Fix	0,000	Significant
<b>Perceived Value (Y3)</b>				
Y31	0,957	Fix	0,000	Significant
Y32	0,964	15,812	0,000	Significant
Y33	0,909	11,891	0,000	Significant
Y34	0,918	12,332	0,000	Significant
<b>Intent (Y4)</b>				
Y41	0,969	20,805	0,000	Significant
Y42	0,969	20,736	0,000	Significant
Y43	0,974	22,120	0,000	Significant
Y44	0,983	Fix	0,000	Significant

The loading factor ( $\lambda$ ) shows that the four variables are significant and each of the indicators can be used in for future analyses.

3.3 Endogen Test



Evaluation Criteria of Goodness of Fit Index Variables  
Social Influence (X2) and Self-Efficacy (X3)

Goodness of fit index	Cut-off Value	Hasil Model*	Remarks
$\chi^2$ – Chi-square	Expected Value	233,908 < (0,05:203=237,240)	Good
Probability	$\geq 0.05$	0.067	Good
CMIN/DF	$\leq 2.00$	1.152	Good
RMSEA	$\leq 0.08$	0.060	Good
GFI	$\geq 0.90$	0.693	Marginal
AGFI	$\geq 0.90$	0.617	Marginal
TLI	$\geq 0.95$	0.969	Good
CFI	$\geq 0.95$	0.973	Good

The same tests were run to measure Social Influence (X1) and Self-Efficacy (Y2). From the eight criteria provided, six of them were met, meaning that the model can be accepted. These two variables were also input to determine their loading factor value or lambda coefficient ( $\lambda$ ). The results can be seen in the table below.

Loading faktor ( $\lambda$ ) of Social Influence (X1) and Self-Efficacy (X2)

Indikator Variabel	Loading Factor ( $\lambda$ )	Critical Ratio	Probability (p)	Remarks
Variabel Social Influence (X2)				
X11	0,825	Fix	0,000	Significant
X22	0,736	6,018	0,000	Significant
Variabel Self Efficacy (X2)				
X21	0,888	Fix	0,000	Significant
X22	0,892	8,975	0,000	Significant
X33	0,893	9,004	0,000	Significant
X34	0,916	9,599	0,000	Significant
X35	0,893	9,006	0,000	Significant
X36	0,872	8,516	0,000	Significant
X37	0,845	7,964	0,000	Significant

The loading factor in Table 33 shows that the the measurement test of the variables X1 and X2 are significant and can be included in the following analyses.

### 3.4 Hypotheses Testing

HIP	Variabel			P-Value	Direct Effect	Indirect Effect	Total Effect	Remarks
	Exogen	Intervening	Endogen					
1	Social Influence (X2)		Trust (Y1)	0,001	-0,364	0,000	-0,364	Negative and Significant
2	Self Efficacy (X3)		Trust (Y1)	0,007	0,510	0,000	0,510	Positive and Significant
3	Trust (Y1)		Perceived Risk (Y2)	0,000	0,949	0,000	0,949	Positive and Significant
4	Trust (Y1)		Perceived Value (Y3)	0,000	0,935	0,000	0,935	Positive and Significant
5	Trust (Y1)		Intent (Y4)	0,773	-0,059	1,002	0,943	Negative and Insignificant
6	Perceived Risk (Y2)		Intent (Y4)	0,000	0,698	0,000	0,698	Positive and Significant
7	Perceived Value (Y3)		Intent (Y4)	0,000	0,364	0,000	0,364	Positive and Significant
8	Trust (Y1)	Perceived Risk (Y2)	Intent (Y4)	0,000	-0,059	1,008	0,949	Positive and Significant
9	Trust (Y1)	Perceived Value (Y3)	Intent (Y4)	0,000	-0,059	0,994	0,935	Positive and Significant

From the data analysis above, trust is directly and significant affected by intent. However, after adding the antecedents of trust variables, we find that trust has direct and significant relation to intent. This is due to mobile applications being more convenient and comfortable to use.

#### a. Relationship of Trust, Perceived Risk and Perceived Value on Intent

The first hypothesis of this model tests whether trust has a positive effect on intent. Statistically, the first hypothesis is not supported. This shows that users are hesitant to use mobil applications to make payments. This is indicated by users having to transfer money to a virtual account in the mobile application. Possible causes of this hesitance is that electronic transactions are vulnverable to theft and rampant hacking.

However, trust has a positive and significant effect on perceived value. This supports the third hypothesis. This also shows that users perceive mobile applications give added value when used as a form of making payments which can create an intention to use them.

Next, perceived risk has a negative effect on intent. This means that people still perceive using mobile applications to make payments as rather risky.

From the findings mentioned above, they show that users still lack trust in using mobile applications to make payments. However, when given information regarding security measures implemented to protect their interests, users' trust in using these applications will rise

Using mobile applications to make payments is indeed rather new in Indonesia, especially like Makassar. Users have to deposit a sum of money before being able to make electronic payments through GO-PAY and GrabPay. This causes a lack of trust in users in addition to the relative newness of virtual money. However, online transportation providers can provide security features and added value to their services and applications to create trust that can lead to an intention to use such applications to conduct electronic transactions.

Additional tests were run to examine the effects of trust on intention. In this study, perceived risk and perceived value were added as moderating variables. The results show that trust positively and significantly affects intention when moderated with the perceived risk variable. This shows that users are still untrusting towards using mobile applications because of its perceived risks. Furthermore, this is closely related to their money being vulnerable to theft and fraud.

When testing the effects of trust on intention with perceived value as a moderating variable, trust and intention have a positive and significant relationship. This means that the trust of users will increase when they perceive such mobile applications provide added value such as points, bonuses or discounts.

#### b. Relationship between Trust and Perceived Value

H2 in this study's model tests whether there is a positive relationship between trust and perceived value. The results show that mobile applications are considered worthwhile if users trust the application. This is supported by a previous study done by Istiana and Irawan (2017) that stated that trust in joint accounts will increase based on the value they hope to receive from such services.

In using mobile applications to make virtual payments, the services offered are not obtained easily. The prices that must be paid for certain services will create a perception of value. Perceived value is closely related to trust (Dewi and Rastin, 2016; Wulandari and Ekawati, 2015; Chen and Lee, 2008; Fiol et al., 2010).

#### c. Effect Trust on Perceived Risk

H4 tests the negative effect of trust on perceived risk. Based on the causality test, this hypothesis is not supported. This shows that users consider using mobile applications to make payments does not bear any significant risk. Since most users of these applications are new and somewhat inexperienced, they feel that any problems or complaints will be dealt with by the company's customer services.

#### d. Social Influence and Self-Efficacy on Trust

H6 tests whether there is a relationship between social influence and trust in using mobile applications to make virtual payments. Statistically, the sixth hypothesis is not supported. This shows that social influence does not play a crucial role in determining whether someone will conduct online transactions.

These findings are supported by those of Wardhani (2016) who analyzed various factors of



perception on using GO-JEK and GrabPay. The findings in this study show that there is no significant relationship between social influence and trust in using these applications.

Even though there are a large number of users on social media platforms such as Facebook, Twitter, Instagram, and Path, this does not mean that users are trusting towards online services. This is because users can easily share positive and negative articles on these social media platforms so filtering information can be quite difficult. This reduces the amount of trust that users have on using mobile applications to make payments. However, users who have personal experience in doing online transactions are usually more trustworthy towards such systems.

H7 examines the relationship between self-efficacy on trust. Statistically, this hypothesis is supported. It is also in line with the study by Wicaksono (2017) who found that self-efficacy are affected by using e-money. This shows that self-efficacy plays an important role since users who are technologically impaired are more likely to steer clear of using online systems to make and receive payments. However, it is mostly the older generation who is technologically impaired and has no understanding of how to use mobile applications to make payments. Self-efficacy is important since registering and depositing money into a virtual account can be somewhat tricky. This is a consideration that can also affect trust in using mobile applications to pay for purchases.

In this study, there were users who wanted all sorts of instant, cheap, safe, and optimal services that will get them more interested in doing online transactions. Further more, users do not want to be troubled with long cash-depositing times. In using mobile applications for making payments, there are three main actors, namely the user, the driver, and the online transportation service provider. The rates given to both the user and drivers, including discounts, must be expressed clearly to the driver and user without causing losses to any of the parties.

Mobile applications have long been used as a media to make payments, but marketing the system to the public has been somewhat ineffective, proven by the limited number of people who pay through these systems and find value in them. Another important point to consider is the point of security provided by the service provider. The amount deposited into the virtual account must be accounted for, and users want a guarantee from the service provider that their money is in safe hands. Without such a guarantee, any other services and facilities provided by these companies will not develop easily.

Risk plays a role in determining whether a user will actively participate in using mobile applications to make payments. As long as service providers offer guarantees of security and deal with complaints, customers will be more prone to using their products and services. In addition, account holders must offer their personal information to the companies in order to use their services. This is done to ensure that nothing out of the ordinary harms any of the parties involved in the online system.

Social influence should be used as a tool to enhance the use of mobile applications as a method of making payments. This can be done by filtering reviews and testimonies posted by users to ensure that only verified members can leave comments. This will ensure that any positive and negative comments read by potential users are real and reflect the true nature of the services provided.

Depositing money to pay for online transactions should be quick and easy. Online service providers have acknowledged this issue and have provided various ways to deposit cash without

consuming too much time and effort. There are other avenues available to customers who wish to deposit cash. They can be done via supermarkets, ATM transfers, mobile banking, and even through a GO-JEK or Grab driver.

#### **4. Conclusion**

The proposed research model has been put through the goodness of fit test which shows that the model is a good fit. Testing of the seven hypotheses was done using AMOS 21. The results show that three of the hypotheses are supported while four of them are unsupported. Social influence and self-efficacy have a positive and significant relation to trust. A negative relationship was found between trust on perceived risk and intention. Other tests showed that perceived risk and perceived value had a positive and significant relationship to intention. This is supported by additional tests done by the researchers by using the effects of trust on intention as a moderating variable. The relationship was positive and significant.

The researchers conclude that trust is affected by social influence and self-efficacy. However, there is very little trust of the community on using mobile applications to make payments. This can be tied to the perceived risk and perceived value variables that can create a feeling of trust and intention to use such applications to make online payments.

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# The Influence of Inquiry and Discovery Model in Social Science Learning on Critical Thinking Skill of Grade VIII Students in SMP Muhammadiyah 3 Depok Yogyakarta

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## Abstract

The purpose of this research is to know: (1) whether there is a difference of students' critical thinking ability as a result of the application of Inquiry and Discovery model in IPS learning in SMP Muhammadiyah 3 Depok , (2) whether or not there is a difference of students' critical ability as a result of the application of Discovery model and Conventional in IPS learning at SMP Muhammadiyah 3 Depok , (3) whether or not there is a difference of students' critical criticism ability as a result of application of Inquiry and Conventional model in IPS learning at SMP Muhammadiyah 3 Depok .

This study is a quasi-experimental study (quasi-experimental) with no equivalent pretest-posttest control group design. The population of this study was all students of class VIII. Samples were taken by simple random sampling technique . Technique of collecting data used critical thinking ability test before ( pretest ) and after ( posttest ) treatment. Validity was determined on the consideration of the supervisor and validator. Instrument reliability was estimated using internal reliability with the Cronbach alpha formula .

The results showed: 1) There is a difference of critical thinking ability as result of applying of inquiry and discovery model in social science learning; 2) There is a difference in critical thinking ability as a result of the application of discovery and conventional models; 3) There is a difference of critical thinking ability as a result of application of inquiry and conventional model in social science learning.

**Keywords :** inquiry, discovery, critical thinking

## 1. Introduction

The process of education in school basically how the process deliver students to become good citizens and can do social interaction with the environment. Theoretically, Social science education brings these missions to deliver students into human beings who have high social intelligence (social smart) in accordance with the identity and character of the Indonesian (Somantri, 2001: 75). The purpose of IPS (Social science education) is to develop student's personalities to be intelligent social actors (Birsyada, 2016: 1). Slameto (2003: 2) explains that learning is a process to obtain a new behavior change, as a result of individual experience from individual interaction with the environment.

Based on the opinion above, formal learning process in school is intended to direct the student changes in a planned way in term of knowledge, skill and attitude. Interaction is also influenced by the environment, such as principal, teachers, students, subject, and various learning sources.

In this modern era, students are expected to be able to improve self quality. Students are not only required to understand the material, but also required to be active in learning process. So learning process is no longer centered on the teacher, but on students (student centre). Therefore, there are various problems in how students can actively participate in learning process.

There are many factors influence the success of learning process (students' critical thinking) in school including teachers, students, environment, learning infrastructure, resources and society (Munirah, 2015: 234). Among these factors, teacher is an important factor. This is because teacher is the communicator of learning factors. Current educational practices are still characterized by teacher role that more dominant in learning and also identified by student who only memorize the subject, so the success of learning cannot be achieved. This also happens in learning process of social studies. Martorella (Solihatin & Raharjo, 2009: 14) explained that social studies more emphasize "education" than "transfer of concepts", because in social studies students are expected to gain an understanding of concepts and to develop and train attitude, value, moral, and skill based on their concepts.

The role of Social Science is very important to educate students in developing knowledge, attitude and skill so that they can actively taking part in their lives as member of society and good citizens (Susanto, 2015: 143). A successful learning is if student can understand the subject presented by teacher and get the expected learning result. The success of learning can be improved if it is supported by facilities and infrastructure, and the ability of teachers to manage class using right, method, strategy and model. Therefore, innovative teachers always create new ideas to invite students actively so they know student's difficulties and find alternative solutions.

However, based on observation result at Muhammadiyah 3 Junior High School of Depok, it was found that there were various problems in social studies learning process, such as: there were students who did not pay attention to teacher explanations, but not a few students were chatting during teaching and learning activity. In addition, there were students who slept in the classroom. This caused by the lack of enthusiasm of students to the subjects explained by teacher, or the learning model used was still conventional and less interesting for students. Thus, these problems can be solved using active learning model ie discovery and inquiry learning model. Discovery and inquiry learning is a learning model that directly observes or investigates anything from the surroundings. This learning model is expected to encourage students to find a new thing of surroundings condition, through the findings that have been previously investigated.

Based on problems described above, the researchers drew three hypotheses to be studied: 1) there is a difference in students' critical thinking skill as a result of inquiry and discovery model application in Social studies learning in SMP Muhammadiyah 3 of Depok; 2) There is difference in students' critical thinking ability as a result of the application of discovery and conventional models in social studies learning at Muhammadiyah 3 Junior High School of Depok; 3) There is difference in students' critical thinking abilities as a result of the application of inquiry and conventional models in social studies learning in Muhammadiyah 3 Junior High School of Depok.

### *1.1 Critical Thinking Skill*

Paul (Liberna, 2011: 192) defines critical thinking as an intellectual discipline process in which

someone actively and skillfully understands, applies, analyzes, explores and evaluates various information that have been collected from experience, observation, reflection, reasoning or communication. Critical thinking is a sense of curiosity, of information, reason, open minded, flexible, fair thinking in evaluation, honest and wise in judgment, willing to reconsider, orderly in complex terms, diligent in finding relevant information, reasonable in criteria selection, focus in investigation, and persistence in searching for results that are as accurate as the subject and state of permission of the investigator.

Gokjav, Stojanovic & Rajic (2014: 596) states that critical thinking can develop personality, so it is important to be developed in learning as well as in professional discussion. The ability to think critically is characterized by a high level of thinking and depth of thinking. The ability to use reason and reflective thinking focuses on deciding what is believed and done. Critical thinking has several characteristics or criteria in assessment. In essence, to find out whether someone thinks critically or not is still very difficult to know, because basically critical thinking is an abstract phenomenon.

Nurhayati (2011: 69) also describes the same thing that the characteristics of people who are able to think critically are: 1) have a particular set of ideas used to approach ideas; 2) have strong motivation to find and solve problems; 3) being skeptical or not easy to accept ideas unless he can prove the truth.

According to Demirel (Birgli, 2015: 74) The advantages of critical thinking are: a) critical thinking people think freely and independently; b) people do not behave without thinking; c) individual can express the problem explicitly. Based on the description of critical thinking indicators, aspects to be used as a reference in this research are:

- 1) Able to formulate issues
- 2) Able to reveal the facts to solve the problem
- 3) Able to choose opinions that fit the reality
- 4) Able to give opinions from different points of view
- 5) Able to solve problems arising from a statement.

Faiz (2012: 2) states the goal of critical thinking is simple, to strongly guarantee that this is correct and valid thinking. Critical thinking can encourage students to express opinions or new ideas. Sapriya (2011: 87) states that the goal of critical thinking is the ability to test an opinion or idea.

### *1.2 Discovery and Inquiry learning model*

Active learning is a learning that invites students to actively learn. One of active learning models that can be applied is the model of inquiry and discovery learning. Johnson, (2010: 106) explains that discovery and inquiry learning model is part of direct learning model that is student-centered, so students can pay attention and be responsible. Four student-centered learning models are; discovery, problem based learning and inquiry. Discovery and inquiry learning is a learning model that directly observes or investigates anything from environment. McPeck (Kuswana, 2013: 21) defines that critical thinking is the accuracy of the use of reflective skeptics of a problem considered in problem areas based on subject. In line with the statement that *inquiry* and *discovery* model application oriented to how students observe and organize problems in the surroundings. Thus, these two models will influence students' critical thinking skills.

The result of Ginanjar's research (2015: 123) explains that *inquiry* learning is better than group using other direct learning. Sirait (2012: 25) describes that *inquiry training* teaches students to be more willing to express their opinions in class. Moore, (2015: 359) explains that generally the purpose between *inquiry* and *discovery* is same, both solve a problem, but *discovery* has an investigation pattern, while *inquiry* has no investigation pattern. *Inquiry* and *discovery* models provide space and opportunities for students to learn the subject so learning is more *student centered*, not *teacher centered*. The research result of Sutabawa, I Made Ngangi, Jantje Mawitjere, Verra (2014) explains that learning using *inquiry* and *discovery* models is better than students' critical thinking skills taught using conventional learning models.

*Inquiry* is basically a learning model that aims to make students search, find and realize every problem. Hosnan (2014: 341) explains that the *inquiry* model is centered to student's activities, but teacher still has an important role as a facilitator and student guide to learn. Hosnan explains the steps of implementing *Inquiry* learning starts from orientation, formulating problems, formulating hypotheses, collecting data, testing hypotheses, formulating conclusions. *Inquiry* has higher-level mental processes, for example formulating problem by themselves, designing experiments, conducting experiments, collecting and analyzing data, drawing conclusions, doing objective attitudes, honest, inquisitive and open desires (Sardiman, 2010: 169) .

Johnson (2010: 163) explains that "*inquiry moves students from passive receivers of knowledge and it also refelects a thingking process that can ben applied to variety of situation*". It means that inquiry drives students from passive acceptance of knowledge into active knowledge creators. In general, the requirements for *inquiry* learning model are characterized by the following characteristics: (1) social aspect in the classroom and an open atmosphere that invites students for discussion; (2) focusing on the hypothesis and (3) the use of fact as evidence (fact information). Collete & Chiapeta (1994: 96-97) wrote that, *inquiry* strategies using "SE Instructional Model" are include five stages, namely *engagement*, *exploration*, *explanation*, *elaboration* and *evaluation*.

Sani (2014: 97) states that the *discovery* learning model is essentially similar to *inquiry*. Moore (2015: 354) states that "*discovery learning is mean by which students engage in problem solving in developing knowledge or skills*". It means that *discovery* is a learning way to directly involve students in solving problem by developing their knowledge and skill. According to Hosnan (2014: 282) that *discovery* is a model to develop an active way of learning by themselves, self-investigating, so the results obtained will be easy to remember and long lasting in memory. Through learning discovery, students can also learn to think analytically and try to solve their own problem. Saefudin & Berdiati (2014: 56) explained that, *discovery* model is a learning theory that defines as a learning process that occurs when learning is not presented with the final result, but through the process of finding. Students are expected to organize their own learning experiences. Based on the explanation above, it can be concluded that *discovery* model learning is a learning that can encourage students to be more active in digging their own knowledge, new or more real knowledge, so that in learning students not just accept what has been said by teacher, what they read, and what is seen, but it is the way to find answers for every solution.

*Discovery* learning models have their own characteristics. Based on various definitions that already described above, there are some characteristics: 1) solve the problem; 2) student-

centered; 3) connecting and combining new knowledge with knowledge that has been studied. Westwood (Sani, 2014: 98) states that *discovery* learning model will be effective if: (1) Learning process is carefully structured; (2) Students have the initial knowledge and skills to learn; (3) Teacher gives support to students to conduct an investigation. The *discovery* learning model is an instructional approach focuses on student's personal experience as a foundation to develop conceptual knowledge. It seems impossible because to bring all students' experience in the classroom is not an easy thing. Therefore in this case students need a discovery context.

### *1.3 Social science learning*

Supardan (2015: 16) explains that social science (IPS) is a term for naming a study which consisting a number of social sciences organized for learning programs in schools. IPS is more as a learning program with multi/interdisciplinary, which should be reflected in its learning method. Supardi (2011: 183) explains that subjects of social studies are including geography, history, sociology and economics. Social Sciences (IPS) as one of the existing subjects in junior high school (SMP) has its own content. IPS learning materials in junior high school (SMP) using subject organization with correlation approach (correlated), means that learning material is developed and arranged in reference to some disciplines limtly and then linked with the real life aspects (factual / real) of learners based on age characteristic, thinking development level, and behaving habit (Sapriya, 2014: 200).

According to Chapin & Messick (Isjoni, 2007) the goals of IPS are: a) Social science learning provides knowledge to make learners as good citizens, being aware as God's creatures, being aware of their rights and duties as citizens, democratic and responsible, have a national identity and nationality. Learners need to be provided with knowledge and values sourced from social sciences and humanities as well as social issues and nationalities; b) Social science learning develops the ability to learn creative thinking in order to understand, identify, analyze and then have social skills to participate in solving social problems; c) Social science learning trains self-study, to build togetherness through creative and innovative learning programs; d) Social studies learning develops intelligence, habit and social skills. Social studies learning is expected for students to have intelligence and skills in various matters related to social life. Social science learning fosters a pleasure towards every social activity, thus resulting social customs based on existing values, norms and conditions; e) Social studies learning is also expected to train learners to understand good life values including morals, honesty, justice, etc. so that it has a noble character; f) Social studies learning develops awareness and concern for the community and the environment.

## **2. Method**

The type of this research is *quasi experimental research* because not all variables appear and experimental conditions can be arranged and controlled strictly, while the research design is *pretest-posttest non equivalent control group design*. There were three groups selected randomly; two experimental groups and one control group. The first experimental group given treatment using the *Inquiry* model, the second experimental group uses *discovery* model and the control group using conventional model. The study was conducted at Muhammadiyah 3 Depok Junior High School, addressed at the complex Colombo, Jl. Rajawali No. 10 Demangan Baru, Caturtunggal, Depok-Sleman. It was conducted on three classes, namely class VIII B and



VIII D for experimental class and VIII C for control class. It was conducted in November 2017. Population of this research is all students of VIII class at Muhammadiyah 3 Depok Junior High School, consist of 4 classes with total 152 students. Sample determination using *simple random sampling*. The sample in this research is using *simple random sampling* technique by determining class randomly. This is to avoid subjective assessment of the research sample. After drawing, class VIII-B categorized as experimental group 1, class VIII-D as experimental group 2, and class VIII-C as a control group. The research sample used was 114 students.

In this research, the data obtained directly by researcher and categorized as primary data. Meanwhile, the instrument of data collection is a description test given to students before (*pretest*) and after (*posttest*) model applicatio. Instruments used in this study must meet the requirements that can be said to be a good instrument. Good instruments must be valid and reliable. Validity used is validity in content and construct. Construct validity is the validity estimated by testing toward the test content with rational analysis (*professional judgment / expert judgment*) in accordance with construct or concept that has been established. The indicator of every instruments must be really measure what they want to measure.

Descriptive data is conducted through descriptive analysis. The data that will be described is from the measurement on research variables (dependent variable) which is the ability to think critically. The obtained data is calculated on average, theoretical maximum value, theoretical minimum value, maximum value, minimum value, standard deviation, and the percentage of mastery. Then it is interpreted to criteria that have been decided and determine the percentage. To categorize critical thinking skills, the researchers using the categorization of Mardapi (2012: 162) in table 2 as follows:

Tabel 1. Categorizations of critical thinking ability

No.	Interval Score	Category
1.	$X \geq \bar{h} + SB_X$	Very positive / very high
2.	$\bar{X} + SB_X > X \geq \bar{X}$	Positive / high
3.	$\bar{X} > X \geq \bar{X} - SB_X$	Negative / low
4.	$X < \bar{X} - SB_X$	Very negative / very low

Notes:

$\bar{X}$  : Average of overall student's score in one class

$SB_X$  : Standard deviation of whole score in one class

X : Student's score

After data is collected, it is processed to be information. In implementation, data will be processed using computer with *software SPSS windows 22.0*. Before testing the hypothesis, the researchers do requirement tests consist of normality test and homogeneity test. The normality test using *SPSS Windows 22.0 software* with Kolmogronov-Smirnov test. The criterion of testing is if value of  $p > 0.05$  then the variable is declared as normal (Ghozali, 2011: 29). Based on the analysis above, the results of normality test are presented in the following table:

Table 2. The result of normality test

Variable	<i>Sig</i> <i>Kolmogorov</i> <i>Smirnov</i>	Notes
<i>Pretest</i> experiment 1	0,125	Normal distribution
<i>Posttest</i> experiment 1	0,193	Normal distribution
<i>Pretest</i> experiment 2	0,076	Normal distribution
<i>Posttest</i> experiment 2	0,051	Normal distribution
<i>Pretest</i> control	0,200	Normal distribution
<i>Posttest</i> control	0,158	Normal distribution

Based on table 3, the sig value for normality test from *pretest* and *posttest* data on critical thinking ability is more than 0.05. This shows that the data is normally distributed. Therefore, data can be used for further testing. Meanwhile Homogeneity Test is conducted by *levene* test using *software SPSS 22.0 for windows*. The criterion of data categorized as homogeneous if  $p > 0,05$ . The homogeneity test results are presented in the following table:

Tabel 3. The result of homogeneity test

Variable	Levene statistic	df 1	df 2	Sig
Before	0,051	2	111	0,950
After	0,413	2	111	0,663

Table 4 above shows that the *Levene* value before treatment is 0.051 with df 1 is 2 and df 2 is 111, while the significance level is 0.950 bigger than 0.05. This shows that the variance-covariance matrix in dependent variable is homogeneous. The *levene* value after treatment was 0.413 with df 1 is 2 and df 2 is 111 and the sig value is 0.663 over 0.05. Means that the variance-covariance matrix on dependent variable is homogeneous. Based on the analysis results, it was concluded that the variance-covariance matrix on dependent variable before and after the treatment was homogeneous. Further hypothesis testing can be conducted because the prerequisite test has been fulfilled. Data analysis test is an analysis to test hypotheses in the study using *Analysis of Variance (Anova)*. ANOVA test is conducted because this study aims to know the effect of two independent variables toward dependent variable in partially and simultaneously. This test is used if the results of the prerequisite for data analysis shows that the data is normally distributed and homogeneous. The test using *SPSS 22 for windows program*.

### 3. Result

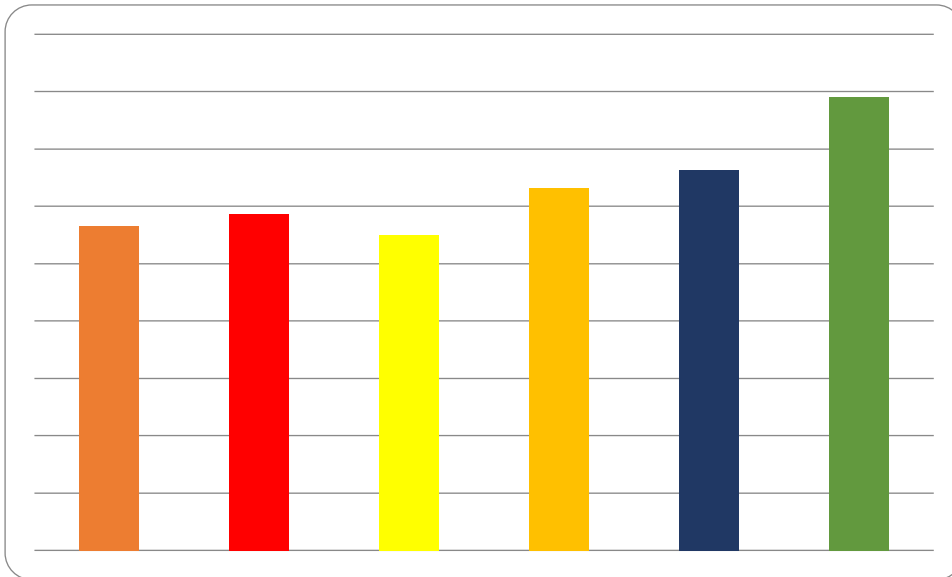
Description of research results is a description of the data to help in writing the discussion of research results. Data generally are divided into two, namely data before treatment and after treatment. Data before treatment contains data of *pretest* result of students' critical thinking ability, while data after treatment contains *posttest* result data of critical thinking ability. The

measurement of students' critical thinking ability is conducted before and after giving *inquiry* and *discovery* model treatment in experiment class and conventional model in control class. Description of students' critical thinking ability when before and after treatment is presented in table 5 as follows:

Table 4. Description of the test data of student's critical thinking ability before treatment (*Pretest*) and after treatment (*Posttest*)

Description	<i>Inquiry</i>		<i>Discovery</i>		Conventional	
	Before	After	Before	After	Before	After
Total	418,000	480,000	504,00	601,00	430,00	332,00
Average	11,000	12,632	13,263	15,816	11,316	8,737
Standard deviation	3,518	3,166	3,406	1,998	3,519	3,367
Variance	12,378	10,023	11,605	3,992	12,384	11,334
Minimum score	3,000	5,000	6,000	11,000	5,000	3,000
Maximum score	16,000	19,000	19,000	19,000	17,000	17,000

The standard deviation of *inquiry* experimental class before and after treatment is 3.518 and 3.166, while standard deviations of *discovery* experimental class before and after treatment is 3.406 and 1.998, and standard deviations of control class with conventional model are 3,519 and 3,367. The minimum score of *inquiry* experimental class before treatment is 3 and after treatment is 5, the minimum score of *discovery* experimental class before treatment is 6 while after treatment is 11 and the minimum score of control class with conventional model before and after treatment is 5 and 3. The maximum score of *inquiry* experimental class before treatment is 16 and after treatment is 19, the maximum value of the *discovery* experimental class before and after treatment is 19, and the maximum value of control class with conventional model before and after treatment is 17. This indicates that there is an improvement of students' critical thinking ability before treatment and after treatment in experimental class 1, and experimental class 2, but not for control class. The improvement of critical thinking skills can be seen from the following graph:



Picture 1. Chart of the Improvement of Critical Thinking Ability before (*Pretest*) and after (*Posttest*) model application

Picture 1 Graph of critical thinking before and after Pretest and Posttest. Based on the graph above, it can be seen that there is an increase in each class when pretest to posttest. Graph shows that the most influence model in critical thinking ability is *Discovery* model. The hypothesis analysis in this study using F test with *SPSS 22 for windows*.

### 3.1 First Hypothesis

The first hypothesis in this study is "There is a difference of students' critical thinking ability as a result of *inquiry* and *discovery* model application in Social studies (IPS) learning in Muhammadiyah 3 Junior High School (SMP) OF Depok". H1 is accepted if the sig value is  $< 0.05$ . The result of Anova, F value is 27.491 with df are 1 and 74 and sig value is 0.000. The sig value is  $< \alpha = 0.05$  so H1 is accepted. Means that there is significant influence difference of *inquiry* model and *discovery* model in social studies (IPS) learning toward critical thinking skill of VIII grade students of Muhammadiyah 3 Junior High School of Depok. Furthermore, it is explained by calculating the *mean* value in the *Upper Bound* which aims to find out the learning model that most influences critical thinking skills in accordance with the F test result on the first hypothesis. *Upper Bound* for *discovery* model is 16.4725. This value is higher than the *inquiry* model. It means that *discovery* model is more influenced toward students' critical thinking ability.

### 3.2 The second Hypothesis

The second hypothesis in this research is there is difference in student's critical thinking skills of Class VIII Muhammadiyah 3 Junior High School of Depok as a result of the *discovery* model application and conventional model in Social studies (IPS) learning. H2 is accepted if the sig value is  $< 0.05$ . This second hypothesis is analyzed using F test. The result of analysis as follows that F value is 124.245 and the value of sign is 0.000. The sig value is that  $< \alpha = 0.05$  so H1 is accepted. It means that there is difference of influence of *discovery* model and conventional model in IPS learning toward student's critical thinking skill of VIII grade of Muhammadiyah 3 Junior High School of Depok. To know which one is the most influence between *discovery* and conventional model on critical thinking ability can be seen in description result, *Upper*

*Bound for discovery* model is 16,4725. This score is higher than conventional model. It means that *discovery* model more influenced toward critical thinking skill.

### 3.3 The Third Hypothesis

The third hypothesis of this study is there is significant difference of influence of *inquiry* model and conventional model in social studies (IPS) learning toward student's critical thinking skills of VIII grade of Muhammadiyah 3 Junior High School of Depok. This analysis was conducted using F test with the help of *SPSS 22 for windows software*. The criteria of decision used when the sig value  $<0,05$ , then  $H_1$  is accepted. The result of Anova test are presented in the F value is 26,990 with p-value is 0.000, where p-value  $<0,05$  then  $H_3$  is accepted. It means that there is a difference of critical thinking ability of VIII grade students of Muhammadiyah 3 Junior High School of Depok as a result of *inquiry* model and conventional model application in IPS learning. To find the most influence aspect among *inquiry* model and conventional model toward critical thinking ability can be seen in that the mean of *Upper Bound* for *inquiry* model is 13,6722 while mean of *Upper Bound* of conventional model is 9,8434. It means that *inquiry* model is more influence to student's critical thinking ability.

## 4. Discussion

The ability of someone to think critically is one of the abilities that must be have by students in Social Studies (IPS) learning, because critical thinking can help students in sorting and interpreting information. The ability to think critically becomes very important for the progress of student's thinking to overcome various problems in the environment. Student's critical thinking ability can be built and developed through IPS learning process. Social Studies need a critical thinking of students to understand the subject given by teacher. The wide scope of learning in IPS requires students to have critical thinking skills. Supported by various phenomena lately, many issues spread in community imply that individuals or students must have the ability to think critically.

To overcome those problems, teachers must innovate using creative and innovative learning model, and provide convenience to students during learning process. They can use *inquiry* model and *discovery* model as an alternative. Inquiry and discovery learning models are good and good for use in social studies learning, so that they can help students build students' critical thinking skills towards their understanding of existing problems.

The application of inquiry and Discovery model on the subject matter understands the problem of social deviation on the students of grade VIII SMP Muhammadiyah 3 Depok-Sleman. In this section, we will present research results that include: (1) there is a difference of students' critical thinking ability as a result of applying Inquiry and Discovery model in Social Studies lesson; (2) there is a difference of students' critical thinking ability as a result of applying Discovery and Conventional model in IPS learning; (2) there is a difference of students' critical thinking ability as a result of application of Inquiry and Conventional model in IPS learning.

As Sund (Erlina et al: 2016) points out that discovery learning strategy is a mental process by which students are able to assimilate a concept or principle. Where is meant by the mental process among others is to observe, explain, measure, make conclusions. In this method students are given the freedom to find themselves or experience a mental process itself. The teacher only plays a function as a guide and provides instructions. Furthermore, in the journal

The Effects of Discovery Learning Model on Student's Critical Thinking and Cognitive Ability in Junior High School (Martaida et al., 2017: 2) explains "Discovery learning model and find their own answer to the questions. "What this means is that the discovery learning model is a series of learning activities that emphasize critical thinking and analysis processes to reach and find their own answers to a question.

From the two statements above it can be said that learning using the Discovery model can improve students' critical thinking skills. Because the essence of learning with the Discovery model is to provide lessons to students in facing problems in the real world. the statement supports the researcher's findings on the first hypothesis which states that the discovery model has a higher impact on students' critical thinking skills. Learning with the discovery model will result in high levels of intrinsic motivation. This is adjusted to the opinion of Moore (2015: 358) learning by using discovery model is a more active learning because it tends to produce higher levels of intrinsic motivation. In learning using discovery models students will tend to learn more and store information longer when they are actively involved in the learning process.

## 5. Conclusion

Based on the data above, there is difference in students' critical abilities as a result of *Inquiry* and *Discovery* model application in social studies learning from the results of univariate test. Based on F test result, F test value is 27.491 with df are 1 and 74 and sig value is 0.000. The sig value is  $<\alpha = 0.05$  in the mean of Upper Bound for *discovery* model is 16.4725. This value is higher than the *inquiry* model. This means that *discovery* model is more influential on students' critical thinking abilities. Thus, it states that the first hypothesis ( $H_1$ ) is proven or true that there is difference in students' critical thinking abilities as a result *Inquiry* and *Discovery* model application in social studies learning.

Furthermore, based on data through *pretest* and *posttest* results, it can be seen that the value of F test is 124.245 and sig value is  $<\alpha = 0,05$ . The conclusion is that there is difference in students' critical thinking skills as a result of *discovery* learning model and conventional model application. In addition, description result shows that mean of *Upper Bound* for *discovery* model is 16.4725. This value is higher than conventional model. It means that *discovery* model is more influential toward the ability of critical thinking. Thus, the second hypothesis ( $H_2$ ) is proven or true because there is difference in students' critical thinking skills as a result of the application of the *discovery* and conventional model in IPS learning.

Based on the results of the univariate test, F value is 26.990 with a p-value is 0.000, which the p-value is  $<0.05$ , then  $H_3$  is accepted. It means that there is difference in students' critical thinking ability as a result of *inquiry* model and conventional model application in social studies learning. Furthermore, from the description analysis result in the *Upper Bound* for mean of *inquiry* model is 13.6722 while the mean of *Upper Bound* of conventional model is 9.8434. Means the *inquiry* model has more influential on students' critical thinking abilities. Thus it states that the third hypothesis ( $H_3$ ) is proven or true that there are differences in students' critical thinking abilities as a result of the *Inquiry* and *Discovery* model application in social studies learning.

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# Panai Payment: Marriage Accounting Practices

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## Abstract

The research reveals the meaning of the values cultural Bugis Makassar determine the nominal amount of Panai' Money held that reflects the accounting treatment. Methods of data collection through interviews with informants of ten people from both sides of the family the bride. The results values of accountability to be a reflection in the Bugis Makassar culture, in particular the determination and decide on the amount of money Panai. Positive information asymmetry caused by a nominal amount of Panai money given by the family of the prospective groom agreed to by both parents of the bride. Presented differently on Mampetuada.

**Keywords:** Panai' Payment, Assets, Liabilities, Capital

## 1. Introduction

The paradigm of research in accounting is currently undergoing rapid development, with various multiparadigms including accounting development associated with culture, and is not something new, but actually accounting has been formed within a culture. Culture in Indonesia is very rich and diverse, especially in terms of marriage culture. One of them is the culture of marriage in the province of South Sulawesi consisting of Bugis, Makassar, Toraja, Mandar, Kajang, Enrekang, and Pamona, but the most unique culture of marriage is the majority of money culture applied by people from Bugis tribe and Makassar. Money panai 'is a wedding expenditure money given by the groom who apply for the bride Bugis or Makassar bride outside the dowry based on religious shari'a. Bugis name itself, the language comes from the word "to Ugi" which means Bugis. Naming Ugi refers to the first king of Chinese kingdom (now included in Wajo district), La Sattumpungi. As a form of awakening to its king, the community named itself To Ugi meaning La Sattumung follower. La Sattumpugi himself is the father of We Cudai and a sister with Batara Lattu, Saweriading's father. After he built a dynasty, he disappeared secretly. Every royal family or every piece of land, for the history of the king is the history of the land, has its own chronicles. Bugis's heirloom is rich with this chronicle (Rusli 2012).

Lamallongeng (2007) in (Rahayu, Sri and Yudi, 2015) explains that in choosing a mate, Bugis people usually pay attention to objective and subjective factors. Objective factors, namely the readiness to marry. This factor is focused on economic issues, maturity, mental, character, intelligence, and so forth. Subjective factor, which is related to the problem of taste, in this case a man who wants to marry a girl or some girl who bloody Bugis Makassar, based more on the sense of mutual affection, love and love each other love. As for the amount of money panai 'for every woman Bugis Makassar blooded to be proposed, it is different in number one with another. Indicator of the quantity of cash money 'can not be measured because cash money' is fully determined by the female family. However, the male family can negotiate (bargain) with the female family about how much money the members of the family can afford. If both parties

have reached an agreement, it will be held Mapettuada event as one of the procession before the wedding.

In modern culture Bugis Makassar society today, seeds, weights, and bebet of the prospective groom, is also an important element of consideration for the family of the prospective bride. This means that if a prospective groom comes from a respected family (public figure), wealthy, has a high position in society and in government, highly educated, then of course this is the basis of the bride to asking for a high amount of money. On the other hand, the level of education of the girls they will marry, will determine the amount of money pannai will be charged to the prospective bridegroom. The higher the education level of their daughters, the more panoramic 'money'. Even if their daughters have a proud profession among them doctors and have worked as Civil Servants then the money panai 'even greater the number, even to touch up to hundreds of millions of rupiah. The amount of money panai 'is considered something common and considered reasonable in the Bugis Makassar. They assume the fair money, because the parents of women have sent their children to college level and to have a permanent job. Even in Bugis Makassar society, girls are considered as income and are big assets but boys are considered expenses. This is a phenomenon that occurs in one of the culture of Makassar Bugis tribe in Indonesia, the culture of money 'panai'.

Based on the phenomenon and the reality of social life in the traditional wedding ceremony of Bugis Makassar mentioned above, this study aims to find and reveal the meaning of accounting in determining the amount of money panai ', and if associated with the formula of accounting equation is the amount of assets will be equal to the debt added with capital. That is in the culture of cash money 'is in it there is capital to be prepared by the prospective bridegroom who will apply and capital of the parents of the prospective bride mensekahkan their child, as well as the debt that may occur with the condition of cash money' is , or just a girl who is an asset. The next phenomenon is when there is agreement about how the nominal amount of money is paid, so the men are not entitled to question the usefulness of the cash money, and the family of women such as uncles and aunts and closest cousins sometimes have different information about the nominal amount cash money '. Based on the reality and social phenomena that actually occur in the culture of cash money 'Bugis Makassar, the researchers are challenged and interested to uncover the meaning and essence of the culture of the money, so this research needs to be done.

## **2. Research Method**

This study was conducted on a family of Bugis tribes that still strongly with the culture of cash money, and who have long lived in the city of Makassar. They are a community group of Bugis Makassar people who still uphold the values of culture, and customs, especially the culture of cash money which is an absolute necessity to do when going to the procession of marriage. This culture became a hereditary belief, and some of them assumed that the traditions of the panai money culture were a cultural heritage of the ancestors of their ancestors, which must be preserved until today's modern era. The focus of this research is the accounting in the culture of cash money 'Bugis Makassar.

The subjects of this study were the two families of men and women, both of whom were from married Bugis tribe who applied the cash money of 10 informants ie the bridegroom candidate

as the applicant and the bride as the applicant and received cash money ', the parents of the men, the parents of the women, 1 siblings of the male parent, and each of them the closest cousins of both sides. The last 1 informant, is one of the colleagues who work as a lecturer and currently he is Vice Dean for Student Affairs at the Faculty of Economics and Islamic Business Alauddin Islamic University of Makassar. List of informant we can see at table 1.

Table 1. Research Informant

No	Name	
1	Sampara	Father of Woman Bride
2	Naima	Mother of woman bride
3	Maman	Father of Groom
4	Sitti Naharia	Mother of Groom
5	Hamid	Brother of Groom
6	Andi Suarda	Uncle of woman bride
7	Nasir Siola	Uncle of groom
8	Sultan Daming	Cousin of woman bride
9	Baso Tiro	Cousin of groom
10	Sahar	The other from family

This research was conducted by conducting an interview after the application procession in its Bugis language known as Mappetuada. But before the event, first done Ma'manu-manu. Ma'manu-manu is the party of the groom and his essential family are present, such as father, mother, uncle, aunt and siblings who come to apply to the prospective bride. In this ma'manu-manu event procession, it is said about their intentions (the prospective groom) coming to apply, and the determination of the nominal amount of cash money '. At Ma'manu-manu stage this is actually the core in determining the amount of money panai ', if there is no agreement, it means the application is rejected. However, if the agreement is reached between the two parties, it can be ascertained that the application of the family of the prospective groom is accepted. The next stage is the Mappetuada event which will be attended by all the big families from both sides. The Mappetuada stage is actually only a customary formality, because at the stage of Mappetuada it is no longer to discuss or discuss how big the nominal money amount is, but only to inform the whole family of the bride and groom about the amount of money the panai, and determine the day of marriage, dowries, and H day of wedding reception. The whole process of determining the nominal amount of cash money ', all agreed on the stage of Ma'manu-manu event. The research was conducted at the Ma'manu-manu event stage and at the Mappetuada event stage. This research uses a qualitative research paradigm by attempting to explore and reveal the meaning of accounting in the reality of panai money culture at the traditional wedding ceremony of Bugis Makassar. In particular, the results of this study are expected to be realized in the accounting equation, ie on the aspect of interpreting the value of assets, debt and capital in the balance sheet on the financial statements of corporate entities. The main instrument of data collection in qualitative research is the researcher himself, but after the research instrument becomes clear, it is likely to develop a simple research instrument, which is expected to complement the data that has been found through observation or interview. Arikunto (2010: 265), the data collection instrument is a tool chosen and used by researchers in their activities to collect data so that the activity becomes systematic and facilitated by it. In

general, in the paradigm of qualitative research, researchers usually use research instruments such as assistive devices such as tape recorders, video cassettes, or cameras. But the usefulness or utilization of these tools is highly dependent on the researcher himself.

The process and stages of the research by using the interview technique to all the informant research, is the first step toward the analysis of data research results accurately and empirically. The paradigm of qualitative research, has ushered the researcher into the world of freedom of expression, poured his ideas and imaginations in a scientific research vessel. In the perspective of this research, panai money culture is very important and valuable information, especially in analyzing data in the form of information that has been obtained from all research informants, with the aim to reveal the meaning of Balai Bugis Makassar tribe culture in Accounting perspective (Asset, Debt, and Capital).

### **3. Discussion and Result Research**

#### *3.1 Accounting in a Cultural Frame*

Culture is the result of transmission that runs in a historical pattern. In it contained a symbol as well as the existence of a hereditary system. This continuity certainly happens automatically as a human attitude towards life. Geertz termed it the "cultural system". While Chaterjee gave him the term with "cultural value". It is a conception of what is seen in a community as a valuable value. So tangible in the form of idealism because it comes from the mind. Together Geertz and Koentjaraningrat see that culture is the process of understanding the unique reality of life each within a certain time and place. In that life, the historical process becomes part where the continuity of material aspects that become inheritance (Wekke 2012).

Kurniawan, Mulawarman, and Kamayanti (2014), explained that financial accounting practices are determined by local social and cultural factors. In reality, accounting is an environmental product that continues to grow dynamically from time to time. Accounting is said to be an environmental product because it continues to experience growth and change along with the needs of the community in the field of services, trade, and manufacturing industry. Changes in the environment and community culture contributed positively, ranging from the traditional accounting system, to the modern accounting system.

Son (2013), the American Institute of Certified Public Accounting (AICPA) states that accounting is: "the art of recording, classifying and summarizing in a particular way and in monetary size, transactions and events that are generally financial and include interpreting the results" the elements of the financial statements in the balance sheet consist of assets, liabilities, and investments by the owner. An asset is an economic benefit that may occur in the future, acquired or controlled by an entity as a result of past transactions or events. Liability is an economic sacrifice that may occur in the future caused by past transactions to transfer assets. Investments by owners represent an increase in the net assets of a corporation arising from the transfer of something of value from another entity to the company to gain or raise ownership interest (Kieso, Weygandt and Warfield 2007).

Based on this information, in the results of this study obtained through the stages of discussion with the research informants consisting of two large family clusters, the family family of the groom, and family family of the bride. In an accounting perspective, the agreement reached by both parties in determining the amount or nominal of the cash money to be submitted during

the mappatuada event indicates that an accounting transaction has been reached, in which case the capital in the form of cash collected by the bridegroom the cash money is an asset for the extended family, especially the father and mother of the prospective bride. The transactions of cash transfers are done openly and transparently, and witnessed by both families of men and women. Implementation of accounting transactions as mentioned above, has reflected that accounting is more holistic, and more prominent than transcendental aspects. The transcendental aspect encompasses the development of different cultures and customs and applies throughout the tribes of Indonesia. Many tribes of many cultures, and fused with the development of science, thus forming a culture. Culture is the work of man, through his work. Another field of Grasshopper, another other fish hole. This phrase implies the diversity of tribes and cultures in every island and region. This means that all tribes in Indonesia from Sabang to Merauke, all have cultural values and customs respectively. In this case is no exception with the pattern of cultural diversity and customs in weddings. Culture comes from the word *sangsakerta* "budhayah", which is the plural of the word "budhi" which means mind or mind. By that, culture is a set of values that underlies all the actions, goals and visions of each individual living in a particular group (community) (Triantoro, 2008).

In the case of marriage, for example, the Bugis Sidrap tribe has a customary value which is still maintained today. Marriage is an important thing in the social life of society. Marriage does not merely unite two beings in a family bond, but further marriage is a medium for developing social, economic, and cultural preservation status itself. A nobleman for example will be attached to his nobility when he marries women from among nobles as well. It will even have a great influence on the socio-political aspect when he marries the nobility of other regions. Accounting as other social sciences are shaped by humans in a particular cultural group, so the values within that culture also influence the formation of the character of accounting science. In other words, accounting is shaped by its environment through very complex social interactions (Sylvia, 2014). The entry of Western society culture, supported by information technology and paradigm underlying the building of scientific science. scientific science claims itself objectively and value-free and aims only to uncover the essence of existing phenomena. The paradigm brought about by scientific science, paving the way for capitalism to grasp mankind into an economic mechanism centered on unlimited desire. Capitalism releases the aspect of desire in man and perceives its spiritual aspect. Man is reduced to being a living animal just to satisfy his desires. Consequently, all forms of value and morality are also reduced to pragmatic morality. Origin can survive, so no need to care about the environment and even others.

### *3.2 Drawing Up the Money Cash Culture 'in the Asset Perspective.*

Culture can be classified into a frame of mind and a physical frame. In the framework of cultural thinking gives a certain mindset or point of view about how people should behave in their daily lives. While in the physical frame of culture is reflected in a certain symbol that distinguishes between one culture with another culture, such as Culture of Java, Bali, Bugis-Makassar, and others. Mindset or a particular cultural point of view, specifically the Bugis-Makassar Culture contains the purpose of life, values, and principles that everyone living in the culture should adhere to. Culture of cash money 'is a typical culture of Bugis Makassar in the wedding ceremony. In marriage not only involves the nuclear family alone, but the whole family of both

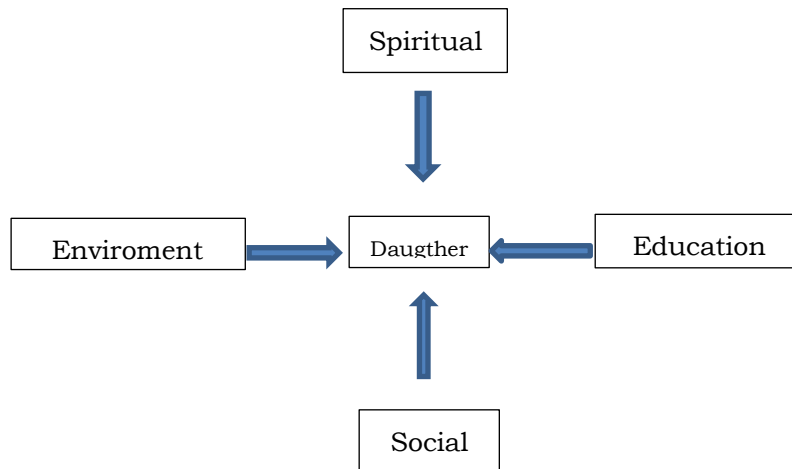
bride and groom candidates. But in determining the amount of money panai 'both prospective brides leave entirely to their extended family, especially their parents. The happiness of parents when their daughters are proposed to marry, but in the adat of Bugis Makassar tribe at the same time they will think of the amount of money panai 'which will be charged to the men who will apply for their daughter.

This culture is also still strongly maintained by most Bugis-Makassar people even though they have wandered. Although it has left its ancestral domain for many years, it has even been born in the overseas territory, the culture of panoramic money 'is also used in the pre-marriage application process (Rahayu, Sri and Yudi, 2015). Money panai 'is not included with the dowry that is already prescribed in Islam so the men who apply in addition to preparing panai money' they also prepare a dowry like gold and a set of prayer tools and moan that contains all the bride's gear starting from the end of hair equipment to toe. All expenditures, which bear the groom's groom. This culture still lives in the midst of modern life of Bugis and Makassar society. But often with the existing economic conditions in Indonesia, this 'panai' culture is often a very heavy burden for couples who plan to get married, especially for men who have to prepare the money panai.

The enactment of cash money ', does not distinguish the area from which the prospective groom came from. When a virgin who comes from outside the Bugis Makassar tribe intends and wishes to marry or marry Bugis Makassar women, he is obliged to give money '. Various stories have occurred with the culture of this money money, and many potential couples eventually get married because of disagreement in the amount of money panai 'because it is considered too expensive for women who will marry until there is a "spinster" or the term woman who is old but still a girl because men are afraid to apply for the woman. In relation to the above information, Sampara said, "My daughter, who is getting married, I have to send her to S2 and working as a civil servant. I will ask for proper cash money for my child's education and work, but surely more importantly actually is considering the future of the man who proposed because I want my child to be the best ". The same thing is expressed by, Naima by stating that "my child I have raised and schooled high and even now have a steady job of course panoramic money 'from the side of the men who apply for my child must be balanced with what we have given to girls we"

Based on the description of Sampara and Naima as the biological parent of the bride party, it means that their daughter is something very valuable and is a good future capital, so that later will have a decent life if proposed by a good man too. So that both parents of this woman interpreted his son's education as an investment, which form in the form of capital of material value. Parents of women are willing to sacrifice their possessions by spending a lot of money to provide the highest education and the best for their daughters. In the science of accounting, investment is a wealth of tangible companies and expenditures that have not been allocated (deffered changes) or costs that must still be allocated to future earnings (Mursalim, et al., 2015). Girls are an asset in Bugis Makassar culture. In order for the child to really be a proud asset for both parents and family, the existence of a daughter born in the middle of the family environment must be kept physically and spiritually from an early age. In Islam, the child is the trust of Allah SWT who should be educated aqidah, that is to give teaching the values of shari'a,

aqidah, morals, and muazarah. The main and important factors inherent in the development of the child's psyche is shown in the following picture:



Based on the image above, so that the child, especially the daughter can be valuable assets, for themselves and their families, then what must be done by both parents to their children are: First, teach it the science of religion or spiritual knowledge. The science of religion is a very fundamental science to teach to the child that is related to the sources of Islamic law, which includes: First, utter two sentences shahadad. Teaching two sentences of syahadad to the child, not only they memorize, then recite the two sentences of the creed, but the parent is obliged to give understanding to his son that the essence of two sentence shahadad is instilling confidence, or menghujamkan confidence in the heart about the existence and greatness of Allah SWT, although the existence of Allah SWT can not be proven empirically. Believing in the existence of Allah SWT must be based on the signs and powers of the creation of the heavens and the earth, and alternation day and night. Allah (SWT) says in the Qur'an the letter of Al-Ghaasyiyah (the day of vengeance) verse 17 to verse 20, which translates as follows: So do they not notice the Camel how he was created (17). And the sky how he was lifted (18). And the mountains how he was established (19). And the earth how it is spread (20). In the explanation of Allah SWT in the Qur'an, as a parent must be able to give explanation and understanding to his son that, although Allah SWT is not a manifestation in this life, but we must believe in the existence of Allah SWT with the form of his creation, the impossible man able to create camels, humans impossible to raise the sky, humans impossible to establish the mountains, and humans impossible to create and spread the earth.

As a simple example, when the Bedouin Arabs were asked about the existence of Allah, they replied in an analogous way, with the traces of the camels on this path, so we are sure that this passage was a camel passing by. It means that, in the presence of the heavens and the earth, and the contents we are convinced that, the existence of all must have created it, that is Allah SWT. This is the method that parents should teach their children about the meaning and meaning of a belief in Allah SWT. Similarly, the belief in the existence of the Prophet Muhammad SAW, as uswatun hazanah, that is by teaching the belief to the child that, impossible Allah SWT who descended from heaven to the earth to teach the Qur'an, of course there are messengers in advance this earth that teaches the noble and noble values in the content of Al-Qur'an, he is the

Prophet Muhammad SAW. The belief in Allah and His Messenger is the capital to reach mardhatillah, that is the jannatun paradise, this is the real asset in the journey of human life during the world.

Second, establishing fardhu prayers five times a day overnight by seventeen rak'ahs. Allah (SWT) says in the Qur'an the letter of Al-Ankabuut (Spider), which translates as follows: Read what has been revealed to you, the Book (Al-Qur'an) and establish prayer. Verily that prayer prevents from evil and unjust deeds, and indeed remember that Allah is greater than His virtues, and Allah knows what you do. Both parents are obliged to guide and teach their children the first prayers starting from ablution. Ablution contains the meaning of innate and inner holiness. To face God Almighty, must be clean physically and spiritually, because Allah is the most clean substance. The essence of prayer in physical form is in the prostration position. Sujud represents total submission and obedience to Allah SWT. People who always prostrate, then God willing he will always avoid the characteristics of arrogant, arrogant, and high hearted. People who are humble, of course always keep his tongue and his arms from things that are forbidden by Allah SWT. People who always bow down to Allah SWT, then he will be protected from actions that can harm the financial, State assets such as corruption, cheating, and so forth. In the perspective of Accounting, Salat can bring sustenance or assets. For example, when Maulana Ilyas r.a conducts a study on prayer can bring sustenance. One person asked, Maulana, where is it possible only with prayer can be sustenance? Maulana pointed out, the policeman only moves his hand to the right and to the left, back and forth, the policeman earns sustenance.

Thirdly, issuing zakat, Allah (swt) says in the Qur'an Surat At-Tawbah (pardon) verse 103, the translation is as follows: Take the zakat from some of their property, with the charity you clean and purify them, and pray for them. In fact, your prayer becomes a serenity for them. And Allah heard again the All-knowing. The values of teaching to the child in order to issue zakat is, to grow mutual giving, and to avoid the child from the miserly nature. Giving confidence to the child that, when we diligently issue Zakat, Infaq, and Sedekah (ZIS), then Allah will multiply our wealth. But the most important of the meaning and substance of zakat is, outwardly appear that the money we spend in paying zakat, it will automatically reduce our wealth in the balance sheet, but actually more and more we issue ZIS when living in the world, it will automatically also add a lot of our treasures and savings in the afterlife later. In connection with this, the Prophet Muhammad SAW cited, namely when Aisyah distributed goat meat, all distributed, which is separated thigh goats. Prophet Muhammad SAW stated that what is left is not thigh goat Aisha, but which has been distributed, that is the value, while thighs of Goats are separated, it is not ours, but our real property in the sight of Allah is the meat of the Goats that have been distributed. In another narration it is told that, Want to know what makes God happy? Prophet Moses asked O God I have performed the worship, then where is my worship that makes you happy? God answers prayers? Your prayer is for yourselves, because with, doing your prayers is preserved from evil and unjust acts. Zikr? That dhikr makes your heart calm. Fasting? Your savagery trains you to combat lust. Then the Prophet Moses asked again, then what is my worship that makes your heart glad O God? God replied that is zakat, infak, alms and your good deeds. That's what makes me happy when you make happy people who are troubled, I am present beside him, and I will replace with the rewards of seven hundred times. This is the real asset, the paradise paradise.



Fourth, fasting in the holy month of Ramadhan. Allah (SWT) says in Al-Qur'an Surat Al-Baqarah verse 183 which translated is as follows: O you who believe, are obliged upon you fasting, as has been obliged upon the people before you, that you are pious. Teach children about the meaning of fasting, so that the child can arise social sensitivity dihatinya. Social sensitivity is to foster a sense of sharing for the poor and needy, especially in charity. Always feel hungry, as the hunger felt by the poor and needy in all time. So that the child can always be aware to share when he gets a food resek.

Fifth, perform Hajj pilgrimage, Medina Al-Munawwar for those who have financial ability. Hajj is a symbol of equal social status in the presence of Allah SWT. Based on the explanation of the five pillars of Islam above has shown that, when everything is well taught to our children, they undoubtedly will provide high asset value, especially for girls. Because if we have daughters who are pious, then God willing, he will get a mate from a man who believes and pious, which by itself when he proposed, he will get a high money panai, and on the other hand both parents will get a position that high and honorable, both in society, and especially in the sight of Allah SWT.

Second, the field of education plays a very important role for the journey of the child's life. Both boys and girls should be able to get a decent formal education. Formal education is referred to is tiered education starting from kindergarten, up to college. In the Bugis Makassar culture, if a girl can go through and finish the education at level one, of course will have high economic value, if compared only graduate of High School and the equal. Especially if the girl can go to medical school, and graduated as a doctor, then surely the value of his cash money will be higher. In Makassar Bugis culture the profession of a doctor is still a prima donna, and is ranked one if compared with other professions. Moreover children's education can be regarded as an investment. Investment certainly requires a source of resources today that can be said to be relatively more certain that is used to obtain a hope or future results that certainly can not provide certainty. When investing, each individual must always consider the results, risks and costs to be sacrificed. To get a better education parents sometimes willing to send their children abroad for a pride without considering the risks that will be faced by the child, especially girls who must be separated away from both parents and the cost is not small in number to go to school in place the prestigious and worthy of his son's future will have a good and proud family. Third, the environment also plays an important role in shaping the child's psychological character, personality, and psychological logging. Islam has taught us all that we should interact with people, or good, or religious religious groups. A permissiveness, if we associate with a seller of perfume, then at least we will smell the fragrant smell of perfume. Similarly vice versa, if we associate with the iron man mason, then at least we will be exposed to sparks fire. It is the duty and obligation of both parents to find a safe and conducive environment for the survival of their sons and daughters. If the development of the child is damaged due to the influence of damaged environments, then automatically the child has a tendency and character that tends to be negative, and if this happens to our daughter, then automatically selling value will also experience depreciation. An example of a girl who is pregnant outside of marriage, even if she is religiously married, but the man who impregnates her will not give her a high harvest money, even if the males are unwilling to take responsibility, or run away, and have a fatal effect on

the family women because they have to bear the shame of a lifetime, as a result of a broken social environment.

Fourth, the social field is of course very related to the environment, only in the social field concerning the role of the child in making a useful contribution to the self, and more important is the role in life that always provide benefits for others. The message of religion is, *khairikum linnasi, anfa'u linnasi*, the best of humans among you is the most beneficial for the life of people. This phrase has a very deep meaning, that every man should be the best for himself and others. To be able to provide benefits for others, then first ourselves should be better, and be an example. That is, the best man is a human who always missed his existence in the community environment where he is domiciled, and people will feel lost when he was not in the community. This is the essence of social status in the culture of cash money in Bugis Makassar.

In the Bugis-Makassar society, there is a phrase that is often spoken for parents who have daughters that is "well, that's your daughter's daughter means treasure because you are brought money from the men and keep your daughter *baek-baek* so high money *panai'nya*". But different again with parents who have a son then the expression that is often spoken by the people of Bugis-Makassar tribe is "waduh, get ready and save it is a treasure or lend money in the bank for your son's harvest money". The same thing is also expressed by Sahar who wants to marry his eldest son on Monday February 20, 2017. According Sahar, it is true if we have a son, then prepare a lot of capital as money *panai*. Sahar states that the boy I will marry on February 20 next, it costs around Rp. 150.000.000, - (One hundred and fifty Million Rupiah), with details of Rp. 50.000.000, - (Fifty Million) in cash delivered directly by Sahar when the application procession took place, while the nominal amount of Rp. 100.000.000, - (One Hundred Million Rupiah) is used for *sundrang*, which consists of to buy dowries in the form of fixed assets in the form of land, bridal equipment in the form of *emar murnis* one set, and moaning bride. Sahar stressed that, in fact only cash money in cash, may not be too burdensome. However, the burdens are money *sundrang* and other wedding accessories fees will be submitted before the wedding day. This is forced to be done by the groom because it is an ancestral culture that is hereditary in the *adat* marriage of Bugis Makassar tribe. To meet all the charges during the wedding procession, Sahar was forced to borrow money in the Employees Cooperative UIN Alauddin Makassar, as a result of to meet all the costs of her son's eldest marriage. In an accounting perspective, the actions taken by Sahar by borrowing money at the Employee Cooperative of UIN Alauddin Makassar have created debts that must be paid in installments every month for a certain period of time. This proves to us all that Sahar, who is an officer in the Faculty, still has to borrow money to marry his eldest son, this is said in the previous explanation that, by having a son, prepare a large amount of money.

Accounting in the culture of cash money, very identical and relevant to the accounting equation that is:  $Assets = Debt + Capital$ . Property is an asset for the prospective bride in the form of grant money from the prospective family of the prospective bridegroom groom. Debt is a routine obligation that must be paid or in the gradually every month and within a certain period by the prospective groom. In the perspective of this study, capital can be meaningful double that can be interpreted and interpreted to touch on both sides, the bride and groom candidate from the side of men, and prospective bride *penganting* from the women. Capital in the perspective of the prospective male *penganting* that is when a husband and wife *dikarunia* boys,

then in the tradition of indigenous culture Bugis Makassar, they immediately stated that, prepare it mi capital money that much later if our son married. In the lyrics of neighbors or others, they will state that the boys they give birth should be prepared capital yes, a lot of money for panai money if they grow up, and get older, then they have a boyfriend, and ask for marriage.

The capital in sight for a couple who has daughters, surely they will say that our daughters are capital if they get married then we will get panoramic money. The same thing also can be said santer spoken by the neighbors, the lyrics of the neighbors faintly and more clearly heard that, tawwa bahasya have daughters, modala it, in the lyrics of dialect Bugis Makassar. It is clear that the capital here has a dual function and role in meeting Adam and Eve, the two different kinds of people, and are brought together in the throne of the auxiliary, thanks to the services of capital money from the harvest money. This means that, the combination of men (debt), and women (assets), it will generate capital.

Capital in the perspective of meaningful balance money, which is the incarnation of the values of justice, of course it reflects more justice values in Islam. Allah SWT says in Al-Qur'an letter of Ar-rahman verse 9, which translates as follows:

*And upright the scales and do not reduce the balance.*

The balance sheet is a mix of assets, debt, and capital in the financial statements. By that, the balance always shows the balance of a value, both in terms of the amount of money value, as well as the value in a broader sense, namely the balance in bringing together two large family clusters that often occur in the wedding reception procession, with the aim that they know each other one with the other in the framework of servitude and devotion to Allah SWT. Allah SWT says in Al-Qur'an letter Al Hujuraat verse 13 which translated is as follows:

*O mankind, we created you from a man and a woman and made you nation and tribe so that you may know one another. Verily the most honorable among you by Allah is the most pious among you. Allah is the Knower, the Knower.*

Islam as a teaching brought the Shari'a clearly implemented in the values of justice (al-'adl), benefit (al-maslahah), wisdom (al-hikmah), equality (al-musawah), compassion (al-rahmah) pluralism (al-ta'addudiyyah), and human rights (al-huquq al-insaniyyah) (Wekke 2012). Still according to Wekke (2012), that in general Bugis people are Muslims, so often in the process of applying, parents will ask, "Is the prospective bridegroom is a santri?" In this sense is the person who can lead in the household based on an adequate understanding of religion. This shows a strong Islamic influence in the Bugis tradition. In their tradition, the election of bride and groom candidates using a religious measure. Although still pay attention to the degree of nobility, power and family property remains the main prerequisite is always the ability to understand Islam. At the lowest level is the ability to read the Qur'an. Some families require the ability of a groom to be a rawatib prayer imam. Therefore, one of the processions that accompany the marriage is the mampanre temme 'menyhatamkan reading'. At the time before mampacci 'cleaned up' the bride or groom, dikhatamkan recitation of the Qur'an is led by the imam. Followed by reading barzanji and closed with mappacci event. At the same time tonight, the parents of each and relatives will give blessing and pray together with other friends will be blessing in the future.

One of the important teachings in Islam is marriage (marriage). Once the importance of the doctrine of marriage is so that in the Qur'an there are a number of verses either directly or

indirectly talking about the question of marriage. In the Qur'an there are two keywords that show the concept of marriage, the *zawwaja* and the word derivation amounted to more or less in 20 verses and *nakaha* and the word derivation more or less in 17 verses (Al-Baqi 1987: 332-333 and 718 in Nurhayati. ). The verse which is quite popular and is usually quoted and made as a basis for explaining the purpose of marriage, namely the Qur'an letter Ar-Ruum verse 21, the translation is as follows:

*And among His signs is he creates for you wives of your kind, that ye may be secure and inclined unto him, and set him in the midst of compassion and affection. Verily in that are really signs for the minds of the minds.*

The culture of harvest money in adat marriage of Bugis Makassar whose nominal amount tends to increase from time to time, this is because it is directly related to the problem of people's needs in the economic field. This means that, if inflation occurs where the prices of primary and secondary goods have increased, then this condition will automatically affect the increase in the nominal amount of the cash. In the Ninety-year era, precisely before the economic crisis in July 1997, the average nominal amount of cash money was in the range of Rp. 3.000.000, - (Three Million Rupiah). This natural researcher when directly involved in my sister's wedding in February of 1994, it was given money *panai* by her husband only Rp. 2.000.000, - (Two Million Rupiah). My brother-in-law is a tribe of Makassar whose extended family is from Maros Town. Maros is the capital city of the district directly adjacent to the city of Makassar.

In July 1996, the researcher's experience was also and directly involved in the procession of my eldest brother's wedding, with a Bugis-blooded girl from Pangkep District. At that time my sister handed in cash money worth Rp. 3.000.000, - (Three Million Rupiah) to the parents of the prospective bride. Assignment of assets in the form of cash is done when the process of application is done. This condition is a social reality that often occurs in the middle of life of Bugis Makassar tribe people in carrying out a wedding celebration. In fact, the burden of costs in the economic field, not only felt when going to organize a wedding, but in activities, or other events, this economic burden is felt by the community, for example when going to perform ceremony, *sunnatan*, celebration, , and other community activities.

If connected with the concept of human resource accounting by Baihaqi (2014) which states that human resource accounting is a recognition that people are human capital as well as human assets. The theory of economy and human capital is based on the concept that humans have the skills, experience and knowledge that are the form of capital called Human Capital. In an economic perspective it is natural that the needs of society for goods and services continue to increase. To compensate for inflation, the government also raised the salaries of Civil Servants (PNS), the Indonesian National Army (TNI), and the Police of the Republic of Indonesia (Polri). In addition, the government has also raised Provincial Minimum Wages (UMP), raising wages, such as construction workers, drivers, factory workers, and all other professions continue to increase incomes in line with inflation. In the agricultural sector, the government provides subsidies in the form of cheap fertilizer prices, and community harvests are purchased at reasonable prices, given that farmers are a pillar in the provision of national food needs.

The government's goal to raise the salaries of civil servants, the TNI, and the Police, sourced from the State Budget (APBN), is actually aimed to offset the economic inflation rate that occurred. This is intended with the aim of increasing the need for Nine basic commodities (sembako), not too felt by the community. In relation to present and contemporary economic realities, it has delivered and influenced the economic activities of the Indonesian people as a whole, both rural-dominated and urban-dominated. In this case is no exception in determining how the nominal amount of money to be submitted by the men to the women when they want to marry the Bugis Makassar.

Based on the phrase, it has been proved that one of the factors inherent in the culture of money in the marriage culture of the Bugis-Makassar tribe, is that along with the development of the cultural age is still valid and considered unavoidable. Whereas in fact the culture of cash money 'is a form of appreciation of the family of the men against the female family because it has educated his daughter well (Rahayu and Yudi, 2015). Married in Bugis custom is not a playful thing. Adat requires every young man to marry to prepare, to be born and to be inner. In the Bugis philosophy, "Mulleniga maggulilingi dapurengnge wekkapitu mumaelo botting" (whether you have been able to circle the kitchen seven times so you decide to marry). Language, of course, this philosophy is not heavy, but culture is not easy. A young man must be able to become the backbone of the family, able to support his wife and family, both born and inner. By itself, work and financial ability are conditions that must be met before marriage. For the Bugis, the highest self-esteem other than religion is the girl (ana 'dara).

In the course of its history, not a few girls who were exiled or expelled from their hometown (riabbiang) because caught adultery or affair with men who have married. Even more terrible to be killed because it is considered to honor the family's honor (map-pakasiri '-iri'). Not only that, the bond of freedom is itself cut off. If it is still maintained in the village, then the girl will not get a mate except from outside the area who do not know about the life of the girl. This is related to the belief of the Bugis tribe that the adulterers will only bear children result of adultery. To that end, keeping a girl is a challenge in itself and a family pride when the girl is able to maintain his honor. It was so hard to look after the girl that the term "Lebbi moi mappie seratu tedong na mampi seddi ana 'dara" (better keep a hundred buffalo than keep a virgin girl (Rusli 2012).

Bugis Makassar tribe highly upholds shame (siri) in everything, especially in marriage. In the beliefs of the Bugis Makassar, religious, customary, and cultural marriages are the greatest honor for families on both sides, and vice versa if a girl is forced to marry for having been pregnant out of wedlock due to adultery, then this is a disgrace that tarnishes honor and the good name of the family, especially on the part of the female family. Even in ancient times, if a girl was caught committing adultery, they were usually sentenced to adat, in the form of a dipasung, and even the more extreme they were immediately killed, or had to die and die on the edge of badik. In some areas of the Bugis tribe, for example in the Sinjai area, when their daughters have grown up, it is usually their daughters forbidden to leave the house, strictly restricted by their movements to adapt to the surrounding community, to the point that the girl is nicknamed the window girl, less social girl aka kuper. By it, maintaining the honor and dignity of the family, usually done by keeping and educating girls from an early age. This is

done so that the future girl can be a pride for the family when entering the wedding time in a good way, and automatically will make the money high, which in the perspective of accounting value of the asset of girls who married in a way that will be well increase assets for the family.

### *3.3 Measurement of Fairness Level of Money Panai'*

The Ma'manu-manu stage is carried out at the home of the bride, the family of the men attended by Maman and Sitti Naharia and the brother of Hamid and of course the prospective bridegroom, they are received directly by Sampara and Naima. After introducing each family background including the job as well as the education of the prospective bridegroom then enter at the stage of discussion the nominal amount of cash money '. In the conversation Maman first asked Sampara, how much the nominal money money wanted by the family of women. Beginning with a rather heavy tone of voice, Maman opened the conversation "Tabe 'pack how much we give the money panai' his son ta ?. Upon the question, Sampara with a smile replied "Iye pak actually just a little ta ability? If I was the same wife, has decided Rp. 100.000.000, - mi just because the average of my big family whose child graduated S1 and not civil servants (PNS) na dikasi rose 'ki money panai Rp. 70.000.000 let alone I have a child's S2 continues to clear his work as a civil servant. But it depends on the mamma family's decision. That's Rp. 100.000.000, - not including the cost of marriage in 'the same moaning and gold is also a dowry, so depending on the family ta mi just pack Maman let alone this our first child. Erang-erang is a serendipity in the form of bride's clothing needs brought by the bridal party on the day of marriage.

After listening to Sampara's statement, Maman and his wife Sitti Naharia were seen breathing long enough but still smiling. Maman replied to the statement of Sampara "iye sir can not we kodong we reduce a little? We only able Rp.80.000.000, - because we also want to make a party at home, about the cost of marriage in KUA can we for two mi just keep on moan stink and gold one stell also wedding ring do not worry miki let us take care of that ". On the statement of the Maman Naima answered "how in 'pack already mi we calculate the expenditure during the ceremony, from Mappetuada event, Mappacci to the top of the wedding reception ceremony later, we plan to carry out only Kabul's permit, and direct wedding reception held on the same day at the hotel. Not yet pi sewing the wedding dress and makeup for Lamming and much more. So it's very difficult if we reduce mi later what na say family if not far from Rp. 70.000.000. Lamming is the bridal seats receive invited guests. Maman and Sitti Naharia and prospective bride whispered briefly finally talked sister bride of the bride is Hamid "Tabe 'sir actually my adek has savings only Rp. 40.000.000, - keep the rest of me and our parents who will bear but we are afraid to owe this marriage. At best we are only able to give money panai 'maximum Rp. 90.000.000, -. Hearing that Sampara and his wife Naharia saw each other, and finally Sampara nodded and said "iye then we accept his application for my first child, but one ji that I ask, that is not ki say my big family if only Rp . 90,000,000, - ji cash money '. If you some body ask you, you have to say Rp. 100.000.000, - well, then the money panai 'is, just transfer to my wife's account to fit the event Mappetuada later do not have to bring cash ". After Sampara said this, Ma'manu-manu stage procession was completed and the next was Mappetuada event which was held one month later which was attended by big family of men and women, which will be held at women's house. At this

stage discussed the determination of the date of marriage and reception and the technical implementation of the wedding procession.

#### *3.4 Transparency and Accountability of Money Panai'*

Post-Ma'manu-manu event in November 2015 and Mappetuada in December 2015, then decided the next two-month wedding date in February 2016. Before the event Mappetuada implemented, the men had previously transferred the money as much as Rp 90.000.000, - to the account of the prospective bride's mother. Regarding the use of cash money 'is entirely handed over to the mother of the bride Naima and the prospective bride is not allowed to take care of the money'. As for the reason Naima did that is "what my child wants to hold it for money? Because the money is used for the event nikahannya ji as well. So the cash money worth Rp. 90.000.000, - it was not for him to take my son, but used shopping for the purposes of his wedding ".

Transparency and accountability in a panoramic culture is that, all nominal amounts of harvest money handed over to women, are all spent on the needs of the wedding, without any rupiah being hidden or misappropriated. To prove it all, usually after the appeal marked by the receipt of the harvest money by the parents of the prospective bride, it is usually the mother of the prospective bride (Naima mother) entrusting to one of the family, in this case usually the aunt or aunt of the prospective bride to manage the money. The model of cash money management is usually done by preparing a small agenda book of marriage expenditure activities. In the small agenda book, details of all kinds of needs of what items will be purchased to prepare and conduct marriage later.

Perhaps unwittingly, the methods by Naima's mother and her sister who are the aunts of her married daughter, especially in the management of the cash money by preparing a small agenda book in recording all expenses during the process before, and at the time of the wedding reception, perform accounting practices in the management of cash money. Panai money management is done by creating a shopping agenda, which includes the day, date, month, and year of purchasing all the needs for a wedding reception. This method of recording is also done in order to recognize the total amount of cash used for expenditure needs, whether the post-wedding money indicates a surplus or minus position. Surely the women in this case Naima mother and her sister, at least must have the knowledge in the field of multiplication, summation, and reduction, so that money panai they manage, not to minus.

If the post-marriage post-wedding position is surplus, surplus in the sense that the money does not run out in marriage expenses, because if the money is minus, it will be the responsibility of the bride to suffice. However, the accountant's value is actually not in the position of surplus and minus the post-marriage money, but transparency is required in the form of honest and open disclosure in front of all families of women, for how much the total cost of marriage that has been incurred during the process and the implementation of marriage, all of which are sourced of cash money. Accounting at the level of accountability shows what is accountable and to whom this information is reported. Accounting that is guided by International Financial Reporting Standart (IFRS) is only responsible for material things. This material nature is indicated by the numbers (Baihaqi, 2014). This is sufficiently relevant to accountability practices at the material value level in the form of quantities or figures of cash. In principle, accountability of cash money in the form of material value, at the level of practice has been

reflected and guided by IFRS. The financial statements as media and forms of responsibility to disclose information useful to interested parties as users of information in economic decision making (Indriani, Khafid and Anisyukurulillah, 2014). The same thing that has been applied to the bride by doing a simple recording but can be used in decision making from the preparation stage until the day of marriage. The role of reporting on the use of Panai money is not necessarily in the form of financial statements to demonstrate the principle of transparency and accountability but by making a simple record of having performed these principles.

### *3.5 Asymmetry of Positive Panai' Money Information*

When the Mappetuada event was held at the home of the bride, a large family of women and even a large family of men who came to the event, was present to listen to the long-awaited moment, which was announced that the cash was Rp. 100.000.000, -, the researchers know from the results of interviews with Andi Suarda and Nasir Siola also sister Sultan Daming and brother Baso Tiro mentions that their family cash money is Rp. 100.000.000, -. The above information has led to information asymmetry, that is because the actual cash money given by the big family of the groom is only Rp. 90.000.000, -, but when it was announced in the mappetuada ceremony in front of the whole family from both parties who attended, the harvest money worth Rp.100.000.000, -. This is a positive information asymmetry. Positive means that for the sake of continuity of the sense of brotherhood, and to avoid shame between the two parties, then the offer of cash money worth Rp. 90.000.000, - received.

In accounting, information asymmetry occurs because the company's management is not blunt to the investor about how exactly the total profit of the company obtained during one accounting period. Similarly, the information asymmetry can occur because it is caused by the act of the investors who are not frank to the management of the company about the situation and the latest developments in stock market movements in the stock market. Similarly, the same thing delivered by Indriani, Khafid and Anisyukurulillah (2014) which states the agency theory explains the conflict of interest between users of information with company management resulted in information asymmetry. Submission of financial statements to stakeholders will be able to minimize information asymmetry that occurs between the manager and stakeholders. Similarly, the determination of how much money the actual harvest submitted by the men to the women. This ambiguity has the potential to generate information asymmetry, especially among large families of both sides. This is because the family of the bride and groom, since the beginning already know when the event ma'manu manu implemented, that the amount of money that will be submitted when the event application or in term Bugis Makassar called mappetuada, which is worth Rp. 100.000.000, - (One hundred million rupiah), but because of the shame (siri) in front of female family, hence from the side of the male family rather feel heavy to fulfill request from family side of woman.

Deliberation to negotiate is done in order to anticipate the condition that happened. Post-ma'manu manu, the party of the male family begs to hold a closed meeting with the family of the bride, especially the parents (father and mother) of the bride. This closed and confidential meeting, held with the aim of negotiating with both women's parents, in order to preserve the amount of money required by the bride party, it could be reduced in amount to Rp. 90.000.000, - (Ninety million).



According to Maman and Sitti Naharia, that the request to ask for a reduction of the amount of money the panai, because in conducting the wedding, not only the cash money that will be the responsibility of the male penganting men, but it is possible will appear unexpected costs, and requires adequate funding, for example, in general the men also make small events at home. In accounting this is called the miscellaneous costs that arise and should be recorded in the income statement. Investments are always based on the decision of sacrificing the present (relative pastr) resources to earn future results (not yet pasfr). In investing, individuals always consider the expected outcomes, risks and costs. The expectation of the results is derived from the expected cash flow value to be earned during the investment period. In addition, cash flow is obtained when the house is resold. If the resale price is higher than the purchase price then the homeowner will get the capital gain that becomes the result of his investment.

#### **4. Conclusion**

In the accounting perspective, ma'manu-manu process reaches mappetuada, there has been bargaining transaction between the seller and the buyer. Bargaining is intended to determine an agreement on the finalization of how the nominal money amount is agreed between the two parties, when the ma'manu-manu event is taking place at the home of the bride. Transparency and accountability appear on the determination of the nominal amount of money transferred to the account of the mother of the bride, Naima. This is evidenced when pronounced in ma'manu-manu event in front of the second family of the bride. The nominal value of Rp. 90.000.000, -, and face value of Rp. 100.000.000, - which was announced when the event mampetuada, this has led to asymmetry of positive information. To avoid information asymmetry in determining the nominal amount of cash money, it may be better for both parties to be more transparent when the mappetuada event is implemented. This is intended to avoid the worst possibilities, such as shame (siri) in the community environment, and family, if in the future there are irresponsible parties from the family of the bride, who leaked or revealed about how the nominal amount of money panai in the real value.

In the Islamic perspective, the asset value of girls can be high when they are taught from the beginning of a religious knowledge. The science of religion in question is to give understanding to the child about the meaning, essence, and importance of the five pillars of Islam. The five pillars of Islam in question is to say two sentences shahada, establishing prayers, issuing zakat, fasting in the holy month of Ramadhan, and performing Hajj pilgrimage ke baitullah for those who have financial ability (financial). Asset in the perspective of Islam is the obedience and devotion of istiqamah in carrying out all the commands of Allah SWT, and Istiqamah in avoiding all his prohibitions. Shalehah daughters of course Insha Allah will be to faced also with a pious man. Subservient has produced valuable assets both in the world, as well as in the future. Asset in world size is the high money from the daughter when she proposed, this is due to the respect of the prospective bridegroom will noble and noble character of his future wife. In the perspective of Islam, piety is an invaluable asset, which is a surge of paradise. This is the meaning and essence of accounting in the perspective of the Bugis Makassar tribe.

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# Budgeting Information Framing, Responsibility and Intrinsic Motivation in Investment Decision-Making of Regional Companies

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## Abstract

This study aims to re-examine the effects of information budget framing, responsibility and intrinsic motivation in investment decision-making with group-shifts as a moderating. This study was conducted in companies located in rural areas. This study tests three possible conditions that affect whether group are more risk-taking or risk-averse based on three components: (1) forming decision alternatives, (2) the level of responsibility for a decision based on past investments, and (3) the rewards given for the success of a particular project. This study uses the 2 x 2 experimental design by creating a decision-making scenario. There were a total of 80 participants who work as employees in rural companies. Before this experiment was conducted, validity and reliability tests were done through a pilot test on the experimental instruments. Paired sample t-test and ANCOVA were used to test the hypotheses through SPSS for Windows. The results show that the decision-making process differed based on whether the information was framed in a positive light or not, as well as the rewards given on the success of a project.

**Keywords:** Framing, Information, Intrinsic, Group-Shifts

## 1. Introduction

### *1.1 Background*

Business competition is good for the development of a company but can also be the cause of corporate failure. Companies use competition as a direction and policy to maintain survival. Competition will be more beneficial for the company if it is supported by a good information system. One such system is accounting information system where a manager can use it to make decisions related to operations and controlling the company in the present and in the future. Accounting information also helps investors make investment decisions.

Accounting information used by internal actors in a company is budgeting information. A budget helps managers plan and control operations (Yunia and Sabaruddinsah, 2011). A budget contains important information used by both for-profit and non-profit organizations. A budget is used by a manager as a tool to measure efficiency, to coordinate cost control, to communicate, to evaluate performance, and to motivate. A manager should take into account the behavior of human resources in the decision-making process. Human resources play a tremendous role in achieving corporate goals while staying within the budget. Decision-making is not done alone but rather in groups who have talents in perceiving opportunities and risks from a list of solution alternatives.

However, the level of risk associated with a sole decision-maker and a group is completely different. Rutledge and Harrel (1994) stated that group decisions indicate that interaction among members will lead to a risky shift in decision-making. A risky shift, oftentimes referred to as a

group shift, is the shift of a decision between a sole decision-maker and a group. In addition, decision makers are considered capable in processing information and deciding on the best possible decision. Rationality also mandates a consistency and coherency in the decision-making process, although it is often violated. A cause of this violation is the information framed adopted by the decision maker. A frame is related to how a fact or piece of information is expressed. Kahnemen and Tversky (1981) proposed a possible theory as a clarifier in this conundrum. Their theory suggests that information framing adopted by a person can influence his or her decision. Naim (1998) found that the influence of information framing is larger in groups than in individuals when aiming for success.

Framing will help clarify whether a risk-taking or risk-averse behavior will be experienced in a group interaction. The adopted frame will help in explaining the decision shift between individual and group decision makers in a company. In addition to information framing, Bazerman (1984) found that responsibility for investment decisions can influence a person or people's decision in allocating company resources.

Responsibility over an investment project can cause someone to adopt a risk-taking approach. When an individual makes a decision, he or she will be responsible and will do what it takes to ensure that their decision will become successful. This is a psychological effect of bearing a responsibility. The social effect is that he or she will be entirely responsible whether the investment is a failure.

Humans are social beings who have tendencies to interact with each other. They are programmed to offer help without expecting any return. In economics, this behavior is known as intrinsic motivation. This type of motivation is not just done in social settings but also has a tendency to be applied when working in an organization or company. Conversely, extrinsic motivation is helping someone with the hope that he or she will be rewarded for their efforts. This is what causes intrinsic motivation to become increasingly scarcer.

This study is a continuation and development of the research conducted by Susanto (2008) with several new additions. First, although this study uses the exact same theory, the objects and subjects are different, so this study contributes to the general theories regarding management accounting and financial management in rural areas, as well as behavioral accounting in Indonesia. Specifically, this study contributes in such a way that can be used to develop the performance of rural companies in Indonesia. Throughout time, state-owned companies in Indonesia (Badan Usaha Milik Negara or BUMN for short) and regional-government-owned companies (Badan Usaha Milik Daerah or BUMD for short) have oftentimes reported losses. Those losses have been proven through various research such as in Furqon's (2012) study which showed that the corporate performance of BUMDs have not been optimal in their finances. Graha's (2014) research showed the same, stating that BUMDs have difficulties in making a return on their investments, even though the government owns and monitors their companies' operations and financial performance reports in the same manner as private parties own and monitor their companies. The odd thing is that managers and employees working in BUMDs are oftentimes contract or freelance workers and have not yet reached the status of civil servants. One main difference in this study compared to previous ones is that past studies mainly used college students as the subjects of their research when in fact they have yet to have any real-life experience in corporate decision-making. The subjects of this study are those who act in the

decision-making processes in their companies.

This study empirically tests the effects of budgeting information framing in a positive and negative light; responsibility which is further divided into two factors, namely high and low responsibilities; and decision-making, of which there are two factors, namely individual and group decision-making. As for the investment decision factor, this can be divided into two different components, namely risk-taking (negatively framed information) and risk-averse (positively framed information). Based on these theories, this study will answer the following hypotheses:

- H1a: The preference to invest in risk-bearing projects will be lower by group-shifts than by individual decision-makers when information is framed positively
- H1b: The preference to invest in risk-bearing projects will be lower by group-shifts than by individual decision-makers when information is framed negatively
- H2a: The preference to add an investment in risk-bearing projects will be higher by group-shifts than by individuals who are not responsible for the initial investment
- H2b: The preference to add an investment in risk-bearing projects will be higher by group-shifts than by individuals who are responsible for the initial investment
- H3: The intrinsic motivation preference in risk-bearing projects will be lower in groups than in individuals when given rewards for their accomplishments.

## **2. Research Methodology**

This study aims to understand human behavior in decision-making when affected by budgeting information framing, responsibility and intrinsic motivation. The total number of participants in study study were 80 people. In the demographic questionnaire distributed to the participants, they were asked about their age and work experience. These two items could be used to potentially gauge differences in their decision-making processes. They were also asked to fill in their gender and intelligence levels, though differences in these two items could be managed by identical working environments. The demographic questionnaire was used as an additional analysis for this study. This experiment was designed using the 2 x 2 experimental design for the independent variables (budgeting information framing and responsibility). The intrinsic motivation variable acted as the covariate variable which measures the before and after effects of being rewarded for their decisions.

This study is comprised of two steps. The first step was dividing the 80 participants into two groups of 40 people. Each person in the first group was given a case study, and the results of the case study showed the decision he or she would make in that particular scenario. The second group of 40 people was also given a case study to work with, though they could work with another person of the group, further dividing the second group into 20 groups of two members. The results of the case study were used to gauge the decisions made by a group of people.

The second step was dividing the second group into individual groups and giving them an identical case study based on the group-treatment of each and every group. This was done because the research did not want the group decision to be influenced by an individual or vice versa. Each person was asked to give their input on a case study both as an individual and as a group member. For each case study, the participants were given 10 minutes to work.

The participants were randomly given research instruments for the treatment phase of this study. Before filling in the instrument, the research manager told and emphasized to each participant to read the study case carefully and to imagine themselves as the acting manager in the case study. The participants were also asked to discuss the decision they would make with their partner. The participants were not given calculators or other tools since there were no right or wrong answers in the study cases. The research manager gave a signal to the participants to begin filling in their instruments. After the signal was given, each participant began reading the study case and continued by choosing a manipulation check, as well as gauging their level of their conviction of their decision.

Filling in the instrument by individuals and groups were done similarly. However, the participants were randomly chosen to work in groups of two. They were given 10 minutes to discuss with their partners the type of decision they would make and to make a consensual decision.

### 3. Results

The total number of participants who joined this study was 80. However, due to time constraints, this experiment was conducted in four different cities: Makassar, Gowa, Palopo, and Malili. Each location conducted the experiment by following the aforementioned standards and procedures. In the first step, 40 participants were divided into two groups consisting of 20 people each. Each of the 20 people in the first group was a study case to gauge their decisions made individually. The second group of 20 people was split into 10 groups of two members each. They were asked to discuss a study case. Their decisions were recorded as a group-made decision.

Afterwards, the first group of 20 individuals were put into groups consisting of two members each, and the second group were asked to give their decisions on a study case individually. Both groups, whether in pairs or alone, were given 10 minutes to discuss and provide their decision.

#### 3.1 Participants Demographic

The characteristics of the participants' demographics were split into three categories: age, gender and work experience as a decision-maker. The results of the data regarding the participants' demographic characteristics can be seen in Table 5.1.

To obtain the demographic data, the participants were also asked about specific information regarding their experience in working as a decision-maker. They were split into four different groups, and each group was compared against one another (as shown in Tables 5.2, 5.3, 5.4 and 5.5). Each group was assigned a different letter from A to D. In all, the average work experience in years of these groups was highest in group B (12.00). Group A had the second highest average work experience with 11.15 years. Group D had 9.85 years in average, and finally Group C had the lowest average work experience with only 6.00 years. In all, the average work experience for every participant was 9.75 years.

Table 5.1 Descriptive Statistics of Participant Demographic

	N	Minimum	Maximum	Mean	Std. Deviation
Age	80	20	42	31.18	8.006
< 20	1				

21-25	23					
26-30	13					
31-35	13					
36-40	21					
>40	9					
Total	80					
Gender						
Male	36					
Female	44	80	1	2	1.55	.501
Total	80					
Work Status						
Bekerja	76					
Tidak Bekerja	0	80	1	2	1.05	.219
Total	80					
Work Experience in years						
<1	1					
1-5	33					
6-10	32					
11-15	13	80	1	19	9.75	7.484
16-20	1					
>20						
Total	80					
Valid N (listwise)		80				

Source: Processed data (2018)

Table 5.2 Demographic Descriptive Statistics for Group A

	N	Minimum	Maximum	Mean	Std. Deviation
Age	20	33	40	33.05	7.776
Gender	20	1	2	1.15	.366
Work Status	20	1	2	1.05	.224
Work Experience in years	20	2	12	11.15	7.365
Valid N (listwise)	20				

Source: Processed data (2018)

Table 5.3 Demographic Descriptive Statistics for Group B

	N	Minimum	Maximum	Mean	Std. Deviation
Age	20	22	45	33.50	8.642
Gender	20	1	2	1.35	.489

Work Status	20	1	2	1.15	.366
Work Experience in years	20	2	13	12.00	8.944
Valid N (listwise)	20				

Source: Processed data (2018)

Table 5.4 Demographic Descriptive Statistics for Group C

	N	Minimu m	Maximu m	Mean	Std. Deviation
Age	20	20	44	26.45	6.236
Gender	20	1	2	1.90	.308
Work Status	20	1	1	1.00	.000
Work Experience in years	20	1	12	6.00	4.984
Valid N (listwise)	20				

Source: Processed data (2018)

Table 5.5 Demographic Descriptive Statistics for Group D

	N	Minimu m	Maximu m	Mean	Std. Deviation
Age	20	20	47	31.70	7.699
Gender	20	1	2	1.80	.410
Work Status	20	1	1	1.00	.000
Work Experience in years	20	2	19	9.85	7.184
Valid N (listwise)	20				

Source: Processed data (2018)

### 3.2 Hypotheses Analysis

H1a was tested to know where there is a difference in decision made by individuals and groups if the investment decision was provided in a positive frame. This hypothesis also serves to understand the comparative preference in decision-making between individuals and groups in risk-bearing decisions based on the information provided.

H1b examines whether there is a difference in decision made by individuals and groups if investment information was provided in a negative frame. In addition, it also examines whether the comparative preference between individuals and groups in determining which of the two are more willing to bare or avert from risky investment decisions.

H2a questions whether there is a difference in decision between individuals and groups if investment information is provided without a manager who will bear the responsibility of the initial investment. It also compares between individuals and groups about which of the two is more prone to making risky decisions.



Finally, H2b checks if there is a difference in decisions made between individuals and groups if investment information is provided by a manager who will bear the initial investment. It also examines whether individuals or groups are more prone to make risky investment decisions. Table 5.6 Differences between Individual- and Group-Decision-Makers (Framed Information and Responsibility)

		Paired Differences					T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Individual-Group – Positive Frame	1.350	2.159	.483	.340	2.360	2.797	19	.012
Pair 2	Individual-Group – Negative Frame High Group	-2.050	1.761	.394	-2.874	-1.226	-5.205	19	.000
Pair 3	Responsibility – Low Individual Responsibility High Individual	-.800	2.419	.541	-1.932	.332	-1.479	19	.156
Pair 4	Responsibility – Low Group Responsibility	.400	2.349	.525	-.699	1.499	.762	19	.456

Source: Processed data (2018)

Table 5.7 Testing the Average Difference Between Individual-Group (Information Framing and Responsibility)

		Mean	N	Std. Deviation	Std. Error
					Mean
Pair 1	Individual Positive Framing	4.25	20	1.410	.315
	Group Negative Framing	2.90	20	1.410	.315
Pair 2	Individual Negative Framing	3.00	20	1.556	.348
	Group Negative Framing	5.05	20	1.099	.246
Pair 3	Group High Responsibility	4.10	20	1.804	.403
	Individual Low Responsibility	4.90	20	1.334	.298

Pair 4	Individual	High	4.25	20	1.410	.315
	Responsibility					
	Group Low Responsibility		3.85	20	1.531	.342

Source: Processed data (2018)

### 3.3 Hypothesis 1a

H1a tests whether there is a difference between decisions made by individuals and groups when investment information is provided in a positive frame. It also compares the decision-making preference between individuals and groups in avoiding or taking risks. The following table shows the percentages of the subjects who chose each alternative.

Table 5.8 Percentage of Subjects (Individual and Group) who Chose Each Alternative when Information is Provided in a Positive Frame

			Decision		Total
			A	B	
Decmaker	Individual	Count	9	31	40
		% within decmaker	22.5%	77.5%	100.0%
	Group	Count	11	9	20
		% within decmaker	55.0%	45.0%	100.0%
Total	Count		20	40	60
	% within decmaker		33.3%	66.7%	100.0%

Source: Processed data (2018)

The test shows that when information is positively framed, of the 40 individuals, nine chose A (22.5%) and 31 chose B (77.5%). When making decisions in groups, 11 people chose A (55%) and the rest chose B (45%).

This test was done with a significant level of 5% and a confidence level of 95% with a degree of freedom (df) of 19. This shows that the tcount is 2.797 for individuals-positive framing and group-positive framing. Since tcount is greater than ttable, then we can conclude that there is a difference between decisions made by individuals and groups when information is provided in a positive frame.

Based on the results, we found a difference in decision and preferences in decision-making following the way information is framed. This shows that framing information will positively affect the decision-making process regarding risky decisions made between individuals and groups. In conclusion, H1a is supported.

### 3.4 Hypothesis 1b

Testing H1b was done to understand whether there is a difference in decisions made by individuals and groups when information is provided in a negative frame. It also examines the comparison between decision preferences between individuals and groups to see which is more

risk-taking and risk-averting based on the information available. The following table shows the percentages of the subjects' choices from the alternative decisions.

Table 5.9 Percentage of Subjects (Individual and Group) who Chose Each Alternative when Information is Provided in a Negative Frame

			Decision		
			A	B	Total
Decmaker	Individual	Count	23	17	40
		% within decmaker	57.5%	42.5%	100.0%
	Group	Count	3	17	20
		% within decmaker	15.0%	85.0%	100.0%
	Total	Count	26	34	60
		% within decmaker	43.3%	56.7%	100.0%

Source: Processed data (2018)

The results show that when information is given in a negative frame, of the 40 participants, 23 of them chose A (57.5%) while only 17 chose B (42.5%). When deciding in groups, 2 chose A (15%) while the rest went with B (85%).

The results above show that there is a difference in the decision made in terms of the participants' preferences when deciding individually or in groups. This shows that framing information negatively will result in a more risk-taking decision. This is proven by the average value of negative framing for individuals compared to that of groups of 3.00 and 5.05, respectively.

From the results, there appears to be a difference in decision and preference between individual- and group-decision-makers. This shows that negatively framing information will result in a difference in risk-taking decisions between individuals and groups. This is shown by the average value of the individual negative framing of 3.00 and group negative framing of 5.05. Basically, decisions made by groups are more prone to make risky decisions when information is framed negatively than individuals. This finding supports H1b, and we can conclude that framing information negatively will affect the decision preference for individual- and group-decision-makers.

### 3.5 Hypothesis 2a

Testing H2a was done to find out whether there is a difference in decision made by individuals and groups when investment information is provided without a manager responsible for the initial investment. It also serves to deepen our understanding on the decision makers' preference to chose between risk-taking or risk-averting decision-making of individuals and groups. It also tests how they will behave when a manager is and isn't bearing the financial risk of the deicion. The following table shows the percentages of their decisions.

Table 5.10 Percentages of the Subjects who Chose Each Alternative when No Manager is

## Responsible for the Initial Investment

			Decision		
			A	B	Total
Decmaker	Individual	Count	15	25	40
		% within decmaker	37.5%	62.5%	100.0%
	Group	Count	6	14	20
		% within decmaker	30.0%	70.0%	100.0%
Total	Count	21	39	60	
	% within decmaker	35.0%	65.0%	100.0%	

Source: Processed data (2018)

The results of the test show that when there is not a manager to bear the responsibility of the initial investment, of the 40 participants, 15 chose A (37.5%) and 25 chose B (62.5%) individually. When split into groups, 6 chose A (30%) and the remaining 14 groups chose B (70%).

This shows that there is no difference in decision nor a specific preference when deciding individually or in groups. By looking at the average value of each treatment, we can conclude that in the scenario where no manager bears the initial investment, there will not be a significant difference in decisions made by individuals and groups. We further conclude that H2a is not supported.

### 3.6 Hypothesis 2b

H2b tests whether there is a difference between individually- and group-made decisions when investment information is provided when a manager is bearing the initial investment. This hypothesis will also test whether groups and individuals prefer making risky or safer decisions in this scenario. The following table shows the percentages of the subjects' decisions in the aforementioned scenario

Table 5.11 Percentage of Subjects who Chose Each Alternative when Managers Bear the Responsibility of the Initial Investment

			Decision		
			A	B	Total
Decmaker	Individual	Count	17	23	40
		% within decmaker	42.5%	57.5%	100.0%
	Group	Count	8	12	20
		% within decmaker	40.0%	60.0%	100.0%
Total	Count	25	35	60	

Source: Processed data (2018)

The data shows that when a manager bears the responsibility for the initial investment, of the 40 individual decision-makers, 17 chose A (42.5%) and 23 chose B (57.5%). When deciding in groups, 8 groups chose A (40%) and the rest chose B (60%). Looking at the average treatment value, the researchers concluded that there is not a significant difference in decisions made or preference in choosing the riskier or risk-averting option.

The average value for individuals was 4.25 whereas for groups it was 3.85 and 4.25 for groups. These values show that groups are more willing to make riskier decisions than individuals when a manager is bearing the responsibility of the initial investment. This does not support H2b. This finding differs from that of Rutledge and Harrel (1994) who showed a significant difference in preference between individual and group decision-makers.

### 3.7 Hypothesis 3

H3 tests whether the behavior of each individual and group plays a significant role in their decisions when they are promised a reward for their performance.

Table 5.12 Difference Between Individuals and Groups Before and After Reward

		Mean	N	Std. Deviation	Std. Error
Pair 1	Individuals before reward	2.29	80	1.561	.174
	Individuals after reward	2.00	80	1.405	.157
Pair 2	Groups before reward	2.30	40	1.620	.256
	Groups after reward	2.98	40	1.687	.267

Source: Processed data (2018)

Table 5.13 Difference between Individuals and Groups Before and After Reward

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Individuals before and after reward	.288	1.371	.153	-.017	.592	1.876	79	.064
Pair 2	Groups before and after reward	-.675	1.670	.264	-1.209	-.141	-2.556	39	.015

Source: Processed data (2018)

In testing H3, the significance level was 5% and the confidence level was 95% with a 79 df, showing tcount to be 1.876 for individuals before reward and individuals after reward. Because the tcount is greater than the ttable, the researchers concluded that there is no significant difference in behavior in individuals before and after rewards are given. However, a difference

exists for groups at the same significance and confidence levels with a 39 df. We see that the tcount of -2.556 before and after groups are given rewards. Because of tcount is less than the ttable, we conclude that there is a difference between behaviors of groups in before and after reward scenarios.

These findings support H3, and the researchers concluded that the intrinsic motivations in risky projects will be lower in groups compared to individual decision-makers when given rewards for their accomplishments. This indicates that a reward will affect both individual and group decision preferences.

Table 5.14 ANCOVA

Dependent Variable: Decision

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	104.659(a)	8	13.082	7.337	.000
Intercept	438.514	1	438.514	245.917	.000
Intrinsicmot	.467	1	.467	.262	.610
Decisionmaker	1.017	1	1.017	.570	.452
Responsibility	.091	1	.091	.051	.822
Framing	2.647	1	2.647	1.485	.226
decisionmaker * responsibility	2.327	1	2.327	1.305	.256
decisionmaker * framing	91.696	1	91.696	51.423	.000
responsibility * framing	6.009	1	6.009	3.370	.069
decisionmaker * responsibility * framing	.895	1	.895	.502	.480
Error	197.933	111	1.783		
Total	2089.000	120			
Corrected Total	302.592	119			

a. R Squared = .346 (Adjusted R Squared = .299)

Table 5.14 shows that responsibility does not have any significant effect on the decision. This can be seen in the table above where the significance level for responsibility, both individually and in interacting with other variables, has no effect on the decision. TO support H1, we can see an interaction between the decision maker and budgeting information framing with a significance of 5% and a confidence level of 95%. It is empirically proven that the way information is framed will affect a decision-maker's decision in a significant manner.

#### 4. Conclusion and Recommendations

##### 4.1 Conclusion

This study aims to gauge the quality of the decisions made by decision-makers working in BUMDs. The quality of their decisions are tied closely to the profits and losses of the company and how they can provide supreme service to the community. The researchers conclude this study by saying that decisions are affected based on how information is framed, both positively and negatively, and when rewards are given for successes of a project.

##### 4.2 Recommendations

The findings of study support several theories, though future research should put an emphasis on timeliness in the decision-making process. Whether decision-makers are aware or not, time plays a significant role in the quality of their decisions. Moreover, timeliness can affect the condition of the BUMD and can increase the risk of losses.

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# The Effect of Collaboration Strategy on Logistics Performance: Mediating Role of Logistics Capability

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## Abstract

This study was aimed to examine the role of collaboration strategy in improving organizational capability, the latter being the impetus of increased logistics performance. This research adopted a quantitative design, and the research instrument was a questionnaire using a five-point Likert scale. The research population was 22 freight forwarding companies located in Badung regency, Bali province, Indonesia. A total of 44 managers and assistant managers were asked to fill out the questionnaire. The research model was built by using structural equation modelling approach and the data were analyzed with the help of SmartPLS-3 software. The research findings revealed that collaboration had a significant effect on logistics capability, which in turn had a significant effect on logistics performance. Theoretically, the findings imply that we need to add the variable body of knowledge into the relationship between the variables and to consider the role of logistics capability as the mediating variable. The practical implication concerns the importance of collaboration strategy in improving capability and logistics performance. The research limitations are discussed.

**Keywords:** Supply Chain, Logistics Capability, Logistics Performance

## 1. Introduction

Based on the data released by the World Bank on the logistics performance index of 166 countries in 2014, Indonesia ranked 53, up from 59 in 2012. Indonesia's logistics performance index has indeed increased, yet according to the Association of Logistics and Forwarding of Indonesia (ALFI) there are still some logistics weaknesses evident in Indonesia, such as high logistics cost and delay in delivery of goods. The high costs of transportation and storage have resulted in increased production costs, coupled with company internal problems, such as low performance of human resources and leadership. For nearly 30 years companies have been increasingly concerned with logistics activities (Tibben et al., 2010). This means that logistics



is an important part of a supply chain network system that should be a major concern in the evaluation of operational costs. Service and manufacturing industries are required to have a competitive value, create a value added, and work more efficiently through the implementation of an integrated management concept so as to create a sustainable competitive advantage.

Shipping businesses have grown so rapidly and is closely related to the logistics process, and transportation costs contribute between 25 and 50 percent (Parego et al., 2010). This is because the process of transporting cargo and documents using ships and aircraft is very complicated and requires relatively high costs. National logistics condition is closely related to the logistics performance of companies, especially those engaged in logistics and supply chain. Logistics performance reflects the organizational performance related to the ability to deliver goods and services in the proper quantity and at an appropriate time according to the demand of the customers.

Logistics distribution as a major component of a business activity in the field of logistics services requires efforts to improve their competitiveness. Increasing competitiveness in the field of logistics services has been carried out by many business organizations through collaboration strategy, on the assumption that collaboration can increase market share, improve customer service, share and lower product development costs, reduce risk, improve product quality, improve skills and knowledge, and so on (Bititci, 2004). According to Vereecke and Muylle (2006), collaboration can lead to improved performance in supply chain. Companies build collaboration relationships with their supply chain partners to achieve sustainable efficiency, flexibility and competitive advantage (Nyaga et al., 2010) ultimately leading to improved corporate performance.

Collaboration aims to strengthen partnership networks by integrating their resources, strengthening business networks, and improving competitiveness in offering services. Nevertheless, contradictory values occur in ceating a partnership pattern, namely a high risk of failure. A number of obstacles in achieving the success of a partnership (collaboration) stem from factors, such as inter-firm rivalry, governance problems, inter-corporate organizational differences, coordination costs, differences in knowledge spillover, differences in target services desired by each company, and organization rigidity (Park and Ungson, 2001). From the description above, a research is required to examine collaboration partnership in an attempt to improve the capability of a company which ultimately leads to increased logistics performance of logistics companies. This research was conducted on companies which have joined ALFI (Indonesian Logistics and Forwarding Association) of Badung Regency, Bali, to examine their efforts to face competition, especially issues leading to customer complaints, for instance high logistics cost and delay in cargo delivery. In addition, Indonesia has already joined MEA (ASEAN Economic Community) which allows more and more foreign logistics companies to enter the country so that competition among the logistics businesses/ supply chains increases. Therefore, in anticipation of such a large expansion, collaboration among existing logistics companies is required to improve logistics capabilities that leads to improved logistics performance.

## **2. Research Methodology and Hypotheses**

### *2.1 Population dan samples*

The population of this study comprised 22 companies that have joined ALFI (Association of Logistics and Forwarding Indonesia) of Badung regency, Bali Province. The sampling technique used in this study was non-probability sampling, where the elements of the population did not have the same opportunity to be selected as samples. The sample unit of this research consisted of 19 cargo companies which were also forwarders and expeditors.

The sampling method used in this research was purposive sampling method, that is the sampling method with certain consideration which is considered relevant or can represent the object under study. The criteria for sampling frame are companies with the following qualifications:

- 1) cargo companies which were also forwarders and expeditors (multipurpose organization)
- 2) over 15 years of operation,
- 3) have overseas agents,
- 4) have service contract with with some support companies, such as shipping companies, tracking, transportation, warehousing, and fellow forwarders, and
- 5) has a PPJK certificate.

After the number of research samples was identified then calculation was conducted of research respondents, namely managers and assistant managers. Respondents represented by managers and assistant managers were representatives of policy makers in organizations, primarily related to research variables such as collaboration and logistics performance. A total of 38 respondents agreed to participate in the present study.

## *2.2 Hypotheses*

Rowland (2008) argued that collaboration strategy has a significant effect on logistics capability where the important role of collaboration concerns its impact on increasing the capability of the whole members. This study drew on the research conducted Nyaga et al. (2010) and Simatupang and Sridharan (2002). Based on the results of past empirical studies, a hypothesis was formulated as follows.

H1: The collaboration strategy will have a significant effect on logistics capability

According to Vereecke and Muylle (2006), collaboration strategies result in improved performance in supply chain management. Companies build collaboration relationships with their supply chain partners to achieve sustainable efficiency, flexibility and competitive advantage (Nyaga et al., 2010) that ultimately leads to improved corporate performance. According to Kocoglu et al. (2011); Wu et al. (2014); Vereecke and Muylle (2006), logistics performance is influenced by collaboration either directly or indirectly. Based on the result of these empirical studies, a hypothesis was formulated as follows.

H2: Collaboration strategy will have a significant effect on logistics performance.

Morash et al. (1996) found that company logistics performance was determined by their logistics capabilities where capability plays an important role as a proxy that has a significant effect on performance. Based on the result of this empirical study, a hypothesis was formulated as follows.

H3: Logistics capability will have a significant effect on logistics performance

## **3. Results and Discussion**

### *3.1 Outer Model Measurement*

Outer model or also known as measurement model is a specification of the relationship between

latent variables and their manifest indicators or variables, or in other words it is a measure of how far the indicators can explain the latent variables. Therefore, validity and reliability tests should be performed. The validity test shows the extent to which a research instrument is able to measure what it purports to measure (Danim, 1997). Data validity is largely determined by the circumstances in which the respondent was interviewed (Umar, 2002). The validity test ensures that the measurement includes a set of sufficient and representative items that represent a concept (now, 2006). The reliability test is a term used to indicate the extent to which a measurement result is relatively consistent if the measurement is repeated twice or more (Umar, 2002). When a research instrument (questionnaire) is administered twice to measure the same phenomenon and the results obtained are relatively consistent, the instrument is said to be reliable.

Covergent validity of measurement model with reflexive indicator is assessed by examining the correlation between an item score/ component score and the construct score, and such validity score was calculated using PLS. Individual reflexive sizes are considered to be high if they correlate more than 0.70 with the construct you want to measure. However, for the initial stage of the development of measurement scale the loading values of 0.5 to 0.60 are considered sufficient (Chin, 1998).

The discriminant validity of the measurement model with reflexive indicators was assessed based on cross loading measurement with the construct. If the correlation between the construct and its measurement items is greater than the size of the other construct, it indicates that the latent construct predicts the size on their block better than the size on the other block. Another method of assessing discriminant validity is to compare the square root of average variance extracted (AVE) value of each construct with the correlation between the construct and the other constructs in the model. If the AVE square root value of each construct is greater than the correlation value between the construct and the other constructs in the model, it is said to have a good discriminant validity value (Fornell and Larcker, 1981).

Fornell and Larcker (1981) argued that these measurements can be used to measure the reliability of latent variable component scores and the results are more conservative than composite reliability. Recommended AVE value must be above 0.50. Composite reliability indicator blocks that measure a construct can be evaluated by two different sizes: internal consistency developed by Werts, Linn and Joreskog (1974) and Cronbach's Alpha. Compared to Cronbach Alpha, this measure does not assume tau equivalence between the measurements assuming that all indicators are weighted equally. So Cronbach alpha tends to produce lower bound estimate reliability, whereas PC is closer approximation assuming that parameter estimation is accurate. PC as internal consistency measure can only be used for construct with reflexive indicator.

Reliability shows the accuracy and precision of a measurement scale. A measurement scale is said to be reliable if the measurement results are accurate and consistent. Measurements are said to be consistent if multiple measurements on the same subject produce no different results. The variable is reliable if the coefficient of alpha cronbach > 0.6.

Tabel 1 Outer Loadings

Matrix	Coll	Capability	Performance
X1.1	825		

X1.10	819
X1.2	884
X1.3	902
X1.4	873
X1.5	814
X1.6	846
X1.7	874
X1.8	855
X1.9	788
Y1.1	0,777
Y1.2	0,869
Y1.3	0,838
Y1.4	0,732
Y1.5	0,736
Y1.6	0,667
Y1.7	0,793
Y2.1	0,921
Y2.2	0,835
Y2.3	0,908
Y2.4	0,915
Y2.5	0,895

Individual reflexive sizes are said to be high if they correlate more than 0.70 with the construct you want to measure. However, for the initial stage of the development of a measurement scale the loading values from 0.5 to 0.60 are considered sufficient (Chin, 1998). Table 5.9 above reveals that the value of outer loading is high. Table 1 indicates that it meets the criteria.

Tabel 2 Average Variance Extracted (AVE)

Average Variance Extracted	
Collaboration	0,720
Log Capability	0,602
Log Performance	0,801

Formnel and Larcker (1981) argued that these measurements can be used to measure the reliability of latent variable component scores and the results are more conservative than composite reliability. Recommended AVE value must be above 0.50. Table 5.10 shows that the AVE value of all variables is above 0.50 so that the measurement criteria are met.

### 3.2 Inner Model Measurement

Research hypothesis testing was done through model feasibility test through examining the ability of the model in explaining variation of value dispersion on dependent latent variable which can be explained by determining factors. First, the result of R<sup>2</sup> analysis was examined. Second, the predict relevance method of Stone Geiser (Stone, 1974 and Geisser, 1971) and Goodness of Fit (GoF) was employed. The calculation of Q<sup>2</sup> and GoF uses the R-square coefficient (R<sup>2</sup>). According to Chin (2010), an R<sup>2</sup> estimate of 0.67 indicates that the model is a quite strong model, 0.33 moderate model, and 0.19 weak model.

Table.3 Sebaran Nilai R<sup>2</sup> dan R<sup>2</sup> Adjusted

Variabel Laten	R <sup>2</sup>	R <sup>2</sup> Adjusted
Logistic Capability (Y1)	0.580	0.578
Logistic Performance (Y2)	0.370	0.366
Average	0,475	0,472

The table above shows that the value of R<sup>2</sup> logistic capability is 0,580, and the logistic performance is 0.370. Based on Chin (1998), the value of R<sup>2</sup> indicates that the model can be classified as a moderate model because it is in the range of 0.33. The average value of the two R<sup>2</sup> was 0.472, which means that the variance in the model of the relationship among the constructs collaboration strategy, logistics capabilities, and logistics performance could be accounted for by 47.2 percent, while the remaining 52.8 percent was explained by other variations outside the model. Another information that could be obtained was that the dispersion of the Adjusted R<sup>2</sup> value is less than the dispersion of R<sup>2</sup> value, so that it can be used as an indication that the change or extension of research model to include other latent variables is still possible (Hair et al., 2010).

The next step was to evaluate the feasibility of the model to arrive at the overall model that could be done based on Stone (1974) and Geiser (1971) expressed in the form of formula Q<sup>2</sup>. Q Square Predictive Relevance (Q<sup>2</sup>) measures how well the observations were generated by the model. Q<sup>2</sup> has values ranging from 0 to 1. The closer the value to 1 means that the model has a better predictive ability (Stone, 1974, Geisser, 1971). The value of Q<sup>2</sup> is calculated by the following equation:

$$Q^2 = 1 - [(1-R^2y1) (1-R^2y2)]$$

$$Q^2 = 1 - [(1-0,580) (1-0,370)]$$

$$Q^2 = 1 - [(0,420) (0,630)]$$

$$Q^2 = 1 - 0, 2646$$

$$Q^2 = 0, 7354 \text{ (good } Q^2 \text{ predictive relevance)}$$

The analysis showed that Q<sup>2</sup> value was 0.7354 which means that the model shows a good observation, that is 73.54% of the variance in the relationship between the variables could be accounted for by the model while the remaining 26.46% was determined by another factor that was not included in the research model.

Goodness of fit (GoF) was used to validate the entire model because it was a single measure of the outer and inner models. GoF values range from 0 which shows the model is less good, yet a value away from 0, getting closer 1 indicates that the model is better. The formula used to determine the GoF value is as follows;

$$GoF = \sqrt{com \times R^2}$$

$$= \sqrt{0,683 \times 0,475}$$

$$= \sqrt{0,324}$$

$$= 0,569$$

The results of the GoF calculation showed a value of 0.569, approaching 1 (one), which means that the model could be categorized as a fit predictive model, which in turn indicates that the accuracy of model measurement was good. Based on the GoF criteria - 0.10 (small GoF), 0.25 (Moderat GoF) and 0.36 (large GoF) - the research model could be categorized as a Large GoF.

Effect size testing (f2) aims to provide more detailed information about the variance in the dependent variable accounted for by a set of independent variables in a system of structural equation (Cohen, 1998). The effect size criteria (f2) is 0.02-0.15 (small effect), 0.15 - 0.35 (moderate effect) and > 0.35 (large effect). If the f2 value is within the range of 0.02 it means that the variance the model can explain can be classified as weak. The f2 value within the range of 0.15 is moderate and the value of f2 within the range of 0.35 or above indicates that the equation system brings about a quite strong effect (Chin, 2010).

Table 4. Results of Cohen (f2) effect sizes

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
X -> Y2	0.216	0.235	0.119	1.816	0.070
Rerata	0,216				

The results of the analysis as shown in the above table revealed that the average value was 0.216, and hence it could be concluded that there was an indication that the formation of mediation relationships will be established in this study.

3.3 Hypothesis Testing

Hypothesis testing in this study was done in two stages, namely testing the direct effects and testing the indirect effects of exogenous variables on endogenous variables.

Table 4 Direct effect path coefficient

Construct	Original Sample	Sample Mean	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	Remark
Col -> LC	0.608	0.626	0.115	5.286	0.000	Support
Col-> LP	0.491	0.474	0.170	2.894	0.004	Support
LC-> LP	0.356	0.375	0.163	2.189	0.029	Support

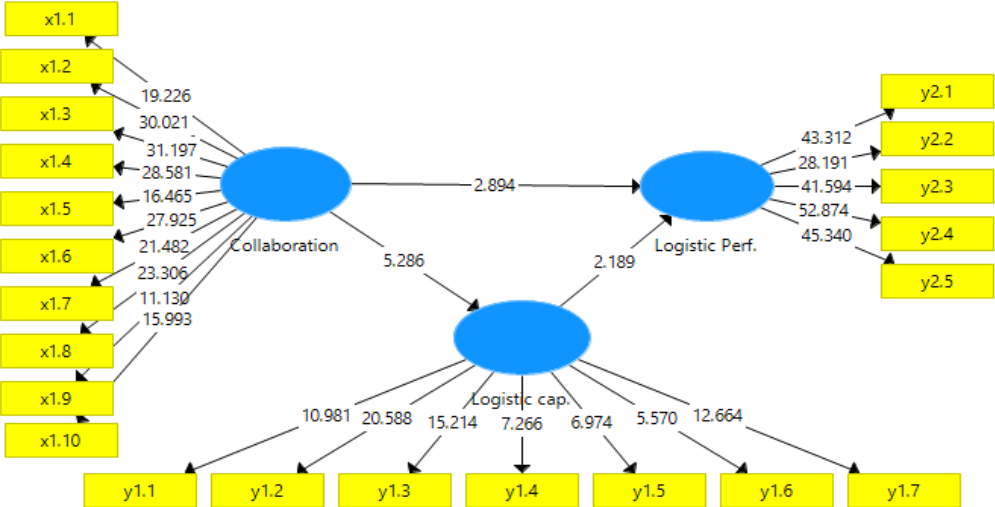


Fig. 1 Bootstrapping Model Analysis

Table 4 shows that the collaboration strategy has a positive and significant effect on logistics capability, where the coefficient value of the indicated path is 0.608 with a t-statistic of 5.286, which is greater than 1.96. This means that the effect is significant positive. The result of this

test indicates that hypothesis 1 which states that collaboration strategy will have a significant positive effect on logistics capability is accepted. This means that more effective implementation of the company's collaboration strategy leads to increased logistics capability. Table 4 also shows that the collaboration strategy has a positive and significant effect on logistics performance, where the path coefficient value is 0.491 with a t-statistic of 2.894, which is greater than 1.96 meaning significant positive. The result of this test indicates that hypothesis 2 which states that collaboration strategy will have a significant positive effect on logistics performance is accepted. This means that more effective implementation of the company's collaboration strategy results in increased logistics performance.

Moreover, the result shows that logistics capability has a positive and significant effect on logistics performance, where the path coefficient is 0,356 with a t-statistic 2,189, which is greater than 1,96 meaning significant positive. The result of this test indicates that hypothesis 3 which states that capability will have a significant positive effect on logistics performance is accepted. This means that higher logistics capability of the company is followed by a concomittant increase in logistics performance. After testing the direct effect then the next step was to test the indirect effect of the role of variable logistics capability as a mediator variable in the relationship between collaboration strategy and performance logistics.

Table 5. Indirect Relationship among collaboration strategy, logistics capability, and logistics performance

No	Model *	Path Coefficient	t-statistics	t-Tabel	Remark
a	Col → LC	0.608	5.286	> 1,96	a significant, b significant
b	LC → LP	0.491	2.894	> 1,96	and c significant but with
c	Col → LP	0.356	2.189	> 1,96	direct coefficient c<b = <i>partial mediation</i>

The table above shows the direct effect of collaboration strategy on logistics capability with a coefficient of 0,608 and a t-statistic os 5,286, which is greater than 1,96, the effect of logistics capability on logistics performance with a coefficient of 0,491 and a t-statistic of 2,894, which is greater than 1,96, and the effect of collaboration strategy on logistics performance with a coefficient of 0.356 and a t-statistic of 2,189, which is greater than 1,96. Following Hair et al (2010), it can be concluded there is a partial mediation role, being the important finding in this study.

### 3.4 Discussion

The path coefficient of the direct relationship between collaboration strategy and logistics capability was 5,286, which is greater than 1.96 which means significant and hypothesis 1 was accepted. This means that collaboration strategy plays an important role in improving logistics capabilities. This result is consistent with the finding of the research conducted by (Rowland, 2008) that collaboration enhances the capabilities of the all members. This study also provides empirical evidence in support of the research conducted Nyaga et al. (2010) and Simatupang and Sridharan (2002). Collaboration is also found to result in improved performance in supply chains (Vereecke and Muylle, 2006). The coefficient of the relationship between logistics capability and logistics performance is 2,189, which is greater than 1.96 which means significant and hypothesis 2 was accepted. This finding in line with that of the research

conducted by Morash et al. (1996) that the company's logistics performance was influenced by logistics capabilities. It is also in accordance with the finding about the resource based view put forth by Barney (1991). The relationship between collaboration strategy and logistics performance was shown by the coefficient of 2,894, which is greater than 1.96 which means significant and hence hypothesis 3 was accepted. The finding of this study is in line with the research conducted by Kocoglu et al., 2011; Wu et al., 2014; Vereecke and Muylle, 2006) that found logistics performance was influenced by collaboration either directly or indirectly.

An important finding of this research is that the variable logistics capability acts as a partial mediator of the relationship between collaboration strategy and logistics performance. This means that logistics capability is not the only factor that affects performance. The results of prediction produced an estimate of the interaction effect of 0.356, which is positive but is still smaller than the prediction results of direct relationship between collaboration strategy and logistics capability, i.e. 0.608. Since the effect on logistics capabilities as a mediating variable for the construct of collaboration strategy is positive, this research can prove that collaboration strategy strengthens the position of logistics capability as a mediator to strengthen logistics performance. That collaboration strategy can choose two paths to strengthen logistics performance, and because the mediation path is positive, the two paths through which the construct of collaboration strategy takes have a strategic value in strengthening the company's logistics performance. This important role makes the collaboration strategy vulnerable to risks so that companies are expected to implement risk sharing patterns through well-regulated agreements that benefit both parties. One of the ways to improve logistics capability is through mapping and possibly also through opening a potential branch to reduce difficulties especially transportation and supplier and to improve lead time service.

### 3.5 Research Limitations

This research is a perception research which might not be immune from bias effects, so it is necessary to do a multi-year research to test the consistency of the relationship between constructs. Thus, the conclusion of the interrelationship between constructs in this study still requires further validation from future studies. This research drew on past empirical studies published between 2005 and 2017, yet there is a strong possibility of future theoretical advancement. Therefore, the model designed and tested in the present study might turn out to be less relevant for solving logistics and supply chain problems management in the future. Future research should include the variables leadership and trust because the organization leader plays a significant role in determining the organization's strategic direction and trust constitutes a crucial factor in building a strong collaboration.

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# The Ethics of Care and Potential Gaps to be Fulfilled by Islamic Business Ethics Theory

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## Abstract

The ethics of care is a quite new branch in ethics and feminist theory. Previous research has used this perspective as an underlying theory for the study of business ethics, corporate governance, auditing, and ethics education. This paper tried to identify the potential gap that can be fulfilled or even refined by Islamic business ethics, which are: sharpen the stakeholder definitions and prioritization, as well as risk management and finance aspect.

**Keywords:** ethics of care, Islamic business ethics, stakeholder

## 1. Introduction: the ethics of care and the ethics of justice

The nature of the firm as a “nexus of contracts” bring about consequences of conflicts of interest among the contracting parties, one of which is the agency problem. According to the agency theory, the problem is in terms of competing and conflicting claims where the main solution is provided by rules and laws, rights and obligations nuances, legitimacy aspect and the power dimension (Machold, Ahmed & Farquhar 2008). The moral reasoning within this arena is a masculinist view according to Gilligan (1982), which is called the ethics of rights. Several corporate collapses due to accounting manipulation provide proofs that problem solving using rules, laws and a power framework are a short-term remedy without sufficient guarantee of long-term success of a business.

A number of changes in the realm of business, including the failing of several well-known companies, cannot be separated from ethical problems. Business ethicists tried to offer ethical perspectives to increase the value of business and enhance the sustainability. One of the ethics solution comes from care perspective which suggested a more caring approach to handle issues in business world by placing care as an important value and framework for personal, business, government and civil society apart from protection of rights or maximization of satisfaction. The emergence of care ethics as a distinct moral theory can be attributed to the work of psychologist Carol Gilligan and philosopher Nel Noddings in the mid-1980s (Hamington and Sander-Staudt, 2011). They claimed that traditional moral frameworks suffer from male bias and hence, offered a “care perspective” as alternative to the “justice perspectives” from Utilitarianism and Kantianism. Even though care ethics is relatively new, it has been applied in business studies with the hope to improve market without sacrificing the goal profit, without slipping into utopian objectives and without making self-deprivation because of the caring activities.

Furthermore, Hamington and Sander-Staudt (2011) stated that although care ethics can be drawn from women’s experience, it does not mean that care cannot be practiced or engaged by men. Its application to business broadly attends to promote justice for women, all humans, and even non-human. In this context, the issue of sustainability come up to not only for the

meaning of survival of the business but also encompass the survival of human-kind. Inter-generational and environmental relations are included as business responsibility, even though future generations are still not-yet-existing persons and hence lack key factors for moral status. Although care ethics has much to offer to business practices, the effort to apply it in business is not without problem. In the masculine world of business, achieving care sounds good but may be deemed to be overly naïve and idealistic. As a response to this problem, this study tried to make care ethics more workable in business setting by offering a pragmatic approach to describe the potential of its use in financial management, especially in financial planning aspect, of a company.

The potential of feminist theory to illuminate accounting has long been noted by several researchers (Cooper, 1992; Hines, 1992; Shearer and Arrington, 1993) who have explored several issues such as woman's role in the accounting profession (Lehman, 1992; Kirkham and Loft, 1993) and feminine view of accounting for the environment. Cooper (1992) herself offers imaginations of accounting based on feminine view in a radically transformed society: "an accounting which is multiple, no debits or credits; which allows for many differences, these could not be added therefore there would be no totals; it would not be concerned with profits, and even less afraid of loss; it would be concerned with gifts, what was given; it would contain no phallogocentric economic terms; and it would not be competitive" (p. 37).

## **2. The Ethics of Care and Stakeholder Perspective**

The stakeholder perspective views the company in a broader sense as the nexus of contracts among all corporate participants to create value. While the alignment of interests of management with those of shareholders as the investors is the focus of the shareholder aspect, the stakeholder model emphasises the value maximisation for all stakeholders, including the contractual participants and the social constituents. The stakeholders' value maximisation objective is achieved through several policies such as minimising cost and waste while improving the product quality, enhancing the employees' skills and satisfaction and contributing to the development of the community.

The explicit statement of company's objective to maximise the stakeholders' interest will be better to guarantee the consideration of business impacts on stakeholders in the decision-making process. The stakeholder-maximisation objective will also not jeopardise the interests of shareholders as found by Bird et al. (2007) and Godfrey (2005). Bird (2007) analysed the relationship between five corporate social responsibility (CSR) activities, namely, contributions to community, employment diversity policy, employee relations, environment protection and high product quality and future stock returns which represent market valuation. Using a statistical regression method, the author found a positive relationship which suggests that there is no conflict between various CSR activities and the stockholders' interest. In line with this, Godfrey (2005) presents theoretical explanations of the relationships between corporate philanthropy and shareholders' wealth. He argues that philanthropic activity will generate positive moral capital among communities and stakeholders which will contribute to shareholders' wealth.

The importance of adopting the stakeholder interest as a company objective is also triggered by several corporate collapses all around the world which call for a better corporate governance

structure to ensure that the managers will act not only to satisfy the shareholders' interest but also that of other stakeholders 'as each of the stakeholders has a legitimate or moral right to claim on the value created by the firm' (Alam 2006, p. 218). Several theories including social contract theory and institutional theory support the stakeholder claim. In social contract theory, an organisation can get legitimacy if the activities are in line with the social expectations. Within institutional theory, a broader perspective is adopted to include the internal and external organisational contexts.

Another consideration to adopt the stakeholder perspective is to ensure that the interests of women are taken into account in corporate decisions. In the shareholder paradigm, the interests of women as workers, small creditors, mothers and small investors tend to be ignored (Sarra 2002). The importance of considering the women's voices and experiences is the focus of this study as the ethics of care from feminist theories is used to explain further the inter-relationship between corporate governance and business ethics. The ethics of care which puts emphasis more on the relationships is considered as an alternative lens through which to study corporate governance (Machold, Ahmed & Farquhar 2008). They proposed feminist corporate governance which 'recognises a multiplicity of actual and potential relationships with varying degrees of asymmetry of power distribution, within which there is an obligation of care' (Machold, Ahmed & Farquhar 2008, p. 673).

As feminist ethics emphasises the importance of relationships with other parties, it has many points of contact with stakeholder theory. The stakeholder theory from the feminist ethics of care is built around relationships rather than just formal structures with clear demarcation lines. The values for stakeholders are created through caring for them and maintaining the web of cooperation to get people to work together to create the value. Another key point from the Wicks, Gilbert and Freeman (1994) identification of masculine and feminine views of the stakeholder concept lies in the process of decision making as good corporate governance can be achieved when the rights and responsibilities of stakeholders are reflected in corporate decision making.

Burton and Dunn (1996) identify another contribution feminist ethics of care can have to stakeholder theory to complement the one that has been discussed in the Wicks, Gilbert and Freeman (1994) paper. The contribution is in the area of decision making. Wicks, Gilbert and Freeman (1994) propose a rule of consensus and understanding according to the ethics of care. First, find the win-win solutions to resolve issues confronting the firm and its stakeholders. If this is not possible, communication is urged to encourage understanding of others' positions and eventual acceptance of a "second best" result. However, this approach will only work if all the involved stakeholders adopt a caring approach to their interactions.

Burton and Dunn (1996) further claim that any theory based on the feminist stakeholder concept will run into problems when 'two stakeholders have opposite views of a decision and will be affected adversely if the decision goes against them' (Burton & Dunn 1996, p. 141). In this case, the difficult part is to try to answer the question: who should be given a privilege when a decision must be made? Whose contract should be broken? They then recommend a caring principle, that is, special attention should be given to the least advantaged members of the moral community. The suggested principle would then become, "Care enough for the least advantaged stakeholders that they not be harmed; insofar as they are not harmed, privilege those

stakeholders with whom you have a close relationship” (Burton & Dunn 1996, p.144). This principle adds to the understanding of the web relationship mentioned by Gilligan (1982) because even though she means the web as relationships to all human beings and not only one’s circle of acquaintances, it is not very clear in her writing as to how the extension to all persons is to be accomplished (Blum 1993). Burton and Dunn’s principle thus translates Gilligan’s web concept into a more practical understanding to be applied in business settings.

The challenge for a company applying the stakeholder approach is more than simply maximising shareholders’ wealth. However, this notion does not mean that all stakeholders must be treated equally but ‘Corporations should attempt to distribute the benefits of their activities as equitably as possible among stakeholders, in light of their respective contributions, costs, and risks’ (Sloan Colloquy in Phillips 2003, p. 27).

Beside the fulfilment of stakeholders’ interests, another challenge faced by companies adopting the stakeholder principle is the relationship between social responsibility and corporate economic performance. This relationship is crucial to maintain the sustainable operation of a business. Conceptually, Freeman and Velamuri (2008) stated that the stakeholder approach to business is able to integrate business, ethics and societal considerations. Technically, Ullmann (1985) hypothesises an inverted U-shaped correlation between social and economic performance. To an optimal level, they are positively related. Conversely, beyond that level, the social activities will negatively affect the economic performance. This issue will be discussed further in the next section about the ethics of care and sustainability reporting.

The feminist view on the stakeholder aspect will also lead to a broader view of risk management as a component of the stakeholder corporate governance model. Francis and Armstrong (2003) stress the relationship between good ethical practices and risk management in the way that an essential risk management strategy is a commitment to ethics in an organisation or company. It is argued that the risk aversion approach is better to prevent a company from huge losses in investment and other activities. This approach can be traced to women’s attitudes towards risk as several researchers claim that females are less risk seeking than males (see for example Powell & Ansic 1997; Smith 1999). From the feminist ethics of care concept, the risk aversion approach is also aimed at protecting the stakeholders from any harm resulting from corporate collapses. According to Clarke (2010), the failure to adopt a risk aversion approach has led to recurring crises; for instance, the spectacular risks with extremely leveraged positions on many securities and derivatives that have been taken by investment banks and other financial institutions have led to the systemic crises in international financial markets commencing in 2007.

Another interpretation of the feminist attitude towards risk is related to social and environmental risk. This is due to the roles of nurturer and care provider which are usually performed by women and are associated with the general issue of health and safety that lead to social and environmental risks (Gustafson 1998). This type of risk arises when a company’s behaviour or the actions of others in the operating environment create vulnerabilities. Kytte and Ruggie (2005) suggest that companies manage their social risks by fully embedding them in corporate strategy, one way of which is through CSR activities.

### **3. Potential Gap to be fulfilled by Islamic business ethics**

It has been presented previously that the caring approach to corporate governance leads to the stakeholder model instead of the shareholder one. This is based on the emphasis put by feminist ethics on good relationships with other parties. This principle is translated into the maximisation of stakeholders interests (the interests of shareholders and other stakeholders) rather than just maximising the interests of shareholders only. Balancing or prioritising the various interests is not an easy task but at least the guidance is provided by the ethics of care that any conflicts are resolved through communication in the spirit of keeping the good relationships and doing no harm to any parties.

As a consequence of the stakeholder model being adopted, risk management becomes an important part in managing the relationship with various stakeholders. This is from the fact that risk management is also a component of corporate governance so that the stakeholder model derived from the feminist ethics leads to the social and environmental risk management to provide a better care for parties involved in a company's web of relationships.

The thoughts on corporate governance from feminist ethics perspective as described above resembled or have many coincidental points with Islamic business ethics. Lewis (2005) stated that Islamic corporate governance has a wide commission, with obligations extending to suppliers, customers, competitors and employees, embracing the spiritual as well as the temporal needs of the Islamic community. This represents the stakeholder model of corporate governance as also prescribed by the ethics of care. Iqbal (2004) further argued that the foundation of a stakeholder model is found and justified in Islam's principles of property rights, commitment to explicit and implicit contractual agreements and implementation of an effective incentive system. However, the contractual agreements bring about "contractual" relationships among stakeholders, which mainly reflect the "conventional" stakeholder theory. Furthermore, the Islam's rules and principles of property rights can be said to be in the ethics of rights (justice) side rather than in the ethics of care.

Another area which is still not clear is how Islam viewed the prioritization of stakeholders' need when there is conflict among them. Beekun and Badawi (2005) just stated that the Islamic ethical system is balanced, fair, just, and benevolent, and seeks to respect the rights of both primary and derivative stakeholders without allowing for exploitation, nepotism and other human ills. Islam advocates a tiered, multi-fiduciary stakeholder approach that calibrates what various stakeholders of a business receive in proportion to their inputs.

In the risk management area, Al Shuhaibani dan Naifar (2013) specifically stated that firms must avoid debt financing instruments and adopt financing instruments that allow for "risk-sharing" rather than "risk-shifting" because all recent financial crises were, in essence, debt crises. However, the social and environmental risk management is not yet explored for this area. Last but not yet, the ethics of care suggested the caring principles in the voice of women. Islamic perspective can argue more on the role of women in corporation especially because there is a more important duties and responsibilities awaited for women for their household and family matters.

The ethics of care perspective on corporate governance is indeed a new approach not yet much discussed by Islamic scholars. Considering the possibility of this perspective to flourish in the future, there have been potential gaps to be further explored using the Islamic business ethics

perspective to give important balance on the use of feminist point of view, which can be opposite to Islamic view.

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# Implementation of Active Learning Model Type of Learning Start With A Question to Increase Students' Basic Accounting Learning Liveliness

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## Abstract

This research was Classroom Action Research. The research aimed to increase Students' Basic Accounting Learning Liveliness Class X Accounting SMK Muhammadiyah 2 Moyudan Academic Year 2017/2018 by implementation of Active Learning Model Type of Learning Start With A Question. The action was conducted in two cycles. Each cycle consisted of four stages : planning, action, observation, and reflection. The data collection techniques were observation, field notes, and documentation. The research finding: based on the observation results students' learning liveliness at cycle I was 46.29% and increased to 80.74% at cycle II.

**Keywords:** Active Learning Model, Learning Start With A Question

## 1. Introduction

In the global era and in the exposure of international competition, education is an important need for people today. Education is considered capable of improving the quality of human resources, thus it can enhance individual competitiveness. To establish qualified human resources, qualified education is required both in terms of process and outcome.

School is a formal education institution aiming to develop excellent and competitive human resources. Learning conditions in schools are expected to support excellent and competent human resources establishment.

Students receive the material presented in learning activities in different way. In receiving new material, learners can be easier to understand new material when learners actively read material sources and ask questions, rather than just listen to the teachers explanations.

According to Zainal and Adhi (2012: 1), active learning has become an important part of the learning process. Active learning has been proven to increase the activity of students in the learning process because the focus in active learning is student centered learning. According to Hisham Zaini et al in Zainal Arifin and Adhi Setiyawan (2012: 2), active learning is a learning in which participants are actively involved in the learning process, it means that they dominate the learning activities. By this, learners can seek for learning materials, find main ideas from learning materials, solve problems or cases, and apply what they learn in real life through the process of discussion facilitated by the teacher.

Accounting Learning Liveliness is a series of activities in which learners are fully involved in the learning process with a purpose to understand the accounting process including recording, classifying, summarizing, and reporting financial events undertaken by the company for business purposes. Accounting learning activities can be observed by reading, listening, writing, discussing, and doing accounting exercises.

Based on the results of preliminary observations made by researcher at SMK Muhammadiyah 2 Moyudan during September 2017, it was found that the students' liveliness of basic accounting learning of class X Accounting was still low. This was proven at the time during the learning process that students were not fully involved in the learning process. Students only received learning materials from teachers, made up, and discussed topics that were not related to the lesson with friends. During the learning process, the teacher still used conventional methods, that were lecture methods and dictate learning materials. In general, out of 33 students, there were only four students who were actively reading, asking, seeking information to solve problems, and paying attention to the teacher's explanation about the material described. The rest, as many as 29 students were still not actively reading, asking even when the teacher gave the time to ask question, seeking information to solve problems, and paying attention to teacher's explanation. Only eight students who were engaged in discussion, solved problems in group discussion, and did the exercise. The rest students, 25 students, were not engaged in discussion, solved problems in group discussion, and did the exercise.

The low level of students' learning liveliness was due to the use of Basic Accounting learning method was less varied, that were only lectures and dictates learning materials. This caused students to be less active and less motivated to learn the material presented by the teacher. Learning resources used were also not varied, it was only dictated by the teacher. Therefore, learning activities tend to center on the teacher.

In basic accounting learning, lecture method is still needed, but if it is too often used, then the learning process will become monotonous. This causes learners to be bored, and lack of learning passion during the learning process. Learners have not done the activity of asking questions and giving opinions on the material given by the teacher. According to Mary Ellen Adams (2016) lecturing actually is not a bad pedagogy, but it must be combined with active learning so students are actively involved in the learning process, not just passive listeners. Ueckert, Wilcoxson, Newsome, et al (2008) stated that the problem of passive learning is that it is contrary to the generation of scientific knowledge. The scientific process is active. Passive learning can lead the student boredom and apathy.

Student learning liveliness is required in Basic Accounting learning to measure students' understanding of learning materials. For example, if the student was actively asking then the teacher would know part of the learning materials that were still poorly understood by the students. In contrary, if students did not actively ask, the teacher did not know which materials have not been mastered by students.

Teacher can implement various learning models to increase students' learning liveliness. The learning models that can be used by the teacher are inquiry learning model, cooperative learning model, contextual learning model, and active learning model.

Learning Start with A Question is one of the active learning models that stimulate students to ask questions. Activities in this learning model begin with students reading the module and then making a mark on materials that are poorly understood. Teachers collect questions and discuss learning materials according to questions asked by students.

Previous research finding by Nurmawaddah (2017) stated that implementation of active learning model using learning start with a question technique could increase students' learning liveliness in accounting learning. The increase of students' learning liveliness was up to 30.12%.

## 2. Research Method

This research was Classroom Action Research (CAR) using Kemmis McTaggart model. The research was conducted in two cycles. Each cycle consisted of four stages: planning, action, observation, and reflection.

The research design could be described as follow:

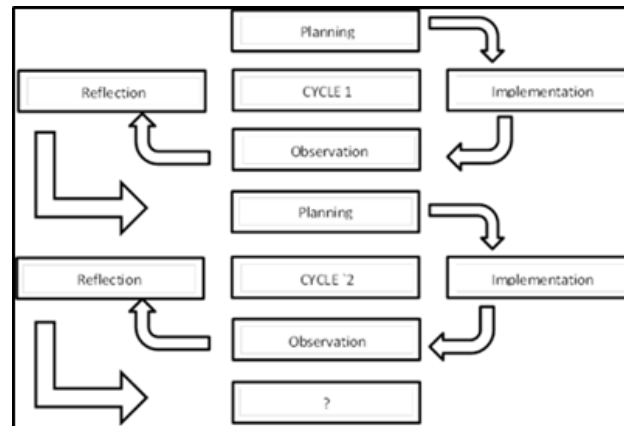


Figure 1. Classroom Action Research Design (Suharsimi Arikunto, 2014: 16)

The research was conducted at SMK Muhammadiyah 2 Moyudan which is located at Jalan Raya Gedongan-Klangon, Ngentak, Sumberagung, Moyudan, Sleman.

Subjects in this study were all students of class X Accounting SMK Muhammadiyah 2 Moyudan Academic Year 2017/2018. The object of this study was students' learning liveliness on basic accounting learning through the implementation of active learning model type of learning starts with a question.

The research was conducted in two cycles. Each cycle consisted of four stages: planning, action, observation, and reflection. On the cycle I and cycle II, the planning stage consisted of: (1) prepared lesson plan (2) prepared trial balance learning module (3) prepared exercise and answer key (4) prepared observation sheet (5) prepared field notes. The implementation stage consisted of: (1) preliminary (2) core activity (3) closing. The observation was done by researcher and assisted by three observers. The observers observed Students' Basic Accounting Learning Liveliness during the learning process using Active Learning Model Type of Learning Start With A Question with the observation sheet and observation guidelines. Reflection stage was done by researcher and teacher. Researcher and teacher discussed to make improvements in the next action. The action was successful if both the average of students' learning liveliness and all indicators of students' learning liveliness passed the minimum criteria (75%).

The data collection technique in this research used observation, field notes, and documentation. The observation used to observe students' basic accounting learning liveliness in the learning process using Active Learning Model Type of Learning Start With A Question in reading the subject matter, asking the teacher, seeking information to solve problems, engaging in discussion in problem solving, can solve problem in group discussion, paying attention to the teacher's explanation, and doing exercise. The field notes used to describe the classroom atmosphere when action was being taken. Various classroom events related to the study were recorded in the field notes. Events can be either interaction among students or the interaction

between teacher and student. The documentation used to get data, in a form of the number of students, photos during the learning process, and other supporting data required by the researcher.

Data analysis technique used was descriptive quantitative with percentage. Data sourced from the observation sheet were analyzed to know the percentage of students' learning liveliness scores. The steps were processing students' learning liveliness score every cycle by creating scoring criteria, calculating score for each students' learning liveliness indicator, making percentage score of each indicator of students' learning liveliness, creating a percentage score of overall students' learning liveliness, and calculating the percentage of increasing students' learning liveliness. After processing students' learning liveliness score, then the data were presented in the form of tables and graph so it was easy to understand. The last was draw a conclusion. The conclusion was done with the purpose to answer the research problem formulation that was whether the implementation of active learning model type of Learning Start With A Question can increase students' basic accounting learning liveliness of class X Accounting SMK Muhammadiyah 2 Moyudan Academic Year 2017/2018.

### 3. Research Finding And Discussion

This research was conducted in order to increase students' Basic Accounting Learning Liveliness using Active Learning Model Type of Learning Start With A Question at SMK Muhammadiyah 2 Moyudan Academic Year 2017/2018.

Observation was done by researcher and was assisted three observers. Observer observed students' learning liveliness on basic accounting learning in the learning process. The indicators of students' learning liveliness were as follow:

- 1) Students read the subject matter (Indicator A)
- 2) The students ask the teacher (Indicator B)
- 3) Students seek information to resolve problem (Indicator C)
- 4) Students engage in discussion in problem solving (Indicator D)
- 5) Students can solve problems in group discussion (Indicator E)
- 6) Students pay attention to the teacher's explanation (Indicator F)
- 7) Students do the exercise (Indicator G)

(Modified from Chairunnisa Astari, 2016)

The result of implementation of Active Learning Model Type of Learning Start With A Question to increase Students' Basic Accounting Learning Liveliness Class X Accounting SMK Muhammadiyah 2 Moyudan Academic Year 2017/2018 were:

#### 3.1 Cycle I

As seen on the table below, the result of observation of student learning liveliness of basic accounting in cycle I showed that the success indicator of learning liveliness at least 75% has not been passed. The average of students' learning liveliness was still 46.29%. This was because in the first cycle students were still shy and unfamiliar with the active learning model.

Table 1. The Result of Research of Students Learning Liveliness Cycle I

Indicator	Percentage
A	74.04%

B	50.00%
C	37.50%
D	41.35%
E	37.50%
F	58.65%
G	25.00%
Average	46.29%

Based on these results, researcher and teacher discussed to make improvements in the next action. Because in the first cycle of implementation Learning Start With A Question had not run optimally, it could be seen from the average learning liveliness that has not passed 75% yet. Based on the discussion with basic accounting teacher, learning with Learning Start With A Question was not optimal because students were not familiar with this learning type. Students were still shy and reluctant to ask. In addition, students also felt reluctant to read learning materials, seek information to solve problems, engaged in discussions, solved problems in discussions, paid attention to teacher explanations, and did the exercises. Students were over-joking in the learning process.

Based on the observation and discussion results, there were several things that need to be done on the next action, that was the teacher could provide direction and inducement thus students could be more active in reading, asking, seeking information to solve problems, engaging in group discussion, solving problems in discussion, paying attention to the teacher's explanation, and doing the exercise. Therefore, researcher and teacher agreed that in the 2nd cycle action was done by improving the way the teacher gave the inducement to the students to be more actively asking. Teacher could approach the students if the students seem had not read the learning materials and had not been involve in group discussions. Teacher also walked around the classroom to ensure that students seek information to solve problems, solved problems in group discussions, and did the exercises. The teacher gave an admonition if the student did not pay attention to the teacher's explanation. This was expected to optimize the active participation of students hence the Students' Basic Accounting Learning Liveliness could be optimal.

### 3.2 Cycle II

Based on the observation of cycle II, the average percentage score of students' learning liveliness has passed the minimum criteria, the percentage score was 80.74%. All indicators have passed the minimum criteria of success indicator (75%).

Table 2. The Result of Research of Students Learning Liveliness Cycle II

Indicator	Percentage
A	76.79%
B	75.89%
C	78.57%
D	77.68%
E	83.93%
F	75.89%
G	96.43%
Average	80.74%

Based on the results of observation in cycle II, it showed an increase on student learning liveliness scores. Improvement plan could be well implemented in cycle II. It could be seen at the observation data that all student learning liveliness indicators have passed the minimum criteria that has been set that was 75%. The average of student learning liveliness was 80.74%, it has passed the minimum criteria. Based on the field notes, in this second cycle students have been accustomed to the Active Learning Model Type of Learning Start With A Question. Therefore, the lesson with Active Learning Model Type of Learning Start With A Question was enough until cycle II.

### 3.3 Comparison of Students' Learning Liveliness From Cycle I to Cycle II

Increasing of students' learning liveliness from cycle I to cycle II could be seen on the table below:

Table 3. Comparison of Students Learning Liveliness Cycle I to Cycle II

Indicator	Cycle I	Cycle II	Increase
A	74.04%	76.79%	2.75%
B	50.00%	75.89%	25.89%
C	37.50%	78.57%	41.07%
D	41.35%	77.68%	36.33%
E	37.50%	83.93%	46.43%
F	58.65%	75.89%	17.24%
G	25.00%	96.43%	71.43%
Average	46.29%	80.74%	34.45%

After analyzing the data, it could be seen the increase of students' learning liveliness percentage in accounting learning by using the Active Learning Model Type of Learning Start With A Question resulted in students reading the learning materials in the first cycle passed 74.04% and in the second cycle increased into 76.79%. Students ask the teacher on the first cycle passed 50.00% and in the second cycle increased into 75.89%.

Students seek information to solve the problem in the first cycle passed 37.50% and in the second cycle increased into 78.57%. Students engaged in the discussion to solve problems in the first cycle passed 41.35% and in the second cycle increased into 77.68%. Students can solve the problem in the group discussion on the first cycle passed 37.50% and in the second cycle increased into 83.93%. Students pay attention to the teacher's explanation in the first cycle passed 58.65% and increased into 75.89%. Students do the exercise on the first cycle passed 25% and in the second cycle increased into 96.43%.

The average of students' learning liveliness in cycle I showed that 46.29% of students have been active and the average of student learning liveliness in cycle II increased into 80.74%. The increase of student learning liveliness from cycle I to cycle II was 34.45%. So, the success indicator of Students' Basic Accounting Learning Liveliness Class X Accounting has been passed. Increasing of students' learning liveliness could be seen on the graph below:

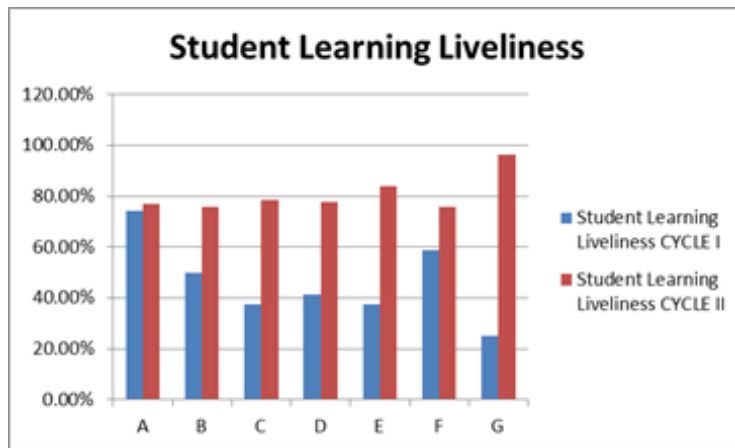


Figure 2. Diagram of Students Learning Liveliness

#### 4. Conclusion and Suggestions

Based on the findings of the research and discussions that had been described, it could be concluded that the Implementation of Active Learning Model Type of Learning Starts With A Question could Increase Students' Basic Accounting Learning Liveliness Class X Accounting SMK Muhammadiyah 2 Moyudan Academic Year of 2017/2018.

Based on the results of research, the researcher gave suggestions as follows:

- a. For Teacher, based on the research finding, the indicator students ask the teachers and students pay attention to the teacher's explanation got the lowest score of 75.89%. Teachers are expected to combine these learning techniques with other learning techniques. For example, to increase students' liveliness in asking question teachers can appoint at students randomly and provide an opportunity for students to ask. To improve students' liveliness in paying attention to teacher's explanation, teachers can make variation in the use of Active Learning Model Type of Learning Start With A Question. Variations can be additional tasks to make a resume of teacher's explanation or teacher can ask some questions randomly when the students seem not to pay attention to the teacher's explanation.
- b. Students should have the courage and confidence to ask questions during learning activities. Students should pay attention to the explanation of the teacher during the learning activities so as to understand the material being studied.
- c. For the Next Researcher, researcher can apply a variation on the Active Learning Model Type of Learning Start With A Question by using ice-breaking at the time of the teacher's explanation. Eison (2010) states that the use of ice-breaking in the material explanation sessions provides courage for learners to actively participate in learning activities because learners feel comfortable in the classroom.

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# Relationship of Mutual Trusts of People Against Political Participation in the Use of the Right to Choose in Executive Elections in Indonesia

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## Abstract

The purpose of this study is to examine the relationship of trustworthiness to other people (trustworthiness of the people) using ethnicity and faith (religion) indicators and their relation to political participation in the use of voting rights in elections in Indonesia.

This research is descriptive quantitative research, the data used from the Indonesia Family Life Survey (IFLS) 5th Edition released in 2016. Because the data used binary, so to know the strength of the relationship of each variable will be tested by using binary logistic regression analysis. Data processing in this research using Stata 13 program.

It found that Mutual trusts containing respondents are still low, especially respondents trusting people with similar beliefs. These circumstances can be changed and conceptualized by issues such as religious sentimentalism and ethnicity because of the religions and the dynamics of politics in Indonesia.

**Keywords:** mutual trust, political participation, the use of suffrage, elections

## 1. Introduction

Indonesia is a democratic country government based on people's sovereignty. People are the main figures who have important role in and the democratic process, both in the executive and legislative, central and local governments. Bernars Crick (2002: 16) suggests that The fundamental democratic ideal was freedom (Eleutheria), This was seen as both the political liberty, indeed almost the obligation, to participate in decision-making but also the private liberty to live more or less as one pleased. That way every citizen is given the right to determine the leader who will make the policy for the sake of survival in the future. Community participation is an indicator of the ideal form of democracy within a country. Budiarto (2008: 367) states that Political participation is the activity of a person or group of people to participate actively in political life, among others by choosing a state leader and, directly or indirectly, influencing government policy.(public policy).

Voting is a participation known to the public in general, such as voting is conducted at the time of the election, both in the legislative and executive elections, based on Pancasila and the 1945 Constitution of the State of the Republic of Indonesia. The election is a system that is one of the characteristics of the democratic state, there is no democracy without election. Miaz (2012: 12) states "Election is essentially a process as well as a democratic means to channel the aspirations of society".

In the course of democratic life in Indonesia, the use of practical politics is still found in political life in Indonesia. Practical politics plays sentiments relating to religion, ethnicity and race to

gain support from voters with similar attributes and classes. The political observer of the Indonesian Institute of Sciences (LIPI), Syamsuddin Haris stated, "Identity politics are so effective in use in Jakarta. Those who use it feel effective. Therefore the potential for strengthening in elections in 2018 and 2019 election is also quite large," said Syamsuddin after the seminar at Widya Graha LIPI Building, Jakarta (Hakim, Kompas.com, 05/03/2017). Then Syamsuddin Haris added that the use of identity which is then capitalized for the electorate is a setback in democracy. Both in Jakarta and other regions have the potential use of identity politics as an opportunity to win elections.

Identity politics plays religious sentiments, ethnicity and race. Issues relating to either religious or ethnic identity are intended to gain sympathy and support from an easily influenced society, and for those with similar attributes or classes. Given the society of Indonesia which consists of various elements of society, whether education, religion, occupation, to ethnicity, each element has social characteristics that correlate in one's political orientation. "That political orientation then forms the order in which the emerging interactions ultimately affect a person's political behavior" (Setiajid, 2011: 31).

In this case, the mutual trust that is the constituent element of social capital of society is crucial, where the background of the identity of the community has an impact on voter orientation in participating in the election. Trust is one of the elements of forming the social order of society, with the belief among the community will be a common reference that forms the norm in attitude and relate between individuals and society.

Fukuyama (2002: 36) states "Trust is a hope that arises in a community that behaves normally, honestly and cooperatively, based on shared norms, for the benefit of other members of the community". The norms meant by Fukuyama are fundamental "value" issues such as God or justice, most likely to include secular norms such as professional standards and rules of conduct. Then, Kohn (2008:17) states Trust is an expectation about another's actions, based on the understanding that the other has the capacity to create mental models of possible courses of action, and to evaluate them within a framework that can incorporate interests besides the other's own. Trust comes from the interaction between two or more parties, whether between two individuals, individuals and groups, or groups and groups. Trust is a hope that arises from social interactions involving a group or two community groups, or from a socio-political institution that encourages attitudes and behavior of people to make decisions with trust attitudes and behaviors. Furthermore Dwiyanto (2011: 360) states that social trust has contributed to the development of political beliefs, namely citizens' belief in government and policy, social beliefs that exist in the community also influence the dynamics of public trust to the government and its policies.

Fukuyama (Khodyakov, 2007: 117) maps the community into two levels of trust, the Low-trust Society and the High Trust. According Fukuyama (Khodyakov, 2007: 117) If a society has a narrow radius of trust the circle of people among whom cooperation and mutual understanding exist and develops trust only in the private sphere, it is a 'low-trust' society. In contrast, in societies with a large radius of trust, citizens actively participate in civic activities and meet different people, which helps them develop trust in the public sphere and societal institutions. In such a society, people tend to trust only the people they like. In contrast, in communities with a large degree of trust, citizens actively participate in civic activities and meet different people,

who help them develop trust in the public sphere and community institutions (High Trust). From the concept introduced by Fukuyama, it can be seen that the level of trust in society is different. People with low trust will build cooperation and tend to develop trust only in the private sphere. People with low beliefs only trust people who have similarities, the similarities can be regional similarity, ethnicity, religion, and even political ideology. The statement indicates that people with low beliefs are people who do not easily believe in systems that exist in other groups. In contrast, in societies with high levels of trust every citizen has an active participation in activities as citizens and is easy to meet with people outside of their group, so the activities they do naturally help to develop trust in the wider domain. People with a high level of trust, more easily mingle and build confidence in others outside the group. So that will bring solidarity, and able to make each individual in society willing to follow the rules, so that impact on the strength of sense of togetherness.

Mutual trust in the community can support the development of democracy in Indonesia. Cholisin (2009: 34) explained that the positive attitude of citizens who are considered important and able to support the development of democracy in Indonesia are trust and commitment to democracy. The level of one's trust can be seen from the mutual trust toward other people who have different streams of trust or ethnicity. The existing mutual trust can be an answer to the current political situation in society, especially in the context of Indonesia's general elections. Trust is a mental condition that is based on the social situation that surrounds it, be it from common ideology of belief, ethnicity, to social class. When a voter takes a decision, he will consider it based on the choices of those whom he can trust. Taqwa & Usman (2004: 541) states that Voting behavior as a political decision-making process does not appear on its own but is the accumulation of various factors behind it, both inherent in the voters and the political situation. So the social situation that exists in the society, especially the social trust situation that is motivated by the flow of trust and ethnicity has a link to participation in the use of voting right in elections In Indonesia. Dwiyanto (2011: 366) states, "When people have common attributes, attitudes and behaviors, they tend to trust each other."

The previous research relating to this research is a study conducted by Back and Christensen (2016) using data from the European Social Survey in 2008 and the Norwegian Social Science data service, with data processing using logistic regression analysis. The study shows that the effect of general trust varies on political participation, depending on the level of trust that is present in the community. Then research conducted by Harris Hyun-soo Kim (2014) which examines the extent to which trust in others can influence the tendency of people to participate in political activities such as formal participation (voting) and informal (signing petitions, demonstrations), using the Asia Barometer The 2005 survey, which contains cross-country data on probability samples from this region. His research shows only a significant institutional trust associated with formal participation.

There is a difference of previous research with this research is, in this research to know the level of mutual trust of society using indicator of religion and ethnicity. The use of both indicators is because, religion and ethnicity is an indicator inherent in every element of society. And in this study focuses on community trust (social trust). The mutual trust between people of different religions and ethnicity will be used as an indicator of the existing level of confidence in the community. Based on previous background exposure, as for hypotheses in this research is There

is a relationship between people's trust in the political participation in the use of voting rights in legislative elections in Indonesia.

## **2. Methodology**

The research used descriptive quantitative research method with secondary data analysis approach (ADS). In this study researchers used data obtained from IFLS, IFLS Survey and their procedures were reviewed and approved correctly by IRBs (Institutional Advisory Board) in the United States (at RAND) and in Indonesia at Gadjah Mada University (UGM) for IFLS3, IFLS4 and IFLS5, and previously at the University of Indonesia (UI) for IFLS1 and IFLS2. Thus all requirements for approval of adults and children are met and approved by IRB before field research can begin. (<https://www.rand.org>).

The research object in this study is the respondents who are citizens of the Republic of Indonesia who are 15 years of age or older who are responder of Indonesia Family Life Survey (IFLS) 5th edition released in May 2016. IFLS samples represent about 83% of Indonesia's population and contains more than 30,000 people living in 13 of 34 provinces in Indonesia (<https://www.rand.org>). The next step is to select the data, then got 18,735 samples.

The variables in this study are divided into two, the dependent variable and the independent variable. The dependent variable in this study is Political Participation in the use of suffrage rights from the (Indonesia Family Life Survey) which is released in 2016. Research subjects are individuals in households aged 15 years or older. The use of suffrage is derived from questions in the IFLS-5 questionnaire on the use of individual Select Rights in the election of the President, DPD Members, Members of the DPRD, Provincial DPRD Members, Regency / Municipal DPRD Members, Governors, Regents / Mayors, The (dummy) variable is determined by 1 = Yes, 3 = No.

The independent variable in this study is the mutual trust of the community, derived from the questions in the IFLS-5 questionnaire about the mutual trust in the village that pay attention to the mutual trust aspect of people from the same ethnic and pay attention to mutual trust towards people from the belief / the same religion. The dummy variable is determined by 1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree.

Data collection in this research using documentation technique that is researcher use material obtained from RAND (Research and development corporation) in the form of socioeconomic data from Indonesia Family Life Survey (IFLS5) in book 3A and 3B related to research topic by doing direct recording of data longitudinal data on IFLS-5 data released in May 2016. Data collection is by downloading and viewing the IFLS-5 2016 household survey data from the meter survey. The data taken include:

- Information on the use of suffrage obtained from questions in the IFLS-5 book questionnaire 3B Community Participation Section (IFLS5, 2016: 194), regarding the use of individual Select Rights in the election of the President, DPD Members, Members of the DPRD, Provincial DPRD Members, / City, Governor, Regent/ Mayor, the last Village Head.
- Description of the Mutual Trust of the community about the trust in the village/neighborhood obtained from IFLS5 book 3A section of mutual trust, paying attention to the mutual trust aspect of people from the same ethnic and pay attention to mutual trust toward people from the same belief / IFLS5, 2016: 138-139).

Data analysis techniques used in this research are descriptive analysis techniques and logistic regression analysis. Because the data in this study is binary then the data analysis used is logistic regression analysis. In addition, each variable has a different scale, inter-scale trustworthiness and participation in the use of nominal Nominal rights, so logistic regression is an appropriate data analysis technique for this research. Imam Gozali (2013: 96) explains that regression analysis is used to measure the strength of the relationship between two or more variables, also shows the direction of the relationship between independent and independent variables. Regression analysis included in non-parametric statistics, non parametric hypothesis is a statistical hypothesis that does not involve population parameters, but relates to the form of population frequency distribution. Budiwanto (2017: 154) states non-parametric statistics are statistical analysis techniques whose models do not specify conditions on population parameters that are the parent sample of his research. More specifically, non-parametric statistical tests are often called free-distribution statistics, since the testing procedures do not require the assumption that the observations are normally distributed.

The hypothesis in this research is tested by using logistic regression analysis because the dependent variable is measured by using dummy variable, so the researcher chooses to use the test instrument to know the effect of the independent variable that is the mutual trust of society towards the participation in the use of voting right in the election. As for the criteria of hypothesis testing in this study as follows:

- a. The level of confidence used is 95% or significant level of significance 5% ( $\alpha = 0,05$ ).
- b. Criteria for acceptance or rejection of the hypothesis are based on significance of *P-Value*
  - 1) If the level of significance  $< 0.05$   $H_0$  is accepted
  - 2) If the significance level  $> 0.05$   $H_0$  is rejected

Categorical-scale data such as the level of public trust will be expressed as the frequency distribution and percentage. The data will be displayed in the form of a frequency distribution table. Bivariate analysis of the relationship between categories The level of mutual trust of the public towards political participation will be analyzed by the test.  $\chi^2$ , and the p value  $< 0.05$  is considered meaningful. Logistic regression also generates an odds ratios ratio related to the value of each predictor. Opportunities (oods) of an event are defined as the probability of an arising outcome divided by the probability of an event occurring.

To find out the correlation between the people's trust in political participation in the use of voting right in election is shown by the coefficient value  $\beta$ . The coefficient value of  $\beta$  is converted to an OR (odds ratio) with calculation using exponential formula coefficient  $\beta$  ( $e^\beta$ ). The OR value indicates the adjusted OR that will be used to draw the conclusion of the study. The variable is expressed as having relationship if  $OR > 1$  and expressed as protective factor if  $OR < 1$ . In addition to the p value, the OR mean is also assessed by the lower boundary range and upper 95% confidence interval (CI). If the range of 95% CI value covers 1 then the variable can not be concluded to have a relationship. The p value is considered significant if  $p < 0.05$ . Statistical analysis will use a computer and processed using software Stata 13.

### **3. Result**

#### *3.1 Description of Research Results*

This study aims to determine the relationship between the level of mutual trust of the people towards political participation in the use of voting rights in Indonesia, based on Indonesia family life survey (IFLS) data released in May 2016. Descriptive analysis is used to see the minimum, maximum, (mean), and standard deviation of each research variable. Descriptive statistics are statistics that serve to describe or provide an overview of the object under study through the sample data or population as is, without conducting analysis and making general conclusions, (Sugiyono, 2015: 61). After the data processing using the 13 software stata, then the data will be presented in the form of frequency table, and for the level of mutual trust of the community then used some questions obtained from the IFLS-5 questionnaire.

a) Taking into consideration the ethnic diversity in the village do you, the mother/father/brother prefer to trusts people who share the same ethnic with you?

Table 1. Frequency distribution of community trust (Ethnic)

<b>Ethnic</b>	<b>Frequency</b>	<b>Percent %</b>	<b>Cumulative</b>
Strongly agree	2,351	12.55	12.55
Agree	11,536	61.57	74.12
Disagree	4,570	24.39	98.52
Strongly disagree	278	1.48	100.00
<b>Total</b>	<b>18,735</b>	<b>100.00</b>	<b>100.00</b>

Table 1 illustrates the distribution of trustworthiness of respondents, with a total sample of 18,735, gives the largest proportion of respondents who agree to trust people from the same ethnic background (61.5%), and the smallest group disagree (1.48%). Respondents expressed disagreement 24.39%.

b) Taking into account the diversity of current religion / religious flows, do you believe in people of the same religion or religious beliefs as yours / brothers?

Table 2. Frequency distribution of community trust (Religion)

<b>Religion</b>	<b>Frequency</b>	<b>Percent %</b>	<b>Cumulative</b>
Strongly agree	4,224	22.55	22.55
Agree	11,662	62.25	84.79
Disagree	2,654	14.17	98.96
Strongly disagree	195	1.04	100.00
<b>Total</b>	<b>18,735</b>	<b>100.00</b>	<b>100.00</b>

Table 2 illustrates the distribution of trustworthiness of respondents, with a total samples of 18,735, give the largest proportion of respondents who agree to trust people from the same background (62.2%), and the smallest group strongly disagree (1.04%), then the respondents who state disagree 14.17%. Based on the frequency distribution data presented, it can be concluded that the level of trust owned by the community is low, it is known from respondents who answered agree to trust people who are from the same background beliefs by 62.2% and 61.5% of respondents answered agree to trust people from the same ethnic.

### 3.2 Hypothesis Testing

The hypothesis in this study states that there is a relationship between people's trust in the political participation in the use of voting rights in legislative elections in Indonesia.

Table 3 Results of Basket Logistics Regression Analysis Relationship between Mutual Trust

between Community and Political Participation in Executive Election in Indonesia.

Statistical Variable	Parameter	President	Governor	Bupati	The head of the Village
<b>Community trust</b>					
<b>Ethnic</b>					
1. strongly agree	$\beta_{11}$				
2. agree	$\beta_{12}$	0.00876 (0.0870)	-0.00212 (0.0653)	-0.0555 (0.0666)	-0.0573 (0.0647)
3. disagree	$\beta_{13}$	-0.194** (0.0965)	-0.131* (0.0737)	-0.221*** (0.0743)	-0.308*** (0.0716)
4. strongly disagree	$\beta_{14}$	0.115 (0.239)	0.226 (0.187)	-0.0797 (0.174)	-0.0237 (0.172)
<b>Religion</b>					
1. strongly agree	$\beta_{11}$				
2. agree	$\beta_{12}$	-0.223*** (0.0703)	-0.155*** (0.0521)	-0.182*** (0.0526)	-0.115** (0.0504)
3. disagree	$\beta_{13}$	-0.375*** (0.0913)	-0.208*** (0.0708)	-0.345*** (0.0696)	-0.262*** (0.0664)
4. strongly disagree	$\beta_{14}$	-0.538** (0.223)	-0.308* (0.185)	-0.346* (0.182)	-0.196 (0.179)
Constant		2.850*** (0.0927)	2.013*** (0.0683)	2.166*** (0.0703)	2.303*** (0.0698)
Observations		17,764	17,764	17,764	17,764
LR chi <sup>2</sup>		184.8	254.3	422.8	1047
Prob < chi <sup>2</sup>		0	0	0	0
Pseudo R-squared		0.0163	0.0151	0.0248	0.0568

(Coef & Standard errors) in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Information :

The coefficient (b) and the sig value (p)

In table 3 it can be seen that by using Likelihood Ratio Test independent variable of mutual trust has a meaning or relationship to political participation in the use of suffrage in executive election. Because mutual trust is categorical variable then in regression arranged into dummy variable. For all significant dummy mutual trusts, this is known from the p value of the coefficients  $\beta_{12}$ ,  $\beta_{13}$ ,  $\beta_{14}$ , <0.05 in the presidential election. Similarly, in the election of Governor, Regent, Head of all the dummy of mutual trust is significant under <0.05. Based on the results of these calculations successfully support the proposed hypothesis so that the research results proved that the mutual trust of the community has a relationship to political participation in the use of voting rights.

#### 4. Discussion

The indicator of the level of public trust in this study is to see the answer of the questions

obtained from the IFLS-5 questionnaire. There are two aspects which is taken in this study. The first aspect is to pay attention to the diversity of the ethnics, “Do you prefer to trust people who share the same ethnic with you? This is the dummy: for the agree answer means that the respondent has a low level of trust toward others, while the disagree answer means that the level of trust of respondents to others is very high.

In this section, the researchers present the results of the data from the logistic regression analysis using the Odds Ratio to see the opportunities. This discussion will explain the dummy that has meaning or relationship to the executive general election. Opportunity of respondent to follow election seen from value of OR, if  $P < 0.05$  then X have relation to Y.

Table 4. Ratio of Opportunities for Presidential Election

<b>President</b>	<b>Odds Ratio</b>	<b>Err. Std</b>	<b>Z</b>	<b>P&gt; z </b>
<b>Ethnic</b>				
Strongly agree				
agree	1.008798	0.0878042	0.10	0.920
Disagree	0.8234971	0.0794358	-2.01	0.044
Strongly disagree	1.122338	.2680674	0.48	0.629
<b>Religion</b>				
strongly agree				
agree	0.8002787	0.0562721	-3.17	0.002
Disagree	0.6875886	0.062801	-4.10	0.000
Strongly disagree	0.5836337	0.1298742	-2.42	0.016

From table 4 can be seen in the election of the President, people who disagreed to trust people from the same ethnic will likely participate in the presidential election. It is known from OR 0.82 or 82%. Later, people who agreed to trust more people from the same religion / religious stream would have a chance to participate in the presidential election. It is known from the OR of 0.80 or 80% higher than the society that stated disagree to trust more people from the same trust with OR value of 68.7%.

In the president election there are respondents who have a high degree of trust in other people who are ethnically different, then there are also people who are less trustworthy of others who have different backgrounds of belief. Fukuyama mapped the community into two parts of society, the Low Trust and the High Trust of community. Based on Fukuyama's theory, on a radius of people with low trustworthiness, it would be difficult to build trust in people outside their group. It can thus be assumed that people who agreed to trust more people of the same beliefs will choose people who share the same attributes and groups.

The election of the president is inseparable from the political party that supports the candidate of president. In addition, the party coalition has the influence to determine the victory for the candidates. Each party has its own ideology, where every party-owned ideology can gain votes in the upcoming elections. Therefore, Ekawati (2015: 24) stated that the phenomenon of the coalition is very clear in Indonesian political practice, both at the national level and in the dynamics of local politics. Then Noer (Ekawati, 2015: 24) stated that based on the experiences of 1999 and 2014 in terms of the coalition of Islamic parties in Indonesia the coalition must be carried out for at least two reasons: first, there is a strong ideological proximity to unite them



in a political cluster. Secondly, there are similarities of political interests that must be fought together.

Herdiansah (2015) said that Prabowo-Hatta pair was supported by the Gerindra Party, the Golkar Party, and most of the Islamic parties PAN, PKS, PPP and the United Nations. Basically, Prabowo-Hatta's support base consisted of a conservative religious group. Golkar Party even supported by religious circles. Based on these statements, it can be seen that the ideological similarity of the flow of trust plays an important role in national politics, where the mass base held by the party, especially in the religious-based party, has the power to gain votes in the national elections.

Table 5. Ratio of Governor Election Opportunities

<b>Governor</b>	<b>Odds Ratio</b>	<b>Err. Std</b>	<b>Z</b>	<b>P&gt; z </b>
<b>Ethnic</b>				
Strongly agree				
agree	0.997878	0.0651273	-0.03	0.974
disagree	0.8772643	0.0646398	-1.78	0.076
Strongly disagree	1.253728	0.2347457	1.21	0.227
<b>Religion</b>				
Strongly agree				
Agree	0.8564433	0.0446158	-2.97	0.003
Disagree	0.8120514	0.0575018	-2.94	0.003
Strongly disagree	0.734677	0.1355845	-1.67	0.095

From table 5 it can be seen in the election of governors people who agree to trust people of the same religion have a chance to participate in governor election. It is known from OR 0.856 or 85%. Then people who disagree to trust people from the same religion / religious beliefs with the OR of 0.81 or 81% lower than those who answer agree.

In the governor election we can find people who do not easily trust other people with different streams of trust also take part in the election. Based on this it can be assumed that in the regent election there are people belonging to a low level of trust to people with different beliefs. The background of trust is the cornerstone of the people's point of view to determine what is good and bad, thus influencing the orientation of society's choice. As Sudrajat (2002: 6) said that when religion affects one's life, at the same time, the style of thought and religious understanding of a person will have implications for his life. Thus, the existence of religious plurality and the pattern of religious thought within a religion by itself constitutes one's political behavior.

Herdiansah, et.al (2017) concluded that religious sentiments are still a factor influencing the political dynamics in Indonesia. Furthermore, Ari Ganjar Herdiansah, et.al stated that from the events of political friction surrounding Jakarta's governor election 2017 involving religious issues, we can see how Islamic groups can move massively and intensively. It can not be denied in such events to illustrate how election contestation with religious issues, or vice versa, has had a significant impact on the perception of national security.

Hemay and Munandar (2016: 1738) stated that in a multi-ethnic society with a close relationship to each ethnic groups, competition in political election can not prevent the

emergence of tribal identity politics. The existence of close identity relationship can certainly affects voter's behavior and political considerations of the voter themselves.

Table 6. Ratios of Regent Election Opportunity

<b>Regent</b>	<b>Odds Ratio</b>	<b>Std. Err.</b>	<b>Z</b>	<b>P&gt; z </b>
<b>Ethnic</b>				
Strongly agree				
Agree	0.946024	0.0630035	-0.83	0.405
Disagree	0.8016824	0.0595896	-2.97	0.003
Strongly disagree	0.9233575	0.16037	-0.46	0.646
<b>Agama</b>				
Strongly agree				
Agree	0.833493	0.0438311	-3.46	0.001
Disagree	0.708458	0.0493411	-4.95	0.000
Strongly disagree	0.7077449	0.1290696	-1.90	0.058

From table 6 can be seen in the election of the Regent, the people who answered did not agree to trust people from the same ethnic had the chance to participate in the election of the regent with OR 0.8 or 80%. Then the people who agreed to trust more people from the same religion / religious outlook also had the chance to participate in the election of the regent with an OR of 0.83 or 83% higher than the people who did not agree to trust people of the same religion. In the election of the regent was found people who have high trust in other people of different ethnics have the opportunity to participate in the election, then people who did not easily trust others who have different streams of trust also took part in the election. Based on this it can be assumed that in the regent election there are people belonging to a low level of trust to people with different beliefs. It can be assumed that the background of trust will influence the orientation of society's choice. As the statement of Ajat Sudrajat (2002: 6) which stated that when religion affects one's life, at the same time the pattern of one's thoughts and religious understanding will also have implications for his life. Thus, the existence of religious plurality and the pattern of religious thought in a religion by itself can also form a person's political behavior.

Table 7. Ratio of Opportunity for Village Head Selection

<b>Village Head</b>	<b>Odds Ratio</b>	<b>Std. Err.</b>	<b>Z</b>	<b>P&gt; z </b>
<b>Ethnic</b>				
Strongly agree				
Agree	0.9443255	0.0611102	-0.89	0.376
Disagree	0.735029	0.0525995	-4.30	0.000
Strongly disagree	0.9766012	0.1678088	-0.14	0.890
<b>Religion</b>				
Strongly agree				
Agree	0.8910687	0.0448788	-2.29	0.022
Disagree	0.7692421	0.0510708	-3.95	0.000
Strongly disagree	0.8216031	0.1472706	-1.10	0.273

In table 7 can be seen in the election of village head , people who answered disagree to trust people from the same ethnic had the opportunity to participate in the selection of village heads, with the OR 0.735 or 73%. Then people who agreed to trust people from the same religion / religious beliefs also had the chance to participate in the selection of village heads, with an OR of 891 or 89% higher than those who did not agree to trust people of the same religion and have a chance to participate in the elections the OR value of 0.769 is 76%.

It also can be seen in the elections of the head of the village, people who have high trust in other people who have different ethnic have the opportunity to participate in elections of village head. Then people who have low trust in others based on the background of the flow of trust also have the opportunity to follow the election of Village head.

In general, the political dynamics in the village has its own uniqueness. The uniqueness among others is shown in the procession of village election which have no political parties. The election of the village head is part of the implementation of the democratic party directly. In addition to the programs offered by the candidate of village head, the village head election is closely related to the emotional relationship in terms of religion and ethnicity. Nugraheni (2017: 64) explains Community behavior is also influenced by religion and beliefs. Beliefs and any religion are guidelines and references that are full of norms and norms that can encourage and direct political behavior in accordance with their religion and beliefs. Widagdo (2016) has a slightly different view, in his research showing partially that emotional cohesion and relationship have no partial influence on the behavior of choosing a village head candidate. Nevertheless cadres, emotional ties and work programs have simultaneous influence on the election of candidates for village head.

## **5. Conclusion**

Based on the results of the discussion on the relationship of mutual trust of the people towards the use of suffrage in the election of the executive general election, there are several conclusion formulations as follows:

- a. Based on the results of logistic binary regression using Likelihood Ratio Test, it is known that mutual trust has a meaning or relationship to political participation in the use of voting right in the executive general election in Indonesia. Because mutual trust is a categorical variable, then the regression is compiled into a dummy variable. For all significant education dummy, this is known from the p value of the coefficient  $\beta_{12}$ ,  $\beta_{13}$ ,  $\beta_{14}$ ,  $<0.05$ .
- b. Based on the results of binistic logistic regression using Odds Ratio found respondents who agree to trust other people from different backgrounds of trust have a chance to participate and grant the right to vote in the executive elections in Indonesia. The level of trust that respondents have in this study is low, especially the beliefs of others with different backgrounds of belief. In such situations, people tend to trust only people who share a common belief and are not easy to trust people who come from outside their group.
- c. Religion is the mental foundation for determining good and bad, religion also forms identities that are social constructions related to political interests. An ideology creates social capital, and guides people to act in the interests of the group they believe in. Thus the influence of parties and classes will shape the chosen orientation taken by the respondents. Although the respondents' level of trust is low against others who have different religious

backgrounds, it does not make them apathetic or golput in the election. Each group will fight for what they believe in, and one of the ways in which it is exercised is to grant their right to vote and vote for a candidate or party believed to be able to fight for the ideology and class of the respondent himself.

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# Analysis on The Implementation of Village Information System in Village Government Performance with Good Governance as Moderating Variable

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## Abstract

The emerging of the village information system is a new means for the village to socialize the village working program to all the people, especially for the local villagers. Village information system is expected to support the performance of village government to be more transparent and accountable. The limitations often encountered in the village administration, in the form of limited facilities and infrastructure as well as limited human resources, to create good village government performance, it is very important for villages to implement good governance in the village. Although the village is the smallest government, but with the creation of good governance in the village, the village government performance is expected to be more effective, efficient, transparent and accountable, so it can support the performance of local government in city / district / province. In order to realize an accountable performance, village government needs to be supported by the implementation of village information system (SID), and it is important to implement good governance system in the village. The results of this study proves that the application of village information systems affect the performance, and good governance has no effect on performance, but good governance as a moderating variable affecting the performance.

**Keywords:** performance, Village Information System, good governance

## 1. Introduction

Implication on the implementation of Law Number 6 of 2014 on the Village has brought fresh wind to the village for improving the welfare of the entire village people. In general, the Village Law regulates the village authority in the administration of village government, village rights and obligations, related to village regulations, village finances and village assets, village development and rural development, village-owned enterprises, village cooperation, village community institutions and customary institutions village, as well as guidance and supervision. Thus the operational activities in the village government is increasing, because with the Village Law village is required to utilize the progress of information technology in managing the village administration, including financial management and management of all activities in the village. By utilizing information technology in the village, it is expected that all village information can be accessed by the community, so as to realize a transparent and accountable village governance system.

Prior to the enactment of the Village Law, the development of information technology in the

village has lagged behind; the policies and programs of the central government only enforced onto the district or sub-district level. Village information governance is inseparable from prevailing regulations, Law No. 5 of 1974 on the principalities of local government and Law No. 5 of 1979 on villages has not regulated the management of village data information. Also in Law No.22 of 1999 on local government, the changes in Law No.32 of 2004 on local government that returned the village as a subsystem in the district / city government that tend to follow the principle of centralization. PP No.72 of 2005 on villages does not specifically regulate information systems similar to SID. Village Law No.6 of 2014 article 86 has emphasized the importance of applying SID in village planning. The development of information technology now has a great influence on the development of rural areas, so that now slowly the village began to be known nationally and globally, hope can create an increase in the economy for the village community. By utilizing Internet technology is expected to open access village information to the public to be more open, without limited by space and time.

The role of information technology in the implementation of village development becomes very important as a form of implementation of the Village Law. In accordance with the vision of the Village Act is to make the village strong, independent, prosperous, and democratic. It is contained in article 86 of the Village Law which has specifically regulated the village information system (SID). Village information system has a very important role in rural development. In article 86, paragraph 2 and paragraph 5, the development of village information system management is carried out by the village government, so that all information can be accessed by villagers, and interested parties. The Village Information System (SID) in government administration and community service at the village level has a very urgent and very important role to be implemented in the current era of public information disclosure.

In year 2017, Bantul regency has been socialized SID application to 75 villages faced by the Office of Communications and Information, but there is an interesting phenomenon because only about 15 villages or 20% who have implemented SID, this is certainly because not all human resources in villages capable of mastering the field of information and communication technology (ICT), and also often constrained the limitations of facilities and infrastructure in each village. As the agenda for reform, village governments are required to achieve better, more effective, and efficient performance of village government. It is therefore important for the village government to consistently implement good governance. Implementation of good governance in village government can be achieved by applying the village information system (SID), because it is expected to create a good accountability system accompanied by transparency and openness in the management of village government that will always be monitored by the community and interested parties.

Based on the phenomenon of application of village information system (SID) in village government in supporting the achievement of performance of village government. So the formulation of the problem in this study as follows: 1) Does the application of village information system affect the performance of village government in District Banguntapan, Bantul Regency? 2) Is there any influence of the application of village information system to the performance of village government with good governance as a moderation variable?

The purpose of this study: 1). to examine the effect of good governance implementation on the performance of village government in Kecamatan Banguntapan, Bantul Regency, 2) to examine

the effect of village information system implementation on village government performance with good governance as moderation variable in Banguntapan sub-district, Bantul regency.

## **2. Theoretical Basis and Research Hypothesis**

### *2.1 Relationship of Village Information System (SID) with Village Government Performance*

Performance according to Robbin (2001) is a results obtained from work that has been implemented, whereas according to Gibson (1996) performance is the results of work related to organizational goals, such as quality, efficiency, and effectiveness criteria of a task / job. Performance is often used as a benchmark for the success of an entity by assessing it economically, efficiency and effectiveness of a program within an entity. So the performance of village government can be interpreted as a form of activities undertaken by the government in providing services to the local community, this is a form of a devotion made by the village government, regarding the form of services provided there are administrative and non-administrative services. Activities undertaken by the village government is a form of public service that must be done by the village government economically, efficiently and effectively in every implementation of work programs that have been planned by the village government. To achieve an efficient and effective village governance, it is imperative and urgent for the village government to implement information technology known as the village information system (SID), to facilitate the achievement of accountable and transparent performance. So it is necessary to develop a Village Information System (SID) in accordance with the vision of the Village Law, in order to realize a strong village, independent, prosperous, and democratic. SID is an integral part of village government development. In accordance with the Village Law article 86 with SID, the village is entitled to access information through a village information system developed by the Regency / City Government, including: hardware and software facilities, networks, and human resources.

The scope of the village information system (SID) includes village data, village development data, rural development. In the application of the village information system (SID) is managed by the Village Government and is accessible to the village community and all stakeholders. The following roles and benefits of the village information system:

#### 1) The more efficient village government

Village administration can provide citizens' mailing services much faster than manual methods by maximizing the use of Village Information Systems. With SID, the villagers' data is already stored and can be loaded automatically on directly printable mail.

#### 2) The more effective village government

By using the village information system, the data storage of the population along with its attributes, can be easily identified accurate population data based on the desired criteria, so as to target a government program on target. Surely this is very effective when compared without the use of SID, where often the determination of village programs is only based on estimates without the support of a complete database.

#### 3) The more transparent village government

The application of the village government SIDs can manage village activities information in a form that is easily presented to the village community, and more accessible. Village information systems can be used to manage village development planning information, and display such



information on various media, such as on the village web.

#### 4) The more accountable village government

With SID planning information, development activities, the use of village funds will be easily accessible to village communities, village government will be required to be more accountable. So that the village government will be easier to make reports of accountability activities, and the use of village funds.

#### 5) The better public service

With village information system (SID) community service in village government will be more efficient and more effective in performing their functions and duties. Because one of the main tasks of the village government is to provide better public services. For example, villagers will be able to obtain the certificate they need more quickly and with more accurate data.

#### 6) Better access to village information for citizen

The village information system accommodates demographic, planning, asset, and budget information that will be stored electronically. All such information has the potential to be more accessible to the village community. Village government can facilitate villagers to easily access village information by publishing all village information on the village web.

#### 7) Villagers can participate more actively in rural development.

SIDs can accommodate the availability of easily accessible village data and information, thereby increasing community participation in rural development. SID also has the potential to provide electronic media to mobilize citizen participation, such as discussion forums or electronic comment / proposal forms, so that all villagers will be aware of all ongoing and planned village activities, and village communities can participate in guarding village activities for provide advice and inputs related to village development.

Accountable and transparent village government performance requires not only the participation of human resources in the village government, but it is important to be able to implement information systems (SIDs) so that villagers can access and monitor the implementation of village administrations, village government programs. So in this study to answer the formulation of research problems with the 1st hypothesis proposed:

H1: There is an effect of applying village information system to the performance of village government.

### *2.2 Relations between Village Information System with Government Performance and Good Governance as Moderate Variables*

In accordance with the prevailing laws and regulations, the performance of the village government is determined by the village officials in performing their duties. The Village Law has stipulated that the Village Government consists of the Village Head or so-called as the other name assisted by the village apparatus as an element of the Village Administration. Village or Kelurahan device (village secretariat) is a regional executor and technical executive officer of public service officer who has duty and responsibility to service to society, and help Lurah or village head in carrying out its duty. The task of service to the community requires that village officials should be able to provide services in accordance with the wishes of the community. Therefore, village officials are required to have sincere skills, skills and feelings of concern and require a high sense of empathy in performing their duties to serve the community. Primary Research (2014) shows that the performance of village government in rural physical

development is a form of village government service to the community in meeting the needs of the community in the form of physical infrastructure provision based on the priorities that have been established as a supporter of all activities and economy in the village. The good performance and the active role of the community in the implementation of development have an impact on the smoothness of the development implementation process.

The villagers' demands for satisfactory services are the ones that must immediately get the village government's response. The realization of good governance in the village becomes very important to produce the effectiveness and efficiency of rural development in the framework of regional autonomy. Principles of good governance consisting of transparency, accountability, responsibility, independency, and fairness are the foundations of good corporate governance, where the application is expected to be a guide in managing good corporate management by taking into account the interests of the community.

Good governance or often called good governance is the process of organizing state power in implementing good and service public, so as to create a village government that builds credibility, ensures transparency and accountability, and maintains an effective channel and information disclosure that will encourage better performance of village governance.

As defined by the State Administration Agency (2000) that good governance is the administration of solid, responsible, effective and efficient state government, and also constructive interaction and synergy between state, private and community. Meanwhile, United Nations Development Program (UNDP) defines governance as: "the exercise of political, economic, and administrative authority to manage a nation's affair at all levels". UNDP emphasizes the political, economic and administrative aspects of state management. According to UNDP there are several principles that must be implemented and should be developed, including 8 eight characteristics of Good Governance as follows:

- 1) Participation, public order in making decision either directly or indirectly through representation agency of village BPD (Badan Musyawarah Desa) in order to conduct their aspiration. Participation is built on the basis of freedom of association and speak and participate constructively. The form of village community participation is seen in the program planning and village development.
- 2) Rule of Law, fair and impartial legal framework, if there is a village apparatus which commits fraud and found to be in violation of applicable laws and regulations, then there will be sanction and a warning letter.
- 3) Transparency, built on the basis of freedom to obtain information directly related to public interest that can be obtained by the people.
- 4) Responsiveness, village administration as a public institution should be quick and responsive in serving and responding to the aspirations of the people. It can be directly or indirectly through BPD or by using the tool of the complaint letter box.
- 5) Consensus orientation, the village government is more oriented towards the comprehensive interests, solving all problems by prioritizing consensus based on the spirit of kinship.
- 6) Equity, every society has equal opportunity to obtain equality and justice.
- 7) Efficiency and Effectiveness, in the implementation of village work programs, management of public resources conducted with efficiency and effectivity.

- 8) Accountability, a form of accountability to the people in every activity undertaken by the village government. That is by making accountability report of the administration of village government at the end of budget year.

The result of the implementation of Village Law through the application of village information system (SID) is expected to create reliable reporting quality and free from any material misstatement. This can be realized with the implementation of good governance in village government, to improve government performance in village. Implementation of Village Law in theory will not be separated from the application of village information systems in support of the performance of village government, which requires the consistency of village government in the implementation of the concept and principles of good governance in the village. If there is no realization and implementation of village information system and good governance, then the public trust for financial management and village administration will be reduced. This is in accordance with research by Sari, IM and Tamrin, NI (2017), that good governance becomes an important role for the quality of financial information. While Heriyanto (2015) states that in the application of the principle of good governance there are obstacles and efforts in overcoming obstacles to the implementation of Village Law. To answer the research problems, the second hypothesis proposed:

H2: There is influence of village information system on village government performance with good governance as moderate variable.

### 2.3 Previous Research

Here are some results of previous research, among others:

Table 1 Previous Research

Researcher	Title	Result
E Niswantariputri, H Murtini. Accounting Analysis Journal, (2017) - journal.unnes.ac.id	The Use of Performance Measurement System in Public Sector Organization	There is a positive influence of information and training on the use of performance measurement system in operational activities, the positive influence of information on the use of performance measurement system in incentive activities, and the positive influence of external pressure and training on the use of measurement system performance in exploration activities. It can be concluded that information,

		external pressure and training affect the use of performance measurement system in Village Government in Demak District.
<b>Researcher</b>	<b>Title</b>	<b>Result</b>
I Gusti Ayu Trisha Sulina; Made Arie Wahyuni; Putu Sukma Kurniawan.  e-Journal S1 Ak Universitas Ganesha Accounting Department (Vol: 8 No: 2 Year 2017)	Role of Village Financial System (SISKEUDES) on Village Government Performance (Case Study in Kaba-kaba Village, Kediri Sub-district, Tabanan District)	(1) Data inputs on the village financial system (Siskeudes) must be in accordance with those listed in the system;  (2) Ways to integrate low human resources (HR) through through mentoring and training;  (3) The implementation of the village financial system (Siskeudes) has a positive impact on the performance of employees. The implementation of the village financial system (Siskeudes) has an important role to play in the village government's perceived performance directly by village officials in Kaba-kaba Village. This is in accordance with the purpose of applying the village financial system (Siskeudes) is to assist the employment of village employees.
Rendra Risto Wuri;	Performance of Village	The result of research shows that

Markus Kaunang; Novie Revlie Pioh. (2017)  <a href="https://ejournal.unsrat.ac.id/index.php/journalexecutive">https://ejournal.unsrat.ac.id/index.php/journalexecutive</a>	Government Apparatus in Improving Public Service (Study in Sinsingon Village, East Passi Sub-district of Bolaang Mongondow Regency)	from three performance indicator that productivity is not good enough in providing service to society, service quality is good enough, accountability in applying service standard in the field of population administration is still not good enough, it is seen from the rules and norms and service ethics that developed in the community.
<b>Researcher</b>	<b>Title</b>	<b>Result</b>
Hendi Sandi Putra Journal of Young Politics, (2017)  <a href="http://journal.unair.ac.id">journal.unair.ac.id</a>	Village Governance in Achieving Good governance in Kalibelo Village, Kediri Regency.	The results of the study found that governance should be improved in several aspects: transparency in the use of village funds and information disclosure; accountability of village apparatus performance performance.

### 3. Research Methods

This research is a quantitative research with survey as the type of the research. The population used for this research is all village people in Banguntapan sub-district, Bantul regency. The sampling method using the census, so that all the population used as sample research. The research respondents consisted of 36 people with up to 32 people completed the survey. Methods of data collection in this study is by using questionnaires distributed to respondents. Village information system (independent variable), good governance (moderating variable), village government performance (dependent variable) questionnaire question is measured by Likert scale 1 (strongly disagree) up to 5 (strongly agree), with interval scale.

The village information system (SID) assists the efficiency and effectivity on the implementation of village governance, and facilitates the achievement of accountable and transparent government performance, in order to create strong, independent, prosperous and

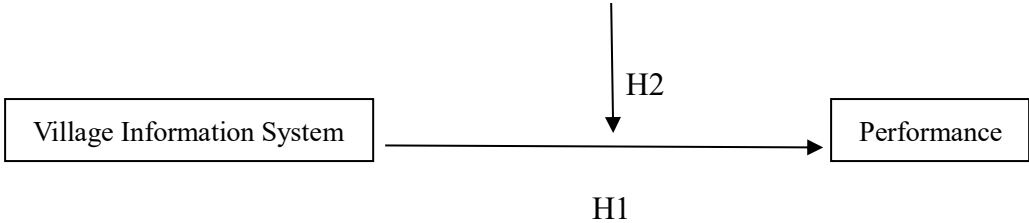
democratic villages. SID is an integral part of village government development. According to the Village Law article 86, the SID indicator in this research includes: hardware and software facilities, network, and human resources.

Good governance in this research is moderating variable. Good governance in village governance is manifested through governance management and village finance management, which includes 8 principles of good governance according to UNDP: Participation, Rule of Law, Transparency, Responsiveness, Consensus orientation, Equity, Accountability, Efficiency and Effectiveness. This independent variable is measured using a Likert scale of 1 (strongly disagree) to 4 (strongly agree) with the interval scale (Sudaryati, 2017).

The performance of village government is a form of activities undertaken by the government in providing services toward the local community. This is a form of a devotion made by the village government, regarding the form of services provided there are administrative and non-administrative services. Activities undertaken by the village government is a form of public service that must be done by the village government. Village government performance is a dependent variable with indicators of output quality, output quantity, output period, work completion time at work, and ability to work together. (Sudaryati, 2017).

Data analysis is done sequentially starting from data quality test, descriptive analysis, simple regression analysis, regression analysis with moderating variable, and hypothesis testing. The data quality test is done by statistical tool in the form of correlation value between each question item to the total score of each item per variable, by looking at correlation Pearson score and significance value for validity test, and reliability test by using Cronbach Alpha statistic test.

This research model is shown with the following picture:



To test the proposed H1 and H2 hypothesis, the researchers use 2 (two) regression equation model as follows:

$$K = \beta_0 + \beta_1SID + e \dots\dots\dots (1)$$

$$K = \beta_0 + \beta_1SID + \beta_2GG + \beta_3SID * GG + e \dots\dots\dots (2)$$

Information:

- K = Performance of village government
- SID = Village Information System
- GG = Good Governance

**4. Data Analysis and Discussion**

Based on survey results through questionnaires to all village units in Banguntapan sub-district, there were 36 samples, but there were 4 incomplete questionnaires, which did not qualify to be processed. So that all samples obtained are 32 questionnaires.

#### 4.1 Data Description of Respondents

The following table 2 describes the respondent's working period, the statistical results show that most village apparatus have been working for less than 5 years with 37.5% percentage.

Table 2 Years of service

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid <5 years	12	37.5	37.5	37.5
5-9 years	7	21.9	21.9	59.4
10-14 years	7	21.9	21.9	81.2
>15 years	6	18.8	18.8	100.0
Total	32	100.0	100.0	

Based on table 3 below, above 50% male with the number of percentage up to 81.2% of the total research respondents or amounted to 26 people and the remaining 6 people are female.

Table 3 Gender

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid Man	26	81.2	81.2	81.2
Women	6	18.8	18.8	100.0
Total	32	100.0	100.0	

Table 4 shows that the respondent's description is related to the age of the village apparatus. Most of the respondents were aged between 40 to 49 years who reached the percentage of 46.9% of the total respondents. While the lowest percentage of village apparatus that became respondents aged under 30 years.

Table 4 Age

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid <30 years	4	12.5	12.5	12.5
30-39 years	8	25.0	25.0	37.5
40-49 years	15	46.9	46.9	84.4
>50 years	5	15.6	15.6	100.0
Total	32	100.0	100.0	

Based on the data of educational background of most respondents is Bachelor with the highest

percentage achievement of 50%. This indicates that the human resources in the village government in Kecamatan Banguntapan Bantul district is good because more than 50% have been educated minimum in Diploma.

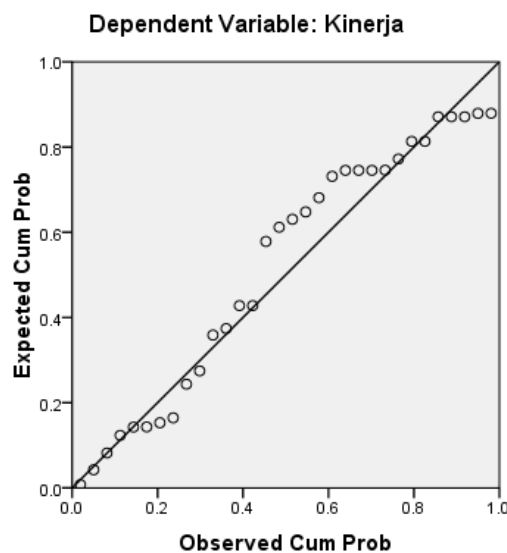
Table 5 Education

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid High School	10	31.2	31.2	31.2
Diploma	5	15.6	15.6	46.9
Bachelor	16	50.0	50.0	96.9
Master	1	3.1	3.1	100.0
Total	32	100.0	100.0	

#### 4.2 Normality Test

Using a normal plot chart to test the data normality, this research analyzes the degree of dots spreading around the diagonal line and follows the direction of the diagonal line. Based on graphic, it is seen that the regression model is feasible to use because it meets the assumption of normality.

Normal P-P Plot of Regression Standardized Residual



#### 4.3 Validity Test

Validity test is used to test the validity of the instrument using analytical techniques by calculating the correlation between the score of each question item with the total score of each variable. Based on the result, the correlation of the question for the performance variable (K1-K10) to the total score of the performance question items showed significant results. So it can be concluded that each item is valid



Table 6 Correlations

	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K
K1 Pearson Correlation	1	.945**	.701**	.686**	.559**	.618**	.691**	.736**	.861**	.741**	.680**
Sig. (2-tailed)		.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32
K2 Pearson Correlation	.945**	1	.656**	.637**	.534**	.584**	.653**	.796**	.820**	.717**	.641**
Sig. (2-tailed)	.000		.000	.000	.002	.000	.000	.000	.000	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32
K3 Pearson Correlation	.701**	.656**	1	.940**	.876**	.784**	.742**	.663**	.701**	.626**	.632**
Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32
K4 Pearson Correlation	.686**	.637**	.940**	1	.832**	.745**	.709**	.634**	.686**	.624**	.670**
Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32
K5 Pearson Correlation	.559**	.534**	.876**	.832**	1	.894**	.750**	.559**	.559**	.604**	.528**
Sig. (2-tailed)	.001	.002	.000	.000		.000	.000	.001	.001	.000	.002
N	32	32	32	32	32	32	32	32	32	32	32
K6 Pearson Correlation	.618**	.584**	.784**	.745**	.894**	1	.783**	.600**	.618**	.654**	.657**
Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32
K7 Pearson Correlation	.691**	.653**	.742**	.709**	.750**	.783**	1	.671**	.691**	.732**	.655**
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32
K8 Pearson Correlation	.736**	.796**	.663**	.634**	.559**	.600**	.671**	1	.853**	.768**	.586**
Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.000		.000	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32
K9 Pearson Correlation	.861**	.820**	.701**	.686**	.559**	.618**	.691**	.853**	1	.875**	.664**

	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.000	.000		.000	.000
	N	32	32	32	32	32	32	32	32	32	32	32
K10	Pearson Correlation	.741**	.717**	.626**	.624**	.604**	.654**	.732**	.768**	.875**	1	.663**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	32	32	32	32	32	32	32	32	32	32	32
K	Pearson Correlation	.680**	.641**	.632**	.670**	.528**	.657**	.655**	.586**	.664**	.663**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.002	.000	.000	.000	.000	.000	
	N	32	32	32	32	32	32	32	32	32	32	32

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Based on the output display below, it can be seen that the correlation of village information system variables between each score of question items (SI1-SI6) to the total score of items of village information system questionnaire showed significant results. It can be concluded that each item of question from the village information system variable is valid.

Table 7 Correlations

		SI1	SI2	SI3	SI4	SI5	SI6	SI
SI1	Pearson Correlation	1	.875**	.372*	.109	.332	.603**	.713**
	Sig. (2-tailed)		.000	.036	.552	.064	.000	.000
	N	32	32	32	32	32	32	32
SI2	Pearson Correlation	.875**	1	.449**	.266	.425*	.556**	.777**
	Sig. (2-tailed)	.000		.010	.142	.015	.001	.000
	N	32	32	32	32	32	32	32
SI3	Pearson Correlation	.372*	.449**	1	.638**	.422*	.505**	.771**
	Sig. (2-tailed)	.036	.010		.000	.016	.003	.000
	N	32	32	32	32	32	32	32
SI4	Pearson Correlation	.109	.266	.638**	1	.565**	.397*	.680**
	Sig. (2-tailed)	.552	.142	.000		.001	.024	.000
	N	32	32	32	32	32	32	32
SI5	Pearson Correlation	.332	.425*	.422*	.565**	1	.643**	.742**
	Sig. (2-tailed)	.064	.015	.016	.001		.000	.000
	N	32	32	32	32	32	32	32
SI6	Pearson Correlation	.603**	.556**	.505**	.397*	.643**	1	.820**
	Sig. (2-tailed)	.000	.001	.003	.024	.000		.000
	N	32	32	32	32	32	32	32
SI	Pearson Correlation	.713**	.777**	.771**	.680**	.742**	.820**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	32	32	32	32	32	32	32

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Good governance variable shows the same result based on the result of correlation test from each item of good governance question (G1-G11) to total score of good governance question shows significant result. It can be concluded that each item of good governance question is valid.

Table 8 Correlations

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G
Pearson Correlation	1	.616**	.616**	.640**	.252	.630**	.387*	.284	.461**	.387*	.630**	.770**
Sig. (2-tailed)		.000	.000	.000	.164	.000	.029	.116	.008	.029	.000	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.616**	1	.699**	.505**	-.049	.162	.419*	.314	.018	.188	.515**	.588**
Sig. (2-tailed)	.000		.000	.003	.788	.375	.017	.080	.920	.303	.003	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.616**	.699**	1	.610**	.289	.162	.188	.314	.372*	.304	.402*	.659**
Sig. (2-tailed)	.000	.000		.000	.108	.375	.303	.080	.036	.091	.023	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.640**	.505**	.610**	1	.447*	.491**	.256	.472**	.464**	.616**	.565**	.794**
Sig. (2-tailed)	.000	.003	.000		.010	.004	.158	.006	.008	.000	.001	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.252	-.049	.289	.447*	1	.524**	.488**	.493**	.688**	.488**	.238	.621**
Sig. (2-tailed)	.164	.788	.108	.010		.002	.005	.004	.000	.005	.189	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.630**	.162	.162	.491**	.524**	1	.553**	.536**	.506**	.553**	.524**	.723**
Sig. (2-tailed)	.000	.375	.375	.004	.002		.001	.002	.003	.001	.002	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.387*	.419*	.188	.256	.488**	.553**	1	.600**	.391*	.467**	.488**	.674**
Sig. (2-tailed)	.029	.017	.303	.158	.005	.001		.000	.027	.007	.005	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.284	.314	.314	.472**	.493**	.536**	.600**	1	.422*	.600**	.379*	.705**
Sig. (2-tailed)	.116	.080	.080	.006	.004	.002	.000		.016	.000	.033	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.461**	.018	.372*	.464**	.688**	.506**	.391*	.422*	1	.527**	.423*	.673**
Sig. (2-tailed)	.008	.920	.036	.008	.000	.003	.027	.016		.002	.016	.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.387*	.188	.304	.616**	.488**	.553**	.467**	.600**	.527**	1	.618**	.740**
Sig. (2-tailed)	.029	.303	.091	.000	.005	.001	.007	.000	.002		.000	.000
N	32	32	32	32	32	32	32	32	32	32	32	32

Pearson Correlation	.630**	.515**	.402*	.565**	.238	.524**	.488**	.379*	.423*	.618**	1	.749**
Sig. (2-tailed)	.000	.003	.023	.001	.189	.002	.005	.033	.016	.000		.000
N	32	32	32	32	32	32	32	32	32	32	32	32
Pearson Correlation	.770**	.588**	.659**	.794**	.621**	.723**	.674**	.705**	.673**	.740**	.749**	1
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
N	32	32	32	32	32	32	32	32	32	32	32	32

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

#### 4.4 Reliability Test

Test Reliability is used to measure a questionnaire which is an indicator of a variable or construct. A questionnaire in katakana is reliable if each question is answered consistently or the answer should not be random because each question supposed to measure the same variable tested. Reliability testing using statistical test Cronbach Alpha, with the variable is said to be reliable if it gives Cronbach alpha value > 0.60. (Nunnally, 1969)

Based on the statistical test, alpha Cronbach value for performance variables shows 0.961 (above 0.60) so it can be concluded that the reliability of the construct or performance is high.

Table 9 Reliability Statistics

Cronbach's Alpha	N of Items
.961	10

For village information system variables alpha Cronbach value shows 0.842 so it can be concluded that the reliability of the construction or village information system is high.

Table 10 Reliability Statistics

Cronbach's Alpha	N of Items
.842	6

Variable good governance alpha Cronbach value shows 0.894 so it can be concluded that the reliability of the constructs or good governance is high.

Table 11 Reliability Statistics

Cronbach's Alpha	N of Items
.894	11

#### 4.5 Descriptive Test

Data from the questionnaire received has been tested descriptively from the responses of respondents on the variables of village information systems, good governance, and the performance of village government. The following table 12 shows that the average of each variable above 3 so then can be concluded that the respondent's answer to the three variables studied is agree (with 4 Likert scale)

Table 12 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Governance	32	2.82	4.00	3.5312	.36372
SID	32	2.67	4.00	3.2812	.39358
Performance	32	2.60	4.00	3.2750	.44214
Valid N (listwise)	32				

#### 4.6 Hypothesis Testing

To test the proposed H1 and H2 hypothesis, using 2 (two) models of regression equation as follows:

$$K = 2.222 + 0.321SID \dots\dots\dots (tabel 13)$$

$$K = 10.888 - 3.561SID - 1.914GG + 0.930SID*GG \dots\dots\dots (tabel 14)$$

Table 13 Coefficients <sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.222	.649		3.421	.002
SID	.321	.197	.286	1.633	.013

a. Dependent Variable: Performance

Table 14 Coefficients <sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	10.888	4.926		2.210	.035
SID	-3.561	1.602	-3.170	-2.223	.034
Governance	-1.914	1.323	-1.575	-1.447	.159
Moderate	.930	.427	4.688	2.177	.038

a. Dependent Variable: Performance

Based on the result of regression test of model 1 shows that the sig value for the variable of village information system is 0.013 smaller than 5% which means the village information system has a significant effect on the performance of the village government, thus supporting the hypothesis H1. This is consistent with the five principles that determine the usefulness of SID, supporting the performance of village government, among others: the principle of participation, transparency, accountability, inclusiveness, and sustainability. These five principles of SID support can strengthen village capacity in public services, information disclosure and development at the village level, and assist in planning and development at the village level, and the management of village resources independently. This is in accordance with Niswantariputri research (2017).

However, it is necessary to manage the information system of village management to be more consistent and always update with the information, so it is necessary to be supported by the implementation of good governance in the village. The village information management principles are also included in the regulation of village authority, village rights and obligations, the rights and obligations of village communities, planning, implementation and monitoring of village development. From a 2nd research model developed on the basis of good government performance theory it should be supported by governance that involves not only village services but the participation of village communities, as well as local government. This second regression model uses multiple regression model to test the influence of village information system on village government performance with good governance as moderating variable.

The result of H2 hypothesis testing (model 2) shows that the sig value for SID variable is 0.034 which can be concluded that there is SID influence to the performance, while the sig good governance value is 0.159 which can be interpreted there is no influence of good governance to the performance of village government. But then, although village governance is less effective and less efficient, village governments are still required to realize more accountable and transparent village government performance. This is in accordance with the results of research Hendi Sandi Putra (2017).

The moderation value of the equation of model 2 shows the sig value of 0.038, means that the H2 hypothesis of this study is supported, which also means that there is an effect of SID on the performance of the village government with good governance as the moderating variable. This is in accordance with the concept of good governance supporting performance in village governance by realizing village management, village administration and finance management, whose implementation involves participation of villagers, upholding the rule of law, by realizing transparency, and improving the responsiveness of village apparatus, and to be more consensus oriented, equity and performance accountability are expected to be accountable, efficient and effective in support planning and development in village government.

## **5. Conclusion**

Some conclusions that can be drawn based on the research result on the implementation of village information systems on the performance of village government with good governance as moderating variables are as follows:

- 1) Village information system has a significant effect on the performance of village government. Thus it can be said that the application of village information system (SID) can improve the performance of village government, in order to achieve more accountable and transparent village performance, so that the village is strong, independent, prosperous and democratic
- 2) Good governance does not affect the performance of village government. So it can be said that although village governance is less effective and less efficient, but village governments are still required to realize more accountable and transparent village government performance.
- 3) However, good governance as moderating variable has significant effect to the performance of village government. Good governance, or can be said by the implementation of good and



correct governance, will be able to support the implementation of village information system so as to create performance of village government more accountable and transparent, thus, creating a strong, independent, prosperous, and democratic village.

## 6. Suggestion

From the findings of this study and supported by empirical data, the questionnaire results of this study suggest as follows:

- 1) Village government should always do supervision and evaluation on the implementation of village information system (SID) and good governance, in order to improve its performance.
- 2) It is better for subsequent research to identify different forms of village information system (SID) such as application of village financial information system (SISKEUDES), village development information system, village service information system and village potential information system.

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# Comparison of Indonesian History Learning Model Science Class and Social Class in Senior High School

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## Abstract

Psychological patterns and learner classroom condition in science classes and social classes have some differences and similarities in intelligence. This pattern influences the use of historical learning model which applied in SMA Angkasa, Indonesia. This study aims to determine (1) the way teachers use the approach, strategies, methods, and learning media of Indonesian history in science and social science classes, (2) to know the suitability of learning models, based on the characteristics (intelligence) of students, learning styles, and classroom conditions (3) learners opinions about the learning model of Indonesian history (compulsory) that has been applied by teachers for X class of IPA and class X IPS of SMA Angkasa. This type of research is qualitative descriptive, comparing the model of learning history, by conducting interviews and observations in science and social Science class. The results show that history learning in dominant Science classes uses mathematical, linguistic, and intrapersonal logical intelligence, appropriate models (assignments, problem solving, causal relationships in historical material). The learning model corresponding to the social classes is interpersonal, visual, and kinesthetic intelligence (cooperative, discussion, question and answer, role play, and visual image). This result is consistent with Gardener's 1986 intelligent theory of multiple Intelligence theory.

**Keywords:** learning model, Indonesian History, Science-Social class, multiple intelligence

## 1. Introduction

### *1.1 Problem*

The interest of student to learning history subject in science classes and social science classes can be caused by elements such as approaches, strategies, methods, and media used in historical learning. These elements are contained in the learning model. In addition, the infrastructure and intelligence review of student characteristics also be a support success in learning history. Learning history a process of cooperation between teachers and students in utilizing all the potential that exists, can be interpreted for example to find the source of history together and then review it into an interesting historical facts (Agung, 2013: 3). Learning history that is only implied as a story of the past will certainly cause a sense of saturation among learners in both science and social science classes. Sense of saturation in learning styles will lead to a reluctance to study history (Soedjatmoko, 1976: 15).

### *1.2 Importance of the Problem*

Teachers and learners has same position to add their knowledge continuously in learning

(Priyadi, 2013: 33). To realize the high level of effectiveness of history learning, it is necessary to choose the effective strategy and process of contextual learning approach. It can be done by bringing closer to the reality and experience of the learners in science and social science class. Through these approaches according to Sudrajat (2011: 6), the learning model is basically a form of learning illustrated from beginning to end that unique which presented by the teacher. Learning approach can also be done by observing aspects of individual intelligence. The intelligence approach has been achieved and the students' intelligence capacity in the science and social science class emerges, there is no obligation for the capacity to be tied to a single charge of the learning model that uses. As Gardener's statement suggests that the capacity of learning includes intelligence (Gardener, 2013: 86). This means that the level of student learning ability should be considered to the learning model, adjusted with the dominant intelligence capacity for students of science and social science classes.

### *1.3 Relevant Scholarship*

Fundamentally, intelligence is the psychological idea that uses by people to approach a set of materials. Teachers should have knowledge about the importance of managing intelligence in learners, in order to create a harmony between the objectives and the learning process. From that approach, learners are placed as a subject of learning processes and activities, then effective and efficient learning should take into the characteristics of students (Benny, 2009: 31). Here the relevance support of the research: (1) Thesis with title Comparison of Scoring Model Based on Response Theory Item Problem National Exam Subject Mathematics SMA / MA IPA program by Nuril Huda from Postgraduate Program of Yogyakarta State University 2015. From that research, about the comparison of a model seen from the characteristics of the value. (2) Thesis with title Comparative Study of History Learning Model at SMA Taruna Nusantara and SMA Negeri 4 Magelang, by Muhammad Fendy Aditya, from the Graduate Program of Yogyakarta State University 2016. From this research, explained that the two schools studied have different in determining history learning model. The relevance to the characteristics of historical learning model can be seen from school policy, history learning curriculum, teacher activity in particular with students' opinions about history learning model used by teachers.

### *1.4 Hypotheses and Their Correspondence to Research Design*

Students in the science class have tendency of linguistic intelligence, while in the social class shows strong interpersonal intelligence. This condition become the based that used by researcher to create the scheme of comparative learning model history in science and social class. Historical learning model will lead learners to achieve the competence to be achieved. One of the theoretical schemes which studied Suranto's book (2011: 5) is the Hull scheme, said that learning as a single phenomenon (unitary).

This can be seen from the achievement of test. Formative assessment indicates that the science class has an average value (reached the KKM), while in the social class tends to be lower than that of the science class. There are several factors become the obstacle in learning process, such as atmosphere, peers, perseverance, and focus of learning between science and social science classes. There is a discrepancy between the learning model used in science and social science classes. Factors that affect to the positive emotions such as hope and pride, negative emotions such as anxiety and shame. That factors has affect to the student performance and achievement, this has been supported through many studies (Baudoin, 2017: 14). This study will show the

elements of the learning model is the approach, strategy, methods, media, and preparation of teachers in determining and implementing the model of learning.

## **2. Method**

This research was descriptive qualitative method, by using comparative approach. Formulating a comparative problem guides the researcher to compare one context or domain to another. For example, Sugiyono (2016: 289) says "Is there a difference in class dynamics taught by lectures and demonstration methods?" In comparison analysis usually through three stages: first stage was a descriptive activity for searching information, the second stage was sorting information based on certain classification, and the third stage was analyzes the classification results to see the relationship between the various variables.

### *2.1 Identify Subsections*

Comparative studies has an objective to examines the phenomenon of educational variation in many backgrounds (quality) comparisons (Rohman, 2010: 90). (1) comparative methods in education concerning aspects or elements of education in schools in a broad sense that affects student achievement (2) characteristics of students, including learning patterns, intelligence, and learning styles (3) classroom environment includes policy, approaches, learning strategies, methods, media and students' view of the school.

### *2.2 Participant (Subject) Characteristics*

SMA Angkasa has two classes in both of classes, science and social. It is interesting to study because it were balanced, so it can be a benchmark of the tendency and success of learning model used for science and social science classes. To succeed learners, achieving maximum results in learning requires appropriate learning models by teachers

### *2.3 Sampling Procedures*

The principal characteristics in this qualitative research were; (1) Qualitative research has a natural setting, data collected from the source directly, and researchers as an instrument (2) qualitative research was a descriptive (3) researchers pay attention to meaningful processes and products (4) researchers analyzed data inductively, data collected not to support or reject the hypothesis, but abstractions are arranged as collected and grouped specificities (5) "meaning" is an essential matter. To obtaining the meaningful data, observations were not just once, but as long as the data collection (Sutopo, 2006: 77).

#### *2.3.1 Sample Size, Power, and Precision*

This research used purposive sampling technique. In this research technique used to take the sample selectively namely; (1) source triangulation, the researcher explores the truth of certain information through various methods and sources of data acquisition (2) triangulation of researchers, conducted by using more than one person in data collection and analysis (3) method triangulation, done by comparing information or data in different ways (4) triangulation theory, is the final result of qualitative research in the form of an information formulation.

#### *2.3.2 Measures and Covariates*

The information extracted from the various data sources, and the types of data sources to be utilized in this study include: (1) Interviews, were: (a) Vice Principal of the Curriculum Section, (b) Indonesian History Teacher (mandatory), (c) Students in Science and Social Science classes with four main interviews, and ten supporting interview data for each class (2) Observation,

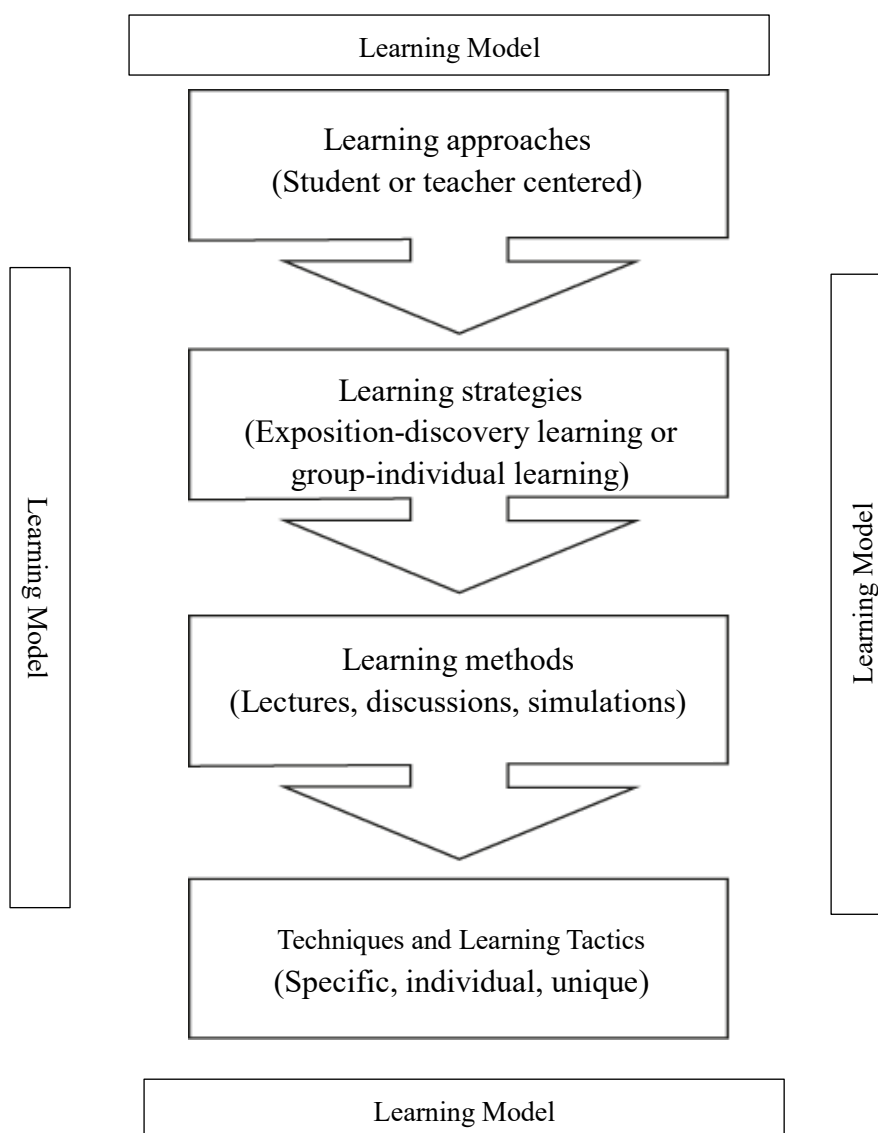
were (a) Lesson Plans (RPP) (b) data archives covering teacher lists, number of students, daily and recurring grades, progress books, number and types of library books, instructional media used, and school facilities and infrastructure (c) places, events, and activities.

### 2.3.3 Research Design

Research resource was the object of research are teachers and learners in running the model of learning in the classroom and observed naturally. The researcher looks at whether; history learning - in science classes and IPS classes have been used - learning approaches, learning strategies, learning methods, and learning media in creating and defining - Historical Learning Models for Science Class and Social Class as - Successful Historical Learning. The successfullness of student has the positive relation to the frequency in learning (Sheldrake, 2017: 6).

### 2.3.4 Experimental Manipulations or Interventions

The conclusions of this study used the verification of data, but it was still temporary, and become changed if the strong evidence which support the data collection stage not found. If the data conclusion which presented at the initial stage, supported by valid and consistent returns of evidence when the researcher returned to the field to collect data, the conclusion presented was a credible conclusion. Here is the scheme (position) of learning model in teaching elements:



Relationship of Terms in the Learning Model (Majid 2013: 20)

### 3. Result

#### 3.1 Comparison History Learning Approach in Science and Social Science Classes

Learning approaches which made in IPA 2 and IPS 2 classes were easier because the classroom circumstances allow a comfortable and enjoyable learning environment. This condition allow students to focus their thoughts and attention to what is being learned. The specific questions, such as: (1) Do students learn faster? (2) Is that a more effective answer to national education standards? (3) Does it give deeper meaning, more enjoyable learning, and a better social experience? (Chemi, T. 2015: 376). Therefore, meaningful and fun learning was associated with new information on relevant concepts contained in the cognitive structure.

Enrichment activities in the learning approach are used to develop their potential, optimally in a fun way to encourage students to done their tasks. Standardization and concepts are required

both science and social science class because the competence of each student were different. The goal is that students become experts in their respective fields. Contextual learning used as an approach system to express meanings that are close to daily life Elain B. Jhonson (2008) (Rusman, 2014: 187). Learning approach can be interpreted as a starting point in viewing the learning process that is still common and can accommodate, inspire to strengthen certain theories (Suryani: 2012: 5).

Head of curriculum, Kristiantora revealed class X has been using the 2013 curriculum in 2017. SMA Angkasa Adisutjipto has a vision and mission of military aerospace, prioritizing discipline and environment. Every 6:45 am students did an 'apel' who are accompanied by members of the military. Every Wednesday there are marching and scouting to train the discipline. As a primary school the discipline discipline became a major supporter in the success of the school as well as being linked to the conditions of science and social science classes.

### *3.2 Comparison History Learning Strategy in Science and Social Science Class*

The curriculum 2013 in high school, Indonesian history subjects including in social science and natural sciences has an important role in shaping the character and personality of the students. Personality tests are used to distinguish the integrity and personality of learners (Yamin, 2007: 43). A curriculum will be structured on the basis of this theory will also focus the purpose, content, educational status, and facilitate the evaluation section. Students will play as an active role in the process of individual evaluation (Doğan, 2007: 88).

Science and social students differs in analyzing the matter, social student can give the strong opinion, but the science science student give a brief and solid opinion. Conceptual learning by linking past events to contemporary realities draws learners' interest in historical learning. Differences in attitudes and thoughts in analyzing are influenced by environments that support brain development in response to lessons. Education is closely related to a strategy defined as a plan, method, or series of activities designed to achieve a particular educational goal, so that learning strategy can be defined as a plan that contains a series of activities to achieve educational goals. (Ngalimun 2016: 4).

Learning strategies are not stagnant or fixed, including in processing time to be effective and efficient, requires precision in understanding students before and after the lesson progresses. The teacher creates a special diary to evaluate the strategy that has been done. The results of the task can be observed to evaluate a strategy that has not been perfect.

Monitoring students' progress in learning not only falls into the category of sustainability strategies, but also enters into targets and results that must be met each day. Projecting strategy as a plan or schedule guide should also be known to students for the next activity target to be encouraged to read some material to be learned. Characteristics of students actually all different both in science and social science class so that there is no difference between science and social science class in particular but can be said to dominate the strategy in memami intellectual dominance that can be used to determine what questions can provoke students to argue, analyze the material. The dominance of intelligence that appears in the science class is the closeness of thought and logic, while the social class is of kinesthetic intelligence, and the more dominant attitude. The learning strategy includes of approaches, methods, techniques, forms of media, learning resources, and grouping of students to realize educational interaction to their learning environment that will result in learning experience (Majid 2013. 6).

### *3.3 Comparison History Learning Methods in Science and Social Science Classes*

Literally, method comes from the Greek language, consists of two vocabulary. *Methodos* means meaning through and *hodos* can be defined path (Noor Syam 1986) (Janawi, 2013: 66). In this case. Direct learning methods are needed in every history lesson either directly or planned. Therefore, the principle teacher will not eliminate the lecture method either directly or indirectly. It simply summarizes and adds with other usable methods. Contextual method used by teacher in learning history by collecting identity from elementary school, junior high school, high school or in the form of photographs as source of history in research. The expressive history in education is crucial in cultivating expressive liberation and spontaneous individuality to students (Erickson, 2015: 122). Contextual methods are very relevant to be used as historical lessons that are wide open and can be learned in science and social science classes.

Paul B. Diedrich (Imron, 2011: 16) lists a variety of student activities including: Visual activities, such as reading, watching: pictures, demonstrations, experiments, other people's work and so on. Oral activities, such as: stating, formulating, asking, giving advice, issuing opinions, making coverage, discussion, interruption, and so forth. Listening activities, such as listening to descriptions, conversations, discussions; music, speech, and so on. Writing activities, such as writing stories, essays, reports, tests, questionnaires, copying and so on. Drawing activities, such as drawing, graphics, maps, diagrams, patterns, and so on. Motor activities, such as experimenting, constructing, modeling, refit, play, gardening, raising animals, and so on. Mental activities, such as responding, remembering, solving problems, analyzing, looking at relationships, making decisions, and so forth. Emotional activities, such as interest, boredom, joy, courage, calm, nervousness, and so on.

Question and answer methods that have been done outside the classroom by providing a way to find questions and answers to students in the science class and social class. The question and answer method that is planned will be better to give the students an opportunity to think analytically. As the concept is a question and answer method is easier to use in the classroom because it is more focused and audible in the room. In this case *ramu* opinion techniques can also take place which is a fusion of question and answer techniques and discussion techniques to develop creative minds. Interpret it, relate it to existing knowledge, make notes, think it critically. Just as questioning does not give much opportunity for various activities (Nasution, 1995: 93).

The method is not differentiated between science and social science class except in its approach. The application of the method should be adjusted to the conditions of the dominant intelligence aspects contained in the class, including in the science and social science class. Teachers do not distinguish methods between science and social science class. Methods relating to student acceptance in learning. The following are the comparisons implemented in both science and social science class: In general, the use of problem based learning method has characteristic of real problems as context of critical thinking and problem solving skills, to gain knowledge. A good learning method is one that can foster learning activities for students, coupled with teacher's efforts in selecting appropriate methods as an effort to enhance the quality of teaching or education that can be accounted for (Hamdayama, 2013: 94). No demonstration methods were found in SMA Angkasa, whereas things like history were more appropriate to be experienced than learned, or more precisely trained by examples rather than through school



lessons "technic could not be exposed in word, wether spoken or written; it could only be demonstrated "(Mulyaningtyas, 2007: 43).

Demonstration learning method is very effective, because it can help learners to see directly the process of the occurrence of historical events. The method of discovery aspect changes the passive learning conditions into active and creative or the teacher oriented to the student oriented so that the students find their own information independently. The method of the exercise task is done in a fun way so that students are not saturated. There is no historical learning model that is said to be most appropriate for use in science and social science class. In using the model, teachers should not be focused on a single theory, because students' self-understanding can be achieved through personal models, group co-operation, information processing skills can be approached by information processing models, and skills acquisition can be trained through behavior modification (Dahlan , 1990: 14).

A good learning model can only be measured by the quality of selection of a good learning model to be used in science and social science classes at least there are 4 components that must be considered, namely teachers, pesera students, facilities and teaching materials. In its use by doing variations so that students are not bored and saturated.

#### *3.4 Comparison History Learning Media in Science and Social Science Class*

Media comes from the Latin word, *medius* has a meaning "middle", "introduction", or "intermediary". In Arabic the media is referred to as the *wasail*, the plural of the *wasilah* which means also "middle" or is between the two sides. (Munadi, 2013: 6). Audio-visual media is most commonly used. The use of complete media can be tailored to the needs that can touch the various senses then the use of multimedia is one of the best alternative choice for teaching and learning memorable. Audio-visual media is more feasible than posters, pictures. Audio visuals can draw attention briefly to attract large numbers of viewers with powerful information (experts) and then it can save time to see objects by presenting in the classroom. Students are more understanding and interested in learning history that is delivered with audio-visual media compared with the lecture method only. Audio visuals can be captured with more than one sense. Learning media is defined as an integral component of the learning system positioned as a communication component in learning (Daryanto, 2013: 7). There is no specific difference in responding to media between students in science and social science class so that teachers do not use strategy. The learning media can overcome the difficulties and clarify the difficult subject matter and one of them is able to understand and make the lesson more lively and interesting. Of course, each class will have different understandings related to media responses. The right media is what attracts students and makes students enthusiastic. The right media can provide the same incentive to experience, perception and motivation. The media is enough because there is an IPS lab containing rocks, LCDs in each class. Unlike in particular the history laboratory as a source of learning replica models of past related things that can also be used as a class of practicum, museum, and display. The use of media is limited by the teacher's busyness. The use of media should also be tailored to the objectives, materials, and learning strategies. The selected media must be in accordance with the three things.

#### *3.5 Comparison History Learning Intelligence in Science and Social Science Class*

Problem solving intelligence is used for learners' learning in the form of controversial material. One's intelligence will be seen when arguing, intelligence in argument is determined by the

ability to understand students' opinions. There is no special portion in Science and Social Science Class on this subject.

Students learn to analyze the text critically, this skill does not have to be transferred in full (Freedman, 2015: 130). Methods in the form of intelligence in analyzing is still limited to knowledge, not on communication, evaluation. Critical thinking as the process of analysis, the process of connecting positional and negative understandings, and combining conclusions or decisions.

Teacher leads students to think critically in science and social critical thinking as a process of analysis, the process of connecting positional and negative understandings, and incorporating conclusions or a decision. Spatial visual intelligence of students based on the direction of the individual who has the pleasure to describe things that they imagine, in science and social class there is no dominant criterion but owned by individuals.

The result of experimental studies, show that the left hemisphere is specialized for verbal and computational expression, but not for reasoning skills (Choi, 2008: 4). Reflection methods are used in science and social science class to understand the concept of values in the material. It is used to refresh the brain after learning is not limited to science and social science class students. In addition, the mandatory methods applied are cooperative learning, problem based learning, project based learning. Based on the application and analysis of the teacher's RPP use the model suggested by the history teacher's deliberations.

Assess intelligence is done through written assessment and spoken language spoken. The dominance of intelligence between science class can be observed by trying to provide an appropriate learning model through observation and evaluation. The example, a child is only high in mathematics, or language, or chemistry, while in other subjects it is just quite even low (Syaodih, 2007: 7). Social class also has students who are smart. Measuring better intelligence is not measurable in any one of intelligence because intelligence has its various types. The teacher understands the characteristics of students as private schools. Teachers play an important role in the development of talent from their students, while schools become a means of talent development.

#### **4. Discussion**

Naturally human beings have different levels of intelligence, ranging from linguistic intelligence, logical-mathematical, spatial, musical, physical-kinestik, interpersonal, and intrapersonal. In the 1980s and 1990s, several meta-analyzes and literature reviews were conducted to determine students' grouping abilities (Decristana, 2017: 110). While grouping more oriented to goal and prospective learners after graduation. Add journals (as a booster) at least. Identical majors to determine intelligence grouping, at least classify the dominance of intelligence among students of science and social science classes, so that the subject matter can be absorbed well by learners using the right model of learning. The development of the 2013 curriculum has opened the opportunity for history subjects to strengthen the sense of nationalism and even get a compulsory label for the history of Indonesia for all students including in science and social science classes.

A direct result in the curriculum that previously placed less hours of lessons in the science class so that this study analyzes how the system is applied in making modela learning history both in

the science classroom and social class with the same hour portion. These findings modify how the learning model is applied on the basis of individual intelligence in the science and social science class so as to create enjoyable learning conditions.

Constructivism, theory of Peaget, assumes that a person's mental image is build when people interact to the environment (media) and the process of acquired knowledge is a process of self-meaning rather than internalization of outside meanings (Hanafiah, 2013: 61). Historical learning models tailored to individual intelligence groups can be an answer to how learning in social classes sometimes leads to less intelligent stigma when compared to Science classes. Even when supposedly students in social classes are smarter in historical subject matter but the results obtained in science classes are better, this is because intelligence content is not measured as a success. Social classroom conditions have kinestik intelligence, interactive in social, discuss with debate. Building a positive stigma of intercultural understanding can be done when the discussion goes on in class, they gain new knowledge from their own culture simultaneously (Singh, 2016: 34).

Tabel 1. Essential Comparison of Student Characteristics in Science and Social Science Classes

<i>Essential Characteristic in Science Class</i>	<i>Essential Characteristic in Social Class</i>
Have linguistics understanding and used the concept of numbers (mathematics)	Have honesty and equality of opportunity
Have an understanding to assess the relationship between the event that precedes the next event, as well as the implications for the resulting causal control	Ability to recognize the life of a society and realize the interdependence in social life
Able to use science and math in everyday life that occurs in society	Have the ability to speak and pride to the aspects of a superior nation
Have an interest to obtain education in accordance with work needs and technological developments	Able to develop an understanding of the human interdependence of the environment and the need to protect the heritage of nation

(Mulyana, 2004: 195)

Science classes have a tendency to learn independently, play logic, and have a strong analytical concept. Teachers and students can point out that they want to have more ways of explaining the same concept or responding to: I have only a half dozen ways to say things I may say ten times a class. It would be nice to have more than one way to say a lot of things I hear myself say. "What else can you add to this?" (See more interest) "What else do you notice?" (Kowalchuk, 2015: 85). In this study, no students are stupid but the builder's intelligence is used less precisely, consequently is the seriousness in learning is reduced. A fun learning style occurs because of the suitability of the learning model. Learning styles is a permanent picture of an abstract, abstracted, abstracted, inner-motivated learner approach as opposed to an extrinsically motivated learner, an impulsive learner the opposite of the reflective learner (brain movement) (Jasmine 2012: 92).

## 5. Conclusions

Based on the results of research and discussion of comparison learning model of history in science and social science class in SMA Angkasa Adisutjipto obtained the conclusion that the learning model has an important role for the learning process which is structured by taking into account the characteristics of intelligence in science and social science classes. Structured learning process can be started from the learning approach, learning strategies, learning methods, and learning media. Through these processes the learning model is modeled and can be used in science and social science classes. The application of historical learning model for science and social science class of SMA Angkasa is not differentiated and applied in accordance with the 2013 curriculum recommendation by using student center active learning model such as cooperative learning, problem based learning, and project based learning.

The most appropriate historical learning model was chosen because of the individual characteristic factors of intelligence within the class. So it can be concluded that giving the task of the group should be based on the purpose and proper carriage for individual performance. (Stenlund, 2016: 154). The intelligence of each individual can not be said as class intelligence but the dominance of the intelligence of similar individuals can be grouped in a class. This then makes the problem-based learning model in the science class succeeded in generating special interest, indirectly demanding that they learn independently and apply the logical intelligence. The learning models in the social class succeeded with cooperative learning, forming groups, stimulating them to interact and express opinions widely.

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# Globalizational and Macroeconomics Performance The Case of Asean Country

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## Abstract

The ASEAN Economic Community was formed with the aim of achieving the perfection of economic integration in the ASEAN region which is believed to provide tangible benefits to all elements of society. The phenomenon of globalization can be seen from the growth of cross country economic activities in various forms. Among other things, the two forms of economic activity are significantly more global, namely the flow of trade and international capital flows. This study uses quantitative methods with secondary data by panel period 2012-2016 by combining 10 ASEAN countries (Indonesia, Malaysia, Singapore, Thailand, Philippines, Vietnam, Myanmar, Brunei, Laos, Cambodia). The result of t test partially obtained is the probability value of t-statistic obtained 0.0000. Then the statistical probability  $\alpha = 5\%$  is  $0.0000 < 0.05$ . So it can be concluded that the variable of capital partially have a positive significance to the variable GDP. While the probability value of t-statistics obtained is 0.4191, then the statistical probability  $\alpha = 5\%$  is  $0.4191 > 0.005$ . So it can be concluded that the variable labor partially does not affect the significance of the variable GDP. While the value of probability t-statistics obtained 0.0251. Then the statistical probability  $\alpha = 5\%$  is  $0.0251 < 0.05$ . but t-statistically marked negative (-) So it can be concluded that the variable of labor partially have a negative effect and significance to the variable of GDP. F test results Simultaneous results are known that  $F_{\text{arithmetic}} > F_{\text{table}}$  ( $1807.174 > 3.69$ ) then  $H_0$  rejected and  $H_1$  accepted ( $F_{\text{arithmetic}}$  is in reception area  $H_1$ ). Then also probability (prob.) From above table that is equal to  $0.000 > 0.005$ , then  $H_0$  is rejected and  $H_1$  accepted. So simultaneously or together the variable capital, labor, opens simultaneously positive and significant to the variable GDP. In the Capital Variables each ASEAN country has excellent capital so that it becomes the main support for the success of the ASEAN Economic Community. While the Labor Variables seen each country is still constrained to the workforce. While the influence of openness to GDP growth of ASEAN countries needs to be improved especially in producing products that can be exported and reduce the import of goods.

**Keywords:** Economic Globalization, Capital, Labor, Openes, GDP, ASEAN

## 1. Introduction

The ASEAN Economic Community (MEA) is an initiative of ASEAN countries to realize ASEAN into a solid economic region and be taken into account in the international economic arena. MEA was formed with the aim to achieve the perfection of economic integration in the ASEAN region which is believed to provide real benefits for all elements of society.

According to Abdurofiq (2015), there are at least 4 (four) things that become the focus of MEA implementation, first, countries in the market and production base areas. Secondly, the MEA will serve as an area with a very high level of competition. Thirdly, the MEA will serve as an inspiration with equitable economic development. Fourth, MEAntintegrated to equitable

economic development among the entire ASEAN region.

The MEA has a broader scope of cooperation in regulating trade liberalization of goods. After December 31, 2015 there will be no drastic changes in the goods trading sector, since the last 5 years tariff-free is already applied to 99% of goods in ASEAN. According to Abduofiq (2015), the implementation of ACFTA and MEA has resulted in the reduction of import-export tariff rates to 0-5 percent and the elimination of other non-tariff and quantitative limits.

Zaroni (2015) explains that in economics in general the phenomenon of globalization can be seen from the growth of cross-country economic activities in various forms. Among other things, the two forms of economic activity are significantly more global, namely the flow of trade and international capital flows. Therefore, the flow of globalization and the flow of world trade and investment take place simultaneously. International Trade Flows The share of domestic consumption spending on goods and services imported from other countries increases, and the share of domestically produced goods and services is increasing.

The previous review of Zaroni (2015) describes the globalization of the economy and its implications for developing countries. While Semancikova (2016) examines trade, open trade and macroeconomics against 10 OCDC countries. While Razmi (2013) examines the impact of open trade and free economy on the economic growth of the middle east and east asia.

This study will focus on the extent to which the globalization of the economic impacts on ASEAN's GDP. Razmi (2013) Globalization according to Solow model consists of capital, labor, opens. This study uses secondary data in the form of panel data with the period of 2012-2016, from 10 ASEAN countries namely Indonesia, Malaysia, Singapore, Philippines, Thailand, Vietnam, Myanmar, Laos, Brunei, Cambodia.

The hypothesis of this research is 1) the variable of capital have positive and significant effect to the variable of GDP, 2) the variable of labor have positive and significant effect to GDP, 3) opens variable have positive and significant effect to GDP, 4) variable of capital, labor variable and opens variable together equal positive and significant effect on GDP variable.

## **2. Method**

The population that became the object in this study came from secondary data obtained from Knoema company, one of the providers of digital economic data. Sampling method using purposive sampling method, that is determination of sample with certain consideration. In this study the sample used using panel data obtained time series data for 5 years and cross section data of 10 ASEAN countries ie Indonesia, Malaysia, Singapore, Philippines, Thailand, Vietnam, Myanmar, Laos, Brunei, Cambodia.

### *2.1 Identify Variables*

The research variables are independent and dependent. for independent variables that exist in this research is the globalization economy that is capital (X2), Labor (X2), Opens (X3) while the dependent variable GDP (Y).

### *2.2 Data analysis*

The method of analysis used in this research is quantitative techniques that use mathematical and statistical models classified in certain categories to facilitate the analysis by using Eviews program. While the analytical technique used is multiple linear regression analysis techniques to see the relationship between independent variables with dependent variable. The data used



is panel data there are three kinds of panel data estimation technique that is pooled least square, fixed effect model, and random effect model. Test the suitability of the model to determine the most appropriate model is to use the Chow test and Hausman test. After that, the test of classical assumption that is normality test, autocorrelation test and also hypothesis test that is partial t test, F test, coefficient of determination test.

### 2.3 Econometric Model

Razmi (2013) in this research using basic solow model in input and output so obtained:

$$Y_t = F(K_t, L_t, O_t)$$

Where:

Y = output, K = capital, L = labour and O = Openes

As for the degree of economic openness of each country can be seen from the large openness index that is the ratio of the value of export (X) and import (M) to gross domestic product (GDP), The greater the index number obtained means the economy of the country concerned more open. namely:

$$\text{Openes} = \frac{X + M}{\text{GDP}} \times 100$$

Where X = Expor, M = Import, GDP

The technique of analysis in this research is panel data regression analysis, while the regression model in log form can be written as follows:

$$\ln Y_{it} = \beta_0 + \beta_1 \ln X_{1it} + \beta_2 \ln X_{2it} + e_{it}$$

Where:

Y = GDP; X1 = capital; X2 = labor; X3 = Openes, i = Country; and t = time.

### 3. Result

The panel data regression estimation test is three, common effect (OLS), fixed effect (FEM) model or Random Effect (REM) model. Determining the panel model to be used in this study, it must be done some testing. Chow test and Hausman test are tests that can be used to determine whether the panel data model can be reordered with common effect (OLS) model, fixed effect (FEM) model or Random Effect (REM) model. The Chow test is used to determine whether the panel data model is reordered with the Common Effect model or with the Fixed Effect model.

H<sub>0</sub>: The best model is Common Effect

H<sub>1</sub>: The best model is Fixed Effect

#### Chow Test

Table 1. Chow Test

Redundant Fixed Effects Tests  
Equation: Untitled  
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	28.067635	(9,37)	0.0000
Cross-section Chi-square	102.880642	9	0.0000

The table above shows that the best model is fixed effect because Chi-square probability value below 0.05, this means H<sub>0</sub> accepted.

#### Hausman Test

Table 2. Hausman test

Correlated Random Effects - Hausman Test  
 Equation: Untitled  
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	25.755377	3	0.0000

The table above shows the result that Cross Section Random is worth 0.0000 that indicates that H0 is accepted. The most appropriate model used in this research is Fixed Effect Model.

Table 3. Fixed Effect Model

Dependent Variable: GDP  
 Method: Panel Least Squares  
 Date: 29/07/18 Time: 21:47  
 Sample: 2012 2016  
 Periods included: 5  
 Cross-sections included: 10  
 Total panel (balanced) observations: 50

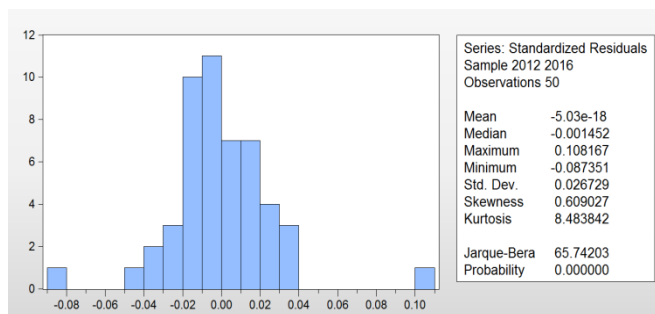
Variable	Coefficient	Std. Error	t-Statistic	Prob.
KAPITAL	0.685093	0.097847	7.001672	0.0000
LABOR	-0.504617	0.617507	-0.817185	0.4191
OPENES	-0.285415	0.122261	-2.334478	0.0251
C	-1.482428	4.029185	-0.367923	0.7150

From the result of panel data regression with selected model is Fixed Effect model, obtained equation of regression model as follows:

$$GDP = 0.685093 (\text{capital}) - 0.504617 (\text{labor}) - 0.285415 (\text{openes}) + e$$

*Normality test*

Figure 1 Histogram



From the output that has been tested stated that the histogram form is distributed symmetrically so that the residual is distributed normally. Based on the JB statistical test, the value is 65.74203 with probability 0.0000 while the chi-square value with significance ( $\alpha = 5\%$ ) is 0.05, so  $JB < \text{Chi Square}$ , Then  $H_0$  is rejected and  $H_1$  accepted means that the residual is normally distributed.

*Autocorrelation Test*

Table 4 Autocorrelation of Cochran Urcutt

Dependent Variable: GDP-0.871326\*GDP(-1)  
 Method: Panel Least Squares  
 Date: 29/07/18 Time: 21:53  
 Sample (adjusted): 2013 2016  
 Periods included: 4  
 Cross-sections included: 10  
 Total panel (balanced) observations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.409498	1.212808	1.162178	0.2553
KAPITAL-0.871326*KAPITAL(-1)	0.255338	0.070097	3.642654	0.0011
LABOR-0.871326*LABOR(-1)	-1.591458	1.258933	-1.264132	0.2170
OPENES-0.871326*OPENES(-1)	-0.267548	0.080025	-3.343299	0.0024

Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.971571	Mean dependent var	0.273496	
Adjusted R-squared	0.958935	S.D. dependent var	0.087774	
S.E. of regression	0.017787	Akaike info criterion	-4.963748	
Sum squared resid	0.008542	Schwarz criterion	-4.414862	
Log likelihood	112.2750	Hannan-Quinn criter.	-4.765288	
F-statistic	76.89356	Durbin-Watson stat	2.964080	
Prob(F-statistic)	0.000000			

Autocorrelation test can be seen from Chi-Square probability value, if greater than 0.05 then the data does not contain autocorrelation problem. If the chi-square probability is smaller than 0.05 then the data contains autocorrelation problems.

The results of the research output indicate that there is an autocorrelation problem, for which researchers use Cochran Orcutt which is used to correct the problem of autocorrelation.

From the output of Cochran Orcutt method obtained DW is 2.964080 where this DW value passed the test in autocorrelation problem. With DL value of 1.4206 and DU equal to 1.6739 then DW value equal to 2.964080 so if  $DL < DW > DU$  ( $1.4206 < 2.964080 > 1.6739$ ) can be concluded there is no problem autocorrelation.

Test t (Partial)

Table 5. Test t (partial)

Dependent Variable: GDP  
 Method: Panel Least Squares  
 Date: 29/07/18 Time: 21:47  
 Sample: 2012 2016  
 Periods included: 5  
 Cross-sections included: 10  
 Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
KAPITAL	0.685093	0.097847	7.001672	0.0000
LABOR	-0.504617	0.617507	-0.817185	0.4191
OPENES	-0.285415	0.122261	-2.334478	0.0251
C	-1.482428	4.029185	-0.367923	0.7150

Effects Specification				
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Based on the above results as follows:

#### *Capital Influence on GDP*

The probability value of t-statistics obtained 0.0000. Then the statistical probability  $< \alpha = 5\%$  is  $0.0000 < 0.05$ . So it can be concluded that the variable of capital partially have a positive significance to the variable GDP.

#### *Labor Influence on GDP*

The probability value of t-statistics obtained is 0.4191, then the statistical probability  $< \alpha = 5\%$  is  $0.4191 > 0.005$ . So it can be concluded that the variable labor partially does not affect the significance of the variable GDP.

#### *The effect of Openes on GDP*

The probability value of t-statistics obtained is 0.0251. Then the statistical probability  $<\alpha = 5\%$  is 0.0251  $< 0.05$ . but t-statistically marked negative (-) So it can be concluded that the variable of labor partially have a negative effect and significance to the variable of GDP.

#### *F Test*

Table 6. F Test (simultaneous)

R-squared	0.998297	Mean dependent var	2.056289
Adjusted R-squared	0.997744	S.D. dependent var	0.647655
S.E. of regression	0.030760	Akaike info criterion	-3.906332
Sum squared resid	0.035008	Schwarz criterion	-3.409206
Log likelihood	110.6583	Hannan-Quinn criter.	-3.717024
F-statistic	1807.174	Durbin-Watson stat	1.276362
Prob(F-statistic)	0.000000		

From the calculation of the value of F, it is known that  $F_{\text{arithmetic}} > F_{\text{table}}$  ( $1807.174 > 3.69$ ) then  $H_0$  is rejected and  $H_1$  accepted ( $F_{\text{arithmetic}}$  is in reception area  $H_1$ ). Then also probability (prob.) From above table that is equal to  $0.000 > 0.005$ , then  $H_0$  is rejected and  $H_1$  accepted. So that simultaneously or together independent variables have a significant effect on the dependent variable.

#### *Coefisein Determination*

Based on the table above, the value of Adjusted R-Square is 0.9977. This shows that the model is able to explain 99.77% of the dependent variable, while the remaining 0.23 other factors influenced beyond the regression model.

## 4. Discussion

The effect of the globalization economy on GDP growth of ASEAN countries needs to be improved. The globalization economy has a variable of capital, labor variables, and variables of Openes. In the Capital Variables each ASEAN country has excellent capital so that it becomes the main support for the success of the ASEAN Economic Community. This result is in line with research conducted on East Asia and Central Asia (Razmi, 2013) so that it can be concluded that all the countries in Asia have excellent capital to support their country's GDP growth. While Labor Variables seen each country is still constrained to labor, both labor at the level of workers and professional levels. These results are in line with research in East Asia and Central Asia (Razmi, 2013). Good competence is expected to exist for all workers in each country, hence it needs training that can improve competence.

Table. 7 Openes

OPENES	2012	2013	2014	2015	2016
Indonesia	0,44	0,46	0,47	0,47	0,36
Malaysia	1,47	1,44	1,36	1,36	1,34
Singapore	3,60	3,52	3,55	3,67	3,16
Thailand	1,30	1,31	1,38	1,34	1,23
Phipilipines	0,51	0,54	0,51	0,56	0,53
Vietnam	1,38	1,41	1,51	1,64	1,71
Myanmar	0,29	0,31	0,36	0,46	0,47
Laos	0,51	0,52	0,50	0,57	0,60
Brunei	0,97	1,11	1,18	1,36	1,02
Kamboja	1,16	1,21	1,29	1,31	1,30

While the influence of openness to GDP growth of ASEAN countries needs to be improved. From the Table it is clear that especially in 2016 almost all ASEAN countries decreased only Vietnam's high level of openness from 1.64 to 1.71 and while Myanmar also increased although slightly from 0.46 to 0.47. This result is highly unexpected, especially in 2016 where the era of the ASEAN Economic Community began. Production problems, competitiveness, especially in producing products that can be exported, so that will reduce the import of goods. Arrangement of export duty tariffs can be given a return policy to foster export climate in each country. In research in East Asia and Central Asia the openness has been very good (Razmi, 2013), so that countries in East Asia and Middle East Asia have been very advanced because it has a high openness. It is hoped that openness in ASEAN countries will increase so many investments will be present so that ultimately the purpose of the establishment of ASEAN Economic Community can prosper each ASEAN country.

## 5. Conclusion

This study aims to analyze the relationship of the Digital Economy, Openness to GDP growth of ASEAN countries period 2012-2016 by using panel regression analysis technique. Based on the results of statistical tests, it can be concluded as follows:

- 1) Partial T test result obtained is the probability value t-statistics obtained 0.0000. Then the statistical probability  $\alpha = 5\%$  is  $0.0000 < 0.05$ . So it can be concluded that the variable of capital partially have a positive significance to the variable GDP. While the probability value of t-statistics obtained is 0.4191, then the statistical probability  $\alpha = 5\%$  is  $0.4191 > 0.005$ . So it can be concluded that the variable labor partially does not affect the significance of the variable GDP. While the value of probability t-statistics obtained 0.0251. Then the statistical probability  $\alpha = 5\%$  is  $0.0251 < 0.05$ . but t-statistically marked negative (-) So it can be concluded that the variable of labor partially have a negative effect and significance to the variable of GDP.
- 2) F test results Simultaneous result is known that F arithmetic  $>$  F table ( $1807.174 > 3.69$ ) then  $H_0$  is rejected and  $H_1$  accepted (F arithmetic is in reception area  $H_1$ ). Then also probability (prob.) From above table that is equal to  $0.000 > 0.005$ , then  $H_0$  is rejected and  $H_1$  accepted. So simultaneously or together the variable capital, labor, openness simultaneously positive and significant to the variable GDP.

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# Analysis Of Islamic Work Value Affect The Job Satisfaction And Organizational Commitment Of Employees In Halal Tourism Places In Jakarta

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## Abstract

**Purpose:** This study aimed to determine the influence of islamic work value which has been validated previously by Wahab, et al (2016) . as a mediator between the variable individual characteristics on job satisfaction and organization commitment of the employees in halal tourism in DKI Jakarta as the capital of the Republic of Indonesia. Jakarta holds an important role in the development of the tourism sector in Indonesia because it is quite strategic, easily accessible, and its appeal as the nation's capital and also Jakarta one of 13 development of halal tourism destinations in Indonesia. It was marked by an influx of Jakarta in the nomination the best destinations world halal tourism 2015 in the United Arab Emirates.

**Method:** This research uses a kuantitatif approach with the SEM methods. This research place respondents from the employees in halal tourism in province of DKI Jakarta in the halal tourism site. There are some variables used in this study i.e., job satisfaction and commitment organization employees as the dependent variable and individual Characteristics of the employees in halal tourism in DKI Jakarta as the independent variable and the value of Islamic work already validated as a mediator variable. The data used in this research is the primary and secondary data. Primary data obtained from a questionnaire distributed to the employees in the halal tourism spots in Jakarta, while the secondary literature from some previous research

**Findings:** Research conducted at the site halal tourism in DKI Jakarta showed there are significant relationships between islamic work value and job satisfaction and comitment organisation and there is not significant relationship between individual characteristics and islamic work value, job satisfaction and comitment organisation

**Originality/novelty:** As a country with a majority muslim population, Indonesia certainly has great potential to become a major destination for a muslim tourists. Research on halal industry in Indonesia as long as it's more about the consumers of halal industry as for the perpetrators or employees in the halal are still classified as low. And Research on the workings of Islamic values in the halal tourism industry is still not significant also Research that discusses the work values of Islam just present published by two new journals (look Wahab et al (2016); Khanifar et.al., (2011)). furthermore, these studies are limited to explore of the construction work of the Islamic values and has not examined the related its influence on employees of companies that implement the work values of Islam.

**Keywords:** halal tourism, individual characteristic, job satisfaction, organizational comitment

## 1. Introduction

The tourism industry has proven to be one of the international industry with enormous growth potential. UNWTO (2017) noted that international tourist arrival growth globally from 25 million tourists in the year 1950 to 28 million in 1980, 674 million in 2000, and 1.235 billion in 2016. This number is projected to be developed into a 1.8 billion tourists in the year 2030. International tourist arrivals to Indonesia itself continues to experience increased during the last five years. Recorded more than 10 million foreign tourists who have visited in the year 2015 increased by 10.4% from the previous year that amounted to 9.435 million foreign tourists. Quantity is believed will continue to evolve along with the potential development of this industry in the future (UNWTO, 2016). With a huge growth potential, the tourism industry can be one of the sectors of the economy plays a very important role in regional development, which in turn imposes on national development. With the number of indonesia's majority muslim community are trying to develop the tourism industry of halal or Shariah-compliant

Islamic tourism is a new tourist destinations in the world today. Utilizing the World Tourism Organization (UNWTO) shows that foreign muslim travellers contribute 126 billion u.s. dollars in 2011. The number of tourists from Germany, defeated the United States and China. According to data of the Global Muslim Traveler, muslim travelers entering Indonesia in 10 of the country's most numerous sightseeing. However, Indonesia is not included in 10 places visit muslim destinations (Utomo, 2014). Ironically, Indonesia cannot capture this opportunity. The country has abundant wealth and it just became muslim inner consumers only.

Farahani and Anderson (2009) asserts that "Islamic tourism can be defined the U.S. traveling activities of Muslims when moving from one place to another or when residing at one place outside their normal place of residence for a period less than one year and to engage in activities with Islamic motivations. It should be noted that Islamic activities must be in accordance with generally accepted principles of Islam; i.e. halal. " Then the Islamic tourism can be defined as the activities of Muslim travel when moving from one place to another or when one places outside their normal place of residence for a period of less than one year and to engage in the activity with Islamic motivations. It should be noted that the activities in Islam must be in accordance with Islamic principles generally accepted, i.e. halal.

Sofyan (2012:33) stated that the definition of the wider Islamic tourism religious tourism that is tourism based on Islamic values. According to the World Tourism Organization (WTO), the Islamic tourism consumers not only Muslims but also non-Muslims who would like to enjoy local wisdom. The characteristics of the Tourism according to Sharia Chukaew (2015), there are eight standard factor measurements of the Shariah in terms of Tourism Administration and management for all tourists can be a distinctive characteristics, namely: 1. Service to the tourists must fit with the principle of Muslims as a whole; 2. Guided tours and staff must have the discipline and respect for the principles of Islam; 3. Arrange all activities in order not to contradict the principles of Islam; 4. Building must comply with the principles of Islam. ; 5. the Restaurant should follow international standards halal services; 6. Transport services should have security protection system; 7. There are places that are provided to all travelers of muslim religious activities; and 8. Travelling to places which are not contrary to the principles of Islam. Of the characteristics of Islamic tourism outlined Chukaew (2015), there are four important aspects to look for in order to support an Islamic tourism. 1. Location: the application of the



Islamic system in the area of tourism. The location of the selected tourism is allowed the rule of Islam and can increase the value of spiritual values. 2. Transport: implementation of the system, such as the seating separation between men and women who are not mahram so keep the passage of Islamic jurisprudence and terjaganya convenience of tourists (Utomo, 2014). 3. Consumption: Islam is concerned in terms of consumption of halal, it is contained in Q. S Al-Maidah verse 3. In terms of the halal here from either of its nature, as well as his acquisition of processing. In addition, a study showed that the interest of tourists in food play a central role in choosing the destination (Moir, 2012). 4. Hotel: the entire work process and facilities provided to walk in accordance with Sharia principles (Utomo, 2009). According to Rosenberg (in which Sahida, 2009), the service here is not limited within the scope of the food or drinks, but also in the given facilities such as spa, gym, pool, living and functional for both men and women should separate. Halal tourism characteristics among others there is a halal tourism packages that include a friendly Muslim tourists destinations, as well as hotels, restaurants, and spas that are halal (Kemenparekraf, 2013).

Kemenparekraf RI so far has been developing and promoting businesses in the field of hospitality, restaurants, travel agencies and tourist spa in 12 tourist destinations. The development is done in a number of cities in Aceh, West Sumatra, Riau, Lampung, Banten, Jakarta, West Java, Central Java, Yogyakarta, East Java, South Sulawesi and NTB (Sapudin, 2014). In the year 2016 and then Indonesia was able to grab the 12 awards at the World Halal Tourism Awards 2016 held in Abu Dhabi, Lombok island became the winner of the award-winning one as the world's Best Honeymoon Destination Halal and world's Best Halal Tourism Destination in The World Halal Travel Summit/Exhibition in Abu Dhabi.

The existence of the human resources in an organization has a very important position in running wheel work (As'ad, 1987) therefore, in order to be able to run the labor function then the workplace or company should be able to manage it with good company should provide enough wages even a leader should provide motivation semnagat and also in return for what is done by the workers. Thus the workers will feel satisfied and happy to work in such places and timbulah a job satisfaction of its employees. In addition, workplace or organization need human resources have the skills and abilities that are in accordance with the vision and mission of the organization. In order that the objectives of the organization can be achieved then it takes employees work efficiently and effectively. And so that employees have job satisfaction and organizational commitment is good then the organization or workplace can provide support through availability of employees who have the characteristics of the individual. According to Abdurrahmat Fathoni in Subekhi and the Jauhar (2012:13) explained that human resources is the capital and the most important wealth of a human activity. Ulrich (1997) stated that at present there is only one runway success for sustainable competitive advantage for a company or a business that is how to manage the human resources of the human factor in this employee is an asset that the most valuable and profitable firms in the long period of time, therefore companies need to give more attention to employees.

Every worker has the characteristics of individuals who differ with one another. According to Gibson, James L (1996:123) that is a characteristic of individuals is the ability and skills, backgrounds and demographics. Individual characteristics is the circumstances or characteristics of any individual who is brought into an organization or workplace. And to

understand each individual according to Umar (2009:11-16) States that to understand individual behavior, we need to examine the various characteristics that are attached to the individual. Characteristics of individuals within a company human factors as the workforce is a very important resource, for that is what will bring the full development of an enterprise as well as determine whether achieved company goals. Man in completing a job, they have different motivation. It is this motivation that greatly influences the individual characteristics of each of the individual itself, hence the difference in the characteristics of individuals from every employee should be a concern to the company management objectives of the company has been reached.

Humans do something usually condensed his entanglement with the value. A value that is the basis of beliefs can be born from a culture that has developed in the community. So did the work. Working for a muslim is an earnest effort, by exerting all assets, thought and, dzikirnya to actualize or revealing the sense of himself as a servant of God who must subdue the world and puts her as part of the best community (Santoso, 2006). A set of beliefs or feelings that are believed to be an identity that gives a special livery to the patterns of thought and feeling, as well as attachment behavior in defined by Darajat (1984) as the value. The value itself directs behaviour and satisfaction in daily life (Muhaimin and Mujib, 1993). The value of those values later can be influential to the employees job satisfaction and employee commitment in association

According to Spector (1997) job satisfaction is the general feeling about work or also as relationships of attitudes about various aspects of the work. And also Levy (2006) defines job satisfaction as a fun, positive emotional state resulting from cognitive assessment from one job or work experience. Because according to Sommer et al (1996) that the fulfillment of the needs of the employees is very important for employees and also the company itself. Organizational commitment also appears as one of the variables that are important in the study of management and organizational behavior. This is because the link between variable causes a certain commitment and also because of the impact of the commitment. This is in accordance with what is stated by the angles and Perry (1993): "Comitmen has been described the U.S. being a matter of reciprocation between the individual and the organization, and the antecedents of the commitment may well be within management's capacity to influence ". Welsch and La Van added that organizational commitment is also an important dimension of behavior that can be utilized to evaluate strength/willingness of employees in reaching the goals of the organization. The concept of halal, in fact it can be applied or even become the backbone of the national tourism industry because in principle the concept aims to provide a sense of security and comfort on the tourists as well as stakeholders who another.

One that is very influential in the development of halal tourism industry this is the human resources in this industry they must have a value of work giving rise to Islamic halal halal work values among several in his goodness it competencies and their cooperation has to be worth the work of islam who later will affect job satisfaction and organizational commitment in the sights with a variety of individual characteristics of human resources.

## **2. Literature review**

### *2.1 individual characteristics*

Individual characteristics of the most important resources in an organization is the human resources. Every human being has the characteristics of individuals who differ with one another. According to Stoner in the Nurhastuti (2011) Characteristics of the individual is the desire, attitude and needs someone who is brought into work situations.

According to Robbins (1996) there is the present variables include individual biographical characteristics, abilities, personality and learning. While according to Winardi (2004) characteristic that is present in every individual includes the background of the family, social, and individual experience of the individual Characteristics are traits that are attached to the individual that distinguishes one individual with others and became a capital of the working ability. Individual characteristics is a character in a good employee that is positive or negative. Characteristics-this very diverse characteristics, any company can certainly choose an employee who has a good criteria and these characteristics should also be in accordance with what the company desired

According to Bashaw & Grant (Siti Mahmudha Almalifah, 2005:33) suggests some personal traits include: gender, marital status, age, education, family income, and term of Office. While according to Nimran (Sopiah, 2008:13) that individual characteristics are biographical characteristics, personality, perception and attitude.

According to Gibson and James L (1996:123) that is a characteristic of individuals is the ability and skills, backgrounds and demographics. At the individual level, the characteristics of each individual (personal) which includes: personal or biographical traits such as: age, sex, marital status, personality traits, values and attitudes and the level of basic capabilities will affect their behaviour at the places of work (Robbins, 2003).

## *2.2 Work Values of Islam*

The value indicates what is desirable or undesirable, or what you want to accomplish Locke (1976); Khanifar (2011). The value is usually associated with an ideal or standard that guides human behavior and a point of reference by which the human judging oneself as well as others (Cox & Parkinson, 1999).

In the environment of a place of work there is the term "job value" which stems from the basic assumptions that can affect the attitudes and behavior of individual and organizational performance (Matin, 2009:303). Work values represent the meaning that individuals cling to the perceived job characteristics according to Kallberg (1977). Institutionalization of values that help build a work environment and a healthy organization can be the cause of the emergence of a positive workplace behavior to improve organizational performance Khanifar dkk (2011) according to Pennings (1970), a work value system can be defined as the set of attitudes and opinions which a person evaluates the work and environment of work. herzbeg dkk. (1956) considers the value of work as motivational aspects of representation, namely the driving factor and personal.

Nowadays more and more organizations are facing an environment that is dynamic and always changing, it is demanded of the Organization to be able to adjust for changes is one of the important things on this current era. Caplow (1983) as cited by Yousef (2000) asserts that every organization must deliver what is required by the environment and such requests varies along with the changing environment. Connor and Becker (1975) and summarizes some of the research concluded that the attention to the value of work of employees in the organisation of

work badly needed. Knowledge of the value of the pattern of work of employees in an organization of work when the note will help the process of smooth execution of job duties that are present in the work of the Organization, so that the effectiveness of the work of employees in the Organization work that can be realized.

England (1973) had a very central assumptions in the field of this value, is a connection between the values embraced someone with his behavior. In addition Connor and Becker (1975) States that the behaviour in General is the manifestation of values and attitudes. This also corresponds to one issue that dominates the literature akhirakhir human resources management focused on values, norms are assumed as the Foundation is essentially to be or behave (Kochan & Baricci , 1985).

Principals who work in the industry of Sharia should have the value of the work values that refer to his kesyariahan i.e. such Islamic Research wahab (2015) values of Islamic work are built from some value that is an attitude of gratitude, hard work, self discipline the virtues of perfection (itqan), responsibilities, skilled, taqwa, Consultative Attitude-Cooperative, Competitive-Cooperative Attitude

### *2.3 Job Satisfaction*

According to Spector (1997) job satisfaction is the general feeling about work or also as relationships of attitudes about various aspects of the work. While according to Mathis and Jackson (2009) job satisfaction is an emotional state that positive results from the evaluation of a person's work experience, this opinion also is similar to the dikemukakakn by Locke in Johnson (2004) which mean contentment work as an emotional state that sites that diasosiasika with the work or employment situation there are several factors that affect job satisfaction of employees according to Spector (1997) there are nine factors that affect job satisfaction of employees with the name of the Job Satisfaction Survey (JSS) namely supervision, promotion, salary, benefits, awards, allowances regulations, work colleagues, the work itself and komuikasi in freedom of association other than those factors Burt in Anoraga (1998) posited his opinion about the factors that can lead to job satisfaction factors i.e. relationships between employees, individual factors, and external factors

### *2.4 organizational commitment*

organizational commitment is an attitude that reflects the extent to which an individual knowing and tied to the Griffins Organization (2004:15) and also the opinion of Robbins (2001:140) a situation where sseorang favoring employees at a specific organization and its aims as well as the intention of maintaining membership in the Organization the Allan meyer and smith (in sopiah, 2008:157) mendifinisakan organizational commitment of a concept that has three forms, namely affectife commitment, continuance commitment and normative commitment. Every employee has a base and a different behavior based on the commitment of the Organization.

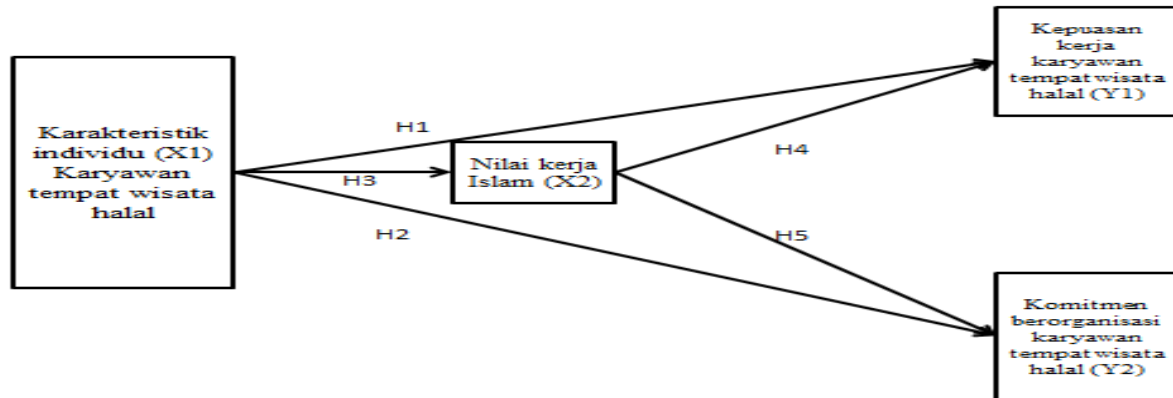
## **3. Methodology**

### *3.1 The Type and Design Of The Study*

the study was designed using multiple variables i.e. individual characteristics, work values of islam as well as employee job satisfaction commitment

### *3.2 Framework*

as for the frame of mind that created the researcher as the follow



variable X that were on the researchers in this study are the characteristics of the individual and work values of islam while the variable Y is the employee job satisfaction and commitment employee organizations

### 3.3 Hypothesis

This study is expected to provide analysis of human behavior and the role of human resources in the development of an organization through employee job satisfaction and organizational commitment as well as a wide range of variables that influenced them, given human resources as perpetrators and are the most strategic aspect as well as capable of creating competitive advantage that always can have maintenance and development. Based on the problem and research objectives that had been expressed earlier, the various previous research results as well as the conceptual framework that is built, then the hypothesis of the research will be formulated as follows: H1: Characteristics of individuals a positive effect towards job satisfaction of employees of H2: Characteristics of individuals positive effect against the employee organizational commitment: the individual characteristics of the H3 of positive work values against the influential Islamic H4: work values of islam influential positive employee job satisfaction against H5: the value of work-a positive effect against Islamic organizational commitment of employees

### 3.4 location and time study

the location of the research examined by researchers including sharia attractions that are located in Jakarta who are already entered in the halal tourism site designated by the Ministry of tourism and research time on april 20 to 20 may 2018

### 3.5 Population Research

population is generalisasi which consists of: an object or subject that has certain qualities and characteristics set by the researchers to learn and then drawn the conclusion (Sugiyono, 2011:80). Population could also be interpreted as a complete collection of the entire element is a type that can be differentiated (distinguishable) who became the object of study (j. Supranto, 2001:42)

While the sample according to sugiyono (2002 57) is a part of the characteristics that became the source of the data is actually Hair et al. in Ferdinand, (2002:48), also suggested that the sample size depends on the number of indicators used in the entire latent variable. It is recommended that the minimum sample size is 5-10 observation for each parameter estimation. In this study a sample of five times of indicator questions. To collect the required data used in

this study, the data-collecting instruments in the form of questionnaires, interviews and documentation. Questions or statements in the questionnaire using Likert scale is measured by a score of 1 to 5. To be able to answer the question of research and assess the models developed, the analysis techniques will be used are Sturctural, Equation Modeling (SEM) using LISREL program packages and SPSS (Statistical Program for Social Sciences) version 21.0. The use of SEM allows researchers to test the relationship between complex variables in order to obtain a comprehensive picture about the whole model. SEM can be tested simultaneously (Bohlen, in Ghozali and Fuad, 2005:3).

#### **4. Research results**

##### *4.1 the Chi-square Analysis*

The relationship between X (free Variables) that is characteristic of the respondents including, age, gender, education, the status of married and working period with Y (variable) the values of work, satisfaction and commitment, were tested using the test relationships through Contingency Coefficient statistics of Chi Square. These statistics are used to determine the relationship of the two symptoms where both nominal scale/category.

##### *4.2 Relationship between individual Characteristics and job Satisfaction*

Characteristics of the respondents who have relationship towards job satisfaction is the only employee working time itself, it is apparent from the value of approx. Sig under 5% (0.05). That means the higher the employee's work period, then it will look how employee job satisfaction itself, while other factors such as age, gender, education, as well as the status of being married, can not directly determine how the perceived job satisfaction this is not in accordance with the research conducted by ilyas (2002) he suggests that age affects the Job satisfaction of a worker

##### *4.3 Relationship between Respondent Characteristics organization Commitment*

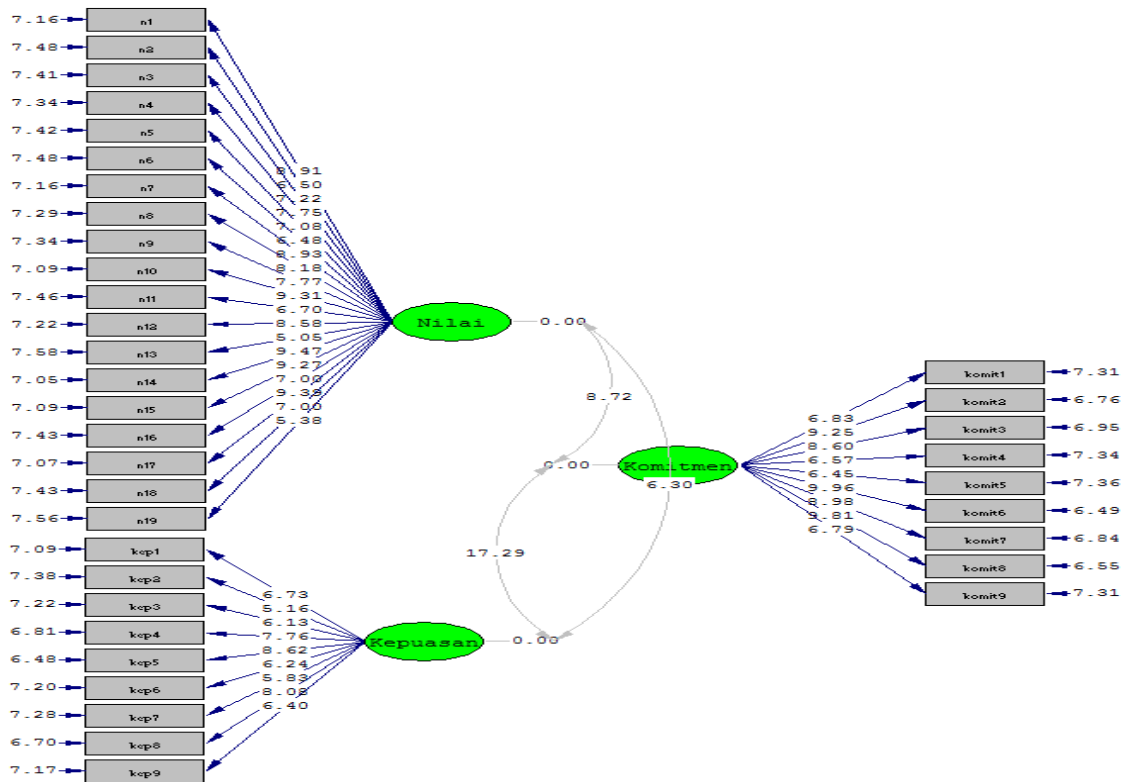
The characteristics of respondents who have a relationship against the work Commitment is just the age range of the employees themselves, this can be seen from the value of approx. Sig under 5% (0.05). That means the higher the age of employees, then it will look bagaimana employee Commitment itself, while other factors such as gender, education, as well as the status of married and working period, can not directly determine how The perceived work commitment.

##### *4.4 Relationship Characteristics of respondents with work values*

Characteristics of respondents who have a relationship against the value of the work itself is the age range and the employee's own time, it is apparent from the value of approx. Sig under 5% (0.05). The working range which means a person can determine the value of work of employees itself, as well as during the work, the longer the working time of an employee, it can be seen how the value of their work.

##### *4.5 Analysis Model Konfirmatory*

Analysis of konfirmatori factor is a factor analysis was used to test or confirm empirically model (measurement model) a or some manifest variable. Analysis of konfirmatori factor is not intended to produce a model, but rather a test measurement model developed on the basis of theoretical studies. In the mean time this is test measurement model on all variables in the absence of lines of influence. Following the CFA processing results using LISREL software:



Based on the results of the output of the LISREL 8.80 above it can be seen that the equations of the third variable coefficient measurement for study (a work value, satisfaction and commitment) each indicator has a value of the t-value  $\geq 1.96$  which means that indicators in each variable are all valid and statistically significant with a level of significance of 5%. and there need be no disposal of the indicators.

#### 4.5.1 Reliability Analysis Models

Tabel 1. Reliability Of The Latent Construct

Variabel	Construct Reliability					Nilai VE
	SSLF	S(SLF <sup>2</sup> )	Serror	Nilai CR	Nilai VE	
Nilai Kerja	12,14	7,90	11,10	<b>0,93</b>	<b>41,6%</b>	<b>Reliabel</b>
Kepuasan Kerja	5,36	3,25	5,75	<b>0,83</b>	<b>36,1%</b>	<b>Cukup Reliabel</b>
Komitment	6,07	4,17	4,83	<b>0,88</b>	<b>46,3%</b>	<b>Reliabel</b>

According to the Hair (2014), the reliability requirement is if it has a value of  $\geq 0.70$  Construct Reliability and Variance Extraced  $\geq 40\%$ . From the calculations in table 4.11 above, it can be seen that the value of the overall construct of reliability on Religiosity  $\geq 0.70$  extraced Variance value while there are still 40% during < satisfaction kerjam but the variance is simply extraced option. This suggests that the reliability of measurement model on latent invalid constructs research has been supported by data obtained.

#### 4.6 Analysis of structural Model

After doing the calculation and analysis of Confirmatory Factor Analysis (CFA), then the next SEM Analysis can be measured against the model of research includes some stuff that is testing the assumptions of normality and test matches on the model overall:

#### 4.6.1 assumptions of Normality Test

Testing the normality of the data related to the size of the skewness and kurtosis. Skewness indicates a distribution while this asymmetry degree kurtosis is the degree of keruncingan of a distribution. Skewness and kurtosis indicates data or Gaussian if pvalue value in excess of 10% (0.01) and 5% (0.05). The following testing normality skewness and kurtosis with using LISREL

Look at normality testing using the skewness and kurtosis above or has a value from the threshold limit i.e. a. Normal, if the value of the z statistic (CR) skewness values of 3 and  $CR < kurtosis < 7$  and Moderately Non-normal, if the value of CR kewness 2-3 and kurtosis value of CR 7-21, so it can be said that the data on research is Gaussian.

#### 4.6.2 Test Matches the overall Model

Tabel 2. Matches the overall Model

Ukuran GoF	Nilai	Tingkat Kecocokan
Chi Square/Degree of Freedom ( $\chi^2/df$ )	1,733	Good Fit
Comparative Fit Index (CFI)	0,92	Good Fit
Root Mean Square Residual (SRMR)	0,058	Marginal Fit
Root Mean Square Error of Approximation (RMSEA)	0,079	Good Fit
Non-Normed Fit Index (NNFI)	0,91	Good Fit
Normed Fit Index (NFI)	0,87	Marginal Fit
Relative Fit Index (RFI)	0,84	Marginal Fit
Incremental Fit Index (IFI)	0,92	Good Fit

Based on the above table it can be seen that the value of the Chi Square Normed (CMIN/DF) is of 1.733, CMIN/DF is said to be a good fit in the value CMIN/DF  $2.0/3.0 <$ , then the value of the RESTING METABOLIC RATE is 0058, this value is more than 0.05 but still below the 0.08 so included in the category of marginal fit,. The subsequent RFI, NNFI, NFI, IFI, CFI and some value  $\geq 0.90$  0.80 range and are on  $- 0.90$ , this means everything can be categorized or fit good marginal fit as well as a value that is less than 0.08 RMSEA. So, overall it can be concluded that the overall sem model (hybrid) measured showed a good match (good fit).

#### 4.7 Analysis of Causal Relationships

After analyzing the results of the model test research and measurement assumptions as well as the fit of the model, the analysis of next SEM done is to do an analysis of the causal relationships in structural models, where the model is hypothesized influence directly the entire exogenous the values of work, job satisfaction, and commitment. Statistical testing for causal relationships



of structural model is made with a level of significance of 5% critical value from the t-value is  $\pm 1.96$ . The results of the estimation of all causal relationships can be seen in the results of the research output of the LISREL 8.80 following:

#### 4.8 The Test Of The Hypothesis Model

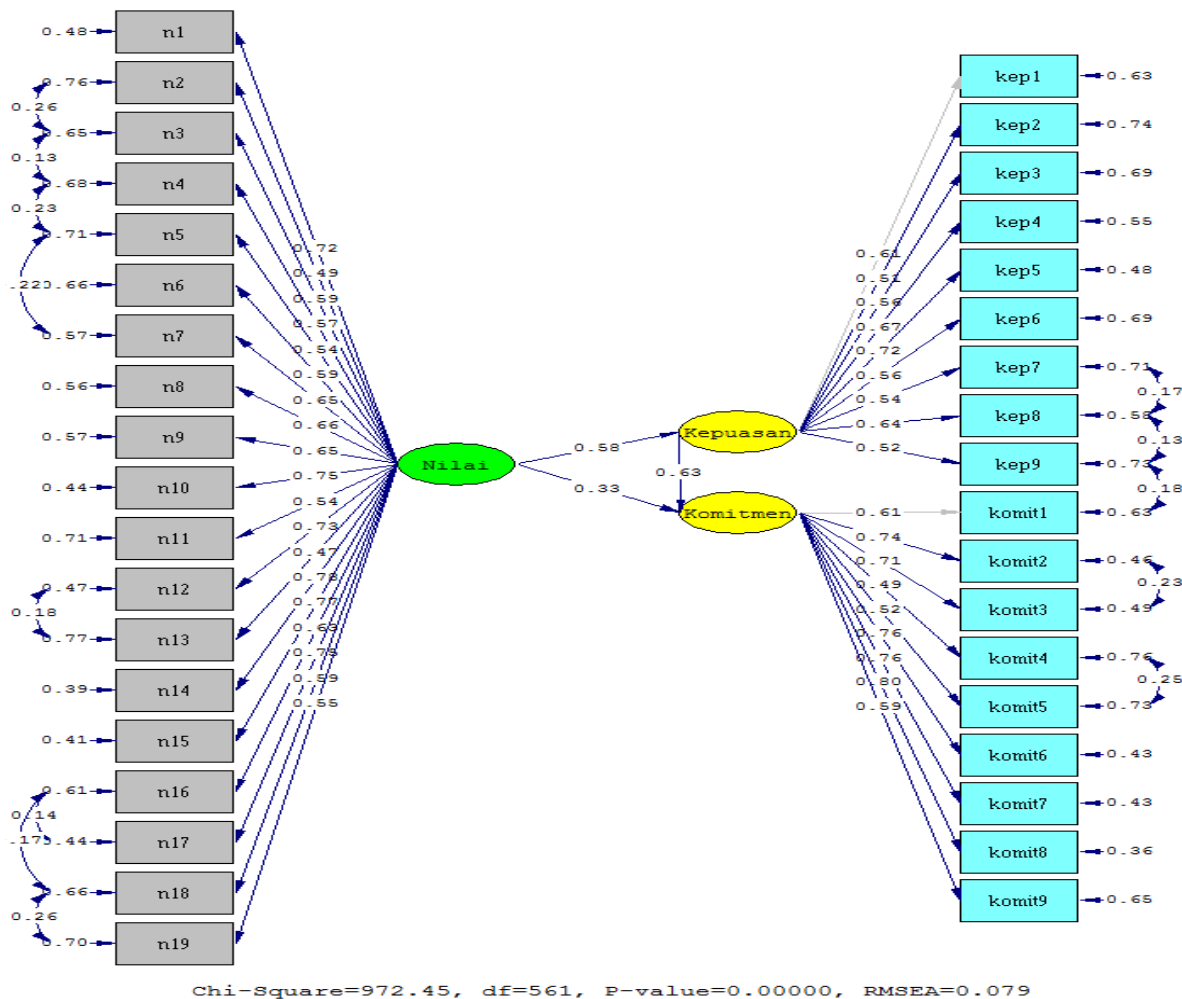


Figure 1. Test Of The Hypothesis Model

##### 4.8.1 Koefisien determinasi ( $R^2$ )

$$\text{Kepuasan} = 0.58 \cdot \text{Nilai}, \text{Errorvar.} = 0.66, R^2 = 0.34$$

$$\begin{matrix} (0.12) & (0.20) \\ 4.92 & 3.35 \end{matrix}$$

$$\text{Komitmen} = 0.63 \cdot \text{Kepuasan} + 0.33 \cdot \text{Nilai}, \text{Errorvar.} = 0.25, R^2 = 0.75$$

$$\begin{matrix} (0.14) & (0.091) & (0.082) \\ 4.57 & 3.59 & 3.08 \end{matrix}$$

From the structural form of the equation above can be seen the value of  $R^2$  equation. The value of  $R^2$  serves to demonstrate how big each exogenous variable capable of explaining variables endogennya variables, the satisfaction of having  $R^2$  of 0.34, these figures show that the value of Variables simultaneously influential 34% against satisfaction, while the rest is explained by factors other than this research. Further work commitments have value  $R^2$  of 0.75, which

emphasizes the influence of value and Satisfaction against Commitments amounting to 75% while the rest is explained by factors other than this research.

#### 4.8.2 Directly Hypothesis Testing

in this study there are 3 (three) hypothesis on direct influence. Analysis of hypothesis testing is performed with a 5% significance level, thus generating the critical t-value of  $\pm 1.96$ . The hypothesis was accepted when the t-value obtained  $\geq 1.96$ , while hypotheses are not supported when the t-value obtained  $< 1.96$ . the following is a table of hypothesis testing to answer the overall question of research:

Tabel. 3 Hypothesis Testing

Hipotesis	Eksogen	Jalur	Endogen	T- Hitung	Loading Factor	Ket
H <sub>1</sub>	Nilai Kerja	→	Kepuasan	4,92	0,58	Significant
H <sub>2</sub>	Nilai Kerja	→	Komitmen	3,69	0,33	Significant
H <sub>3</sub>	Kepuasan	→	Komitmen	4,57	0,63	Significant

Based on the results of the structural model of data processing, the output results are obtained in the form of a t-value, as for the t-value of the whole hypothesis  $> 1.96$  meaning on the hypothesis that there is a significant influence among them, the value of work partial effect, both to the satisfaction of working with the value of the influence of 0.58, and against a commitment to the value of the influence of 0.33. As well as significant influence satisfaction with the value of commitment against the influence of 0.63.

#### 4.8.3 hypothesis testing Mediation (Indirect Influence)

In this study, there is one (1) hypothesis moderation by the variable satisfaction. Analysis of hypothesis testing is performed with a 5% significance level, thus generating the critical t-value of  $\pm 1.96$ . The hypothesis was accepted when the t-value obtained  $\geq 1.96$ , while hypotheses are not supported when the t-value obtained  $< 1.96$ . the following is a table of hypothesis testing to answer the overall question of research:

The value of-----

Satisfaction--

The commitment of 0.37

(0.09)

4.13

Based on output results LISREL above, the data from the structural model output results, obtained in the form of a t-value (line 3), the results indicate that the variable Satisfaction can influence among variables mediate the attitude, commitment towards employees , It is apparent from the t-value for count is greater than 1.96 i.e. of 4.13.

## 5. Discussion and Conclusion

After data retrieval with spreading to 100 person questionnaire of workers in halal tourism places in jakarta then penejelasan hypothesis as follows:

1) individual characteristics Influence against job satisfaction

On the characteristics of the individual variables namely age, education, gender, status of married, and period of employment. from the variables that influence significantly to job satisfaction of employees of halal tourism places in Jakarta is the old work so the longer the individuals working at these attractions are increasingly adding to the satisfaction of working at the venue This is not in line with the research that's been done by Septa (2011), obey job satisfaction is influenced by several factors, one of which is the age. And also the results of research of Anton (2014) which mentions that there is a strong link between a person's age with job satisfaction. The research results obtained in a trend often seen that the more elderly person getting high also the employees job satisfaction as well as education gender status married has no influence on the significant as well against job satisfaction. But the research is in line with research that is already done by Meiyanto and Santoso (1999) i.e. If the longer employees work in a workplace will feel any ties with the company. Space time period of the work, the same man who has had extensive work experience, both the resistance as well as its success.

#### 2) individual characteristics Influence organizational commitment towards employees

In a study halal tourism at Jakarta that the characteristics of the individual worker at Jakarta's halal tourism which include age, education, gender, status of the marriage, and the work shows that only on the characteristics ages under 5% while others i.e. education, gender, status of marriage, and the work is still above 5% this shows only the variables that influence the age of signifikan against the organizational commitment of employees of halal tourism places in Jakarta is in line with the opinion of the opinion of the Robbins (2003) the older the age of workers, then the commitment of the organization grew stronger in the organizational commitment of individual characteristics variables have a significant influence on yag is the age of respondents whereas others i.e., level of education, gender status of married and working period does not have a significant influence on organizational commitment of employees against the attractions of halal in Jakarta this contrary to the results of the study research conducted Arifin (2010), Lumbanraja (2009); indicates that the individual characteristics of a positive and significant effect against the commitment of the organization. But for the characteristics of the halal industry has no effect because only a significant age are other influential does not have significant influence

#### 3) The influence of individual characteristics of Islamic work value

On the research of the characteristics of the individual who is the most influential work of islam that is worth less than 5% is the working period and the age of the individual worker in halal tourism so it means the working range one can determine the value of employee work itself, as well as during the work, the longer the working time of an employee, it can be seen how the value of their work. While increasingly influential sex education and married status does not affect the value of the work the individual Muslim

#### 4) Influence of the islamic work values against the employee's job satisfaction

The value of the work in validation by wahab et al (2016) in this study found the presence of influence on job satisfaction of employees of halal tourism places in Jakarta. Based on the results of the structural model of data processing, the output results are obtained in the form of a t-value, as for the t-value of the whole hypothesis  $> 1.96$  meaning on the hypothesis that there is a significant influence among them, the value of work partial effect on job satisfaction influence value of 0.58. Work values such as cooperation, virtue, attitude and competitive

koperatif effect to employee job satisfaction in the Islamic sights. The better the work values of islam someone the more satisfied working at the venue

5) The influence of islamic work values against the organizational commitment of employees  
The value of the work in validation by wahab et al (2016) in this study found the presence of influence on organizational commitment of employees in halal tourism places in Jakarta on the basis of the results of the data processing of the structural model, obtained results output either a t-value, as for the t-value of the whole hypothesis  $> 1.96$  meaning on the hypothesis that there are significant effects against a commitment value of 0.33 influence positive influence suggests that the higher Islamic work ethic then the resulting in organizational commitment are also high. This is in accordance with the research Rokhman (2010) entitled: The Effect of Islamic Work Ethics on Work Outcomes, suggesting that Islamic work ethic variable is positive and significant effect against the organizational commitment.

6) The influence of organizational commitment towards job satisfaction of employees  
Job satisfaction as measured by workload, salaries, the increase of Office, supervisors and co-workers indicates has been well managed so that contributes to organizational commitment. This research is relevant to the statement of John Greenwood (2001), Mathis and Jackson (2011) that job satisfaction reflects the feelings of a person against the payment through employment, when a person is satisfied towards improvements then they will be more committed to the Organization . This is in line with the research Boles et al. (2007) in some companies of the United States that the granting of the appropriate salaries and promotions will have an effect on the employee's desire to remain loyal to the organization. Hsiao and Chen (2012) in his research conducted at several companies in Taiwan stated that job satisfaction has a significant positive influence towards organizational commitment. The research of Luqman et al. (2012) in the public sector in Nigeria stating that employees will be more committed in providing services to consumers when they are satisfied against job and given a chance for a career. These results are consistent with research conducted by Maryadi (2012), where the results of his research found there was significant influence between the job satisfaction against the commitment of the organization. The consequences, organizational commitment as outcomes of job satisfaction are acceptable. This means that with the increasing job satisfaction then it will have an impact on the increasing commitment of organsasi. The results of this study corroborate the results of research conducted by tedahulu (Hsiao, Chang, & Tu, 2012; Ismail & Razak, 2016; Puspitawati & Riana, 2014) and the result is similar to that spoken by Chairy (2002) that job satisfaction on employees can affect the level of employee commitment to organizations, where the higher the job satisfaction of employees of the high organizational commitment on employee. Job satisfaction related to employee selection process, particularly related to the needs, interests and expectations of the prospective workers, then to place the right person is indispensable (Anorogo and Widiyanti, 1993). Arifin (1993) States that job satisfaction has a subjective sense i.e. every person get the job satisfaction in different ways. Salami (2008) defines job satisfaction as a State of pleasant or positive emotional state resulting from the assessment of one job or work experience.

Job satisfaction and organizational commitment in which the average height among employees caused anyway because employees have a sense of security and peaceful in the works. Employees need not worry to find work (Kuntjoro, 2002).

## 6. Conclusions

on the research of the variable characteristics of the individual does not have an effect on job satisfaction, organizational commitment and also the value of work of employees of Islamic halal tourism spots. While the work of influential Islamic values significantly to job satisfaction of employees of halal tourism places in Jakarta and significant effect against the organizational commitment of employees of halal tourism places in Jakarta

## 7. Recommendation

Based on the results of research on performance of workers in halal tourism spots in Jakarta, investigators give advice because of the positive influence between job satisfaction, organizational commitment and past work values then the author suggested that the Manager halal tourism places in Jakarta in order to conduct training to develop the work values of Islam so that job satisfaction and organizational commitment of employees the halal sights can be improved better because there is a positive influence among all three and also the maintainer of the attractions of halal in order to pay attention to the individual characteristics of the workers because of them because the working period of work or old person working in the place influence on job satisfaction and the Islamic workers begins work that means that the more someone long worked at the venue will be the better work values of Islam and his satisfaction and also pay attention to the age factor because the workers more old adults then commitment to organizations in the sights and the value of his work is getting better.

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# Model of Consumer Trust, Technology Anxiety, Sales Service Support, and Other in Features E-Marketplace System to Built Customer Satisfaction

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## Abstract

The development of online business in Indonesia caused the growing popularity of startup business in Indonesia. Many startups appear mainly in terms of buying and selling or often called a marketplace. The purpose of this research is to know the influence of trust, technology anxiety, customer service support, and e-Marketplace features to customer satisfaction to make the online purchase by a college student in Tembalang Subdistrict, Semarang. This study is a quantitative research by approaching data collection through observation with the number of samples of 80 respondents from students college in Tembalang Sub-district Semarang City. By using multiple linear regression analysis tools with regression equation produced  $Y = 0,117 - 0,144X_1 + 0,119X_2 + 0,52X_3 + 0,313X_4$ . With T-test results obtained trust significance (X1) Sig = 0.261, technology anxiety (X2) Sig = 0.394, customer service support (X3) Sig = 0,000, and e-Marketplace features (X4) Sig = 0.002. It shows partially variable trust and technology anxiety have no significant effect on customer satisfaction, but customer service support and e-Marketplace features variable significantly influence customer satisfaction in making online purchasing. The result of F test obtained by Sig = 0,000 which shows simultaneously variable of trust, technology anxiety, customer service support and feature significantly influence to customer satisfaction in making purchasing through the online system. Of the four variables studied variable customer service support (X3) is the dominant variable in affecting customer satisfaction.

**Keywords:** online shop, trust, technology anxiety, e-Marketplace.

## 1. Introduction

Internet usage in Indonesia from year to year continues to increase along with the needs of people who are hungry for information. This is supported by technological developments and infrastructure facilities as well as supporting facilities such as telecommunications companies and government. Increasing internet usage in Indonesia has caused public awareness that the internet will facilitate the activities and fulfilment of society's needs. The development of the Internet also led to new models and trends that promise in the business world. E-commerce

is the behaviour of business transactions or managerial activity using the internet. Since e-commerce models and applications have been used in this business, a new movement called dynamic e-business emerges to advance e-commerce applications by simplifying the web business (Gajendra Sharma and Wang Lijuan, 2013). According to Nwsou (2017) quoted from Elsoud stated that advances in Internet technology have led to innovations in business models, goods, and markets, including the use of electronic commerce (e-commerce) to conduct sales transactions between individuals, businesses, and organizations. Knowledge and innovation has become an important key factor in the economic, economic paradigm with human resources as the driving agent (Iwan Hermawan, 2016). In this case, the quality of the website and the service is related to the quality of the general service. Customer service is an essential service of e-commerce services and websites are the main things that provide quality services in e-commerce (Sun et al, 2015).

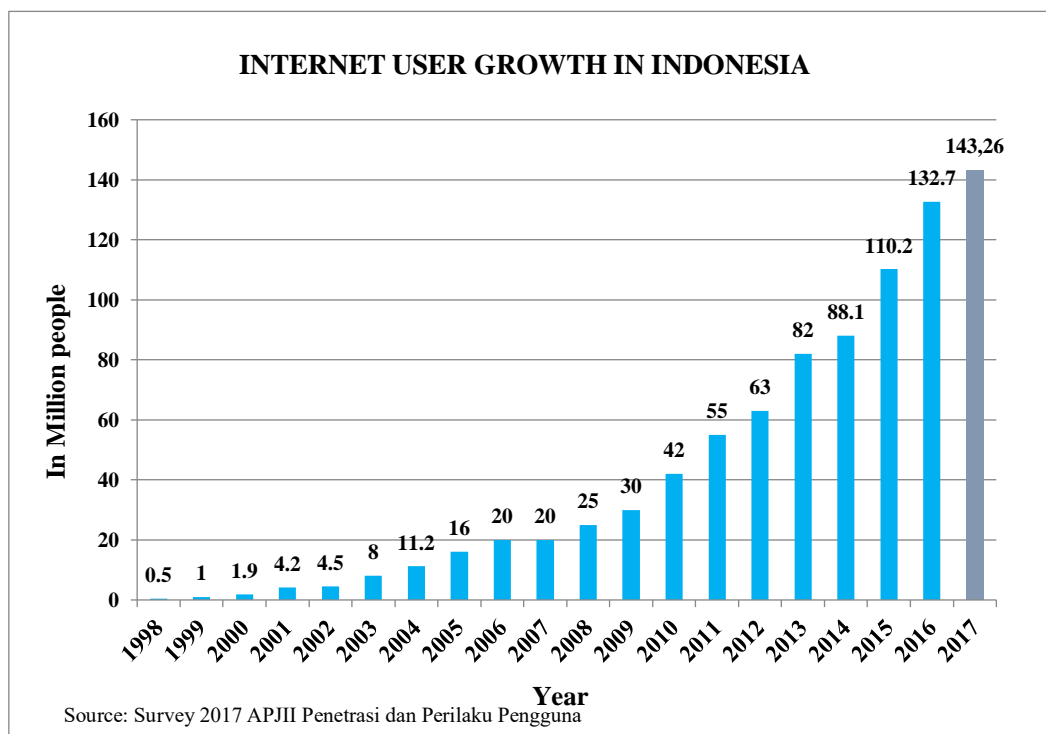


Figure 1. Internet User Growth in Indonesia

Figure 1 sourced from the APJII Survey of 2017 on the penetration and behaviour of internet users in Indonesia that the growth of internet users in Indonesia from year to year has increased significantly. The development of online business in Indonesia caused the growing popularity of startup business in Indonesia. Many startups appear especially in terms of buying and selling or often called a marketplace. The increasingly popular and rapid wave of digital economic revolutions has significantly led to changes in spending patterns in society. This will have an impact on major retail companies such as Mall-Mall that cannot survive the development of the digital economy. The inability of the company to read trends and external advances have led to the collapse of a retail company. According to the information quoted from Liputan6.com, Toys'R'Us became the latest example of companies affected by the disruption. A global toy retail retailer with 1,600 stores in 38 countries collapsed and is filing for bankruptcy protection.

CEO of Toys'R'US David Brandon explains, one of the causes of the collapse of a chain of stores that have 64 thousand employees is the blow of online retail stores such as Amazon.com. Not only abroad, in Indonesia also began to feel the impact began as information quoted detikFinance, the circular company as of 16 August 2017 was addressed to suppliers (suppliers) Ramayana. The contents are notified to suppliers that 8 Ramayana stores will be closed on August 28, 2017. The stores that will close include R098 (Gresik), R030 (Banjarasin), R115 (Bulukumba), R025 (Bogor), R057 (Pontianak), and R008 (Sabang). Then there are 2 stores that have information 'closed' in Surabaya namely R222 and R214. According to Kotler and Keller (2013) explain that unexpected situations and attitudes toward purchasing will have an effect on the decision-making process. Customer service and customer retention required a strategy that should be focused (Best, 2013)

In addition to impacting conventional retailers, the digital business revolution also makes the micro industry sector and SMEs to strengthen. As quoted from Metronews.com President Director of Marketing Service and Small Medium Enterprises (LLP-KUKM), 3.97 million online SMEs currently contribute 45 per cent of the government's target. Because of this gap, it becomes an interesting thing to be studied.

With the e-commerce services of companies and consumers are greatly benefited. On the consumer side to buy products directly to meet the seller is inefficient for consumers who have a solid routine. Booking and shopping are easier for consumers with e-commerce. Similarly, for the fast and easy service company desired by consumers will soon be followed up for the company to provide the best possible and trusted by consumers. Currently, there are many e-marketplaces that sell various daily necessities such as primary, secondary and tertiary needs. The e-marketplace is very interested in the community, especially young people such as students. Based on the 2016 APJII survey, students become the highest internet users in 2016. In this case, the students become the smart and critical customer's criterion in shopping to fulfil their needs.

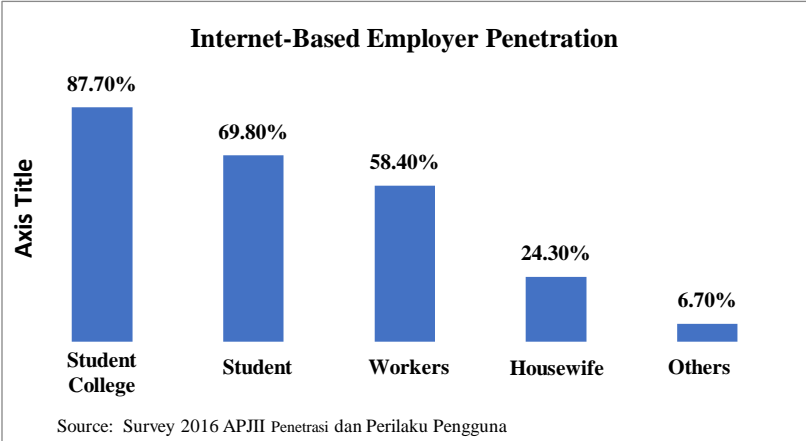


Figure 2. Internet-Based Employer Penetration'

The development of e-Marketplace especially in Indonesia has several generations, namely the first generation, second generation and third generation. The first generation is when people are new to online shopping, for example on OLX that facilitate sellers to market their products online. But people do not have a high interest to shop online. This is because people are still afraid of online fraud committed by irresponsible elements. To minimize the occurrence of

online fraud so buyers and sellers use cash on delivery system (COD) where buyers and sellers and buyers meet in person. In the second generation, companies market their products through the website, so buyers can see the products that companies have online. In the third generation of people's interest to shop online is higher, this is because of a joint account on e-Marketplace, for example on Tokopedia, Shopee, Lazada, and so on. With a joint account, e-Marketplace withholds the funds paid by the buyer until the buyer confirms the arrival of the goods. The marketplace owner also holds goods from the seller before the buyer makes a payment. It minimizes the occurrence of online fraud. Along with the easier and faster transactions online, online shopping also has risks that can harm consumers and companies. According to Ibnu Widiyanto and Sri Lestari Prasilowati (2015) quoted from Turban the first risk is a mismatch of ordered products with the displayed image. Display products shown look tempting and deliberate in engineering. The second risk is the damage of goods received either because of the delivery or defect of the production process. The third risk of packing errors such as colour errors, the quantity or type of goods shipped. The fifth risk is the appearance of fraud or deception either by the seller or the buyer. According to Uddin et, all (2014) explains that feelings and emotions are factors that affect a person to make a purchase. Risk factors perceived by customers and customer trust have a direct effect on customer loyalty while perceived quality has an indirect effect on customer loyalty through customer trust (Lalinthorn Marakanon and Vinai Panjakajornsak, 2017).

The purpose of this research is to know the influence of trust, technology anxiety, customer service support, and e-Marketplace features to customer's willingness to make the online purchase by the university student in Tembalang Sub-district, Semarang.

## **2. Method**

In this study using primary data which is the data taken directly in the field with the method of data collection Observation and Interview by distributing questionnaires. For the measurement in this research, the variable of trust, technology anxiety, customer service support and e-Marketplace features are dependent variable while customer satisfaction variable is the independent variable.

### *2.1 Population and Sample*

The population is the whole unit or individual within the scope and time desired to be researched. The population here is a college student in Tembalang Sub-district, Semarang City. Samples are part of the population to represent the interests of the entire population. How to select the sample that is with the quota, the quota is the number of samples to be investigated set first (Sutrisno Hadi, 2004). The principal feature of the quota is the number of pre-determined subjects will be met. And the number of samples or the respondents will be 80 respondents.

### *2.2 Analyzed Methode*

Before the data are analyzed the data firstly done some testing to produce relevant analysis results. Test the validity to measure the accuracy of the measuring tool. Reliability test to test the reliability of the question being asked with a stable answer over time. Classical Assumption Test To know whether the regression model really shows a significant and representative relationship.

In this study using multiple regression analysis with SPSS used to test the hypothesis in seeing

the influence between variables. Multiple regression analysis was chosen because the technique can conclude directly the influence of each independent variable in the form of trust, technology anxiety, customer service support and marketplace feature to customer satisfaction as the dependent variable. The analysis is done partially and on each independent and dependent variable to accept or reject the hypothesis that has been proposed. And simultaneous testing of all independent variables to the dependent variable. This model of multiple analysis can be formulated with the following equation.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots \dots \dots (1)$$

$\alpha$  : Fixed numbers (constants)

$\beta$  : Regression coefficient

Y : Customer satisfaction

$X_1$  : Trust

$X_2$  : Technology anxiety

$X_3$  : Support and service

$X_4$  : E-Marketplace features

### 2.3 Hypothesis

Ho1: Simultaneously (together) trust, technology anxiety, customer service support and e-Marketplace features have no significant effect on customer satisfaction.

Ha1: Simultaneously (together) trust variables, technology anxiety, customer service support and e-Marketplace features have a significant effect on customer satisfaction.

Ho2: Partially trust variable has no significant effect on customer satisfaction.

Ha2: Partially trust variable has a significant effect on customer satisfaction.

Ho3: Partially variable anxiety technology has no significant effect on customer satisfaction.

Ha3: Partially variable of anxiety technology has a significant effect on customer satisfaction.

Ho4: Partially variable customer service support has no significant effect on customer satisfaction.

Ha4: Partially variable customer service support significantly influence customer satisfaction.

Ho5: Partially e-Marketplace features variable has no significant effect on customer satisfaction.

Ha5: Partially e-Marketplace features variables significantly influence customer satisfaction.

### 3. Results

To test the scientific facts about the influence of Trust ( $X_1$ ), Technology anxiety ( $X_2$ ), Customer service support ( $X_3$ ) and E-Marketplace features ( $X_4$ ) to Customer satisfaction (Y) in making purchases through online system by college students located in Tembalang Sub-district, Semarang City with crosstab, parametric analysis, multiple regression, the approach of data obtained from field observation will be done some test, such as validity test, alpha Cronbach reliability test, classical assumption test and normality data test as variable feasibility requirement in predicting the model.

Tabel 1. Respondent Profil

E-Marketplace	Gender		Total
	Men	Woman	
Lazada	15	8	<b>23</b>
Tokopedia	7	2	<b>9</b>
Blibli.com	1	0	<b>1</b>
Olx	1	0	<b>1</b>
Shopee	2	34	<b>36</b>
Other	2	8	<b>10</b>
<b>Total</b>	<b>28</b>	<b>52</b>	<b>80</b>

Based on Table-1 in this study respondents are allowed to choose their favourite e-Marketplace. There is a choice of Lazada, Tokopedia, Blibli.com, Olx, Shopee and other marketplaces. There were 28 respondents of male sex and 52 female respondents with 36 respondents chose Shopee as their favourite e-Marketplace. 23 respondents chose Lazada as their favourite e-Marketplace while only 1 person chose Blibli.com and Olx as their favourite e-Marketplace, and 10 other respondents chose other e-Marketplaces not mentioned in the questionnaire.

### 3.1 Validity Test

Because the data model used in the form of ordinal data, so that the regression analysis model used is Spearman regression model with the following formula.

$$r_{xy} = \frac{N(\sum XY) - (\sum X \cdot \sum Y)}{\sqrt{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)}} \dots \dots \dots (2)$$

N: Ttotal population

X: item score

Y: Total score

r : Correlation coefficient

Table 2. Validity Test

Variabel	Pearson Correlation	Sig. (2-tailed)	Keterangan
X11 (X1 Trust)	0,586	0,000	Valid
X12	0,436	0,000	Valid
X13	0,448	0,000	Valid
X14	0,601	0,000	Valid
X21 (X2 Technology anxiety)	0,45	0,000	Valid
X22	0,703	0,000	Valid
X23	0,634	0,000	Valid
X31 (X3 Service support)	0,457	0,000	Valid
X32	0,641	0,000	Valid
X33	0,65	0,000	Valid
X34	0,819	0,000	Valid
X41 (X4 E-Marketplace features)	0,612	0,000	Valid
X42	0,785	0,000	Valid

X43	0,835	0,000	Valid
Y11 (Y1 Customer satisfaction)	0,707	0,000	Valid
Y12	0,788	0,000	Valid
Y13	0,871	0,000	Valid

Based on the results of data processing from SPSS with a sample of 80 respondents with 17 questions with the significance value of each item less than 0.05 it means trust variables, anxiety technology, customer service support and features able to describe the level of accuracy of measuring the effect of customer satisfaction. From the table shows r count is greater than r table then the list of questions asked is valid.

### 3.2 Reliability Test

According Suharsimi Arikunto (2013) reliability test conducted to measure consistent construct or variable research. A questionnaire is said to be reliable or reliable if one's response to a statement is consistent or stable over time. The formula used is the formula coefficient Alpha Cronbach as follows.

$$r_{11} = \left[ \frac{k}{(k-1)} \right] \left[ 1 - \frac{\Sigma \sigma_b^2}{\sigma_t^2} \right] \dots\dots\dots (3)$$

$r_{11}$  : Instrument reliability

$k$  : Many questions

$\Sigma \sigma^2$  : Number of grain variants

$\sigma_1^2$  : Total variance

According to Imam Ghozali (2013), A variable is said to be reliable if it has Cronbach Alpha ( $\alpha$ ) more than 0.60. Reliability Test Results with the formula yields Cronbach's alpha value with a value of 0.804 and the value of n is 80. From the results of Cronbach's alpha reliability test of the reviewed Cronbach alpha value greater than 0.6, which means reliable data used.

Table 3. Reliability

Cronbach's alpha	N
0,804	80

### 3.3 Normality Test

Normality test to know the data is normally distributed or not. The normality test is very important in the parametric test which is a requirement that the data should be normally distributed. By checking the rest of the regression model in this study can be known whether the data is normally distributed or not. With Asymp. Sig (2-tailed) value more than 0.05 then the data can be issued normally distributed.

Table 4. Normality Test

N	Kolmogorov-SmirnovZ	Asymp. Sig. (2-tailed)
110	0,829	0,625

Based on data processing using SPSS from the summary of Normality Test results with Kolmogorov-Smirnov evidenced on Asymp value. Sig. (2-tailed) value of 0.625 is greater than 0.05 which means that the data used is normally distributed with 80 respondents.

### 3.4 Classic Assumption Test

In order for the right regression model to be used properly, the classical assumption test is

performed so that the multiple linear regression model is appropriately used and can predict correctly. The classical assumption test used in this research is the Multicollinearity test, Autokolerasi test, and Heterokedastisitas test.

### 3.4.1 Multicollinearity test

Consider correlation between independent variables that is Trust ( $X_1$ ), Technology anxiety ( $X_2$ ), Customer service support ( $X_3$ ) and E-Marketplace features ( $X_4$ ) to dependent variable Customer satisfaction ( $Y$ ). With the provision of Variance Inflation Factors (VIF) if the VIF value is more than 10 then multicollinearity occurs, but if the VIF value is less than 10 then there is no multicollinearity.

Table 5. Varians Inflation Factors

<b>Variabel Independent</b>	<b>VIF</b>
<b>X1</b>	1.149
<b>X2</b>	1.489
<b>X3</b>	1.676
<b>X4</b>	1.374

From the table shows that the multicollinearity of the 4 independent variables namely convenience, trust, services provided and features of the dependent variable that is the result of the purchase obtained VIF value less than 10 of the data does not occur multicollinearity.

### 3.4.2 Autocorrelation

The autocorrelation test aims to test the model in linear regression regarding the correlation between the confounding error in period  $t$  with the previous period. In this study the test using the Durbin Watson Test method. By setting DL and DU values by looking at the Durbin Watson table and comparing the Durbin Watson test value. If Durbin Watson's value between DU and  $4-DU$  means there is no autocorrelation, if Durbin Watson is better than DL means positional autocorrelation occurs, if Durbin Watson value is more than  $4-DU$  means positive autocorrelation occurs, but if Durbin Watson value is between  $4-DU$  is equal to  $4-DL$  then the result cannot be concluded clearly or doubt. Based on Durbin Watson table with  $n = 80$  obtained DU value equal to 1.7430 and value  $4-DU$  2,257. While Durbin Watson's result from SPSS is 1.987 which means Durbin Watson's value between DU and  $4-DU$  it can be concluded that the data used does not happen autocorrelation.

Table 6. Durbin Watson

<b>Durbin Watson</b>	<b>N</b>
1,987	80

### 3.4.3 Heteroscedasticity

Heteroscedasticity test shows that variant variables are not the same for all observations. In this study in detecting the presence of Heterokedatisitas using scatterplot. How to test it is by using the scatter diagram data processing program. From the diagram, the way to conclude is that if the points spread randomly either above zero or below zero both vertical and horizontal axis, then it is concluded not happened Heterokedatisitas in the tested regression model.



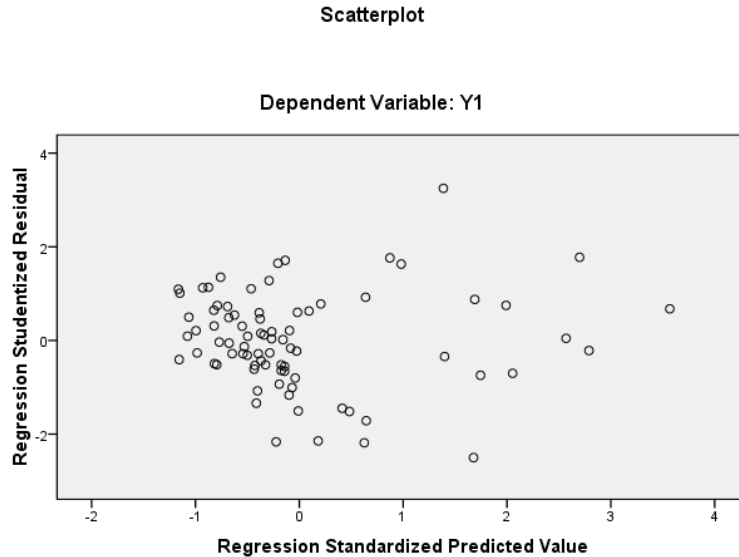


Figure 3. Scatterplot Test

By performing data transformation can be seen in diagram Scatterplot does not form a certain pattern and spreading point randomly between vertical and horizontal axis between number 0 hence from data used data concluded that data do not happen heteroscedasticity.

### 3.5 Multiple Linear Regression Analysis

Multiple linear regression analysis used in research to know the relation or pattern of relationship of one variable with other variables. In testing using prior to testing using SPSS in this study determined the hypotheses of research results. After the hypothesis is determined then calculate the sign value using SPSS.

Table 7. Model Summary

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	0,742	0,550	0,526	2,98031

From the result of data processing using SPSS in the table 7 showing the correlation relationship between the independent variable and dependent variable. From the table, the value of R is 0.742 which shows the relationship between independent and dependent variable equal to 74.2% but R Square value is 0,550 which means influence between independent and dependent variable equal to 55,0%. While Adjusted R Square signifies the relationship between independent variables and dependent more accurate with the resulting value 0.526 which means the influence of independent and dependent variables in this model of 52.8%.

Table 8. Simultaneous Test

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig</b>
Regression	813,638	4	203,410	22,901	,000
Residual	666,167	75	8,882		
Total	1479,805	79			

From the table shows that the value of Sig SPSS calculation is 0,000 smaller than alpha 0.05 which means that simultaneous influence test of independent variables to the dependent variable

there is the significant influence. In this case, Ho1 is processed and received Ha1 which means there is significant influence between trust variables, technology anxiety, customer service support and e-Marketplace features to customer satisfaction variable.

Table 9. Partial Test

Model	Unstandardized		Standardized	t	Sig.
	Coefficient				
	B	Std. error	Beta		
(Constant)	0,117	1,8880		0,062	0,951
X1	-0,144	0,127	-0,094	-1,1330	0,261
X2	0,119	0,139	0,081	0,857	0,394
X3	0,52	0,099	0,529	5,274	0,000
X4	0,313	0,097	0,292	3,216	0,002

From the table 9 shows that the value of Sig for the trust variable is 0.261 bigger than alpha 0.05 which means Ho2 received and processed Ha2 means the variable trust does not significantly affect the purchase satisfaction variable. Sig value for technology anxiety variable is 0,394 bigger than alpha 0,05 which means Ho3 accepted and processed Ha3 meaning variable of technology anxiety have no significant effect to purchase satisfaction variable. The value of Sig for customer service support variable is 0.000 smaller than alpha 0,05 which means Ha4 accepted and Ho4 processing means to support and service variable have significant effect to purchase satisfaction variable. Selanjutya for e-Marketplace features variables obtained Sig value 0.002 smaller than alpha 0.05 which means Ha5 received and Ho5 processing means to support and service variables significantly influence the variable purchase satisfaction. Based on the table shows that the formulation for this research model is  $Y = 0,117 - 0,144X_1 + 0,119X_2 + 0,52X_3 + 0,313X_4$ .

#### 4. Discussion

Based on the results of tests that have been done can be argued that in this study trust, technology anxiety, support and services and e-Marketplace features simultaneously affect the customer satisfaction in making purchases with the online system. And obtained a positive constant value of 0.117 which means there is a positive influence of independent variables on the dependent variable. Trust has no significant effect on customer satisfaction in online shopping but if it is influential it will have an inverted effect due to its negative beta value. If trust affects customer satisfaction then any increase of unit of trust will decrease customer satisfaction level by 14.4%. Technology anxiety has no significant effect on customer satisfaction in online shopping but if only technology and its effect on customer satisfaction in online shopping then every increase of technology anxiety unit will increase customer satisfaction by 11.9%. Customer service support provided by e-Marketplace affects customer satisfaction in purchasing through the online system which means every increase of unit from customer service support given by e-Marketplace will increase customer satisfaction equal to 52,0%. E-Marketplace features affect the customer satisfaction in making purchases with the system online this means that each unit increase of the features provided by e-Marketplace will increase customer satisfaction by 31.3%. From the results of analysts simultaneously for each variable, variable trust, technology anxiety, customer service support and e-Marketplace

features contribute to customer satisfaction of 55.0% which means customer satisfaction in making purchases with the online system influenced 55.0% of variables trust, technology anxiety, customer service support and e-Marketplace features while the remaining 45.0% of customer satisfaction to make purchases online is influenced by other variables not examined in this study.

## **5. Conclusion**

In this research, the trust of the customers is not affected to make purchases online. Customers tend to decide on purchases based on the needs they need. While all respondents are students who are already responsive to the technology so it is able to make purchases online. Sales and sales services provided by e-Marketplace became the dominant variable in this study. From partial analyst result for each variable, trust variable, technology anxiety, customer service support and e-Marketplace features give contribution to customer satisfaction equal to 55,0% which means customer satisfaction in making purchasing with online system influenced (55%) from variable trust, technology anxiety, customer service support and e-Marketplace features while the rest (45%) of customer satisfaction to make purchases online is influenced by other variables not examined in this study.

### *5.1. Research weakness*

The first data obtained after testing the symptoms of heteroskedasticity. After undergoing data transformation, the data used does not occur heteroskedasticity. So the use of heteroskedasticity testing for this research data using scatterplot method is not necessarily accurate.

### *5.2. Business Implications*

The use of technology that is growing and easy to use by everyone proves that business in the field of the startup is very promising. Proven in this research, Teknologi anxiety has no effect on customer satisfaction, it proves that society especially students are ready with an ordinary with existing technology at this time. People are now beginning to consciously consider the needs before making a purchase so that customer trust will be eroded against the needs they need. In building an e-Marketplace based on the results of analysts in this study support services provided by the e-marketplace is very influential on customer satisfaction so that startup and e-marketplace need to improve customer service support. So also about the features offered by each marketplace should be improved in order to meet customer satisfaction.

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# Factors Affecting the Readiness to Entering Job Market Among Accounting Students

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## Abstract

This research aimed to explore factors affecting the readiness of entering job market among accounting students. It is an ex post facto research with quantitative approach. Data collection technique used in this research were documentation and questionnaire. Population of this research was the students class XII accounting SMK N 2 Magelang academic year 2017/2018. The sample of 83 respondents was determined by proportional random sampling technique. Instrument validity test used product moment correlation and reliability test used Alpha Cronbach. The analysis technique used regression. The research showed that the student's readiness of entering job market positively and significantly affecting by on the job training, productive subject achievement, social environment, and motivation to work both separately and simultaneously.

**Keywords:** On the Job Training, Productive Subject Achievement, Social Environment, Motivation to Work, Readiness

## 1. Introduction

Vocational High School (VHS) is an education which focuses on preparing graduates to be ready to enter directly into the job market with the knowledge provided both in theory and skills. Unfortunately, VHS actually gave rise to educated unemployment with an increasing number each year since three years ago. Data obtained from the Badan Pusat Statistik (BPS) showed the unemployment rate of VHS graduates per February 2014 is 7.21%, in 2015 is 9.05% and in 2016 is 9.84.

Based on data that downloaded from [www.youthmanual.com](http://www.youthmanual.com) shows that in business and management sector the number of students who graduates much higher than the amount of labor needs opportunity. The availability of fewer job vacancies will lead to strong competition among graduates, so, students who have the readiness to entering job market is a great opportunity to win. Readiness according to Chaplin J. P. In Kamus Psikologi (2002: 418) is the level of development of maturity or maturity that is profitable to practice something. While the Readiness to enter the job market is a condition in which a person already has physical, mental, and experience maturity so they have the ability to perform activities in order to get the desired results of the job market.

SMK N 2 Magelang is one of Business and Management VHS in Magelang, is expected to graduate students with high competence and have readiness to enter directly in the job market in accordance with the field, especially in the accounting program which is a leading skill program on the vocational school. Based on interviews conducted on students of SMK N 2

Magelang Class XII Accounting Academic Year 2016/2017, it was found that students were fear to directly work, so preferred to continue the education to college first.

Then, Vice Principal for Public Relation Affairs of SMKN 2 Magelang, stated that data from alumni showed from 51 graduates of accounting study program in 2016, 14 people immediately worked, 27 people continued their education to universities and 10 people are still unemployed. The data is supported by a pre-research questionnaire distributed to students of XI Accounting in this school. From 107 students, show that there were students of SMK N 2 Magelang who have not the readiness to directly enter the job market in accordance with the field as the vision of VHS in Indonesia.

Readiness to enter the job market can be influenced by various factors. According to Kardimin (2004: 2-3), there are two factors that affect the readiness of work, namely: first internal factors, the factors that come from within students, including maturity both physical and mental, pressure, creativity, interest, talent, intelligence, independence, mastery of science, skills and motivation. Second, external factors that are factors that come from outside the student self, including the role of society, family, peers, school facilities and infrastructure, information about the job market, and work experience.

School as an external factor plays an important role in preparing graduates both with theory and practice. Theory is given in productive subjects, and practice is done with experience of On the Job Training. On the Job Training is a professional preparatory stage where a student who almost completes their studies formally works in the field with the supervision of a competent administrator within a certain period of time, which aims to develop the ability to carry out responsibilities in their field Hamalik (2007: 91). Based on the interviews that have been conducted on the students of Class XII of SMK N 2 Magelang Academic Year 2016/2017, it was known that the XII grade students of the school preferred to emphasize the theory of productive subjects to maintain the highest National Examination Score in Central Java, rather than preparing to enter the job market.

In addition, On the Job Training is expected to open the insights of students to the job market was still not running optimally. In fact, there were students who are placed on agencies or positions that were not relevant to their programming skills. Based on interviews with Mr. Yahya Christian Husein, Accounting Manager of PT. Mekar Armada Jaya, the company could not put the vocational students to internship in the accounting department because the company's accounting data is a sensitive company's secret and accounting work must be handled by skilled employees.

Beside the influence of school, Convergence Theory (Walgito, 2004) states that the social environment has an important role in the development of individuals, in this case is on the readiness of entering job market. The family as the main environment of the students plays an important role to determine the future of the students. Based on the information provided by Staff of Guidance and Counseling SMK N 2 Magelang, the majority students came from middle to lower economic class families whose most of their parents are employees.

The family's economic factors require students to be ready for the job market as soon as possible because they are not tend to be able to continue their education to college, or because students are responsible for helping their family's economy. However, the number of low educational cost offerings or scholarships for underprivileged students such as Bidikmisi Program makes

students think to continue education to college first.

Beside, peer and neighborhood society environment also affect student's readiness to enter the job market. Although technological developments make information from all corners of the world are easy to obtain, information from peers and neighborhood society is more trusted by students. The peers and the neighborhood society environment provide information about the job market that made perceptions about the job market.

Beside external factors, motivation to work as an internal factor of students allegedly affect the readiness of students in facing the job market. Motivation is an internal and external impulse in a person to make changes in behavior, the desire to engage in activities, the impulse, the need to engage in activities, the hopes and ideals, the respect and self-respect, and the good and interesting activities Uno (2013: 10). Student's motivation to work that appear as an encouragement because of student interest to work immediately after graduation from VHS later on low. Accounting Students of SMK N 2 Magelang are more motivated to continue their education to university.

Many other factors are suspected to affect the readiness of students in Entering Job Market. However, the school effort factor through the provision of theory in productive subjects and practice in On the Job Training; the students' social environment both the family environment, their peers and the neighborhood society in where they live; and motivation to work is thought to be the most significant influence toward the readiness of students of SMK N 2 Magelang.

This research is almost same and relevant with the research by Desti Suryani, Accounting Education student of FE UNY in 2015 entitled Influence of Motivation to Work, Learning Achievement, and Industrial Work Practice Experience toward the Readiness of Working Class XII Competency of Accounting Expertise at SMK Negeri 1 Bantul Academic Year 2014/2015, Ari Prasetiani, Accounting Education student of FE UNY in 2013 entitled Influence of Industrial Work Practice Experience, Achievement of Accounting Learning, and Motivation of Entering Job market to Readiness of Working Class XII Student Accounting Expertise Program SMK Negeri 1 Pengasih Academic Year 2012/2013, by Kurniatin, a graduate student of Vocational Technology Education at Universitas Pendidikan Indonesia in 2016 entitled Role of Career Guidance, Motivation of Entering Job market and Work Practice Experience on Vocational Students Working Readiness, Valery Lang Hall, a University of Georgia student in 2010 entitled Work Readiness of Career and Technical Education High School Students, and Hanum Risfi Mahanani, Management students of Diponegoro University in 2014 entitled Analysis of the Influence of Internal and External of Environmental Factors on Interest in Entrepreneurship (Research on the students of SMA Negeri 1 Semarang).

The research was done to know that On the Job Training, Productive Subject Achievement, Social Environment, and Motivation to Work affecting the Readiness of Entering Job Market of Students Class XII Accounting SMK N 2 Magelang Academic Year 2017/2018. Subject of this research was student of accounting skills program because of researcher's background as student of accounting education who later expected to become a accounting teacher.

## **2. Research Method**

This research is an ex post facto research that belongs to correlation study or causal research. ex post facto research more formally as that in which the independent variables have already

occurred and which the researcher starts with the observation of dependent variable (Kerlinger in Sukardi, 2013). While the approach used is a quantitative approach because it used to measure variables using numbers processed through statistical analysis. This research aims to determine the effect of independent variables, namely On the Job Training ( $X_1$ ), Productive Subject Achievement ( $X_2$ ), Social Environment ( $X_3$ ), and Motivation to Work ( $X_4$ ) toward the dependent variable Readiness of Entering Job Market (Y).

The population in this study are the excellent class students of Accounting SMK N 2 Magelang with the total of 106 students. The technique used to determine the sample is a prrportional random sampling technique. Determination of the number of samples can use the following Slovin formula, as mentioned by Astuti (2016: 46) as follows :

$$n = \frac{N}{1 + Ne^2}$$

Keterangan:

n = Sample Quantity

N = Population Size

E = Critical value (limit of accuracy) desired (Percentage of inaccuracy due to sampling error / 5%)

Based on the formula then it can be seen that the number of samples taken in this research are:

$$n = \frac{106}{1 + 106 \times (0,05)^2} = 83,79$$

Then it is known that the sample quantity that will be used is 83 students. Because the population in this research consists of 3 classes, then the calculation is proportionally done. The procedure in this research is to create a set of research instruments which then be tested in advance with the research trial test amounted to 30 people. After that, the data of the test instrument is analyzed by validity and reliability test. When the research instrument is feasible, the next step is to take research data on the subject of research.

This research used Documentation and Questionnaire as the data collection method. In this research the questionnaire is used to obtain data on On the Job Training ( $X_1$ ), Social Environment ( $X_3$ ), Motivation to Work ( $X_4$ ) and Readiness of Entering Job Market (Y) students of class XII SMK N 2 Magelang Academic Year 2017/2018. Documentation in this research is used to get data on Productive Subject Achievement ( $X_2$ ) of students class XII SMK N 2 Magelang Academic Year 2017/2018.

Table 1. Research Data Description

Variable	N	Min	Max	Mean	Std. Dev.
The Readiness of Entering Job Market	83	43	58	53,47	3,10
On the	83	47	67	55,78	4,43



Job Training					
Productive Subject Achievement	83	86	95	90,45	1,70
Social Environment	83	39	59	47,77	4,07
Motivation to Work	83	42	64	53,57	4,83

Source: Primary Data Processed

Data analysis technique used in this research were descriptive analysis, prerequisite analysis test, hypotheses test, and calculate effective contribution and relative contribution.

Descriptive analysis in this research is used to analyze the data obtained from the respondents through questionnaires that have been filled by them during the study which then presented in the form of data description of each variable (independent variable and dependent variable). Description of data used include description of the data, description of respondent characteristic, and description of research variable.

Prerequisite analysis test include the Normality Test, Linearity Test, Multicollinearity Test, and Heteroscedasticity Test. Hypothesis test used in this research was Simple Linier Regression and Multiple Linear Regression.

### 3. Result of Research and Discussion

Tendency category of the Readiness of Entering Job Market indicated in the high category (96,39%). Tendency category of On the Job Training indicated in the high category (85,54%). Tendency category of Productive Subject Achievement variable indicated in the high category (100%). Tendency category of Social Environment variable indicated in the high category (98,80%). Tendency category of Motivation to Work indicated in the high category (96,39%).

Prerequisite Hypothesis Testing Analysis show that:

Table 2. Summary of the Result of Normality Test

Variable	<i>Asymp. Sig. (P-value)</i>	Condition	Conclusion
Y	0,349	> 0,05	Normal
$X_1$	0,350	> 0,05	Normal
$X_2$	0,842	> 0,05	Normal
$X_3$	0,511	> 0,05	Normal
$X_4$	0,712	> 0,05	Normal

Source: Primary Data Processed

From the above table it can be seen that the p-value of the variable of the Readiness of Entering Job Market, On the Job Training, Productive Subject Achievement, Social Environment, and Motivation to Work is more than 0,05 so it can be concluded that the samples of these five variables are normally distributed and can be used as a sample in the research because it is considered to represent the population.

Table 3. Summary of the Result of Linearity Test

Variable	Df	F Price		P	Conclusion
		F <sub>count</sub>	F <sub>table</sub>		
X <sub>1</sub> → Y	16;65	0,997	1,8017	0,471	Linear
X <sub>2</sub> → Y	45;36	0,801	1,7080	0,671	Linear
X <sub>3</sub> → Y	17;64	1,412	1,7849	0,161	Linear
X <sub>4</sub> → Y	19;62	0,849	1,7568	0,643	Linear

Source: Primary Data Processed

From the above table it can be seen that the value of F<sub>count</sub> between the variable of On the Job Training (X<sub>1</sub>), Productive Subject Achievement (X<sub>2</sub>), Social Environment (X<sub>3</sub>), Motivation to Work (X<sub>4</sub>) toward the Readiness of Entering Job Market (Y) is smaller than F<sub>table</sub>, it was concluded that all the independent variables to the dependent variable had a linear relationship and the regression analysis could proceed.

Table 4. Summary of the Result of Multicollinearity Test

Variable	Collinearity Statistics		Conclusion
	Tolerance	VIF	
Y	0,888	1,126	There is no multicollinearity
X <sub>1</sub>	0,970	1,031	
X <sub>2</sub>	0,591	1,693	
X <sub>3</sub>	0,590	1,694	

Source: Primary Data Processed

From the above table it can be seen that the value of the variable On the Job Training (X<sub>1</sub>), Productive Subject Achievement (X<sub>2</sub>), Social Environment (X<sub>3</sub>), and Motivation to Work (X<sub>4</sub>) have a tolerance value greater than 0,10 and VIF value less than 10, it is concluded that there is no multicollinearity problem between independent variables and regression analysis can be continued.

Table 5. Summary of the Result of Heteroscedasticity Test

Variable	Sig. (2-tailed)	α	Conclusion
X <sub>1</sub>	0,343	0,050	There is no heteroscedasticity
X <sub>2</sub>	0,338	0,050	
X <sub>3</sub>	0,067	0,050	
X <sub>4</sub>	0,052	0,50	

Source: Primary Data Processed

From the table above, it can be seen that the value of variable correlation On the Job Training,

Productive Subject Achievement, Social Environment, and Motivation to Work have a significance value which is greater than 0,05 so it can be concluded that there is no problem of heteroscedasticity on the regression model.

Hypothesis testing in this research was conducted using simple regression analysis technique with one predictor to test the first, second, third, and fourth hypothesis and multiple regression analysis techniques with four predictors to test the fifth hypothesis.

The first hypothesis in this research is There is a positive and significant influence On the Job Training toward the Readiness of Entering Job Market of Student Class XII Accounting SMK N 2 Magelang Academic Year of 2017/2018. Testing the first hypothesis using simple regression analysis with the following results:

Table 6. Summary of the Result of Simple Regression Analysis ( $X_1 \rightarrow Y$ )

Variable	Price r			Price t		Coeff	Const.	Expl.
	$r_{x1y}$	$r_{tabel}$	$r^2_{x1y}$	$t_{hitung}$	$t_{tabel}$			
$X_1 \rightarrow Y$	0,540	0,216	0,292	5,781	1,991	0,378	32,372	Positive & Significant

Source: Primary Data Processed

Based on the above table the regression equation can be expressed as follows:

$$Y = 0,378X_1 + 32,372$$

The equation shows that the value of the regression coefficient is a positive value of 0,378 which means if the value of On the Job Training ( $X_1$ ) increase one unit then the Readiness of Entering Job Market (Y) will followed increase by 0,378. The value of constanta number is 32,372 means that if On the Job Training ( $X_1$ ) = 0, the value of the Readiness of Entering Job Market (Y) by 32,372. The result of simple regression analysis with one predictor shows that the correlation coefficient ( $r_{x1y}$ ) shows a positive value of 0,540 which means there is a positive influence between On the Job Training ( $X_1$ ) toward the Readiness of Entering Job Market (Y). Thus, it can be said that the higher the On the Job Training ( $X_1$ ) then the higher the Readiness of Entering Job Market (Y).

Then the coefficient of determination ( $r^2_{x1y}$ ) was 0,292 indicates that On the Job Training ( $X_1$ ) is able to affect 29,2% change in the Readiness of Entering Job Market (Y), so there are still 70,8% other factors or variables suspected to have the possibility of affecting the Readiness of Entering Job Market.

The t test is used to determine the influence of On the Job Training ( $X_1$ ) toward the Readiness of Entering Job Market (Y). Based on the results of data analysis correlation coefficient ( $r_{x1y}$ ) of 0,540 then consulted on  $r_{table}$  with  $n=83$  and 5% significance level so that the price of  $r_{table}$  obtained by 0,216. After the t test conducted so it is obtained the price  $t_{count}$  of 5,781 which is then consulted with  $t_{table}$  with a significance level of 5% of 1,991. Then it can be seen that the price of  $r_{count}$  is greater than  $r_{table}$  that is  $0,540 > 0,216$  and  $t_{count}$  is greater than  $t_{table}$  that is  $5,781 > 1,991$  so the hypothesis can be accepted.

The implication is, with On Job Training, students will face the Job Market directly so they can know the knowledge and skills needed. After that, when returning to school students will prepare well in order to meet the demands of the Job Market so students will be ready to enter into the Job Market professionally. Thus, if the school improves the quality of On the Job

Training and the students perform optimally, students will be better on readiness of entering job market.

The second hypothesis in this research is There is a positive and significant influence Productive Subject Achievement toward the Readiness of Entering Job Market of Student Class XII Accounting SMK N 2 Magelang Academic Year of 2017/2018. Testing the first hypothesis using simple regression analysis with the following results:

Table 7. Summary of the Result of Simple Regression Analysis ( $X_2 \rightarrow Y$ )

Variable	Price r			Price t		Coeff	Const.	Expl.
	$r_{x_2y}$	$r_{table}$	$r^2_{x_2y}$	$t_{count}$	$t_{table}$			
$X_2 \rightarrow Y$	0,351	0,216	0,023	2,370	1,991	0,275	28,616	Positive & Significant

Source: Primary Data Processed

Based on the above table the regression equation can be expressed as follows:

$$Y = 0,275X_2 + 28,616$$

The equation shows that the value of the regression coefficient is a positive value of 0,275 which means if the value of Productive Subject Achievement ( $X_2$ ) increase one unit then the Readiness of Entering Job Market (Y) will followed increase by 0,275. The value of constanta number is 28,616 means that if Productive Subject Achievement ( $X_2$ ) = 0, the value of the Readiness of Entering Job Market (Y) by 28,616.

The result of simple regression analysis with one predictor shows that the correlation coefficient ( $r_{x_2y}$ ) positive value of 0,351 which means there is a positive influence between Productive Subject Achievement ( $X_2$ ) toward the Readiness of Entering Job Market (Y). Thus, it can be said that the higher the Productive Subject Achievement ( $X_2$ ) then the higher the Readiness of Entering Job Market (Y).

Then the coefficient of determination ( $r^2_{x_2y}$ ) was 0,023 indicates that Productive Subject Achievement ( $X_2$ ) is able to affect 2,3% change in the Readiness of Entering Job Market (Y), so there are still 97,7% other factors or variables suspected to have the possibility of affecting the Readiness of Entering Job Market.

The t test is used to determine the influence of Productive Subject Achievement ( $X_2$ ) toward the Readiness of Entering Job Market (Y). Based on the results of data analysis correlation coefficient ( $r_{x_2y}$ ) of 0,351 then consulted on  $r_{table}$  with  $n=83$  and 5% significance level so that the price of  $r_{table}$  obtained by 0,216. After the t test conducted so it is obtained the price  $t_{count}$  of 2,370 which is then consulted with  $t_{table}$  with a significance level of 5% of 1,991. Then it can be seen that the price of  $r_{count}$  is greater than  $r_{table}$  that is  $0,351 > 0,216$  and  $t_{count}$  is greater than  $t_{table}$  that is  $2,370 > 1,991$  so the hypothesis can be accepted.

The implication is the achievement of productive subjects at SMK majoring in accounting is showing the knowledge and skills of students in the field of accounting. Despite the impact that it has on being ready to enter the job market, students still have to improve achievement in productive subjects, because, if high achievement itself does not guarantee the readiness of entering the job market, especially if the productive subjects achievement of is low.

The third hypothesis in this research is There is a positive and significant influence Social

Environment toward the Readiness of Entering Job Market of Student Class XII Accounting SMK N 2 Magelang Academic Year of 2017/2018. Testing the third hypothesis using simple regression analysis with the following results:

Table 8. Summary of the Result of Simple Regression Analysis ( $X_3 \rightarrow Y$ )

Variable	Price r			Price t		Coeff	Const.	Expl.
	$r_{x_3y}$	$r_{table}$	$r^2_{x_3y}$	$t_{count}$	$t_{table}$			
$X_3 \rightarrow Y$	0,357	0,216	0,128	3,441	1,991	0,272	40,479	Positive & Significant

Source: Primary Data Processed

Based on the above table the regression equation can be expressed as follows:

$$Y = 0,272X_3 + 40,479$$

The equation shows that the value of the regression coefficient is a positive value of 0,272 which means if the value of Social Environment ( $X_3$ ) increase one unit then the Readiness of Entering Job Market (Y) will followed increase by 0,272. The value of constant number is 40,479 means that if Social Environment ( $X_3$ ) = 0, the value of the Readiness of Entering Job Market (Y) by 40,479.

The result of simple regression analysis with one predictor shows that the correlation coefficient ( $r_{x_3y}$ ) shows a positive value of 0,357 which means there is a positive influence between Social

Environment ( $X_3$ ) toward the Readiness of Entering Job Market (Y). Thus, it can be said that the higher Social Environment ( $X_3$ ) then the higher the Readiness of Entering Job Market (Y). The result of simple regression analysis with one predictor shows the coefficient of determination ( $r^2_{x_3y}$ ) was 0,128 indicates that Social Environment ( $X_3$ ) is able to affect 12,8%

change in the Readiness of Entering Job Market (Y), so there are still 87,2% other factors or variables suspected to have the possibility of affecting the Readiness of Entering Job Market.

The t test is used to determine the influence of Social Environment ( $X_3$ ) toward the Readiness of Entering Job Market (Y). Based on the results of data analysis correlation coefficient ( $r_{x_3y}$ )

of 0,357 then consulted on  $r_{table}$  with  $n=83$  and 5% significance level so that the price of  $r_{table}$  obtained by 0,216. After the t test conducted so it is obtained the price  $t_{count}$  of 3,441 which is then consulted with  $t_{table}$  with a significance level of 5% of 1,991. Then it can be seen that the price of  $r_{count}$  is greater than  $r_{table}$  that is  $0,357 > 0,216$  and  $t_{count}$  is greater than  $t_{table}$  that is  $5,781 > 1,991$  so the hypothesis can be accepted.

The implication is that the social environment is a place with all the conditions that students can observe and even get the impact including decisions about preparing to enter the job market. If the environment tends to show a bad impact on a workplace, the student will avoid it and otherwise if it shows something of interest to the student then he will seek it. Besides, in terms of job market, if the social environment of students show high motivation to prepare to enter the job market, the students will be brought to follow it, otherwise, if the student environment is not willing to prepare for the job market, students can imitate as well. Thus, students should choose to associate with a social environment that can support their readiness of entering job market.

The fourth hypothesis in this research is There is a positive and significant influence Motivation

to Work toward the Readiness of Entering Job Market of Student Class XII Accounting SMK N 2 Magelang Academic Year of 2017/2018. Testing the first hypothesis using simple regression analysis with the following results:

Table 9. Summary of the Result of Simple Regression Analysis ( $X_4 \rightarrow Y$ )

Variable	Price r			Price t		Coeff	Const.	Expl.
	$r_{xy}$	$r_{table}$	$r^2_{x4y}$	$t_{count}$	$t_{table}$			
$X_4 \rightarrow Y$	0,225	0,216	0,051	2,079	1,991	0,144	45,733	Positive & Significant

Source: Primary Data Processed

Based on the above table the regression equation can be expressed as follows:

$$Y = 0,144X_4 + 45,733$$

The equation shows that the value of the regression coefficient is a positive value of 0,144 which means if the value of Motivation to Work ( $X_4$ ) increase one unit then the Readiness of Entering Job Market (Y) will followed increase by 0,144. The value of constanta number is 45,733 means that if Motivation to Work ( $X_4$ ) = 0, the value of the Readiness of Entering Job Market (Y) by 45,733.

The result of simple regression analysis with one predictor shows that the correlation coefficient ( $r_{x4y}$ ) shows a positive value of 0,225 which means there is a positive influence between Motivation to Work ( $X_4$ ) toward the Readiness of Entering Job Market (Y). Thus, it can be said that the higher the Motivation to Work ( $X_4$ ) ( $X_1$ ) then the higher the Readiness of Entering Job Market (Y).

The result of simple regression analysis with one predictor shows the coefficient of determination ( $r^2_{x4y}$ ) was 0,051 indicates that Motivation to Work ( $X_4$ ) is able to affect 5,1% change in the Readiness of Entering Job Market (Y), so there are still 94,9% other factors or variables suspected to have the possibility of affecting the Readiness of Entering Job Market. The t test is used to determine the influence of Motivation to Work ( $X_4$ ) toward the Readiness of Entering Job Market (Y). Based on the results of data analysis correlation coefficient ( $r_{x4y}$ )

of 0,225 then consulted on  $r_{table}$  with  $n=83$  and 5% significance level so that the price of  $r_{table}$  obtained by 0,216. After the t test conducted so it is obtained the price  $t_{count}$  of 2,079 which is then consulted with  $t_{table}$  with a significance level of 5% of 1,991. Then it can be seen that the price of  $r_{count}$  is greater than  $r_{table}$  that is  $0,225 > 0,216$  and  $t_{count}$  is greater than  $t_{table}$  that is  $2,079 > 1,991$  so the hypothesis can be accepted.

The implication is that motivation as awareness arising from one's self will tend to give the most significant effect if the student has a high opinion person. The stronger the students desire to work, the more he will try to be ready to face the job market after graduation later.

The fifth hypothesis in this research is There is a positive and significant influence of On the Job Training, Productive Subject Achievement, Social Environment, and Motivation to Work simultaneously toward the Readiness of Entering Job Market of Student Class XII Accounting SMK N 2 Magelang Academic Year 2017/2018. Testing the fifth hypothesis using multiple regression analysis with the following results:

Table 10. Summary of the Result of Multiple Regression Analysis

Variable	Price R and R <sup>2</sup>		Price F		Coeff.	Const.	Expl.
	R <sub>y(1,2,3,4)</sub>	R <sup>2</sup> <sub>y(1,2,3,4)</sub>	F <sub>count</sub>	F <sub>table</sub>			
X <sub>1</sub>	0,591	0,350	10,480	1,446	0,333	16,063	Positive & Significant
X <sub>2</sub>					0,125		
X <sub>3</sub>					0,211		
X <sub>4</sub>					0,147		

Source: Primary Data Processed

Based on the above table, then the regression equation with four predictors can be expressed in the following regression equation:

$$Y = 0,333X_1 + 0,125X_2 + 0,211X_3 + 0,147X_4 + 16,603$$

The equation shows that the coefficient value  $X_1$  of 0,333 means if the value of On the Job Training ( $X_1$ ) increases one point then the Readiness of Entering Job Market (Y) will followed increase by 0,333 points with assumptions  $X_2$ ,  $X_3$ , and  $X_4$  remain. The coefficient  $X_2$  of 0,125 means that if the Productive Subject Achievement score ( $X_2$ ) increases by one point then the Readiness of Entering Job Market (Y) will followed increase by 0,125 points with assumptions  $X_1$ ,  $X_3$ , and  $X_4$  remain. The coefficient  $X_3$  of 0,211 means that if the value of the Social Environment ( $X_3$ ) increases one point then Readiness Entering Job Market (Y) will followed increase by 0,211 points with assumptions  $X_1$ ,  $X_2$ , and  $X_4$  remain. The coefficient  $X_4$  of 0,147 means that if the value of Motivation to Work ( $X_4$ ) increases one point then the Readiness of Entering Job Market (Y) will followed increase by 0,147 points with assumptions  $X_1$ ,  $X_2$ , and  $X_3$  remain. The value of constanta number is 16,603 means that if On the Job Training ( $X_1$ ), Productive Subject Achievement ( $X_2$ ), Social Environment ( $X_3$ ), and Motivation to Work ( $X_4$ ) simultaneously = 0, the value of the Readiness of Entering Job Market (Y) by 16,603.

The result of multiple regression analysis with four predictors shows the coefficient  $R_{y(1,2,3,4)}$  coefficient shows positive value of 0,591 means there is positive influence between On the Job Training ( $X_1$ ), Productive Subject Achievement ( $X_2$ ), Social Environment ( $X_3$ ), dan Motivation to Work ( $X_4$ ), simultaneously toward the Readiness of Entering Job Market (Y). Then shows the coefficient of determination  $R^2_{y(1,2,3,4)}$  of 0,350 indicating that 35% change in the Readiness of Entering Job Market (Y) can be influenced by On the Job Training ( $X_1$ ), Productive Subject Achievement ( $X_2$ ), Social Environment ( $X_3$ ), and Motivation to Work ( $X_4$ ), so there are still 65% other factors or variables that could have an influence toward the Readiness of Entering Job Market.

F test is used to know the variability meaning of On the Job Training ( $X_1$ ), Productive Subject Achievement ( $X_2$ ), Social Environment ( $X_3$ ), and Motivation to Work ( $X_4$ ) toward the Readiness of Entering Job Market (Y). After the F test is done, it obtained price  $F_{count}$  of 10,480. Then consulted with  $F_{table}$  with a significance level of 5% of 1,446. It shows that  $F_{count} > F_{table}$  so that On the Job Training ( $X_1$ ), Productive Subject Achievement ( $X_2$ ), Social Environment ( $X_3$ ), and Motivation to Work ( $X_4$ ) simultaneously influenced the Readiness of Entering Job Market (Y) of Class XII Student of SMK N 2 Magelang Academic Year of 2017/2018, so it can be concluded that the hypothesis is accepted.

Based on the results of multiple regression analysis it can be seen that the amount of Relative Contribution (SR) and Effective Contribution (SE) can be seen in the following table:

Table 11. Summary of Relative & Effective Contribution Result

No	Variable	Contribution	
		Relative (%)	Effective (%)
1	On the Job Training	38,87	13,60
2	Productive Subject Achievement	23,60	8,26
3	Social Environment	21,08	7,38
4	Motivation to Work	16,45	5,76
Total		100	35

Source: Primary Data Processed

Total Effective Contribution of 35% means the variables of On the Job Training, Productive Subject Achievement, Social Environment, and Motivation to Work simultaneously provide Effective Contribution of 35%, while 65% is given by other variables not examined in this research.

The implication is between the variables can affect with the portion of each depends on each individual student. To increase the readiness of students in Entering Job Market it is necessary to improve also the factors that have been studied can give the highest and significant influence.

#### 4. Conclusion and Suggestion

There was a positive and significant influence of On the Job Training toward the Readiness of Entering Job Market, There was a positive and significant influence of Productive Subject Achievement toward the Readiness of Entering Job Market, There was a positive and significant influence of Social Environment toward the Readiness of Entering Job Market, There was a positive and significant influence of Motivation to Work toward the Readiness of Entering Job Market of Student Class XII Accounting SMK N 2 Magelang Academic Year 2017/2018.

There was a positive and significant influence of On the Job Training, Productive Subject Achievement, Social Environment, and Motivation to Work simultaneously toward the Readiness of Entering Job Market of Student Class XII Accounting SMK N 2 Magelang Academic Year 2017/2018.

Based on the results of the research and the conclusion above, it can be given the following suggestions:

As a vocational graduate focused on work after graduating school, respondents should have motivation to get a better job than high school graduates who are not given knowledge and skills to face the job market.

Teachers can ask students who are ready to work immediately to influence friends who are not ready to work with a personal approach.

Teachers on the tax administration subjects should provide more knowledge so that student achievement can be increased and students are more competent.

We recommend that the intensity of teacher visits as a delegate from the school is improved so that it can be seen that On the Job Training activities directly and can provide appropriate evaluation.

The student should be improved mentally to be ready to accept any consequences that are likely to be encountered in the job market.

It is necessary to conduct further research toward the Readiness of work for vocational school students considering the demands of higher job qualification so that it is necessary to know other factors that are more influential and significant to the readiness to enter job market.



It is advisable to examine the social environment separated between the family environment, the environment of peers and the neighborhood society because the likelihood of students is only affected by one or part of the environment not in whole.

It is better to retrieve data from students class XII by questionnaires in semester 5 because in semester 6 students are busy preparing nasional exams, so they do not have enough time to fill too many questionnaires.

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# The Effect of Infrastructure, Social, Economic, and Environmental on Agribusiness Production Performance and Its Impact on Sustainable Development

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## Abstract

Magelang Regency is an agropolitan area located not far from Mount Merapi which is an active volcano where the eruption impact damaged the surrounding areas in various aspects including infrastructure, social, economic and environmental. As an area with superior commodities in agriculture, definitely, agricultural land suffered severe damage by 43% which reached the value of the loss of Rp 1.326 trillion resulted in a dramatic fall in production performance so that required rapid recovery of agricultural land to restore the state. The primary purpose of this research is to find out the effect of infrastructure, social, economic and environmental toward production performance and its impact on sustainable development in the agropolitan area. Data collection using questionnaires with stratisfield random sampling method on 89 farmers respondents scattered throughout Magelang District. This study uses SEM (Structural Equation Modeling) analysis which yields substructural equations 1:  $Y_1 = -0.29X_1 + 0.17X_2 + 1.25X_3 + 4.67e_1$  and substructural equations 2:  $Y_2 = 0.43X_2 + 0.15X_4 + 1.30e_2$ , indicating that infrastructure variable was effected on production performance ( $P=0.018$ ), social economic variable was direct effected on sustainable development ( $P=0.003$ ), and production performance variable was effected on sustainable development ( $P=0.000$ ) at agropolitan area in Magelang Regency.

**Keywords:** Agribusiness, Magelang Regency, Commodities Productivity, Disaster Agri Capabilities

## 1. Introduction

Since 1872, Eruption in 2010 is the largest on Mount Merapi with the strength of VEI of 4 (Preece et al, 2014). The total 11% victims from around the world are caused by the eruption of Mount Merapi recorded as the fourth largest eruption in the world during the twentieth century (Witham, 2005) quoted from (Warsini et al, 2014). One of the volcanoes in Indonesia is Mount Merapi, located in the Central Java Island.

Magelang Regency has a agricultural land area of 36,855 Ha (42.65%) and a dry land area of 49,550 Ha (57.35%) with a total area of 108,573 Ha (Badan Pusat Statistik Magelang, 2017). As an area with leading commodities in the agricultural sector such as rice, corn, peanuts, and cassava, through agropolitan concept, can developed various agribusiness activities. Based on the information cited from liputan6.com, according to the Geological Survey of Geological Survey and Technology (BPPTKG), in 2006, Mount Merapi erupted with the Volcano Explosive Index (VEI) 2, from scale 1 being the lowest to the 4th highest before erupting back in 2010. The eruption in 2006, a covered land area of ash about 50,850 hectares with a thickness of about 2.5 cm. According to BNPB (2011) quoted from Kartika (2012). In 2010 eruption, agricultural land suffered severe damage with loss value reached Rp 1.326 trillion (43%) of the total value of a loss. Severe environmental damage was caused by the eruption of Mount Merapi in 2010, ranging from village to community land, all burned by lava to ashes (Warsini et al.2014).

Mount Merapi eruption causes damage in various aspects such as infrastructure, social, economic and environmental so require immediate recovery. However, the recovery period requires considerable time due to development in various sectors. Therefore, sustainable development is essential for the survival of the community in the future.

One of the closest areas of Mount Merapi is Magelang regency which is less than 30 km. Both in terms of social, economic, environmental and infrastructure of Magelang Regency affected by the eruption of Mount Merapi. However, the volcanic ash caused by the eruption of Mount Merapi makes the soil fertile and potential for agropolitan development (Hermawan et al, 2017). Magelang regency run the regional development strategy that will be achieved by mapping the leading commodities as a driver of planning and application of agropolitan city. Post-effect of the eruption of Mount Merapi would have an impact on the availability of land for the development of commodities in the region's flagship region. How is the speed of recovery rate of the agricultural sector to the development of superior commodity in Magelang regency which will be the discussion in this research. This study aims to determine the effect of infrastructure, social, economic and environmental impact on production performance and its impact on sustainable development.

Agropolitan is an area that performs agribusiness activities that also push the surrounding area (Agusta, 2008) which quotes from Sitorus (2015). According to Sembiring (2017), agropolitan development is carried out thoroughly to agricultural areas that serve as agricultural cities. In developing agropolitan areas based on local superior commodities will be useful to increase productivity so that rural areas can grow. (Siswanto et al, 2014).

Based on this understanding, Magelang Regency in agropolitan development effort related to how quickly the rate of agricultural land recovery due to the eruption of Mount Merapi can be known by analyzing the effect of four aspects of social closely related to the ability to adjust to changes - changes that exist both from within or outside. Adjustment to the environmental both physically and socially through good interaction is expected to contribute to the development of agropolitan development (Wedjajati, 2008) quoted from Sembiring (2017). In the economic aspect required the development of human resources experts ranging from production to marketing products and reached the hands of consumers. Agricultural marketing techniques do not play an important role in increasing productivity and consumption but accelerating economic development (Acharya & Agarwal, 2011) quoted from Rai et al (2016). Similarly, the

results of research conducted by Mtega et al (2016) which proves that knowledge of agriculture is needed by farmers ranging from seed selection to product marketing. In the socio-economic development, especially the speed of land recovery required rapid and integrated infrastructure development.

Fulfillment of these four aspects is expected to improve the production performance of superior commodities management in Magelang Regency. To achieve maximum levels of economic development, the utilization of agricultural resources must be rational and efficient (Huagauo, 2018). In this study, production performance is projected by the number of harvests that are raised over the year in favored commodities. Total production volumes and productivity per hectare are used to prove that agricultural productivity as a function of physical and cultural variables (Kumari, 2017). Sustainable development can be supported from the environmental aspect with the awareness of its own human (Suparmoko, 1997) quoted from Sembiring (2017). The economic, social, cultural and environmental aspects of rural development are linked to sustainable agriculture's advancement underlying agropolitan to achieve ideal conditions. If this can be realized, sustainable development will be achieved in the long term (Fatkhianti, 2015).

## 2. Method

The research was conducted in Magelang Regency, Central Java with the subject of research is 110 farmers spread all over subdistrict in Magelang Regency. This study used primary data obtained from direct communication techniques through questionnaires distribution and interviews of farmers. The data analysis method used is Structural Equation Modeling (SEM). According to Maruyama (1998) quoted from Mustafa et al. (2012, p.1), SEM is used to process and estimate the relationship strength calculations between variables shown in theoretical models either directly or indirectly. The calculation results for the model significance test is to test the goodness of fit including GFI(Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), CFI (Comparative Fit Index), RMSEA (Root Mean Square Error of Approximation), TLI (Tucker Lewis Index) and CR (Critical Ratio). According Mustafa (2012), requirements of the goodness of fit measurement model as follows :

Table 1: Rule Value Limit of Model

<b>Indeks</b>	<b>Cut off Values</b>
Chi Square	Mendekati 0
Probability	$\geq 0.05$
CMIN/DF	$\leq 2.00$
GFI	$\geq 0.90$
RMSEA	$\leq 0.08$
AGFI	$\geq 0.90$
TLI	$\geq 0.90$
CFI	$\geq 0.90$

There are steps to analyze data using SEM that are theory-based development, construct path diagrams, transform path diagrams into structural equations, select the matrix input type & model estimation proposed, assess the structural model identification, assess the criterion of goodness of fit, and the interpretation and modification of the model.

The proposed hypotheses are :

Substructural equations 1

$$Y_1 = p_{Y_1X_1}X_1 + p_{Y_1X_2}X_2 + p_{Y_1X_3}X_3 + p_{Y_1X_4}X_4 + p_{y_1}e_1 \quad (1)$$

Substructural equation 2:

$$Y_2 = p_{Y_2X_1}X_1 + 0.43X_2 + p_{Y_2X_3}X_3 + p_{Y_2X_4}X_4 + p_{Y_2X_5}X_5 + p_{y_2}e_2 \quad (2)$$

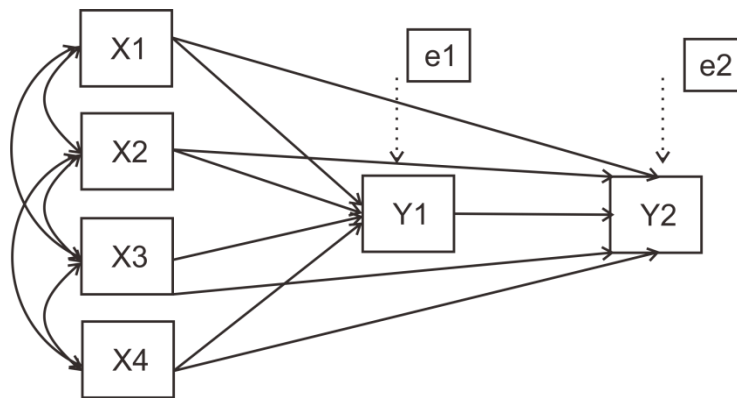


Figure 1: Structural Model of Sustainable Development

The analysis developed is the effect of infrastructure (X1), social (X2), economy (X3) and environmental (X4) toward production performance (Y1) and its impact on sustainable development (Y2). The hypotheses developed in the model as follows:

- Hipotesis 1 (Ha1): There is a significant effect of infrastructure on production performance.
- Hipotesis 2 (Ha2): There is a significant effect social on production performance.
- Hipotesis 3 (Ha3): There is a significant effect of economic on production performance.
- Hipotesis 4 (Ha4): There is a significant effect of environmental on production performance.
- Hipotesis 5 (Ha5): There is a significant effect of infrastructure on sustainable development.
- Hipotesis 6 (Ha6): There is a significant effect of social on sustainable development.
- Hipotesis 7 (Ha7): There is a significant effect of economic on sustainable development
- Hipotesis 8 (Ha8): There is a significant effect of environmental on sustainable development
- Hipotesis 9 (Ha9): There is a significant effect of production performance on sustainable development

Prior to do analysis, the data is tested by validity and reliability. The validity test is used to measure the extent to which the meter accurately measures the concepts tested. (Hair et al, 2010). Pearson products moment formula :

$$r = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[n\sum X^2 - (\sum X)^2][n\sum Y^2 - (\sum Y)^2]}} \quad (3)$$

Information :

r : correlation coefficient

$\Sigma X$  : number of item scores

$\Sigma Y$  : total score of items

n : number of respondent

Whereas the reliability of the data is tested by alpha cronbach reliability test using a formula as follows :

$$r_{11} = \frac{n}{n-1} \left( 1 - \frac{\sum_{i=1}^n s_i^2}{s_t^2} \right) \quad (4)$$

Information :

$r_{11}$  : reliability coefficient

n : number of item scores

$s_i^2$  : scores of varians i-th

$s_t^2$  : total scores of varians

In addition, this research also using factor analysis to identify the between manifest variables to build a construct. This analysis is for simplified on several factors selected by determining some of the factors of multivariate data with enough components can be simplified on several factors selected.

Factor analysis model:

$$X_{ik} = \lambda_{i1}f_{1k} + \lambda_{i2}f_{2k} + \dots + \lambda_{im}f_{mk} + e_{ik} \quad (5)$$

Information :

$X_{ik}$  : value of the i-th variable for k-observation

$\lambda_{ij}$  : value of the jth factor for k-observation (also called scores factor).

$f_{jk}$  : the relationship of the i-th variable by the j th factor, where there is the factor m and p variable,  $m < p$ .

### 3. Results

Measurements were performed on the latent variable Infrastructure (X1) consisting of the following manifest variables: feasibility of road access supporting farmer activities (X1\_1), irrigation and irrigation conditions (X1\_2), internet service conditions (X1\_3), dam utilization (X1\_4), and transportation convenience for product distribution (X1\_5). The latent social variable (X2) consists of the following manifest variables: procurement and training (X2\_1), education level (X2\_2), farmer's understanding of agribusiness management (X2\_3), the participation of cooperative members (X2\_4). The latent economic variable (X3) consists of the following manifest variables: motivation of production target fulfillment (X3\_1), profit/loss on production (X3\_2), farmer marketing management capability (X3\_3), inflation effect (X3\_4). The latent environmentalal variable (X4) consists of the following manifest variables: agricultural intensification (X4\_1), agricultural extensification (X4\_2), change response (X4\_3), and maintenance effort (X4\_4). The latent variable of production performance (Y1) consists of manifest variables as follows: the number of harvests in a year (Y1\_1), planting period (Y1\_2), and harvest volume/year (Y1\_3). As for the latent variables of sustainable

development (Y2) consists of the following manifest variables: market dominance (Y2\_1), commitment to the farming profession (Y2\_2), failure risk management (Y2\_3), and concern for agricultural sustainability (Y2\_4). Measurements are performed on all manifest variables of each latent variable as follows :

### 3.1. Validity and Reliability Test

The validity test revealed that the variable of X3\_2, X4\_3, Y1\_1, Y1\_2 dan Y2\_3 have value sig > 0.005 which means invalid and value of Cronbach's Alpha under 0,6 means the data is not reliable. Subsequentlt, those variables are omitted and re-tested until valid (Sig. < 0,05), so it can be concluded that variables are able to measure what they want to measure. However the data reliability test is 0.560 < 0.6. which means data is not reliable.

#### 3.1.3. Factor Analysis

Due to the data is not reliable, it is necessary to be given treatment to meet the requirements. The given treatment is to analyze the existing X-factors. The X variables were then analyzed using the IBM SPSS Statistics 23 program. In the first analysis, based on the anti-image table, X2\_1, X2\_2, and X2\_4 were not eligible (anti-image correlation value < 0.5). The variables are removed and re-analyzed.

The second analysis concludes that there are 5 variables whose anti-image correlation value is below 0.5 ie X1\_3, X2\_1, X2\_2, X2\_4, and X4\_3 (0.475, 0.416, 0.480, 0.472, 0.361) respectively. These variables are considered unfit for factor analysis to be eliminated and then tested again. After re-testing, the anti-image correlation value of all variables meets the feasibility requirements of factor analysis (> 0,5). The sample adequacy test is done through Kaiser Meyer Olkin Measure of Sampling Adequacy (KMO) value, the value of KMO data is 0.577 greater than 0.5 means that the sample of 110 respondents with 10 units of the variable is quite feasible to be analyzed. Bartlett's Test of Sphericity of 622,745 and Sig. A 0.000 indicates that the correlation matrix is not an identity matrix, so it is feasible doing factor analysis.

The third analysis, the output of factor analysis based on eigenvalues  $\geq 1$ , there are four factors formed to be analyzed. The cumulative percentage value for all four factors is 72,477%, which means that the four factors are able to explain multivariate data of 10 variables more than 0.5. Based on the Rotated Component Matrix Production Capability, see the highest loading factor value. However, when SEM analysis is done using AMOS 22 software it is known that the model is not fit (not suitable between theoretical models with the empirical model) so the output path diagram does not show the regression weight. Looking at the variable of a result of factor analysis there is one variable having lowest validity level and omitted to then be tested again so that got a result of the testing value of KMO data equal to 0,577 > 0,5 meaning that sample counted 110 respondent with 10 unit variable enough to be analyzed. Bartlett's Test of Sphericity of 615,679 and Sig. A 0.000 indicates that the correlation matrix is not an identity matrix, so it is worth entering into the model.

The fourth analysis, the output of factor analysis based on eigenvalues  $\geq 1$ , there are three factors formed to be analyzed respectively - each worth 2,868, 2,242 and 1,068. The cumulative percentage value for the three factors is 68,644%, which means that the three factors are able to explain the multivariate data of 9 variables more than 0.5.

Table 2 : Rotated Component of Production Capability Matrix

<b>Kapabilitas Produksi</b>	<b>Component</b>
-----------------------------	------------------



	1	2	3
X1_1 (Feasibility of road access supporting farmer activities)	,693	-,237	,170
X1_2 (Irrigation condition)	,909	,139	-,097
X1_4 (Dam utilization)	,887	,190	-,055
X1_5 (transportation convenience for product distribution)	,669	-,226	,438
X2_3 (Farmer's understanding of agribusiness management)	,010	,926	,178
X3_1 (Motivation of production target fulfillment)	,156	,442	,525
X3_3 (Farmer marketing management capability)	-,008	,917	,128
X4_1 (agricultural intensification)	,447	,295	-,287
X4_2 (agricultural exteensification)	-,063	,191	,769

Based on the calculation of Rotated Component Matrix which appears on table 2, it was found that there were three groups of first factor components, namely the feasibility of road access supporting farmer activities (loading factor 0.693), irrigation conditions (loading factor 0.909), dam utilization (loading factor 0.887), transportation convenience for product distribution (loading factor 0.669), and agricultural intensification (loading factor 0.447), hereinafter referred to as infrastructure factor. The second is farmer's understanding of agribusiness management (loading factor 0.926) and farmer marketing management capability (loading factor 0.917), hereinafter referred to as socio-economic factors. While the third is motivation of production target fulfillment (loading factor 0,525) and agricultural extensification (loading factor 0.769), hereinafter referred to as environmental factors.

### 3.1.4 Structural Equation Modelling (SEM) Analysis

#### 3.1.4.1. Validity and Reliability Test

Prior to SEM analysis, the validity and reliability test is performed to ensure that the data is capable of measuring concepts and feasible for SEM analysis.

Table 3. Validity Test

Variable	Sig	Status
X1_1	0,000	Valid
X1_2	0,000	Valid
X1_4	0,000	Valid
X1_5	0,000	Valid
X2_3	0,000	Valid
X3_1	0,000	Valid
X3_3	0,000	Valid
X4_1	0,000	Valid
X4_2	0,000	Valid
Y1_3	0,000	Valid
Y2_1	0,003	Valid
Y2_2	0,002	Valid
Y2_4	0,002	Valid

Table 4. Reliability Test

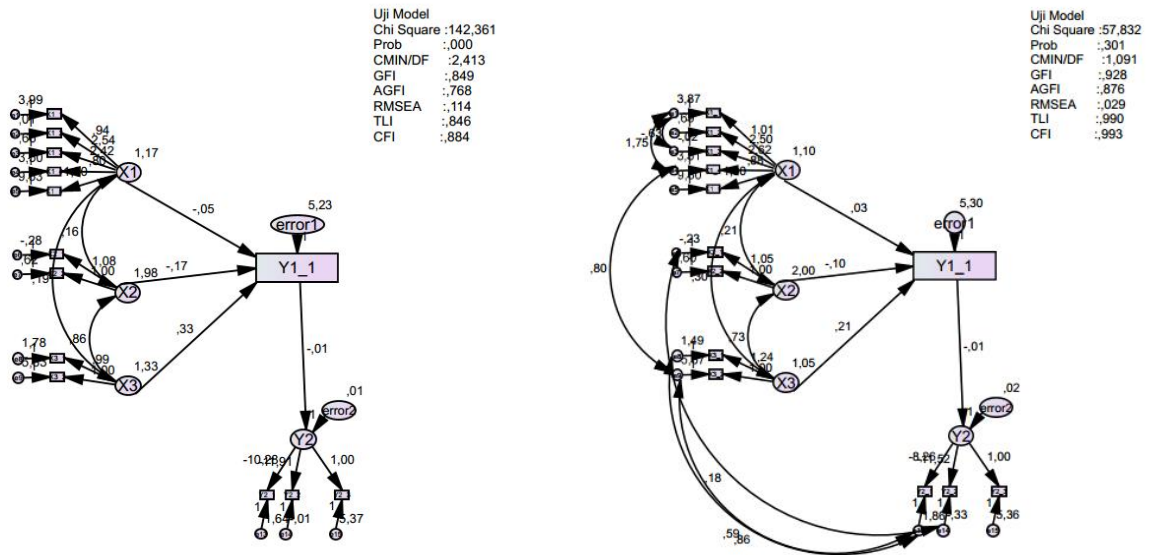
Cronbach's Alpha	N of items
<b>0.665</b>	13

In terms of the validity test, the data shows that all significance is less than 0.05 and Cronbach's

Alpha value  $0.665 > 0.6$  which means data is feasible for further testing ie SEM test.

### 3.1.4.2. Model Conformity Test

Based on the result of factor analysis done before using SEM analysis, infrastructure factor acts as variable X1, socio-economic factor as variable X2, and environmental factor as variable X3 which then referred to as independent variable. Variable Y1 as intervening and Y2 as the dependent variable. The output path diagram generated as follows::



**Basic Model**

**Modification Model**

Figure 2. Analisis SEM (First)

Based on the SEM analysis after modification, it appears that the model is still not fit since  $AGFI < 0.9$  ( $0.876 < 0.9$ ) and the resulting output is none that can describe the theory empirically. Reduction of manifest variables on independent variables that have the lowest validity value is Y2\_4 variable (on analysis as variables Y2\_3) of 0.008 to obtain the output diagram as follows:

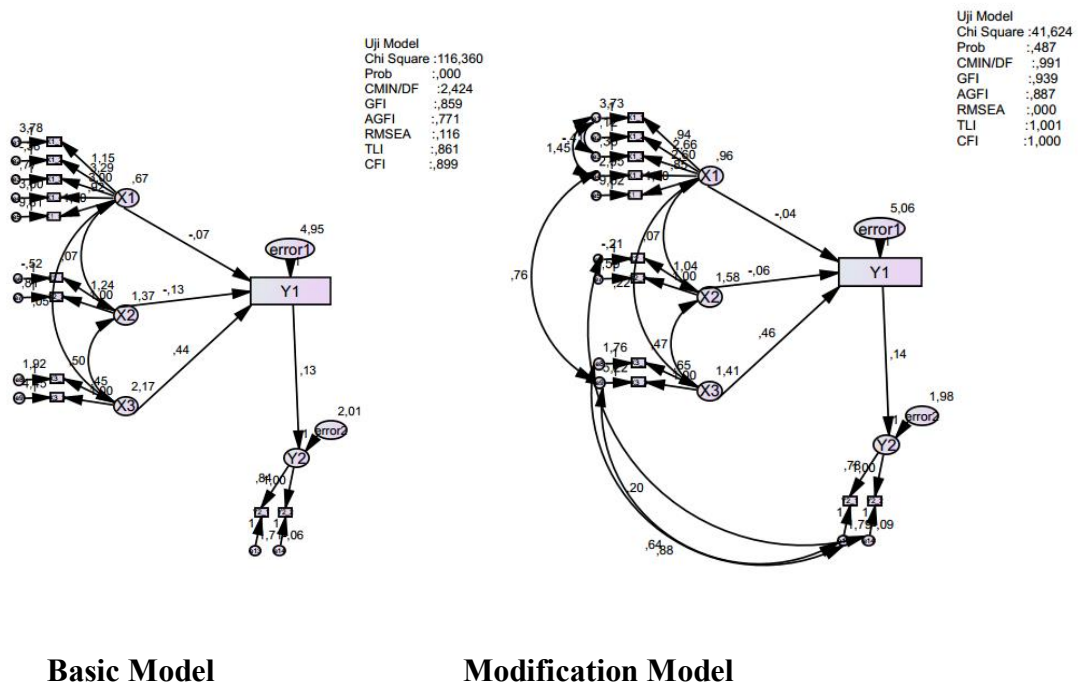
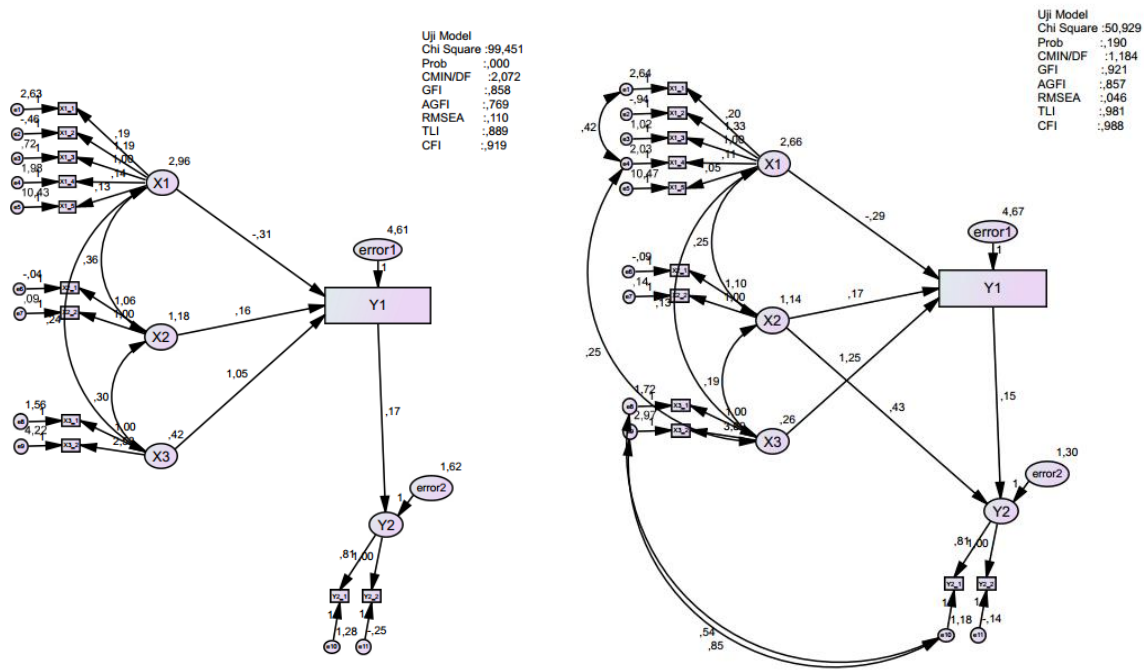


Figure 3. Analysis SEM (Second)

The probability model test of  $0.487 < 0.05$ , AGFI  $0.867 < 0.9$ , means that the model cannot be said fit and the resulting output is none that can describe the theory empirically. Therefore, the modification is done in the form of Z standardization. Standardization of Z value is done to detect the existence of samples including outlier. Outlier data is data that is significantly different from other data (Santoso, 2014, p 32). For a confidence level of 95%, the value of Z used states the outlier data if greater than +1.96 or smaller than the -1.96. Samples including outlier data were eliminated until 89 samples were tested. The result of SEM analysis as follows:



**Basic Model**

**Modification Model**

Figure 4. Analisis SEM (Third)

The analysis using SEM shows that the chi square value model 50,929 (small value), probability  $0.190 > 0.05$ , CMIN / DF  $1.184 < 0.200$ , GFI  $0.921 > 0.900$ , TLI  $0.981 > 0.900$ , CFI  $0.988 > 0.900$  and RMSEA  $0.046 < 0.08$  indicating that the model meets the requirements goodness of fit. Although AGFI  $0.857 < 0.900$ , but the value is not far from the provisions. Based on the model, it was obtained the structural equation as follows:

substructural equations 1 :  $Y_1 = -0.29X_1 + 0.17X_2 + 1.25X_3 + 4.67e_1$

substructural equations 2 :  $Y_2 = 0.43X_2 + 0.15X_4 + 1.30e_2$

#### 4. Discussion

##### 4.1. Model Causality Test

The result of regression weights between latent variables shows the estimated value of effect between variables (Mustafa et al.2012) as follows:

Table 5. Regression Weights

Variable	Estimate	S.E.	C.R.	P	Label
Production Performance <--- Infrastructure	-,288	,121	-2,369	,018	par_11
Production Performance <--- Socioeconomic	,170	,236	,720	,472	par_12
Production Performance <--- Environmental	1,252	,745	1,680	,093	par_13
Sustainable Development <--- Production Performance	,145	,050	2,929	,003	par_14
Sustainable Development <--- Socioeconomic	,434	,104	4,185	***	par_15

Further explanation of the regression weight evaluation analysis can be described and explained

as follows:

- 1) Reject Ho's hypothesis and accept Ha1 which means there is a significant effect of infrastructure on production performance. because the significance of t-count is smaller than the probability value  $<0.05$ .
- 2) Rejecting the hypothesis Ha and accept Ho2, Ho3, Ho4 which means partially socio-economic and environmental no effect on the production performance because t-significance significance is smaller than probability value  $> 0.05$ .
- 3) Rejecting the Ha hypothesis and accepting Ho5, Ho6, Ho7, Ho8 which means partially infrastructure, social, economy and environmental there is no effect on sustainable development because the significance of t-count is less than probability  $> 0.05$

#### 4.2. Direct Effects, Indirect Effects, and Total Variable Effects

The magnitude of the effects of each of the latent variables directly (standardized direct effect), or indirect (standardized indirect effect) and total effects (standardized total effect) are summarized as follows:

Table 6. Effect between Variables

Variable	Direct Effect	Indirect Effect	Total Effect
Infrastructure → Production Performance	-0.204	0.000	-0.204
Socio-Economic → Production Performance	0.079	0.000	0.079
Environment → Production Performance	0.279	0.000	0.279
Socio-Economic → Sustainable Development	0.358	0.020	0.378
Production Performance → Sustainable Development	0.259	0.000	0.259

According to the table, it was concluded as follows:

- 1) The infrastructure variable directly effect on the production performance of -0.204.
- 2) Socioeconomic variables directly effect on the production performance of 0.079.
- 3) Environmental variables directly effect on the production performance of 0.279.
- 4) The socioeconomic variable directly effect on the sustainable development of 0.358 and indirectly by 0.020 so as to have a total effect of 0.378.
- 5) Production Performance has a direct effect on the sustainable development of 0.259.

## 5. Conclusion

Partially, the infrastructure has an effect on production performance. Infrastructure has an important role in agropolitan development in Magelang Regency, especially in relation to the recovery of agricultural land. According to Li Shengwen et al (2011) quoted from Guo et al (2014), the thought that the development of rural road shortening the market distance reduces the logistics cost and market segmentation increases transaction efficiency and reduces transaction cost. Integration of infrastructure development will improve the performance of superior commodity production in Magelang regency.

In addition to infrastructure, socio-economic influence acts as a support for sustainable development which is expected to create an agropolitan-based regency with long-term planning. Socioeconomic effects directly on sustainable development. The post-effect eruption of Mount Merapi can be overcome by farmers who adjust to the recovery of agricultural land quickly. Production performance is able to project the success rate of sustainable development and encourage productivity improvement in the future. Seen from the analysis that the performance of production directly affects sustainable development.

The magnitude of infrastructure influence in agropolitan development needs to be supported by various parties, especially the government whose hope can provide assistance and facilitate the development of integrated infrastructure. Post-effect handling of the eruption of Mount Merapi must be handled quickly so that productivity is maintained. Assistance to farmers will understand the management of agribusiness is considered effective to develop agropolitan in Magelang regency.

In the research has weakness in the testing of SEM model that is the value of AGFI (Adjusted GFI) used to test the acceptance of the model (Mustafa, 2012) should be greater than equal to 0.9, but the model of the last analysis shows the value of 0.857, model is considered still lacking. Given these limitations, it is advisable to do comparative study with a wider sample size.

Based on the analysis, economic implication that can be taken as follows: infrastructure negatively effects on production performance since infrastructure lowers production costs. Where infrastructure development facilitates the access of farmers, it will take advantage of the access to other more profitable sectors as it sees the higher production costs for agriculture as an example of the importation of fertilizers from outside when the value of the rupiah declines due to inflation.

Socio-economic impact on sustainable development. This is true as farmers are able to understand the management of agribusiness from the flow of production to marketing. Understanding that they have will encourage farmers to innovate both in the aspect of diversification of agricultural products or even be widened to other sectors outside of agriculture. Why is that, because understanding raises awareness of agricultural production chains and sectors that have high incentives.

Production performance provides a boost of production in relation to meeting food security where food security itself is one of the prerequisites for the realization of sustainable development. If you look at the behavior of farmers, who have a high volume of production that meets the factors of sustainable development in the form of market domination and commitment to the profession of farmers. Therefore true that production performance positively affects sustainable development.

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# The Analysis Comparison of Quality Textbooks of Sociology in High School

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## Abstract

This paper is aimed to know and compare textbooks of Sociology for Senior High School especially for class XI. Theoretically, this study may produce the good quality concept for Sociology textbook and in practically, this study may give contribution of constructive suggestions to the quality of textbooks in terms of content, presentation, language, and graph. This research is descriptive qualitative research with content analysis approach. The data used is the textbook of Sociology of high school class XI. As for the guidance of textbook quality criteria using standard criteria of the advisability assessment of content, language, presentation, and graphicism from Badan Standar Nasional Pendidikan (BSNP). Data management in this research is using interactive model Miles and Huberman include data reduction, data presentation, and conclusion.

The findings of this study is the level of quality of the three textbooks Sociology is in the category quite well. The percentage of textbooks on Sociology lesson published by Kemendikbud has better quality compared to Yudhishtira and ESIS textbooks. The percentage of textbooks published by Kemendikbud is 76.2%, textbooks published by ESIS 72.9%, and the last is Yudhishtira textbook with 71.7%.

**Keywords:** textbook, Sociology, 2013 Curriculum, and BSNP.

## 1. Introduction

One of the main components of education is the curriculum. His position becomes a compass that can indicate where students will be taught. Therefore, the curriculum must be in accordance with what the learners need. In Indonesia, curriculum development basically rests on the development of education in Indonesia itself. Fitri Wahyuni (2015) states that in the course of curriculum development in Indonesia there are two periods namely (1) pre-colonial period / colonial period; (2) the post-independence period. Since 1945, the National Education curriculum has changed in 1947, 1952, 1964, 1968, 1975, 1984, 1994, 2004, 2006, and which is now 2013. The change is a logical consequence of the change of political system, social , culture, economic, and science and technology in the nation and state. Therefore, the curriculum as a tool of education plan needs to be developed dynamically according to the demands and changes that occur in society.

Currently the Indonesian government is implementing the 2013 Curriculum which starts in the academic year 2013/2014. This curriculum fixed curriculum applied by the government to replace the 2006 Curriculum which has been valid for approximately 6 years. The 2013 curriculum enters its testing period in 2013 by turning some schools into stub schools. The 2013 curriculum was limited to pioneering schools, it was in grades I and IV for Elementary School, Grade VII for Junior High School, and Grade X for Senior High School / Vocational High

School, while in 2014 the Curriculum 2013 is implemented in Class I, II, IV , and V while for SMP Class VII and VIII and SMA Class X and XI. The number of schools that became pioneer schools was 6,326 schools spread across provinces in Indonesia ([www.wikipedia.org](http://www.wikipedia.org)).

Mulyasa (2014: 6) states that the 2013 curriculum was more emphasized on character education, especially at the basic level that would be the foundation for the next level. Through the development of curriculum 2013 based on character and competency-based, it hoped that this nation becomes a nation of dignity and its people have added value (value), and selling value that could be offered to others and other nations in the world, so we can compete, even competing with other nations in the global arena. This is possible if the implementation of the 2013 curriculum can really produce a productive, creative, innovative and character.

The key to success that determines the success of the 2013 Curriculum implementation is the facilities, resources and tools or media that can support the achievement of goals. Related to that, textbooks are a learning resource for learners. A.J. Loveridge (1970: 9) said a textbook is a school-book in which selected material on a certain subject, in a written form which will satisfy a specific learning and teaching situation, is systematically set out for assimilation. Textbooks become one of the learning resources that provide a very big role in efforts to improve the process and learning outcomes. In addition, the textbook as a teaching material that contains the science of the results of the analysis of the curriculum in written form. The textbooks are compiled using simple, engaging language, with pictures, descriptions, book content, and bibliography. The existence of textbooks will greatly help teachers and students in deepening knowledge in accordance with their respective subjects. In this case, the quality of textbooks lessons learned as a source of learning also determine the achievement of learning objectives. The better the quality of textbooks, the better the teaching of subjects supported by the textbook.

To measure the quality of textbooks, in Indonesia there is a government agency that deals specifically with the book, the Badan Standard Nasional Pendidikan, abbreviated as BSNP in cooperation with the Center for Curriculum and Books, abbreviated as Pukurbuk. The policy of providing textbook is done by the government whenever curriculum changes occur (Sitepu, 2012: 115). This would be interpreted as the government will also replace the previous curriculum textbook into a textbook based on the next curriculum which is now based on the Curriculum 2013. Selection and utilization of textbooks as a medium of appropriate learning resources is a factor supporting success in learning. Benefits gained by Sunarko (2007) include:

- a. Enhancing the attention and motivation of learning
- b. Providing learning variations
- c. Providing learning-friendly structures
- d. Presenting the core of learning information
- e. Providing more examples concret
- f. Stimulates analytical thinking
- g. Provides a non-stress learning situation.

In line with the rapidly growing world of bookkeeping in Indonesia, the Indonesian government provides flexibility for educational institutions, educators, learners and parents to choose books as a companion to learn. Although the government has prepared textbook for the implementation of the Curriculum 2013, the fact is that there are private publishers that publish

and sell textbooks that read the scientific approach of curriculum 2013. It must be criticized whether the textbook has met the advisability standards as stipulated by the Government, through the Badan Standard Nasional Pendidikan (BSNP) and the Pusat Kurikulum dan Pembukuan (Puskurbuk). The textbooks are monitored and tested for their quality and advisability standards that include content advisability, presentation, language, and chart.

Pusat Kurikulum dan Pembukuan (Puskurbuk) sets the criteria for textbook quality according to Badan Standard Nasional Pendidikan (BSNP) should have four feasibilities, namely: (1) the advisability of the contents; (2) misrepresentation; (3) language advisability; and (4) the advisability of graduation. Advisability of the content is a advisability criterion related to the conformity of the material description with the Core Competence and Basic Competence, the level of material accuracy, and the supporting material. Advisability of presentation relates to the technique of presenting the presentation of learning, and the completeness of the presentation. The language advisability of language conformity with the level of students' thinking development, the use of communicative language, qualifies the demands and integrity of thinking. Meanwhile, the graphic advisability assesses the size of the leather design, and the design of the book contents.

Regulation of the Minister of Education No. 8 of 2016 About the Lesson Book conducted by the Education Unit, both in the form of Text Text Lesson and Non-Text Book Lesson, is a means of learning process for teacher and learners, so that learners can improve basic knowledge for higher education . Knowledge informed through Textbook Lessons and Non-Text Book Lessons are very important. Therefore, the presentation of the material should be arranged with interesting, easy to understand, has a high level of legibility, and positive numbers prevailing in the community, including not containing pornography, understand extremism, radicalism, violence, SARA, gender bias, and not called Other irregularities. In addition, the publisher must use the permission contained in the regulation. The print submission path for publishers is: 1). Fill out information about the title information of the book, Author history, and history of Publisher provided by the Ministry or BSNP. 2). The publisher must attach a letter from the author containing the truth of the author's story and the content of the book.

The existence of textbook as a source of learning can actually be a source of problems in learning. Greene and Petty (in Tarigan and Tarigan, 2009: 20) say that ignoring the quality of textbooks means ignoring the quality of learning as well. Errors or inaccuracies in the textbook can occur. Teachers as the main controller in learning in the classroom need to look first at the textbooks that will be used as teaching materials. Text books without prior study in the end the students who become victims. Various possibilities can occur. Books that do not comply with quality standards can lead to failure in attracting students' interest in using them so that they affect motivation and learning achievement.

The number of publishers and authors of textbooks of Sociology that exist today is very possible the emergence of the presentation of the material with different language styles and everything that can affect the understanding of learners. It can even be feared that many textbooks less or less suitable for use by students and teachers because it is not in accordance with the Indonesian textbook language eligibility rules determined by BSNP (Badan Standard Nasional Pendidikan) and not in accordance with the applicable curriculum. Seeing the various problems, the study of Indonesian textbooks is considered very important to do. In addition to knowing the

advisability of a text book, analysis of textbook this lesson could be used as a reference by teachers in choosing textbook that meet the criteria as a teaching material both and in accordance with the applicable curriculum.

The previous research related to this research was conducted by Fetty Permatasari (2013) which uses textbook data which focused on the analysis of character education payloads. The results showed that the three textbooks contain character education in the form of character values, which are presented explicitly and implicitly. However, the development of character education content in each textbook varies depending on the material presented. Furthermore, research conducted by Atfalul Anam (2014) evaluating Textbook of Indonesian Language and Literature Lesson of SMA / SMK Based on Curriculum 2013. The result of the research shows: (1) there is lack of content related aspect of less contextual material with learning of SMK, English text, and its translation; (2) lack of systematic presentation of less scientific and summary, and mismatch between material and syllabus; (3) the language aspect has a deficiency in complex and lengthy sentences, and unusual diction; (4) Readability text BTPBSI SMA / SMK based Curriculum 2013.

The difference of previous research with this research is this research was done to know the level of quality textbook lesson based on eligibility criteria according to BSNP. The Badan Standard Nasional Pendidikan (BSNP) has developed a textbook assessment instrument. This instrument used to determine the eligibility of a textbook to be categorized as a standard book. According to BSNP qualified textbooks must meet the four elements of eligibility, namely the advisability of content, advisability of presentation, language advisability, and advisability of chart.

## **2. Methodology**

This research uses descriptive qualitative research method with content analysis approach. Researchers use primary data obtained from three textbooks Sociology of high school level with Curriculum Curriculum 2013. The three textbooks are as follows:

- a. Ministry of Education and Culture written by Lia Candra Rufikasari and Slamet Subiyantoro. The book is a student book entitled: "Sociology: Specialization of Social Sciences for Class XI SMA / MA".
- b. Yudhistira, written by Yad Mulyadi, Tarsisius Wartono, Didi Wiraatmadja, and Taufiq Rohman Dhohiri, entitled "Sociology of Class XI High School".
- c. ESIS written by Kun Maryati and Juju Suryawati. The book is entitled: "Sociology: Group of Specializations in Social Sciences".

The secondary data sources from this research are books, documents, journals, and others that discuss about textbook and curriculum 2013.

The position of researcher in qualitative research is to make researchers as a key instrument that collects data based on the studies studied. Researchers are planners, executors, data gatherers, analysts, data interpreters, as well as reporting research results (Moleong, 2010: 223). Other instruments used are the guidance of the advisability aspect by using matching list matching criteria or *checklist* to collect data that has observation guidance namely the content, language, presentation, and graphicism advisability standards of the Badan Standard Nasional Pendidikan (BSNP)

To determine the validity of the data required inspection techniques. The validity of the data in

this study is based on validity and reliability. To measure the validity in this study using validity testing through evaluation of experts in the fields of sociology and graphics. The researcher will describe the meanings contained in the 2013 Sociology curriculum textbook class XI. The descriptions are book suitability with content advisability aspect, advisability of presentation, language advisability, and advisability of graphicism adjusted with the rules of eligibility as stated in instrument of assessment from BSNP Pusurbuk. The researcher requested an opinion to one lecturer of Sociology material experts and one Sociology subject teacher to evaluate the suitability of the book with the content advisability aspects, advisability of presentation, and language advisability. Meanwhile, the advisability of graphics is evaluated by a graphic expert lecturer. Next, researchers conducted comparative tests with quantitative to determine the high or low quality level of textbooks. To measure reliability in this research is stability. Reliability of stability is the extent to which the process does not change over time. Stability reliability is done by reviewing the data sources repeatedly to obtain a consistent understanding of the data under study. Observation of the source conducted by researchers 4 times.

Data analysis techniques in this study using analytical techniques using Miles and Huberman model that suggests activities in analysis qualitative data interactively and lasted continuously until thoroughly so that the data is saturated. Interactive models in data analysis include data reduction, data presentation, and conclusion (Sugiyono, 2013: 246-253).

a. Data Reduction

Data reduction means summarizing, choosing the essentials, focusing on the essentials, searching for the theme and pattern. The steps taken by researchers is to select, summarize, and focus on what is being studied. The principal data studied are four aspects of advisability, namely the content advisability aspect, the advisability aspects of the presentation, and the advisability aspect of the graduation.

b. Presentation of Data

Presentation of data is the process of presenting data arranged in a relationship pattern so easily understood. In this research, the presentation process is in the form of tables and graphs. Assessment of books in the form of qualitative data and then based on scale techniques. Type of scale used is Likert scale with size 1 to 4. The weight of the scale include:

Tabel 1. Weight Rating Scale

Score	Interpretation
4	Very good
3	Good
2	Enough
1	Less

The data obtained from the assessment results are then compared with each other to find out the quality of Sociology textbooks published by the Ministry of Education and Culture, Yudhistira, and ESIS. To facilitate data search, each data is given a different code. The third code of textbooks is K for textbooks published by the Ministry of Education and Culture, Y for textbooks published by Yudhistira, and E for textbooks published by ESIS.

c. Conclusion

The conclusion done by looking at and understanding the data collected and the things that

often appear and lead to the advisability aspects contained in the three textbooks are then last with the conclusion as a result of the findings.

### 3. Results

#### 3.1 Description of Research Results

This study aims to determine the level of quality of the three Sociology textbooks of high school level based on advisability aspects according to BSNP namely the advisability of content, advisability of presentation, language advisability, and advisability of graduation. Analytical techniques in this study using Miles and Huberman model that suggests activities in analysis qualitative data interactively and continuous progress samoi thoroughly so that the data is saturated. Interactive models in data analysis include data reduction, data presentation, and conclusion (Sugiyono, 2013: 246-253). After presenting the data using an assessment in the form of numbers 1 to 4, the data will be presented in the form of a table. The data obtained from the assessment results are then comparable to each other to determine the quality of textbooks Sociology published by Kemendikbud, Yudhistira, and ESIS. To facilitate the search data each data is given a different code. The third code of the textbook is K for a textbook published by Kemendikbud, Y for Yudhistira publications, and E for ESIS textbooks.

The results of the quality assessment of the three subjects of Sociology class XI textbooks on each component are as follows:

#### a. Advisability Aspect of Content

On the content advisability aspect there are 30 items of assessment instrument items. The results of the advisability assessment of content contents as follows:

Tabel 2. Results of Assessment of Advisability Components

Sub Component	Item	Score		
		K	Y	E
<b>A. Completeness Materials</b>	1. Material Completeness	3	3	3
	2. Extent of Material	3	3	3
	3. Depth of Material	3	3	3
	4. Explanation of Core Competencies	3	3	3
	5. Scope of Types of Practice Questions	4	3	3
	6. Sufficiency of Problem Type	3	4	3
	7. Exercise			
<b>B. Accuracy Material</b>	8. Concept Accuracy	3	4	3
	9. Accuracy of theory	3	3	3
	10. Accuracy of Facts	3	3	3
	11. Accuracy of the Method	2	3	3
<b>C. "Kemutakhiran" Theory</b>	12. Compatibility with Development of Science	2	3	3
	13. Recency	2	3	3
	14. Reference	2	3	3

<b>D. Insight Intelligence Spiritual, Social and Skills</b>	15. Making Spiritual Attitude	3	2	3
	16. Making Social Attitude	4	3	3
	17. Making work ethic	3	3	3
	18. Making Innovative and Creative	3	3	3
<b>E. Stimulate Curoisity</b>	19. Making a feeling of desire to know	2	3	3
	20. Challenge for learn more ad or doing scientific work	3	2	3
<b>F. Developing life of skill</b>	21. Developing personal skill	2	3	3
	22. Developing social skill	3	4	3
	23. Developing Academic skill	3	3	3
<b>G. Developing Insight Unity</b>	24. Apreciate to Social Stratification	3	3	3
	25. Apreciate to Multiculturalism	3	3	3
	26. Gender Orientation	2	3	2
	27. Developing value of justice and solidarity socio-economic	3	3	3
	28. Pay Attention to Perspective villages and cities	2	3	3
	29. Developing values of justice, race, and religion (SARA)	2	3	3
<b>H. Contextualization development insight competence</b>	30. Presenting social structures	3	3	3
	31. in various life community, for example on local, regional, national, and international.			
	32. Presenting some examples of social changes in the life of society. for example on 33. local, regional, national, and international.	3	3	3
<b>Total</b>		83	88	89

b. Advisability Aspects of Presentation

In the aspect of the advisability in presentation there are 20 items of assessment instrument items. As for the results of the assessment of the appropriateness of presentation components as follows:

Table 3. Results of Assessment of Presentation Components

Sub Components	Item	Score		
		K	Y	E
	1. Systematics	3	3	3

<b>A. Presentation Techniques</b>	2. Coherence	3	3	2
	3. Consistency of presentation technique in using terms and symbols	3	2	2
	4. Balance in chapter	3	3	2
<b>B. Proponent of Material Presentation</b>	5. Suitability and accuracy illustration with the material in chapter	3	3	3
	6. Introduction	3	3	4
	7. Glossary	3	1	3
	8. Bibliography	3	3	3
	9. List of Indexes	3	1	3
	10. Reference	3	3	3
<b>C. Presentation Learning</b>	11. Summary	3	3	3
	12. Student centred	3	4	3
	13. Involvement of the student	3	3	3
	14. Stimulating the metacognition of the student	3	3	3
	15. Stimulating the thinking of student	3	3	3
	16. Stimulating critical thinking	2	3	3
	17. Creating an interactive communication	3	3	3
	18. Contextually of presentation	3	3	3
	19. Compatibility characteristic of subject	2	3	3
20. The ability to create feedback for self evaluation	3	3	3	
<b>Jumlah</b>		<b>58</b>	<b>56</b>	<b>58</b>

### c. Advisability Aspect of Language

In the aspect of advisability in language, there are 19 items of assessment instruments. The results of the assessment of linguistic appropriateness components are as follows:

Table 4. Results of Assessment of Language Components

<b>Sub Component</b>	<b>Items</b>	<b>Score</b>		
		<b>K</b>	<b>Y</b>	<b>E</b>
<b>A. Compatibility the developing of student degree</b>	1. Suitability the development of student thinking	3	3	2
	2. Suitability the development of social-emotional degree	3	3	2



<b>B. Communicative</b>	3. Understanding the message	3	3	2
	4. Suitability of illustration in message	3	3	3
<b>C. Dialogue dan Interactive</b>	5. Capatibility to motivate and understand of the message	4	3	2
	6. Encouragement of student in critical thinking	3	3	2
<b>D. Direct</b>	7. Accuracy of sentences structure	4	3	3
	8. Basic of terms	3	3	3
<b>E. The Systematic of Tinking</b>	9. Suitability in the chapter others	2	3	3
	10. Suitability in the chapters and subchapters	3	3	3
	11. Suitability in the subchapter and chapters	3	3	3
	12. Suitability in paragraph and subchapter	3	3	3
	13. Suitability in among sentences in a paragraph	3	3	3
<b>F. Coherence</b>	14. A complete meaning in a chapter and subchapter	3	3	3
	15. A complete meaning in a paragraph	3	3	3
<b>G. Compatibility of the Indonesian Language Rule</b>	16. Accuracy of grammar	3	2	3
	17. Accuracy of Spelling	3	2	3
<b>H. Using of Terms</b>	18. Consistency of using terms	3	3	3
	19. Consistency of using symbols	4	3	3
Jumlah		59	57	52

#### **d. Advisability Aspect of Graphic**

In the aspect of advisability of graphic there are 54 items of assessment instrument items. As for results of the assessment of linguistic appropriateness components as follows:

Table 5. Results of chart appropriateness

<b>Sub Component</b>	<b>Items</b>	<b>Score</b>		
		<b>K</b>	<b>Y</b>	<b>E</b>
<b>A. Book Size</b>				

Size	1. Suitability of book size with ISO Standard: A4 (210 X 297 mm ) atau B5 (176 x 250 mm)	4	1	3	
	2. Compatibility with the material content of the book	4	2	3	
<b>B. Cover Book Design</b>					
1. Layout of the cover book	3. Arrangement of layout elements on face and back cover have unity	3	2	3	
	4. Arrangement of layout elements on face and back cover have harmonious and gives the impression of a good rhythm	4	2	3	
	5. Showing point center well	3	1	3	
	6. Composition of layout element (title, author, illustrations, logos,etc) balanced and rhythm with content layout	3	3	3	
	7. The size of the layout element is proportional	3	1	3	
	8. The element colour of the layout is harmonious and clarify the book content	3	2	3	
	9. Show good contrast	4	1	3	
	10. Consistent position base on the pattern	3	3	3	
	11. Consistent position base on the pattern in a one series of the book	3	3	3	
	2. Typography of the Cover Book	The character used are interesting and easy to read			
		12. The size of the title of the book are dominant than others	4	4	4
13. Colour of the title of the book is contrast with background		4	1	3	
14. Size if the characters are proportional compared with book size		4	3	3	
The simple of Character (Communicative)					
15. Does not use many kinds of the characters		4	4	4	
16. Does not use decoration letters		4	4	4	
17. Using a suitable characters in series book		4	4	4	
3. Illustration of The Cover Book	Reflecting the contents:				
	18. Illustration of the book define the content of the book itself.	3	3	1	
	19. Illustration can reach the character of object	3	3	1	
	20. Shape, colour, size, and object proportion are real	3	3	2	
<b>C. Design of The Content Book</b>					
	The layout is Consistent				

1. Layout of The Contents Book	21. The placement of the layout element is consistent base on the pattern	3	3	3
	22. The separation between paragraph is clear	3	3	3
	23. There are no widow or orphan	3	3	3
	24. Placement of chapter etc are consistent	3	3	3
	Harmonic Layout Element			
	25. The print field and margin are proportional	2	2	3
	26. The distance of text and illustration are appropriate	2	3	4
	27. Margin between two pages side by side are proportional	3	1	3
	28. Suitability of shape, color, and size of elements layout	3	3	3
	Placement and Appearance of Layout Elements			
	29. Chapter title	4	4	4
	30. Subchapter	4	3	2
	31. Page rate	4	4	2
	32. Illustration	1	3	2
	33. Caption	3	3	3
	34. White Space	3	3	3
	The layout speeds up understanding:			
35. Placement of decoration/illustration as background doesnot interfere with the title	3	3	3	
36. Placement of title, subtitle, illustration, and caption are not annoying understanding	2	3	2	
2. Typograpy of the content books	Simple typography			
	37. Does not use many kind of the characters	4	4	4
	38. Does not use decoration characters	4	4	4
	39. Does not overusing the kind of characters (bold, italic, capital, small capital)	4	4	4
	Typograpy is easy to read			
	40. The large characters correspond to degree of student	4	4	4
	41. The font type correspond to the content	4	4	4
	42. The width of the arrangement as per convenience read maximum learner level 78 characters	4	1	3
	43. Space of lines are normal	3	1	3
	44. The kerning spaces are normal	3	1	3
	Typograpy facilitates to understand			
45. The hierarchy of titles are clear and consistent	4	4	2	

	46. The hierarchy of titles are proportional	4	4	2
	47. There are no white spot in the text	3	3	3
	48. Hyphenation	3	3	3
3. Illustration of The Content Book	Illustrations clarify and simplify understanding:			
	49. Reveal the meaning of object	3	3	3
	50. Forms are proportional	3	3	3
	51. Shape and scale are suitable to reality	4	4	3
	Content illustration causes attraction			
	52. Ilustrations are harmonious	2	2	2
	53. Streaks of lines and raster are clear	1	3	2
	54. Creative and dynamic	2	3	3
Jumlah		175	152	160

To obtain these qualities, researchers analyze, interpret and compare the quality of the book thoroughly on each component of eligibility. The total score score for each component of book quality is as follows:

Table 6. Total Total Score of Each Component of Book Quality

Component	Kemendikbud	Yudhistira	ESIS
Content	83	88	89
Presentation	58	56	58
Language	59	57	52
Graphicism	175	152	160
<b>Amount</b>	<b>375</b>	<b>353</b>	<b>359</b>

The total number of scores from the four assessment components in the table above shows that the textbook published by Kemendikbud gets a value of 375, Yudhistira textbooks get 353, and ESIS textbooks get 359 points. Fourth , the assessment component is 123 points. The textbook quality interpretation of the total number of items is as follows:

Highest score:  $123 \times 4 = 492$

Score II:  $123 \times 3 = 369$

Score I:  $123 \times 2 = 246$

The lowest score:  $123 \times 1 = 123$

Scale assessment of the interpretation will be obtained interpretation score textbook quality as follows:

Table 7. Interpretation of Total Number of Scores

Score	Interpretation
123 - 214	Less
215 - 306	Enough
307 - 398	Good
399 - 492	Very good

The percentage of the quality of the three textbooks as follows:

$$1) \text{ Buku terbitan Kemendikbud} = \frac{375}{492} \times 100 \% = 76,2 \%$$

$$2) \text{ Buku terbitan Yudhistira} = \frac{353}{492} \times 100 \% = 71,7 \%$$

$$3) \text{ Buku terbitan ESIS} = \frac{359}{492} \times 100 \% = 72,9 \%$$

The percentage results stated that the three textbooks were in a pretty good category. However, there is a difference in value differences which is very meaningful for the assessment of the three books. The textbook published by the Ministry of Education and Culture has the best quality from the other two books, namely the text book published by Yudhistira and ESIS. The sequence for the quality of high school Sociology textbooks for class XI 2013 curriculum is the first is a text book published by the Ministry of Education and Culture, the second is a text book published by ESIS, and the third is a text book published by Yudhistira.

#### **4. Discussion**

Discussion of the quality of the three published XI grade Sociology textbooks The discussion of the quality of the three Sociology textbooks of class XI published by the Ministry of Education and Culture, Yudhistira, and ESIS is the stage where the findings will be discussed with relevant theories. There are four aspects of the appropriateness component of the Badan Standar Nasional Pendidikan (BSNP), namely aspects of content appropriateness, aspects of presentation appropriateness, linguistic appropriateness aspects, and graphic aspects of eligibility. Sociology class XI textbooks based on 2013 curriculum are some of the revised editions such as the 2016 Revised Yudhistira textbook and the revised ESIS textbook of 2017. Meanwhile, the text book published by the Ministry of Education and Culture is still in the 2014 edition. feasible to be used, in the process of appraisal of appropriateness it was found some problems related to content, presentation, language, and Graphic.

The findings on the content appropriateness aspects show that the three textbooks have good category. Understanding the text in the form of commands or exercises that direct students to understand the form, structure, and content / text messages are well presented by the characteristics of each publisher. Material descriptions are designed in accordance with the demands for the achievement of main competency and base competency based on the scope of four core competencies (spiritual attitudes core competencies, social attitudes core competencies, core knowledge competencies, core competency skills). The concept of a qualified Sociology textbook is a textbook of lessons in which the process of preparing content, presentation, language, and presentation of graphs is concerned with and adapted to the characteristics of the Curriculum 2013. The textbook should be tailored to the characteristics of the Sociology subject from both objectives, content, strategies, and evaluations in the subjects of Sociology and also the characteristics of high school students both in terms of psychological development and learning styles. The material or content of the three textbooks has been in accordance with the current curriculum of the Curriculum 2013 with the criteria of each publisher. This is in accordance with the opinion of Muslich (2010: 60) which states that

textbooks are called qualified textbooks are prepared based on the message of the curriculum of education both from the foundation, approach, strategy, and program structure and focus on specific objectives in accordance with the formulation of learning there in the applicable GBPP curriculum. This is also reinforced by the opinion of Sitepu (2012: 21) who said that the existence of textbook lessons as a learning resource can not be separated from the curriculum, because it contains learning materials that can provide students' abilities according to the goals set out in the curriculum.

The same thing was found in the aspects of the presentation and linguistic appropriateness of the three textbooks. In the aspect of presentation appropriateness, the three textbooks have shown good category. Concepts and materials presented are coherent. The use of illustrations with the material in the chapter is appropriate and accurate with an explanation of the illustration. The textbook published by the Ministry of Education and Culture has provided an introduction, glossary, bibliography, index list, references, and summaries. However, the text book published by Yudhistira has not yet provided a glossary and index list. Presentation of learning has provided learner-centered learning by making several individual and group exercises and several rubrics that contain knowledge about the material.

In the aspect of language appropriateness there are several problems related to the suitability of the level of development of learners. Muljono (2007) stated that the quality of textbooks is also related to the developmental psychology of students because the textbook is intended by students as the main source. The ability to receive and process information optimally is influenced by the level of one's psychosocial development. Therefore, awareness of the importance of the characteristics of cognitive and socioeconomic maturity that will be the target of learning books is needed. Of the three textbooks Sociology studied textbooks published ESIS less attention to developmental psychology of learners. In the aspect of accuracy of concepts and theories have not presented in a simple, difficult to understand and not in accordance with the context of the development of learners. ESIS publisher textbooks use the language style commonly used among colleges rather than in high school.

The last aspect of appropriateness is the appropriateness of graphics. The findings show that the three books have a pretty good category. Broadly speaking, the three books do not yet have good graphic merit. The size of the book for the right high school students is B5 (175 mm x 245 mm). Yudhistira published textbooks have A4 size (204 mm x 275 mm) and have different types of paper quality. This textbook is not recommended for high school children because the size is too large. Textbooks published by Kemendikbud and ESIS are suitable size that has size B5 (175 mm x 245 mm). Illustration pictures on the cover of the ESIS textbook did not show any connection with the Sociology subjects. In the picture there is like a student student not a high school kid.

In addition, the child does not show the products of local people (foreigners). Textbooks published by Kemendikbud there are illustrations that are not clear. The design of color on the cover of Yudhistira published textbooks there are colors that are less harmonious. There are parts of the contrast color that is too strong that is orange and blue color that causes saturation to be seen. In addition also in textbooks published by ESIS also found a color that is the color yellow and gray. The margin between the two pages side by side in the Yudhistira textbook is very close. This shows disproportionately. In addition, in the textbook published by

Kemendikbud found that the margin distance between text and illustration is very close together. In the placement of the layout element of the chapter title, the subhead of the chapter in the ESIS textbook does not have any numbering in the subheads of the chapter.

After knowing the advantages and disadvantages, the publishers can do an evaluation to improve the quality of textbooks, especially subjects Sociology High School level Equal. Refer to Richards (2001) "..... textbooks play a crucial role in classrooms. The use of textbooks assists in the implementation of curriculum reforms ". Richards argues that textbooks play an important role in the classroom and their use helps to reform the curriculum. In addition, Hugo, et.al (2006) explains that textbooks are one of the student resources to extend beyond classroom learning and good quality textbooks are the most inexpensive and effective textbooks in the classroom and at home.

The same thing is also explained by Ur (1998) which shows that the textbook provides a firm framework that provides guidance for teachers and students as to what they have done and what they will do. Ur reports that textbooks are the cheapest tool compared to other materials such as learning devices, photocopying worksheets or computer software.

Tarigan and Tarigan (2009: 13-14) state that textbooks are textbooks in certain fields of study which are standard books prepared by experts in the field with instructional intentions and are easily understood by the users in schools and colleges. Based on the above opinion, it can be concluded that the core use of quality textbooks is based on learning objectives that refer to the curriculum. For now the Ministry of Education and Culture uses a new curriculum, namely the 2013 Curriculum.

A textbook lesson must not only be suitable for use in the learning process, but also must be of good quality. Komalasari (2011: 44) explains that when choosing textbooks, some eligibility requirements and quality of books should be considered, namely the presentation must be interesting, challenging, the material varies so that students are truly motivated to learn it. The more qualified a book, the more perfect the subjects it supports. Measurement of the quality of textbooks must be considered important aspects, namely the suitability of the content with the curriculum, the truth of the concept, language, and the presentation of the graph. If the textbook used in the content matches with a low curriculum, the expected competencies are difficult to achieve. This will happen if the teacher tends to consider the whole book to be true and accept what it is without analyzing the contents of the textbook first.

According to Husen (1998), the textbook writer for students must consider the interests of the students who use the textbook. Indicators used to determine the attractiveness of textbooks include: coloring, the cover displayed, the quality of the paper used, and the content of the material in general. A good textbook is a text book that can make students want, want, like to do what is illustrated in the book. Especially if the textbook can lead students towards growing intrinsic motivation. This is reinforced by the opinion of Greene and Petty in Kaharudin Arafah (2015) how to write books that are classified as good quality and as follows:

- a. Textbooks should be of interest to children
- b. Textbooks should be able to motivate students
- c. The textbook must contain illustrations that interest the students.
- d. Textbooks should consider linguistic aspects
- e. Textbooks should be closely related to other lessons.

- f. Textbooks should also stimulate, stimulate the students' personal activities
- g. Textbooks must be conscious and firmly avoiding vague concepts.
- h. Textbooks should have a clear point of view
- i. Textbooks should pay attention to learning objectives
- j. Textbooks must respect the personal differences of their students.

## 5. Conclusion

Based on the results of the discussion about the quality of textbooks especially Sociology high school level, there is a conclusion that is:

- The quality of the three Sociology lesson textbooks is in fairly good category. The findings show that the percentage of Sociology textbooks published by the Ministry of Education and Culture has better appropriateness quality compared to the textbooks published by Yudhistira and ESIS. The percentage of textbooks published by the Ministry of Education and Culture is 76.2%, ESIS textbooks are 72.9%, and the last is the text book published by Yudhistira with 71.7%.
- Textbooks are part of a learning tool that is very important and meaningful in spurring, advancing, and educating students. In addition, textbooks should be well designed and correct so they serve as an effective learning tool. A good textbook is a textbook that can help students learn. The textbook is not just a book that is opened or read at the time of classroom learning, but a book that is read at any time.

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# Meaning of Welfare and its Influence on Management of Business and Finance of Seaweed Farmers in Kertasari Village, West Sumbawa Regency

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## Abstract

Welfare can be significantly different and are subjective for each group, community or individual. Benchmarking indicators and welfare measures at the macro level is basically only useful for comparative studies between citizens in different countries, and certainly does not give a realistic picture of what is understood and perceived by community groups or individuals. With regard to the study on the welfare of the community group or individual, more meaningful when it is based on the interpretation given by community groups or individuals concerned. Especially if the study is used to perform in-depth study of the dynamics of their business and financial management. This study aims to examine how the seaweed farmers in the village of West Sumbawa Kertasari interpret the well-being and how it affects their business and financial management. The study was conducted by grounded theory approach to qualitative type, the research subjects were 58 farmers are segmented into 4 categories Ropes Ris ownership and farming activities. The results found that the variation in the meaning of the welfare individuals and segments of society seaweed farmers in the village of West Sumbawa Regency Kertasari. Besides meaning of wellbeing also affect business strategies and management practices as well as their finances.

**Keywords:** Welfare, Business Management, Financial Management, Seaweed Farmers

## 1. Introduction

The conception of welfare is much debated by economists, but because it is interesting to study, the concept is closely related to the measure of success of a country to achieve its main objectives, namely the welfare of the citizens of the nation. In this regard, an assessment of well-being more done in the scope of macro, with the focus on the economy. It is inseparable from the notion of vocabulary "prosperous" meaning safe through, and prosperous, while the well-being interpreted as a case or prosperous state (Dictionary of Indonesian edition V). In another meaning welfare is defined as "aid in the form of money or the need for those in need" (Merriam Webster Dictionary). In this regard, the past is often the level of prosperity of a nation is indicated by the level of Gross Domestic Product (GDP) or the level of income per capita.

Measuring the level of welfare of the GDP has some fundamental weaknesses, among others: (1) GDP does not describe any measure of prosperity; (2) GDP only counts market transactions; (3) GDP does not describe the income distribution; (4) GDP does not describe what is being produced; and (5) GDP ignores externalities (<https://quickonomics.com>, 2015). Because, basically GDP does not describe anything about subjective well-being, even if the increase in GDP will also encourage increased welfare objective, it does not mean people are groups and individuals feel that their welfare is subjectively better (Frey, 2008).

The objection to the use of GDP as an indicator measuring the level of welfare, foster the emergence of various alternatives Another measurement that better describe welfare, for example, Human Development Index (HDI), the Gross National Happiness Index (GNH), the Social Progress Index (SPI), the National Welfare Index (NWI), and the measurement index that tries to combine economic growth and prosperity in society, which is called the Index of Sustainable Economic Welfare (ISEW). This latter measurement is quantitatively summing and subtracting the magnitudes in the macro measurements by the formula:

$$\text{ISEW} = \text{personal consumption} + \text{non-defensive public expenditures} - \text{defensive private expenditures} + \text{capital formation} + \text{services from domestic labor} - \text{costs of environmental degradation} - \text{depreciation of natural capital}.$$

Another attempt to find an alternative approach to the measurement of prosperity and quality of life is done by incorporating aspects of social and ecological. Transactions outside the market such as housework and volunteer work at the price and added value in the calculation of GDP, while other activities are detrimental to society and environmental damage serve as a factor that reduces GDP ([www.cesifo-group.de / ifoHome /.../ Wohlstandsindikator.html](http://www.cesifo-group.de/ifoHome/.../Wohlstandsindikator.html)),

Meanwhile Jones and Klenow (2011) developed a welfare index by summing the quantitative measurement of consumption, leisure time, inequality and life expectancy. Furthermore, in 2010 the country's economic expert council Germany and France to develop indicators to measure economic performance, quality of life and sustainability. Not less than 25 indicators developed. For the economy developed indicators to make the GDP as a measure of economic performance is better by improving the measurement of the quality and volume of output of services, the quality of the exchange and trade, economic dependence, the measurement of the performance of the labor market, and the development of indicators for well-being in the scope of economic income and consumption, the distribution of income, wealth and time allocation community activities. For the aspects of quality of life, indicators of health, education, personal activities, political voice and governance, social connections and relationships, environment, and personal and economic insecurity. For the sustainability of macroeconomic sustainability indicators developed consisting of the sustainability of growth, external and fiscal; kerberlanjutan financial and environmental sustainability includes greenhouse gas emissions, productivity and consumption of natural resources, biodiversity. Each indicator is presented separately and not aggregated as a universal indicator(SVR and CAE 2010).

After all macro welfare measurement in principle not able to cover a deep understanding of the sense of well-being perceived by community groups or individuals within a country. Generalizing on welfare in the context of the macro level can not be denied is not able to provide a full picture of variations in the level of welfare of the community groups or individuals as citizens of a country. Especially in a nation there are variations in the socioeconomic and

cultural life of the community groups, which incidentally has a different interpretation of well-being. Similarly individually meaning prosperity and quality of life is very varied, depending on the perception of each in accordance with the level of socioeconomic status, outlook on life, faith or belief and the influence of social environment. Someone who is rich, can find no peace, while the simple life, felt his life was prosperous. Thus at the micro level, meaning well-being is subjective, depending on the perception of each individual and also a community of people who have similar attitudes and behavior in the culture and activities of daily living (Easterlin in ;CESifo DICE Report 8 (4), 2010).

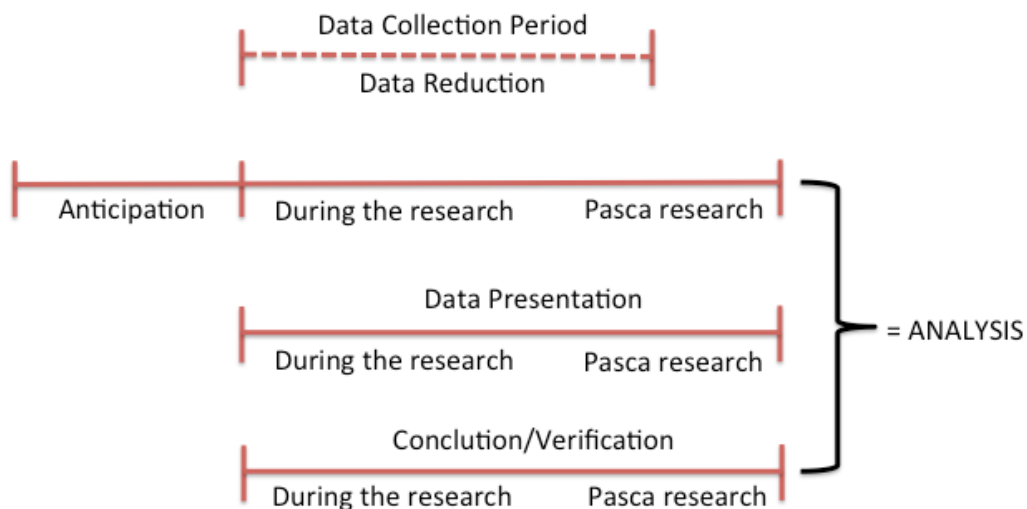
With regard to the conception of subjective well-being, attractive to do in-depth study of the meaning of well-being in communities that have economic activity, outlook on life, culture and beliefs is relatively the same, namely community groups seaweed farmers who live in the coastal area of the village Kertasasi West Sumbawa Regency, one of the six districts in West Nusa Tenggara province of Indonesia. Event managing seaweed cultivation involves almost all the villagers, and a major source of their economic livelihood. The whole village is also a Bugis Tribe with a view of life and the same culture and the same religious beliefs, Islam. However in terms of socio-economic strata, they are divided into several segments based on social roles and level of wealth as measured from the ownership of the area for cultivating seaweed and determine the level of income. In equality and social segmentation, allegedly seaweed farmers have differences in meaning of well-being and ultimately will affect them in managing the business and household finances. This research aims to examine in depth the variation of subjectivity in interpretation welfare and how it affects the strategy and business and financial management processes seaweed farmers Kertasasi coastal areas of West Sumbawa Regency Village.

## **2. Research Methods**

Referring to the objectives, the study was designed with a qualitative approach. Implicit in the purpose of this study to find new propositions that have not been previously disclosed, this research can be categorized as grounded research. Subjects were seaweed farmers in the village Kertasasi West Sumbawa Regency, both land and sea the other parties involved and making a living in the cultivation of seaweed, such as sharks and collecting the remains of fracture seaweed that is not taken care of by their owners (these activities called "ngomok"). Overall number of residents in the village of 2,024 people or 632 households. Of the households, more than 90% make a living from farming seaweed. Through the snowball sampling technique successfully determined farmers as respondents (key informants) in this study, as many as 58 people and mostly women as housewives, for almost the entire activity of seaweed farming and business management as well as household finances carried out by them, including community leaders (elders and village officials) and an activist of Social Institutions (NGOs) or Non Government Organization (NGO) who settled in the village of Kertasari.

The data collection is predominantly carried out through in-depth interview techniques (in-depth interviews) and observation. Interviews were conducted individually and collectively in the social activities undertaken by the respondent. While the observation is made when they make seaweed farming activities and when they do manage household routines. To the researchers to stay in the village where the research for almost two months, in a separate

timeframe. In general, the activities undertaken to manage and analyze the study data include: (1) Preparing and organizing the data in the event data collected in the form of notes on interviews and observations, recording sound and images as well as photos, prepared, organized, and organized; (2) Reviewing and exploring the data on these activities, assisted by NGO activist who also became one of the key informants and penjelesan study made on the data that has been organized; (3) Coding of data into categories, then do the coding on the data collected, based on the specification of data sources, the location and date of data collection, as well as research variables (meaning welfare, business management and financial management); (4) Constructing descriptions of important concepts, in these activities do the arrangement and identification of linkages concepts relevant to the substance of the research that is the meaning of well-being, business management and financial management. Including start drafted provisional hypotheses related to variations in the meaning of well-being and its impact on business and financial management of the household; (5) Building themes and testing hypotheses, the next to do the preparation of the themes to be used to test the hypothesis that has been developed in the previous step; and (6) Reporting and interpreting the data, the recent activities carried out preparation of reports and discussion. Although in general the activity sequence data analysis as set forth above, basically such measures do not linearly. Based on this, it can be described with a chart analysis of research data flow model of Miles and Huberman, 2007), as follows:



### 3. Research Result

From the analysis of the data according to the research methods applied in this study, presented the findings of the study as described below.

#### 3.1 Description Location and Research Subjects

Village Kertasari District of Taliwang West Sumbawa regency consists of 4 (four) Hamlet, namely: Hamlet Kertasari, Padak New, Labuhan Kertasari and Hamlet Bone Puteh, where all four (4) Hamlet is have the condition and potential of natural resources and human resources relatively the same. While the area of the village of the District Kertasari Taliwang West Sumbawa Regency, totaling 4,565 hectares. The main commodity and farming in general pattern in the village Kertasari are: Corn area of 600 ha, ponds 15 ha, and Seaweed with a yield

of 360 tons / year. It is also cultivated crops coconut and cashew. For cultivated farm Cow, Buffalo, Goat Horses, sheep, chicken, ducks, and wild duck. Of the adult population of 814 people by 91% activity as seaweed farmers.

In this study, respondents were used as research subjects were 58 people. One person village chief, four village head, two community leaders, the members of House of Representatives and the son of the inventor of the village Kertasari, as well as an NGO activist. Thus the target respondents Seaweed Farmers research that as many as 50 people. Of the 50 people Seaweed Farmers, can be divided into four strata, first, large middlemen as much as two people, and as many as six feet middleman. Middlemen are not doing seaweed farming activities, while the foot middlemen landless sea for seaweed cultivation and employ others, because his land was spacious and Tali Ris (moorings seaweed and generally in length from 12 to meters) in number of the more than 2,000 Ris rope, and earned income of approximately USD 30 million, - for each harvest for a period of 40 to 45 days. Second, farmers with Tali Ris number between 800 to less than 2,000, with each harvest income for a period of 40 to 45 days at 18 to 25 million. Third, farmers who possess Ris rope between 500 to less than 800, with the amount of revenue every time the harvest of 9 to 15 million rupiah. Fourth, farmers who do not have land and act as laborers or fracture seaweed gatherers (ngomok) and Farmers with Tali Ris 200 or less, with each harvest income of not less than Rp 6.000.000, -.

In general though their income can be said to be high, especially for the first and second respondents strata, but they tend to have a simple life patterns, with the consumption level is not high. It is seen from the general condition of the houses in Kertasari mostly wooden stilts with simple conditions. Similarly, for clothing, can be said to be too simple. Fancy clothes and custom clothes they wear only occasionally at times when there are events. For food consumption, as well as the fulfillment of other requirements, also filled with taste, with dominant menu made from fish and vegetable crop itself. From the observation also proved to rare their own food outlets. With such a pattern of life, they should able to save or invest, the fact that no bank operating in Kertasari village, and only a village cooperative. In addition to the expenses incidental large enough, for example, organizing weddings or circumcise their children, in general, seaweed farmers, filling it with borrowed to a large wholesaler. As for the three and four strata farmers they are often in debt to middlemen to finance agricultural activities, such as buying inputs and seedlings seaweed. Even some of them, because of compelling need, to borrow money to middlemen and paid later after their harvest.

Nevertheless most of them have a high appreciation of his children's education, so most of their children to continue their studies at various universities in the provincial capital, the city of Mataram. The impetus for the achievement of high level of education of children, caused more by a desire to gain pride in the surrounding community. Encouragement also makes them tend to fulfill every wish child currently studying outside the area. In other words, they tend to be not as an expense for the education of children. With this trend, farmers in the village allegedly Kertasari West Sumbawa spent much of the income they earn from farming of seaweed.

### *3.2 Meaning of Welfare and Its Effect on Business Management and Finance*

From the deepening of the meaning of the welfare of the seaweed farmers are the subject of research and additional information obtained from key informants other than farmers, namely the head of the village, the village head, community leaders, and NGO activists, found things

as follows.

1. In general, the seaweed farmers in the village of West Sumbawa Kertasari prosperous interpret life is "Conditions of life in peace, in harmony with others, and fulfilled the basic needs of the economy (not hungry because food is available, not freezing because the clothes available, and no rain for the home shelter available), and children can take a higher education than their parents to achieve better life."
2. There are variations in the meaning of well-being based on the socio-economic strata of society seaweed farming village Kertasari based on the West Sumbawa Regency, social life, personal activity, economic life, health, education, and environmental conditions.
  - For social life, groups of socio-economic strata of the first and second, that the welfare meaningful as the pride and feeling needed by the farmers they assist seaweed marketing. As for the third and fourth prosperous strata remain subdued meaningful relationships with fellow farmers, and subdued confidence and legs middleman middleman as a determinant of the price and the smooth sale of seaweed, as well as a meet the credit needs when there is an urgent need and the money is not available.
  - For personal activity, socioeconomic strata first group and the second considers that the availability of free time during the harvest waiting period provides an opportunity for recreational berkegiatan outside the village, and that their welfare. As for the third socio-economic groups feel prosperous with routine activities in the management of seaweed cultivation. For the fourth socio-economic strata, enjoy the waiting period harvests with other activities, such as weaving, farming and living activities in the home, give pleasure and welfare.
  - For economic life, for socio-economic strata first and second feel prosperous if you have new goods such as vehicles, mobile phones, televisions and other electronic equipment, so it was no lag in following the progress of technology. For the third and fourth strata, Primary basic needs or provide a sense of ease and prosperity.
  - For health, basically do not differ significantly, seaweed farmers in the various strata feel prosperous if they do not have health problems. In common with the activity of farming activities and other activities, seaweed farmers in the village Kertasari have a good physical fitness.
  - Education of children, for the strata one and two felt prosperous when it can send children in higher education, with the hope of someday her son can work outside the village and success. Although many found their children after graduation returned to the village and help businesses parents. For strata three children's education problems is also important and foster a sense of well-being, and there is great hope her success in education and work to improve the welfare of older people. For the fourth strata, the obsession to reach the children's education to higher education much less, due to their education level and availability of funds to support them.
  - For environmental conditions, in principle no different meanings of the four socioeconomic strata. they feel at ease, especially strata two and three when a little choppy seas for the benefit of the growth of seaweed, and coastal protected from pollution that can damage the sea grass. For environmental cleanliness land around the settlement, with good looks less attention. Moreover, the majority of homes is the home stage and

the lower part of the house usually used for raising livestock.

3. Meaning influence on the welfare of the business and financial management. In principle, seaweed farming is a business that does not require a complicated and difficult management. Seaweed farming has been done with the routine and habits remain stagnant over time. Experience after experience gives them a seaweed cultivation management techniques According to him either. Innovation to conduct business efficiency and increased productivity can be said to be almost non-existent. The dynamics of business management is underway in the affairs of marketing and seaweed processing into refined products that provide added value. In fact even this problem seaweed farmers are also not challenged to find new patterns in the management of its business. Therefore marketing very dependent on middlemen and brokers depend also on wholesalers and exporters. The price fluctuation is accepted as a natural condition and seaweed farmers have no bargaining power. When the price goes up, grateful for the blessings, if the price drops accepted willingly. Meanwhile, the effort to cultivate seaweed be processed into a variety of products, constrained by marketing. Training provided by various parties, including local governments, and farmers have the ability to cultivate seaweed, but stalled because of the problem of marketing their products.

Associated with the meaning of well-being, because the farming community feel that their lives are relatively prosperous, then the meaning of well-being against the influence of business management basically just proved to take place in the farming community strata one and two. In this stratum welfare interpreted dynamically, in a sense always appears awareness to improve the prosperity and quality of life. For those reasons, they are concerned with the increased productivity of seaweed farmers. One proof of that is evident and they help provide seedlings, and provide the means of production in the form of poles, rope and ice plastic binder ris seaweed on the ropes. In addition they are also actively follow the development of the price of seaweed and build a network with wholesalers and exporters. Maintain the good name and the trust of farmer's seaweed is very urgent for the business of seaweed farmers strata one and two.

For the management of household finances, meaning the effect on the welfare of farmers in the proven place on all levels. Despite this different effect. At farmer strata one and two visible influence on the management to maintain the availability of cash to meet the needs of farmer's strata three and four, which are often unpredictable and cannot be planned. It is important to maintain the confidence of farmers and provide financial benefits and social. Other than that meaning the welfare of the aspects of a child's education, also affect household financial management, to prepare funds to finance the education of children with all their needs. As mentioned earlier, they tend to seek to meet the desires and demands of children who are studying higher education.

For farmers in the third and fourth strata, the effect on the welfare of the meaning of financial management as evidenced by their simplicity in managing household finances, with no planning, regularly recording and distribution of the expenditure items. This happens because they think for a middleman along the foot of middlemen still believe, any expenditure needs that require quite a lot, can be borrowed from them. Meaning of prosperity from the economic aspect that can be said is simple to make them less good and careful in



managing finances. Efforts to save rare they do, because to buy goods or meet needs beyond their reach, they can borrow it from a wholesaler or middleman feet.

#### **4. Discussion**

This study managed to find the meaning of well-being that are subjective in seaweed farmers in the village of West Sumbawa Regency Kertasari. Such different meanings in addition to the various indicators of well-being developed by experts to measure the level of prosperity of a nation, it is also proved that the measurement of well-being in macro index does not necessarily apply to all citizens of the nation. Given in a nation, there are groups and subgroups that have social and economic life, way of life, culture, traditions and beliefs varied. Proven in this study that the social and economic life, way of life, culture, traditions and beliefs foster meaning of the conception of welfare is subjective. Also found in this study that in a community with a view of life, culture, traditions and beliefs, there was a segment that forms the strata based on their socio-economic conditions. In each stratum they have a different interpretation about the welfare and varied. The difference is based on aspects of social life, personal activity, economic life, health, education, and environmental conditions. At a high socio-economic strata, meaning well-being based on various aspects, proved to be more complex and diverse. It is considered reasonable given their needs and desires are also more complex, as well as their roles and responsibilities in the social interaction is also greater. In contrast to the socio-economic strata of lower and lower, meaning they are on welfare simply, this is in line with the demands of their needs and desires in social and economic life is also simple.

In this study also found the influence of meaning for the welfare of the business and financial management of the household. Such influence is mainly taking place in the seaweed farming communities with higher socioeconomic strata and medium enterprises. This happens because the management of the business areas to feel and experience the high dynamics are middlemen and brokers foot with sea land for cultivation of seaweed are vast, categorized stratified high and middle socioeconomic. Similarly, family financial management, meaning the well-being effect on family financial management in a group of farmers with high and middle strata. Meanwhile, for farmers with lower socioeconomic strata, the landowners were not spacious and the workers as well as collecting the remains of fracture seaweed, can be said to be stagnant business management and are highly dependent on natural conditions. In these groups, meaning the welfare of the less influence on business and financial management of the household.

#### **5. Conclusions and Recommendations**

From the research findings may be disclosed conclusion in this study, that the meaning of well-being are subjective in community groups, even varies on the subgroups that level based socioeconomic life. In the subgroup of high socioeconomic strata and secondary schools, meaning they are on welfare is more complex than in the lower strata. Moreover, it can be concluded that the effect of meaning for the welfare of the business and financial management seaweed farming families Kertasari village of West Sumbawa, only lasted in those with higher socioeconomic strata and medium enterprises. no effect on middle and low social strata because basically the management of their businesses are stagnant and less dynamic, as well as their household financial management is also simple, in accordance with their needs and desires simplicity.

Based on these conclusions can be delivered advice to other researchers to conduct a study on the meaning of well-being in groups of other communities that have the characteristics traditions and unique culture. For policy makers, need to be encouraged empowerment seaweed farmers, to improve their welfare and to change the mindset, so they are encouraged to develop their business and at the same life.

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# Marketing as A Government Program Priority in Optimizing Local's Superior Product | Case Study: Shell Craft Business, Tanjungbalai

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## Abstract

This Study aims to analyze the urgency needs of SMEs in Tanjungbalai to improve their turnover. The main objective of this study was to empirically analyze the best support program that should be made and used by Tanjung Balai Government to make this SMEs more profitable. Timothy (1995) said that SMEs who get help from the government will be bigger, more profitable, and less likely to go bankrupt. This study attempts give the best kind of support reference to Tanjungbalai Government that used to develop their SMEs by analyze all the phenomenon that happened. This research focuses on analyzing needs of craftsmen that their need from government with a qualitative approach. This needs will be guidance for government's priority support program. This research using triangulation techniques by comparing data founded from the process of asking and observing. The craftsmen have some of different problem. That all leads to a main problem, that is marketing. Government have a duty to support the crafsmen of their superior product. By paying more attention to the situation, priotizing needs, and making good decisions that are applied to the support program will make this SMEs more profitable. The results showed that making a marketing support program is urgency needs for the craftmen. This study implies the need for academics and policies to involved in discussions to create the best R & D program.

**Keywords:** Business, Government Support, Marketing, SMEs.

## 1. Introduction

The low of sales turnover is a main problem for the shell crafting business of seashell in Tanjung Balai. This problem automatically causes low revenue of the craftsmen. This fact founded from observation process that done by researchers. Logically this fact should be make this problem as a important to discuses and resolved.

This business is one of SMEs that produced superior product of this city. Problem above can be more important to discussed because of Indonesia's law statement (No.20 of 2008) that said superior product business must be main economic sources for regional and its citizen. Further, government has a responsibility and should guaranty sustainability of this business.

Government of this city has given some supports to SMEs of this business. But the fact, the

problem above is still existed and not be solved. It indicates that something wrong in government supports. Maybe the supports is not compatible with craftsmen needs, or the programs that given is not evaluated. This opinion is possible according Eisinger's statement (on Timothy 1995), he said that SMEs development programs was not evaluated in any systematic by governmental units.

There were many kinds of supports could be used that found from literature. For example is financial support. Kye (2006) said that most of the last decade witnessed the provision of financial services for SMEs. Factually, financial support has been given and the problem not be solved. It indicates that financial is not as main problem. This was also supported by Gulli & Berger's state,emt (1999), they said that finance alone does not automatically lead to the desired development effect of promoting entrepreneurs.

SMEs development is not only the steps and responsibilities taken by the government (Feni et al., 2013). Nevertheless, there must be something wrong in the government program. Good and appropriate support by government is needed to improve sales turnover of this SMEs. Sometimes the government not knows what must they do. Need an empirical study to analyze and give reference to them. Factually, until before this study, no one had tried to do. So, this study is the first one on this case. We are aware of this, therefore this research tries to find out what problems exist in this UKM? What is needed? Was the support program provided so far appropriate? And others.

As a basic research before planning a R&D program, this time we try to find a main problem and needs from this SMEs. We hope this study can give a reference for government to create a good support program. The conclusion is, this research provides advice on which aspects of the government should focus. Whether on aspects of training, finance, innovation, marketing, or others. The potential next research is create R&D based on aspect that advised.

## **2. Method**

This study uses qualitative approach that shows the urgent aspect of superior SMEs that needs government support. The strategy used was embedded case study strategic. The data analysis technique used Miles and Huberman's (2014) stages, there are: 1) Data Collection; 2) Data Reduction; 3) Presentation of Data; 4) Conclusions. This study used triangulation technique to validating the datas, that is source triangulation, methodological triangulation and time triangulation. Wiersma (1986) said "*Triangulation is qualitative cross-validation. It assesses the sufficiency of the data according to the convergence of multiple data source or multiple data collection procedures*".

Data collection was done by using interviews, questionere and observation. This study subjects are craftsmen and government official. Responden of this study collected used purposive sampling methods. There were 60 craftsmen who were given open questionnaire to find our their main problem and needs.

## **3. The main Problem of Shell Craftsmen**

The main problem of shell craftsmen is investigated by questionnaire, interview and field observation. After the data obtained is enough, then do the data grouping then draw conclusions. Based on the data analysis process, there are some problems faced by the craftsmen. Some of

these problems lead to one of the most important problems, namely low sales turnover resulting in low income of the craftsmen.

The main problem is confirmed through the observations made. Observation results show that in this city does not see the existence of products produced by the craftsmen in some shopping centers. Production agitation looks quiet and only order. Craftsmen are afraid to mass produce due to low demand.

The local government represented by the official of the Tanjungbalai City Industrial Service also mentioned the same thing. As a regional superior product, shell craft products have not been able to become a source of local revenue. This is of course caused by the sale of handicraft products that are still small scale that has not been able to provide good economic value for local treasury.

#### **4. The Main Factor Cause The Low Sales Turnover of The Craftsmen**

The main factor of low sales turnover are marketing and market share aspects. This factors examined through two perspectives that is from the side of the government and craftsmen. Triangulation of data obtained by both parties is done in order to obtain valid results.

The craftsmen do not have a good market share. This is shown by the fact that they do not know how to promote their products. The absence of a sales center for their products and order production systems also confirmed that the marketing aspect is the main factor. Ernani (2011) said that innovation is very important in the development of UMKM. The results of interviews obtained from the government, innovation of the product is a factor causing low sales turnover of the craftsmen. However, these results are refuted based on the triangulation process with the findings of the researchers.

Researcher see and found that the types of products produced vary widely. The function of the resulting product also varies. Not only as an accessory, some products can also be used in everyday activities such as tissue box, tepak, lamp, and others. This fact has been able to argue that product innovation is not the main cause of the problem.

Raw materials are also be an aspect of attention. Leonardus & Lyndon (2017) have said that resources have a contribution to the competitiveness of SMEs. Based on this theory can be concluded that the availability of rare raw materials will inhibit the production and competitiveness of shell craftsmen. But again this aspect is denied by the data obtained through interviews and observations of researchers. The town of Tanjungbalai is a clam-producing city. Craft competitor business is also not found in Tanjungbalai City. This means that craftsmen are very easy to get raw materials of shell. They also have no competitors, so they should be able to master the market for the type of product produced.

#### **5. The Government programs support that have been given**

At the beginning of the discussion, researchers has emphasized that the focus of research is to find the most priority aspect for government to make their superior SMEs support program. The researcher focused on three aspects: the training assistance program (skill), the capital assistance program, and the marketing assistance program. In addition, the researcher also focuses on the responses of craftsmen to the government working system related to shell craft business. The process of analysis is done by triangulation of data obtained from the government

and the craftsmen.

The Government of Tanjungbalai City has provided skill training assistance for the craftsmen. This assistance is done by providing a coaching class on craft processing techniques made from raw shell. The craftsmen are taught how to make some products. This training is often provided by the government. This fact proves that the skill possessed by craftsmen is not a factor causing low sales turnover. It is also confirmed based on observations made. The craftsmen look shrewd in making their products. Tidiness is also noticed. The products produced have good tidiness. In the absence of glue that spills on the product, good packaging, and good results is enough to prove that the products produced by craftsmen are neat.

The Municipal Government has provided capital assistance to the craftsmen through its working groups. It also argues that business capital is not a factor in the low turnover of craftsmen's sales. Based on the observation, capital assistance is provided through the community empowerment department, social service, industry service, cooperative service. This type of assistance is a grant and a rotating loan.

## **6. The Craftsmen Needs from Government**

This study found that marketing support as main support for the craftsmen. This fact confirmed by data analyzed. Most of them need that support from government. These needs confirm the main problem found. This argument is supported by Zhou & Zhang (2014) findings. They said *"The reason of low revenue is the inconsistency between the marketing benefited party and the responsibility party"*.

The need for marketing support is assured by the lack of a government role in this aspect. In contrast to the previous two aspects, the results of the study indicate that the government has not provided marketing assistance programs either to buy the products or to market the products of the craftsmen. All the craftsmen who responded provided answers that supported the fact. Not only that, the city government also claimed to have not provided marketing assistance for products that become the regional superior. This confirms the cause of the problems that have found.

Tanjungbalai City Government does not have a unit of sales of local products that are able to accommodate the superior products of craftsmen in this city. The regional industrial service confirmed this. Assistance that provided is still limited to training and capital. As for marketing, craftsmen are still left independent by the government.

The craftsmen's response to government grants led to the lack of integration between divisions within the government in drafting its work program. They said that the training and capital assistance provided came from several units of the regional apparatus unit (SKPD). They also say that the assistance provided is monotonous and does not match the needs they need. Like the response of a craftsman, "we continue to be given training and capital, but we are not helped to sell our goods".

The same work program of several SKPDs indicates no integrity between SKPD. A craftsman says, "I am always given training. Should the empowerment service provide training, the cooperative service will then provide the capital, the social services provide another. Last industry service accommodate our products ". They also said that the government through its SKPD does not cooperate in making programs that are marked with the assistance given remains the

same regardless of the needs of the craftsmen.

The absence of integration between SKPD in making the work program especially for the development of superior product of Tanjungbalai city area is confirmed through interviews with some related government officials. The results of the analysis show that each SKPD works independently in preparing its work program. Not only between SKPD, integration to the craftsmen also did not exist. The statement that the government created a work program that does not meet the needs of the community can be validated through the results of this interview. The craftsmen do not need training aid and need little capital help. All they need is marketing assistance for the resulting product. They want the government to create a sales unit that can accommodate the products produced. They think that with the sales units of government-run products, the products they produce will be closer to the consumers and find their market share. If it is so, then they can mass produce and no longer an order production.

### **7. Government Priority Support Program**

This study found that marketing is an urgency aspect of craftsmen. This urgency as priority for government to make their support program. Ronnas (1992) said that promotion of SMEs has been a central tenet in policy statements in Vietnam. European Government support their SMEs by increasing market entry and innovation (Bennett, 2008).

The final part of the discussion is how should the government develop work programs to develop shell craft business in Tanjungbalai City. The results of the analysis show that the government must cooperate among its divisions. Work programs are arranged based on the needs of the craftsmen. Craftsmen currently require government assistance on the marketing aspect. In other words, the craftsmen need an integrated program of assistance both within the government and between the government and the craftsmen.

### **8. Conclusion**

The main problem of craftsmen is the low sales turnover due to lack of marketing aspect and does not have a large market share. The assistance from the Local Government of Tanjungbalai City is very necessary in the development of this SMEs. Marketing support should be government priority program. However, government support should be complete, from training, capital, managerial, and product marketing. Regional working units should also have integrated work programs with each other so that the assistance provided can be more effective and efficient. It is necessary to build a Shelter Unit and Sales of People's Business Products (UP3UR) as a marketing and sales facility of products produced by SMEs especially shell craft business.

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# The Effect of Company's Growth, Leverage Ratio, Cash Flow Ratio, and Debt Default on The Going Concern Audit Opinion

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## Abstract

This study aimed to analyze the effect of Company's Growth, Leverage Ratio, Cash Flow Ratio, and Debt Default on the Going Concern Audit Opinion. This study was a causal research. The population of this research was manufacturing companies listed on Indonesia Stock Exchange period 2012-2016. The sample was selected by using purposive sampling method. 22 Companies were defined based on criteria, such as listed on IDX period 2012-2016, not delisting from IDX, published the audited financial statements, minimum had a negative net profit after tax for three years and had complete information of financial reporting. The data used are secondary data and data analysis techniques using descriptive statistics and logistic regression. The result of this study showed that Company's Growth, Leverage Ratio, Cash Flow Ratio, and Debt Default affect on the Going Concern Audit Opinion. It is prove by Chi-Square=89.435,  $df=4$ , and the significance=0.000. The regression equation  $Y = -5.831 + 0.188X_1 + 4.130X_2 - 0.790X_3 + 3.869X_4$ . The regression coefficients of Leverage Ratio and Debt Default are correlated significantly (Leverage Ratio=0.002, Debt Default=0.000), while Company's Growth and Debt Default are not significantly correlated (Company's Growth=0.687, Cash Flow Ratio=0.345). It means Leverage Ratio and Debt Default affect the Going Concern Audit Opinion, while Company's Growth and Cash Flow Ratio does not affect the Going Concern Audit Opinion.

**Keywords:** Going Concern Audit Opinion, Company's Growth, Leverage Ratio, Cash Flow Ratio, Debt Default

## 1. Introduction

The Indonesian manufacturing industry contributes to nearly one-quarter of Indonesia Gross Domestic Product ([www.kemenperin.go.id](http://www.kemenperin.go.id)). It makes the manufacturing industry as an engine of economic growth in Indonesia. Although the manufacturing industry's growth was great, it has not been able to ensure business continuity manufacturing company in the future. Therefore, investors should consider it, before making a decision on investment.

SA 570 (2015) confirms that the going concern of the entity must maintain at least twelve months after the balance sheet date. When the company received going concern audit opinion, it indicates there are doubts about the sustainability of their business for the next twelve months. Only companies that indicate have doubts about remaining the continuity of business got it. It means to signal users that the company is in financial distress and may not survive (Nogler, 2006: 47). In 2012 to 2016 showed the manufacturing company that receiving going concern audit opinion is 8 to 9 companies every year. Although those companies do not reach 10% of

the total 144 manufacturing companies, however, it indicates there are companies still have doubted its business sustainability.

Companies that are not able to maintain the continuity of business will become a bad company. For example, in 2014 PT. Asia Natural Resources Tbk. was delisting from Indonesia Stock Exchange because they do not have business continuity. PT. Asia Natural Resources Tbk. suffered losses of Rp357.33 billion in June 2014. Also, PT. Davomas Abadi Tbk. experienced the same thing in 2015. Since Davomas defaulted on bonds with the total amount US \$238 million in 2009, the value of company's investment continued to decrease. Related to this case, Indonesia Stock Exchange did stock removal process of the two companies because they did not have business continuity in the future.

The financial condition of the company can represent the company's ability to survive in a certain period (Pradika, 2017: 3). Companies that have positive's financial growth from year to year will able to continue their business in the future. If the company has negative growth, it indicates the operation is not great and doubted to continue the business in the future. In general, companies that have the rapid growth will obtain and lead the competition, get the benefit from the increased sales and market significantly (Kusumajaya, 2011: 22).

The financial ratios can show the financial condition of the company. One of the financial ratios is leverage ratio. This ratio describes the ratio between total debts to total assets of the company. If the total debt is more than the total assets, it will lead to a deficiency of equity (negative equity). Companies that have negative equity feared to be in danger of bankruptcy and unable to sustain its business. Companies with a highly mechanized manufacturing process should fund its machines with equity rather than debt to moderate total leverage. (Palmer & Sanders, 2008: 26).

In Pernyataan Standar Akuntansi Keuangan (PSAK, 2009) No. 2 stated that the information about a company's cash flow is useful to users of financial statements as an adequate basis for assessing the company's ability to generate cash and cash equivalents and assess the needs of the company to use the cash flow. This ratio compares the total cash operating activities to total current liabilities of the company. If the cash flow generated higher during the year, it more likely the company could pay its current debt, so the company's ability to sustain life is also getting bigger.

The failure of the company in fulfilling its debt obligation after the due date (debt default) will also threaten the company's ability to sustain its business in the future. Researches by Chen & Chruch (1992) and Mutchler et al. (1997) found evidence of going concern audit opinion decision before the bankruptcy significantly correlated with the probability of bankruptcy as the default. Praptitorini & Januarti (2011) found a strong correlation between default status and going concern audit opinion.

Based on the above description, the conclusion that the factors affecting the going concern audit opinion on a company are still an interesting discussion to be analyzed further. Therefore, the authors are motivated to do further research on "The Effects of Company's Growth, Leverage Ratio, Cash Flow Ratio, and Debt Default on the Going Concern Audit Opinion."

## **2. Research Method**

### *2.1 Research Design*

Based on the variables, this study is included in the causal research, where there are independent

variables and dependent variables. Based on the type of data and analysis used, this research is included in the quantitative research, because this research uses many numbers, including in the process of data collection, data interpretation, and presentation of research results. This research is conducted by taking the secondary data available on the internet. The official site is used as a place for data collection, such as the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) and the official website of the company used as the research sample. This research was conducted in December 2017 until February 2018.

### 2.2 Population and Sample of Research

The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange period 2012-2016. A purposive sampling method was used as a sampling method and 22 companies were selected as sample of research. The criteria of purposive sampling method are:

- 1) The manufacturing companies listed on the IDX period 2012-2016.
- 2) The manufacturing company was not delisting from the IDX during period 2012-2016.
- 3) The manufacturing companies publish financial statements that audited by an independent auditor during period 2012-2016.
- 4) The manufacturing companies who have the negative net profit after tax at least in three years in a row during period 2012-2016.
- 5) The sample of company's financial statements contains all the information required for this study.

### 2.3 Operational Variable Definition

#### 2.3.1 Going Concern Audit Opinion

Going concern audit opinion is the opinion issued by the auditor to evaluate whether there are doubts about the company's ability to sustain their life (IAI, 2001: SA Section 341). Measurement of going concern audit opinion variable is using dummy variable. Code 1 for companies that accept going concern audit opinion, while 0 for companies that receiving non-going concern audit opinion.

#### 2.3.2 Company's Growth

The proxy of company's growth in this study is the ratio of sales growth. Sales growth ratio measures how good the company will maintain its economic position, both in the industry and in the overall economic activity (Weston & Copeland, 1992). The formula for calculating sales growth as follows (Kasmir, 2012: 107).

$$\text{Company's Growth} = \frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}}$$

#### 2.3.3 Leverage Ratio

Leverage ratio shows the proportion of the use of debt to finance investment (Sartono, 2010: 120). This ratio is measured using Debt to Assets Ratio. The formula for calculating Debt to Assets Ratio (DAR) is as follows (Kasmir, 2012: 155).

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100\%$$

#### 2.3.4 Cash Flow Ratio

The purpose of the cash flow statement is to provide relevant information about the cash inflow and payment of a company during a period (Keiso et al., 2008: 212). The formula to measure

Cash Flow Ratio is as follows (Darsono&Ashari, 2005: 91).

$$\text{Cash Flow} = \frac{\text{Total Operational Cash Flow}}{\text{Total Current Liabilities}} \times 100\%$$

### 2.3.5 Debt Default

Debt default is as negligence or the company's failure to pay principal or interest on the debt at maturity (Chen & Church 1992). The formula to measure Debt Default is using dummy variable. Code 1 if debt default, code 0 if no debt default.

### 2.3.6 Data Collection and Data Analysis

The data used in this research is secondary data. This secondary data is obtained from several sources, such as the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) and the official website of the company used as the research sample. The data analysis techniques were descriptive statistical analysis, multicollinearity test, hosmer and lemeshow's goodness of fit test, overall model fit test, nagelkerke r square, classification table, and logistic regression analysis.

## 3. Research Results and Discussion

### 3.1 Descriptive Statistical Analysis

#### 3.1.1 Going Concern Audit Opinion

Based on the result of descriptive analysis it shows the minimum value of Going Concern Audit Opinion is 0 and the maximum value is 1. The mean value of this variable is 0.30 and the standard deviation is 0.46.

Table 1. The Result of Descriptive Statistic

Var.	N	Min.	Max.	Mean	Std. Deviation
GCAO	110	0	1	0.38	0.488
CG	110	-0.734	5.947	0.111072	0.681516
DAR	110	0.039	5.056	0.91169	0.879556
CF	110	-2.037	1.155	0.26099	0.352025
DEF	110	0	1	0.44	0.498

Data of Going Concern Audit Opinion shows that there are 42 samples (38.2%) receive going concern audit opinion from auditor, 68 samples (61.8%) receive non going concern audit opinion. Therefore, the conclusion is the company that receiving going concern audit opinion in the manufacturing companies listed in Indonesia Stock Exchange period 2012-2016 are fewer than company that receiving non going concern audit opinion. This results can be looked at the diagram below.

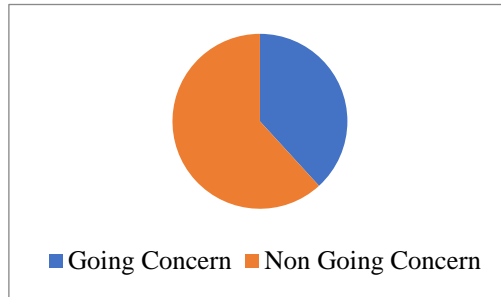


Figure 1. Diagram of Going Concern Audit Opinion Distribution

### 3.1.2 Company's Growth

Based on the results of the descriptive analysis, the minimum value of the company's growth is -0.734 and the maximum value is 5.947. It shows that the sample of company's growth rate in this study ranged from -0.734 until 5.947. The company that gets the minimum value and the maximum value is Kertas Basuki Rachmat Indonesia Tbk in 2013 and 2015. The mean value is 0.111072 and the standard deviation is 0.681516.

### 3.1.3 Leverage Ratio

The leverage ratio has a minimum value 0.039 and maximum value 5.056. It shows that the leverage ratio in the sample of this study ranges from 0.039 until 5.056. The companies that get the minimum value is Kertas Basuki Rachmat Indonesia Tbk in 2012, the maximum value is Asia Pacific Fibers Tbk in 2016. The mean value of this variable is 0.91169 and the standard deviation is 0.879556.

### 3.1.4 Cash Flow Ratio

Based on the results of the descriptive analysis, the cash flow ratio has minimum value -2.037 and the maximum value is 1.155. It shows that the cash flow ratio in the sample of this study ranged from -2.037 until 1.155. The companies that get the minimum value is Bentoel International Investama Tbk in 2012, the maximum value is Tifico Fiber Globalindo Tbk in 2015. The mean value of this variable is 0.26099 and the standard deviation is 0.352025.

### 3.1.5 Deb Default

Based on the results of the descriptive analysis it can be seen that the minimum debt default value is 0 and the maximum value is 1. The mean value of this variable is 0.44 and the standard deviation is 0.498.

Based on the distribution table of debt default with the total 110 observation research, 48 of them experienced debt default or 43.6% from total observation research, while the other 62 (56.4%) observation research experienced no debt default.

Table 6. The Distribution Table of Debt Default

	Freq.	%	Valid %	Cumulative %
Valid NODEF	62	56.4	56.4	56.4
DEF	48	43.6	43.6	100.0
Total	110	100.0	100.0	

#### 4. The Results of Data Analysis

##### Multicollinearity Test

Based on multicollinearity test, it shows that the tolerance value of all independent variables is greater than 0.10 and the VIF value is less than 10, so it can be concluded that the regression model that used in this study does not have multicollinearity.

Table 7. The Result of Multicollinearity Test

Var.	Collinearity Statistics	
	Tolerance	VIF
CG	0.940	1.063
DAR	0.894	1.119
CF	0.936	1.068
DEF	0.877	1.140

##### Hosmer and Lemeshows's Goodness of Fit Test

The statistical value of Hosmer and Lemeshow's Goodness of Fit Test is 7.263 with probability 0.509. In addition, the probability 0.509 whose value is greater than 0.05 indicates that the model is able to predict the observed value in the research.

Table 8. The Result of Hosmer and Lemeshow's Goodness of Fit Test

Step	Chi-square	Df	Sig
1	7.263	8	0.509

##### Overall Model Fit Test

Based on this test, the conclusion is that the second regression model is better, because there is a decrease in value from the first block to the second block.

Table 9. The Result of Overall Model Fit Test 1

Iteration		-2 Log Likelihood	Coefficients			
			Constant	CG	DAR	CF
Step 0	1	146.291	-0.473			
	2	146.288	-0.482			
	3	146.288	-0.482			

Table 10. The Result of Overall Model Fit Test 2

Iteration		-2 LL	Coefficients				
			Constant	CG	DAR	CF	DEF
Step1	1	76.478	-2.2	0.2	0.7	-0.1	2.3
	2	62.775	-3.5	0.2	1.7	-0.3	3.1
	3	58.267	-4.7	0.2	2.7	-0.6	3.6

4	56.982	-5.5	0.2	3.7	-0.8	3.8
5	56.854	-5.8	0.2	4.1	-0.8	3.9
6	56.853	-5.8	0.2	4.1	-0.8	3.9
7	56.853	-5.8	0.2	4.1	-0.8	3.9

### Nagelkerke R Square

Based on the result of the tests, the value of Nagelkerke R square is 0.757, which means variability of the dependent variable that can be explained by independent variable as company growth, leverage ratio, cash flow ratio, and debt default is 75.7 percent.

Table 11. The Result of Nagelkerke R Square Test

Step	-2 Log Likelihood	Cox & Snell R Square	Nagelkerke R Square
1	56.853	0.556	0.757

### Classification Table

There are 37 companies (88.1%) predicted to receive going concern audit opinion from total 42 companies that accept going concern audit opinion and 61 companies (89.7%) predicted receiving non going concern audit opinion from the total 68 companies that accept non going concern audit opinion. Overall, it means that the logistic regression model can predict 89.1 percent correctly.

Table 12. Classification Table

Observed		Predicted			
		GCAO		%	
GCAO	NGCAO	NGCAO	GCAO		Correct
GCAO	NGCAO	61	7	89.7	
		GCAO	5	37	88.1
Overall Percentage				89.1	

## 5. Hypothesis Test

### Omnibus Test of Model Coefficient

This test shows that the company's growth, leverage ratio, cash flow ratio, and debt default simultaneously can explain about going concern audit opinion. The chi-square result is 89.435, df 4, and significance 0.000, whose value is smaller than 0.05. It shows that  $H_1$  is accepted, so the company's growth, leverage ratio, cash flow ratio, and debt default have an effect simultaneously to the going concern audit opinion.

Table 13. Omnibus Test of Model Coefficient

Step 1	Step	Chi-square	Df	Sig.
	Block	89.435	4	0.000



Model	89.435	4	0.000
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### Logistic Regression Analysis

Table 14. The Result of Logistic Regression Test

	B	S.E.	Wald	Sig.	Exp(B)
FG	0.188	0.465	0.163	0.687	1.206
DAR	4.130	1.329	9.662	0.002	62.163
CF	-0.790	0.836	0.892	0.345	0.454
DEF	3.869	0.785	24.272	0.000	47.878
Constant	-5.831	1.229	16.148	0.000	0.003

Based on table 14, the equation for logistic regression in the hypothesis test is as follows.

$$\text{LN} \frac{\text{GC}}{1-\text{GC}} = -5.831 + 0.188X_1 + 4.130X_2 - 0.790X_3 + 3.869X_4$$

From the logistic regression analysis test can also be interpreted the effect of each independent variable to the dependent variable as follows.

The regression coefficient value of Company's Growth is 0.188, the significance value is 0.687, which is greater than 0.05. Based on this result, the conclusion is that the company's growth does not affect the going concern audit opinion. It indicates that the company's growth is not a main consideration in the acceptance of going concern audit opinion on the company. Sales generated by the company will be reduced by the cost of revenue and other sales expenses. Although the company experienced high sales, but if followed by a higher expense, it will cause losses. Therefore, the decrease in sales is not necessarily followed by a decrease in profits. This study is in line with research by Gama & Astuti (2014) and Rafflesia (2015).

The regression coefficient value of Leverage is 4.130, the significance value is 0.002, which is smaller than 0.05. Based on this result, the conclusion is that the leverage affect the going concern audit opinion. It proves that the company's ability to pay debts is considered in giving going concern audit opinion, so the greater the leverage ratio is more likely will accept the going concern audit opinion by the company. This study is in line with Widyantari's research (2011).

The regression coefficient value of Cash Flow Ratio is -0.790, the significance value is 0.345, which is greater than 0.05. Based on this result, the conclusion is that the cash flow ratio does not affect the going concern audit opinion. The cash flows in the company not only come from cash flow from operating activities but also cash flow from investment and financing activities. Therefore, negative operating cash flow does not necessarily follow a negative cash flow and

cash equivalents as well. This study is in line with research by Masyitoh & Adhariani (2010) and Gharaghayah, Jahanshad, & Adhami (2013). The results of this study cannot prove that companies with adequate cash can avoid the failure to fulfill their obligations.

The regression coefficient value of Debt Default is 3.869, the significance value is 0.000, which is smaller than 0.05. Based on this result, the conclusion is that the debt default affects the going concern audit opinion. It proves that if there are problems with companies such as negligence in paying debts, violating debt agreements, or in the process of debt restructuring will increase the probability of the company to accept going concern audit opinion. This study is in line with research by Praptitorini & Januarti (2011), Ardiani et al. (2012), and Khaddafi (2015).

## **6. Discussion**

The Company's Growth does not affect the Going Concern Audit Opinion in Manufacturing Companies listed on IDX in 2012-2016. This study is not in line with research conducted by Kristiana (2012) and Arma (2013) which shows the negative and significant effect on Company's Growth and Going Concern Audit Opinion. They stated that the company's growth indicates the ability of the company to maintain its business continuity and if the company experienced negative growth then it indicates a greater tendency toward bankruptcy. Nevertheless, the results of this study are consistent with research conducted by Gama & Astuti (2014) and Rafflesia (2015). The results of these studies show insignificant results, so the conclusion is that the company's growth does not affect the going concern audit opinion. Sales generated by the company will be reduced by the cost of revenue and other sales expenses.

Although the company experienced high sales, but if followed by a higher expense, it will cause losses. Therefore, the conclusion is that the company's growth does not affect the going concern audit opinion in manufacturing companies listed on the IDX period 2012-2016. Company with low growth should be doubtful about their ability to continue their business activities in the future, making it possible to receive Going Concern Audit Opinion. However, the regression coefficients generated in this research were positive. It is because the sample of manufacturing companies experienced uneven company's growth. From the total 22 companies, there are only three companies include in the high category, but contribute more than 60% in total sales of the manufacturing sector. While 19 companies with low categories only contributed 35%. It shows that a small group only controls the good condition of company's growth of manufacturing companies period 2012- 2016 so that lead to inefficient market. When the company's growth in an industrial sector is good even though only a small group of companies contribute greatly, it will make the sector look good and considered capable of continuing its business in the future. In fact, there are still many companies do not experience good company's growth.

The result of leverage ratio test shows that there is an influence of leverage ratio on the going concern audit opinion at manufacturing company listed in IDX period 2012-2016. The results of this study support the research from Widyantari (2011). The Widyantari's research (2011) entitled "Opini Audit Going Concern dan Faktor-faktor yang Memengaruhi: Studi Pada Perusahaan Manufaktur di Bursa Efek Indonesia" shows the results that the leverage ratio is significant to the going concern audit opinion. If the assets owned by the company are not able to cover its debt, it will create doubt for the company cannot pay off all debts that affect the business continuity. It proves that in the business continuity of a company need to pay attention

to the company's ability to pay debts, so the bigger the leverage ratio is more likely will accept the going concern audit opinion by the company.

Related to the Cash Flow Ratio, this study are consistent with the research conducted by Masyitoh & Adhariani (2010) and Gharaghayah, Jahanshad, & Adhami (2013). Their research was indicating that the cash flow ratio does not affect on the going concern audit opinion. The results of this study cannot prove that companies with adequate cash can avoid the failure to fulfil their obligations so not influence on acceptance the going concern audit opinion. The cash flows in the company not only come from cash flow from operating activities but also cash flow from investment activity and cash flow from financing activities. When operating cash flow is positive, but the cash flow from investment and funding activities are negative, it will result the negative total cash flow of the company. Therefore, negative operating cash does not necessarily follow a negative cash flow and cash equivalents as well. Thus, the conclusion is that the cash flow ratio with the proxy of operational cash flow is having no significant impact on the going concern audit opinion in manufacturing companies listed on the IDX period 2012-2016. Although the cash flow ratio has no significant effect on the going concern audit opinion, the coefficient regression showed that the cash flow ratio is negative, so when the company receives a going concern audit opinion, it is also followed by a low cash flow ratio of the company.

The result of debt default variable testing shows that there is an effect of debt default on the going concern audit opinion in manufacturing companies listed on IDX period 2012-2016. The regression coefficient is 3.869, which means that every increase 1 points of debt default will increase 3.869 points of going concern audit opinion on manufacturing company listed in IDX period 2012-2016. The leverage ratio test results have a significant value of 0.000, which is smaller than 0.05. Based on the considerable value, it shows that debt default affects the going concern audit opinion. The results of this study are consistent with research conducted by Praptitorini & Januarti (2011), Ardiani et al. (2012), and Khaddafi (2015). In the research shows the result that debt default has a significant effect on the going concern audit opinion. It proves that if there are problems with companies such as negligence in paying debts, violating debt agreements, or in the process of debt restructuring will increase the probability of the company to accept going concern audit opinion. The conclusion is that the debt default has a positive and significant effect on the going concern audit opinion in manufacturing companies listed on the IDX period 2012-2016.

## **7. Conclusion and Suggestion**

### *7.1 Conclusion*

Based on the results of research and the discussion in the previous chapter, it can be concluded that there is a significant effect of Company's Growth, Leverage Ratio, Cash Flow Ratio, and Debt Default on the Going Concern Audit Opinion. Based on the data analysis also obtained the conclusion about the effect of independent variables to the dependent variable partially, as follows: Company's Growth Variable has no effect on the Going Concern Audit Opinion. This is indicates that the total net sales as a proxy of a Company's Growth does not affect the Going Concern Audit Opinion. This is because the proxy for company's growth is using sales growth does not necessarily indicate that the profit earned by the company also increases. Leverage Ratio variable has a positive and significant effect on the Going Concern Audit Opinion. This is indicates that the increasing of total debt of asset will increase the receiving Going Concern

Audit Opinion of the company. It proves that the company's ability to pay debts is considered in giving going concern audit opinion, so the greater the leverage ratio is more likely will accept the going concern audit opinion by the company.

Cash Flow Ratio variable has no effect on the Going Concern Audit Opinion. This indicates that the total operating cash flow to total current liabilities has no effect on the receiving Going Concern Audit Opinion. The results is the companies with adequate cash can not avoid the failure to fulfill their obligations so not influence on the acceptance of going concern audit opinion. Debt Default variables have a positive and significant effect on the Going Concern Audit Opinion. It proves that if there are problems with companies such as negligence in paying debts, violating debt agreements, or in the process of debt restructuring will increase the probability of the company to accept going concern audit opinion.

### 7.2 Suggestion

Potential Investor should consider more on the leverage ratio and the company's debt default status because these factors have a significant influence on the Going Concern Audit Opinion. The management of a company should increase the attention to debt owned by the company. Such concern may initiated by the company's efforts to improve its ability to repay debts, especially debt that will mature to reduce the probability of obtaining a going concern audit opinion. The further research should develop research by increasing the number of samples, number of corporate sectors, replace the proxy of the variable, and adding other independent variables.

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# Soft Modeling: Online Consumer Behavior on E-Business : Marketing Mix, Social Culture, Information Technology and Humanism as A Moderator

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## Abstract

Today many banking institutions have implemented e-business in business activities. Nevertheless, there are still very limited consumers who optimize e-busines for business. The purpose of this study is to examine the online consumer purchasing decision model in e-business and the role of external factors (marketing mix, socio-culture, information technology, humanism) on online consumer decision making. This study uses the population of managers of banking institutions in the province of Central Java. The research used the surve method. Intrumen data collection with questionnaires sent by post. The number of respondents obtained is 100 people. Technique of collecting data with random sampling is method of collecting data which done by random. Instrument testing uses validity and reliability. Statistical analysis with SEM PLS because the amount of data is small and not normally distributed. This study uses the approach of Engel's theory (2006). The results show that (1) The concept of "Consumer Decison Journey " is still applicable in the context of online consumer behavior in e-business because every step of the online consumer decision making process has significant influence (2) The results showed that marketing mix, social culture, information technology, humanism has no significant effect on the process of online consumer purchasing decision making (online consumer behavior).

**Keywords:** E-Business, External factors, Consumer behavior online

## 1. Introduction

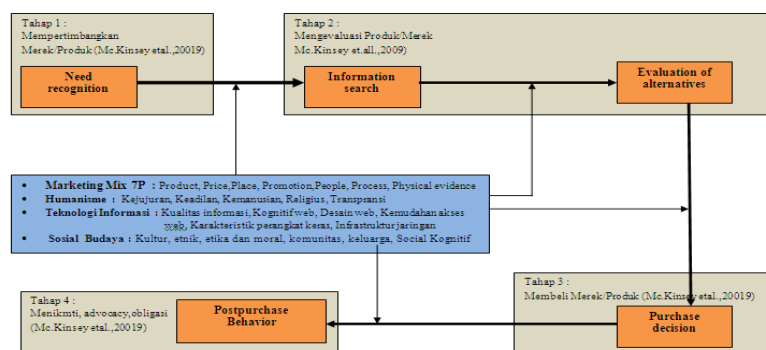
E-business covers all things that must be done using information and communication technology to conduct business activities between organizations and from organizations to consumers. (Huff et.al, 2000). The growth of e-business in Indonesia has continued to increase since 2001. The development of e-business has changed the face of business in Indonesia. The prospect of e-business in Indonesia is getting bigger, such as the value of online shopping transactions in Indonesia, in 2012 and in 2014, has reached 266 million US Dollars and 736 million US Dollars (about 7.2 trillion rupiah). In 2015 internet users in Indonesia reached 139 million users. ([www.apjii.or.id](http://www.apjii.or.id) accessed March 23, 2012). E-business includes e-commerce that includes transactions (purchases and sales), marketing and service of products, services, and information via the Internet or other networks.

The successful implementation of e-business is strongly influenced by many factors, both

internal and external factors. Previous research has partially explored internal factors that influence online consumer behavior especially in purchasing decisions. Psychological / psychological factors of consumers such as: 1) trust plays an important role affecting consumer behavior in e-business (Luo et al., 2012), 2) utilitarian and hedonic motivation (Close et al., 2010), 3) extrinsic and intrinsic motivation, cognitive experience on the web (Shang et al., 2005). Online consumer confidence in a web vendor on e-business is significantly influenced by the post-purchase factors of familiarity, perceived security, product quality and especially quality of service not due to reputation, ease offered on its web vendor (Luo et al., 2013). The quality of site design, service quality has a significantly stronger effect on consumer confidence and satisfaction, both of which lead to online consumer purchase intentions (Zhou et al., 2009). Perceived benefits, perceived risk and psychological factors are significant variables and perceived profits and psychological factors have a positive impact on consumer attitudes and purchasing behavior. Psychological factors have the highest correlation with online shopping behavior, it can be concluded that the trust of online vendors and security issues is the most important in determining the online purchasing patterns of Pakistani consumers (Adnan, 2014). Personality factors such as age, income, consumer education and marital status, and their perceived usefulness are predictor factors that significantly influence online shopping decisions (Gong et al., 2013), innovative and subjective norms positively affect online shopping behavior (Moshrefjavadi et al. , 2012), likewise, entertainment satisfaction factors, surfacing irritation experience (mass media), perceptions of benefits and ease of use of the Web are important predictors of online shopping intentions (Huang et al., 2008). The security, privacy and risk factors of consumer perception affect to shop online, where the privacy of online business transactions on trust is mediated by perceived security, and consumers believe in online transactions is significantly related to the trust of Web vendors (Thaw et al., 2009). Experience with brand factors significantly affects consumer confidence, about the importance of trust, security and comfort in the online environment (Lodorfos et al., 2006). Trust trust brand factors affect online intentions, and may be necessary to increase online sales. The influence of confidence in the seller's beliefs online online varies with brand trust, confidence for products and services coupled with brand trust beliefs (Becerra et.al, 2011). In the process of consumer buying decision, known as Engel et al (2006) theory or also known as McKinsey (2009) concept introduces the concept of "Consumer Decision Journey", where consumer decision travel through 4 stages: 1) consider, (2) evaluate, (4) buy, and (4) enjoy, advocacy, bonds (Court et al, 2009).

Much of the previous research has explained the internal factors of online consumers that influence purchasing decisions, however, there is no clear measure of prior research showing the contribution of external factors to consumers such as socio-cultural. And, the results of previous research on the contribution of the social and cultural environment to online consumer behavior is still very varied. For example, there is an earlier study, from Hasan et al (2008) which shows that culture has no significant effect on online consumer behavior, while other researchers claim that social culture has a significant influence on consumer behavior in purchasing decisions. Indonesian society is a society that is strongly influenced by social life, culture and customs. Indonesian society is very unique because it has a very diverse culture and social life and this is very different from other world community. The dynamics of socio-

cultural development of Indonesian consumers are closely related to the development of science and technology. The development of the marketing strategy of the mix, the development of information technology, the development of philosophy of humanism has great influence in socio-cultural dynamics in Indonesia (Siringoringo, H.2004), Ngafifi, M. (2014), Pranadji, T.2017). Thus, in discussing the behavior of online consumers in e-business in Indonesia, this research relates factors that are: marketing mix, socio-culture, information technology, humanism as a factor of moderation affecting consumer buying behavior online. In this research approach Consumer behavior theory (Kotler, 1999) and Consumer Decision Journey Theory (Engel et al.,2006; McKinsey, 2009). And, the conceptual framework developed based on these two theoretical approaches is :



Sumber : Kotler (1999), Kotler dan Armstrong (1997), Luo et al (2012), Clos et al (2010), Shang et al (2005), Zhou et al (2009), Adnan (2014), Zhang et al (2012), Gong et al (2013), Moshrefavadi et al (2012), Hung et al (2008), Thev et al (2009), Lodoros et al (2006), Becerra et al (2011), Park et al (2003), Osman et al (2010), Li et al (2010), Adam et al (2007), Hong et al (2011), Zuroti et al (2012), Mc Kinsey (2009)

## 2. Methods

Banking institutions were chosen as research objects because many banking institutions in Indonesia have implemented e-business in running their business. The population of this study was chosen by the banking consumer ie the customers who have a lot of experience in e-business, therefore selected respondents managers and banking staff. Technique of collecting data by random sampling method (random) because banking customer counted about 15 million, then random sampling. Data collection instruments in the form of open and closed questionnaires, Likert scale, 5 points. Research respondents were selected 100 online consumers. After the data is collected, then the reliability and validity testing is performed. Reliability with Cronbach Alpha method and Validity with product moment method. This analysis aims to ensure valid and consistent data quality (Ferdinand, 2014). This study uses SEM (Structural Equation Modeling) data analysis to test the hypothesis concerning the relationship between latent variables in the study. SEM analysis in this study uses WarpPIS because it amounts to more than 30 people (as per SEM requirements with WarpPLS). This descriptive statistics describes the characteristics of respondents, which are seen from several variables such as: gender, age, online transaction satisfaction.

Table.1. Resume of Background Respondent

Information	Sum	Prosentase
-------------	-----	------------



Gender		
• Male	30	30%
• Female	70	70%
Age		
• < 30 years	46	46%
• >= 30 years	54	54%
Status		
• Staff	54	54%
• Manager	46	46%
Online Transaction Satisfaction		
• Satisfied	85	85%
• Not satisfied	13	13%
• netral	2	2%

Table 2. Reliability test results from the research model

	Crobach Alpha	Sum of item valid
Marketing Strategy 7P Mix (X1)	0,7694	21
Socio-cultural (X2)	0, 5740	4
Information Technology (X3)	0,6602	5
Humanism (X4)	0,7684	5
Recognition of Needs (X5)	0,8866	5
Search Information (X6)	0,8661	5
Evaluation of the Alternative (X7)	0,8365	5
purchasing decisions (X8)	0,7611	5
post-sponsorship (X9)	0,7616	5

Based on the reliability test shows that the data quality is good, the data meet the criteria reliable and valid, because all Cronbach Alpha values greater than 0.6. The data that has met the test of reliability and validity have a good quality and can be used for further analysis.

### 3. Results

Data analysis technique using structural model with Partial Least Square (PLS) method. The structural model in this study will be analyzed using the WarpPLS 3 program. In this study using SEM (Structural Equation Modeling) because SEM is a type of multivariate analysis in social science, where multivariate analysis is the application of statistical methods to analyze several research variables simultaneously or simultaneously. The purpose of using multivariate analysis is (1) to confirm, and (2) explore. Multivariate confirmatory analysis is used to test hypotheses developed based on existing theories or concepts. Warpls program can take into account the non linear and linear relationship at once. Kock (2010) states that the Warpls program can identify nonlinear relationships between latent variables and correct path coefficient values based on these relationships. By considering the highest validity coefficient for each latent variable, the results of data analysis with SEM-PLS with WarpPLS provide the

following structural models:

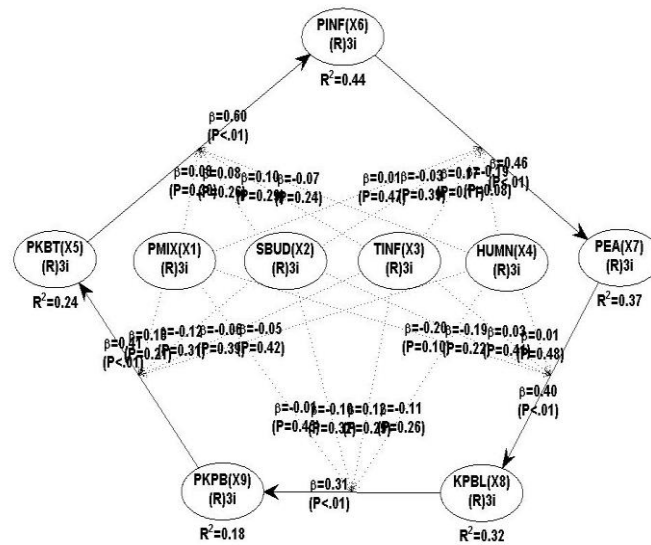


Figure 1. Soft Modeling with WarpPLS structural

The fit model of the structural model is determined based on the fit indices and P values model to show the results of three fit indicators, Average Path Coefficient (APC), Average R-Squared (ARS) and Average Variance Inflation Factor (AVIF). The p value given for APC and ARS is calculated by estimating resampling. The fit model of the WarpPLS 5.0 program can be seen from the general output: 1) Average path coefficient (APC) has P < 0.05, 2) Average R-Squared (ARS) has P < 0.05, 3) Average Adjusted R-Squared (AARS) has a value of P < 0.05, 4) Average Block Variance Inflation Factor (AVIF) has a value < 5 and ideally 3.3. Based on the calculation of the WarpPLS program, the value of the fit model is as follows:

Tabel.3. Model Fit Indices dan P-values

	Indicator	P-values	Criteria	Resume
1	APC	0,002	< 0,05	good
2	ARS	0,015	< 0,05	good
3	AVIF	1,680	< 5	good

Based on the three indokator (Model fit indices and P values) it can be concluded that the model is good (fit), has the meaning that the model can be used as a confirmation theory.

Effect of moderation variable based on P-Values, if P-Value value count smaller than 0.01 (significant level 0.01) then it is said that the influence is significant and vice versa.

Table.4. Pengujian Hipotesis

Effect	Path	Coefisien (β)	P-value	Criteria	Resume
H1	X5 → X6 moderated X1	0,08	0,30	> 0,01	Not Significant
H2	X6 → X7 moderated	0,01	0,47	> 0,01	Not Significant

	X1						
H3	X7 → X8	moderated	<b>0,20</b>	0,10	> 0,01	Not Significant	
	X1						
H4	X8 → X9	moderated	0,03	0,46	> 0,01	Not Significant	
	X1						
H5	X5 → X6	moderated	0,08	0,26	> 0,01	Not Significant	
	X2						
H6	X6 → X7	moderated	0,03	0,39	> 0,01	Not Significant	
	X2						
H7	X7 → X8	moderated	<b>0,19</b>	0,41	> 0,01	Not Significant	
	X2						
H8	X8 → X9	moderated	0,17	0,32	> 0,01	Not Significant	
	X2						
H9	X5 → X6	moderated	0,10	0,29	> 0,01	Not Significant	
	X3						
H10	X6 → X7	moderated	0,17	0,11	> 0,01	Not Significant	
	X3						
H11	X7 → X8	moderated	0,03	0,41	> 0,01	Not Significant	
	X3						
H12	X8 → X9	moderated	0,18	0,21	> 0,01	Not Significant	
	X3						
H13	X5 → X6	moderated	0,01	0,24	> 0,01	Not Significant	
	X4						
H14	X6 → X7	moderated	<b>0,19</b>	0,08	> 0,01	Not Significant	
	X4						
H15	X7 → X8	moderated	0,01	0,48	> 0,01	Not Significant	
	X4						
H16	X8 → X9	moderated	0,11	0,26	> 0,01	Not Significant	
	X4						

Based on the results of these tests show that marketing mix, social culture, information technology and humanism have no significant effect as a factor that moderate the process / stages of consumer online travel decisions. Meanwhile, based on the big coefficient of influence of moderation ( $\beta$ ) then there are three major moderation influencing online consumer decision decision that is: 1) influence of moderation marketing mix to relation of evaluation of lateratif (X7) and purchasing decision (X8), 2) influence of social culture moderation to relationship of laterative evaluation (X7) and purchasing decision (X8), 3) the effect of moderating humanism on information seeking relations (X6) and alternative evaluations (X7).

The Determination Coefficient or  $R^2$  (R square) shows the contribution of the independent variable and the moderating variable to the dependent variable can be presented as follows:

Table 5. Coefficient Determination or R<sup>2</sup> (R square)

	Relationship with variable	R <sup>2</sup>
1	Influence X5 to X6 moderated X1, X2, X3, X4	0,44
2	Influence X6 to X7 moderated X1, X2, X3, X4	0,37
3	Influence X7 to X8 moderated X1, X2, X3, X4	0,32
4	Influence X8 to X9 moderated X1, X2, X3, X4	0,18
5	Influence X6 to X5 moderated X1, X2, X3, X4	0,24

The most influential R<sup>2</sup> is the influence of recognition (X5) on information search (X6) moderated by mix marketing (X1), Social Culture (X2), Information Technology (X3) and humanism (X4). This shows that the contribution of the largest moderating variable occurs at the stage of need recognition and information seeking by online consumers. In the introduction phase of the need to search for information of mix marketing factor (X1), Social Culture (X2), Information Technology (X3) and humanism (X4) give a big influence. R<sup>2</sup> of 0.44 means that information search (X6) is influenced by 44% by the introduction of needs (X5) which is moderated by mix marketing (X1), Socio-Culture (X2), Information Technology (X3) and humanism (X4), and 56 % is influenced by other variables not examined in this study. Another bigger factor could be the internal online consumer factors such as personality, psychology, motivation or something else.

#### 4. Discussion

The results of this study indicate that the effect of moderation on the process of online consumer purchasing decision making is not significant. Marketing mix, socio-culture, information technology and humanism have no significant effect on the online consumer decision process, this is acceptable because some previous research also explains it. Tjahjono, A. (2013) states that the marketing mix and the socio-cultural environment affect the buying decision. Setiawan, W. (2014) and Sukotjo, H., & Radix, S. A. (2010) stated that marketing mix (zipper mix) has no significant effect on purchasing decisions. Past research on sociocultural influences on online purchasing decisions is still very limited. Jarvenpaa, S. L., Tractinsky, N., & Saarinen, L. (1999) stated that culture has no effect on online consumer confidence. De Mooij, M. (2010) states that consumer culture and behavior are two important aspects in global marketing. Koufaris, M. (2002) also states that information technology presented on the web has an impact on online consumer behavior. Widiana, M. E., Supit, H., & Hartini, S. (2012) mentioned that internet technology influences sales and purchasing decisions. Many previous studies have discussed the influence of marketing mix, socio-culture, information technology and humanism (philosophy) on purchasing decisions, but almost no previous studies have explained the influence of these variables on the online travel decision process of consumers. So that this study gives results that are different from previous studies, that it turns out that in the context of online consumer behavior, marketing mix, socio-cultural, information technology and humanism philosophy variables do not have a moderating effect (the effect that strengthens or weakens the relationship between variables) which is significant.

Meanwhile, the contribution of marketing variables to mix, socio-cultural, information

technology and humanism philosophy in the consumer decision-making process is still very low, which can be seen from R<sup>2</sup> (R Square). R<sup>2</sup> is the biggest influence on the need to identify information that is moderated by marketing mix, socio-culture, information technology and humanism by 44%, while the influence of other factors not examined in this study of the consumer decision process is 56%. Other factors that are not examined have a greater influence on the process of consumer decision travel in the form of internal factors that exist in consumers such as personality, consumer psychology / psychology. This study measures and proves that external factors are not a dominant factor influencing online consumer decisions, but individual internal factors are the main factors influencing online consumer decisions.

The results of this study certainly provide a phenomenon that is contrary to consumer behavior theory of Kottler (1999) which states that social factors, culture, technology greatly affect consumer behavior in general. The general consumer behavior theory of Kottler (1999) is not applicable to the online consumer decision process, which means that offline consumer behavior and online consumer behavior are very different and each msing has different characteristics. Offline consumer behavior has been formulated with various Kottler theories, but online consumer behavior is still a lot that can not be formulated theoretically. This study shows that consumer theory of consumer theory has not been enough to explain the behavior of online consumers, but research can prove that online consumer behavior is not significantly influenced by social-cultural factors, humanism value, marketing strategy and information technology. And the results of this study as well as referring to future research to examine again what factors affect consumer behavior online.

## 5. Conclusions

This study aims to measure the influence of the external environment of online consumers such as social culture, information technology, marketing mix and humanism value to online consumer decision process with empirical study on banking institutions running e-business. The results of this study indicate that the marketing mix, socio-cultural, information technology and humanism as a moderation variable has no significant effect on the process of making online consumer decisions. The contribution of marketing mix, socio-cultural, information technology and humanism variables as a moderating variable in consumer decision making process is still small around 44%, which means that the external factors have less impact on the online consumer decision, and 60% may be influenced by other factors researched as the internal factors of the consumer ie personality and psychology / psychology. Therefore, further research recommendation is to examine internal factors of online consumer such as personality and psychology / psychology.

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# The Influence of Tax Knowledge, Tax Service Quality, and Tax Awareness Towards Motivation to Pay Tax for Private Tax Payers in Kpp Pratama of Kebumen

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## Abstract

This research was aimed to know the influence of tax, tax service quality, and tax awareness towards motivation to pay tax for private tax payers in KPP Pratama of Kebumen. This was a causal comparative research using a quantitative approach. The research population were private taxpayers registered in KPP Pratama of Kebumen. Sample taking used was an incidental sampling technique with samples numbered of 200 respondents. The data gathering method used was a questionnaire. The data was taken in March 2018. The data was analyzed using a descriptive statistics, pre-condition test, simple linear regression analysis, and multiple linear regression analysis. These research results showed that tax knowledge, tax service quality and tax awareness positively and significantly influenced motivation to pay tax for private tax payers.

**Keyword:** Motivation to pay tax, Tax Knowledge, Tax Service Quality, Tax Awareness

## 1. Introduction

Indonesia is a country that is actively doing development in the field of economy, politics, social, culture, defense, and security. One of the sectors that are the source of funds to finance the development comes from taxes. This is in accordance with one of the functions of tax that is as a function of revenue ((budgetary)) in which tax is a source of government revenue that is used to finance both routine and development expenditures (Resmi, 2011: 3).

Receipts from the tax sector up to December 31, 2017, reached Rp1.151 trillion or equivalent to 89.7% of the targeted tax revenues in the Revised State Budget 2017 (Kompas, 2018). Therefore the government continues to improve the tax sector by issuing Law Number 28 of 2007 on General Provisions and Tax Procedures which states that the tax payment system changed from official assessment system to self-assessment system. According to Fidel (2010: 11) "Self Assessment System is a tax collection system that gives authority, trust, and responsibility to the taxpayer to calculate, pay, and self-report the amount of tax payable".

Based on the system, taxpayers are required to have high motivation in paying tax obligations. In Kebumen, the number of individual taxpayers increases every year. During the last 6 years, the increase occurred in 2011 as many as 56.155, in 2012 as many as 65.729, in 2013 as many as 73.410, in 2014 89.757, 2015 as much as 102.592, and in 2016 as much 116.715 (KPP Pratama Kebumen, 2018). However, the increase in the number of individual taxpayers is not

offset by an increase in the number of reports of its Annual Tax Return or *Surat Pemberitahuan (SPT)*. The number of taxpayers who did the reporting of the Annual Income in 2011 amounted to 43.122, in 2012 amounted to 45.738, in 2013 amounted to 53.533, in 2014 of 52.434, in 2015 of 53.869, and in 2016 of 58.738. Based on it can be seen that there is a difference between the number of taxpayers who are required to make an annual tax return with the realization of its Annual Report of SPT.

From the data can be seen that the level of motivation to pay taxes in KPP Pratama Kebumen is still relatively low. This can be seen from the number of taxpayers delaying in both payment and reporting. The number of taxpayers delaying the payment in 2011 is 13.033 individual taxpayer, in 2012 is 19.991 individual taxpayer, in 2013 is 19.877 individual taxpayer, in 2014 is 37.323 individual taxpayer, in 2015 is 48.723 individual taxpayer, and in 2016 is 57.977 individual taxpayer. Thus, it can be seen that every year there is an increase in the number of taxpayers who make delays. It can be concluded that Individual Taxpayers in KPP Pratama Kebumen still less motivated in paying tax obligations.

The degree of motivation of an Individual Taxpayer in paying taxes may be influenced by taxation knowledge. The knowledge of taxation is the knowledge of the concept of general provisions in the field of taxation, ranging from tax types, tax subjects, tax objects, tax rates, tax calculations payable, to how filling tax reporting prevailing in Indonesia (Andriani, 2000: 25). Knowledge taxation Individual Taxpayer in Kebumen is still lacking, this can be seen from many taxpayers who are not aware and concerned about taxes. Individual taxpayers in Kebumen still have not fully understood the importance of paying taxes. It is proved by the ratio of tax payments in KPP Pratama Kebumen which decreased from 77% in 2011 to 2016 down to 60%. Thus, the taxation knowledge of the taxpayers should be increased so that they are aware by paying taxes in a timely manner.

The level of motivation in paying taxes Individual Taxpayers can also be affected by the quality of tax services provided by the officer. This can be seen from the information stating that of 33 DGT spread in various regions in Indonesia, Central Java II was third from bottom in the rank of taxpayers (Suara Merdeka, 2018). This is clearly a homework for the KPP located in Central Java Regional Office II, one of which is KPP Pratama Kebumen. The government through the Directorate General of Taxes seeks to increase the human resources of tax officials.

The level of motivation in paying taxes Individual Taxpayers can be influenced by factors from within the taxpayer, namely tax awareness. Currently the level of awareness of Individual Taxpayers in KPP Pratama Kebumen is still lacking, so that the impact on tax revenues that have not been maximized. Proven from 12 KPPs under the supervision of Regional Office of DJP Jateng II, the lowest tax revenue up to the first semester of 2017 was booked by KPP Pratama Kebumen with revenue of Rp 131 billion or 29.15 percent of the targeted Rp 451 billion (Merdeka, 2017). This is clearly a problem that must be handled by KPP Pratama Kebumen to be able to increase tax revenue. From the information obtained tax revenue in Kebumen that can achieve the target budgeted from the year 2011-2016 only occurs for two times in the year 2012 and 2014. Thus, awareness in paying taxpayers of individuals in the KPP Pratama Kebumen needs to be improved again.

Based on the description and the above phenomenon, the researchers are interested in conducting a research with the title: "The Influence of Knowledge Taxation, Tax Service Quality,

and Tax Awareness on the Motivation of Paying Tax Individual Taxpayer in KPP Pratama Kebumen".

## **2. Research Methods**

### *2.1 Research Design*

This type of research is included in comparative causal research with the object of research that is Personal Taxpayer registered in KPP Pratama Kebumen. The approach used in this research is quantitative approach.

Quantitative approach is a method to examine a specific population or sample with random sampling technique, and data collection using research instruments and data analysis is quantitative / statistical with the aim to test the hypothesis that has been established (Sugiyono, 2015: 14). The data used in this research is primary data.

### *2.2 Place and Time of Research*

This research is conducted in Tax Office (KPP) Pratama Kebumen which is located at Jalan Arungbinang No 10 Kebumen. The study was conducted in February 2018 - March 2018, and continued by analyzing data and reporting in April 2018.

### *2.3 Population and Sample Research*

Population in this research is all Individual Taxpayers registered in Tax Office (KPP) Pratama Kebumen. Sampling technique used in this research is non probability sampling by using incidental sampling. Incidental Sampling is the determination of a sample accidentally encountered by a researcher who is considered suitable as a data source (Sugiyono, 2015: 124). According to Roscoe in Sugiyono (2015: 131) "The size of the sample is feasible in the study is 30 to 500, otherwise if in the study will perform multivariate with the analysis (correlation or regression), then the number of sample members at least 10 times of the variables studied". The technique of determining the sample in this study using incidental sampling with the number of samples used based on Roscoe theory as much as 200 respondents or 50 times of the number of variables studied.

### *2.4 Research Techniques and Instruments*

Technique of collecting data in this research is using questioner. The instrument used in this research is closed questionnaire, so the respondent only need to give checking mark (√) on the alternative answer that has been provided. Measurement of variable Tax Paying Motivation, Tax Knowledge, Quality of Tax Service, and Tax Awareness using Likert scale.

### *2.5 Test Instruments*

#### *2.5.1 Validity Test*

Validity test is used to measure how accurately the instrument is able to generate data in accordance with the actual size to be measured by researchers (Mustofa, 2009: 164).

According to Roscoe in Sugiyono (2015: 131) "The size of the sample is feasible in the study is 30 to 500, otherwise if in the study will perform multivariate with the analysis (correlation or regression), then the number of sample members at least 10 times of the variables studied" . The technique of determining the sample in this study using incidental sampling with the number of samples used based on Roscoe theory as much as 200 respondents or 50 times of the number of variables studied.

Table 1. Validity test

Variable	Items	Invalid	Valid
Tax Knowledge	23	1	22
Quality of Tax Service	12	-	12
Tax Awareness	8	-	8
Motivation to Pay Taxes	13	1	12

Source: Primary Data Processed, 2018

Validity test results indicate that there are 2 items of statements that are not valid and then not used in the research.

### 2.5.2 Test Reliability

Reliability is a measure that shows how high an instrument can be trusted or reliable (Mustofa, 2009: 224).

Table 2. Test Reliability

Variable	Number of items	Cronbach's Alpha
Tax Knowledge	22	0,901
Quality of Tax Service	12	0,846
Tax Awareness	8	0,753
Motivation to Pay Taxes	12	0,825

Source: Primary Data Processed, 2018

Based on the above table, it is seen that the value of Cronbach's Alpha > 0.6. So that all the instruments are reliable.

## 2.6 Data Analysis Technique

### 2.6.1 Test Prerequisite Analysis

#### 1) Normality Test

Wibisiono (2013: 181) argues that "The normality test is a statistical test used to determine whether a population is normally distributed or not."

#### 2) Linearity Test

Ghozali (2011: 166) defines that "Linearity test used to determine the relationship between independent variables and dependent variables have a linear relationship significantly or not". The linearity of data, can be known by using test of linierity test with 5% significance level, so if the value of linearity significance greater than 0,05 then the data is linear, if under 0,05 then the data is not linear.

#### 3) Heteroscedasticity Test

The heteroscedasticity test aims to test whether in a regression model there is an inequality of variance from the residual one observation to another. To test heterokedastisitas done by using park test.

#### 4) Multicollinearity Test

Multicollinearity is a situation where there is perfect correlation between independent variables

with the other independent variables (Sunyoto, 2010: 97). Multicollinearity test can be known by using two ways that see the value of tolerance and the opponent Variance Inflation Factor (VIF). If  $VIF < 10$  and tolerance values  $> 0.10$  then there is no multicollinearity symptoms.

### 2.6.2 Hypothesis Testing

Hypothesis test aims to determine the effect of independent variables on the dependent variable.

#### 1) Simple Linear Regression Analysis

Simple regression analysis is used to know the effect of free variable (X) that is Knowledge Taxation, Quality of Tax Service and Tax Awareness to dependent variable (Y) that is Partial Pay Tax Motivation. A simple linear regression analysis is used to test the first, second and third hypotheses. To search by using the regression equation, look for the coefficient of determination ( $r^2$ ) and look for significance of correlation coefficient with t test.

#### 2) Multiple Linear Regression Analysis

Multiple linear regression analysis is used by the researcher, if the researcher intends to predict how the condition (rise and fall) of the dependent variable (criterion), if two or more independent variables as predictor factor is manipulated (Sugiyono, 2010: 275). Multiple linear regression analysis in this study was used to test hypothesis four. To search by using the regression equation, look for the coefficient of determination ( $r^2$ ) and look for the significance of the correlation coefficient with the F test.

## 3. Research Result and Discussion

### 3.1 Descriptive Analysis

The analysis of data descriptions presented in this study includes Minimum, Maximum, Mean (M), and Standard Deviation (SD).

Table 3. Descriptive Analysis Results

Variable	N	Min	Max	M	SD
Tax Knowledge	200	58	85	73,6	4,9
Quality of Tax Service	200	22	48	40,3	3,2
Tax Awareness	200	20	32	26,9	2,4
Motivation to Pay Taxes	200	35	48	40,7	2,6

Source: Primary Data Processed, 2018

### 3.2 Test Prerequisites

#### 3.2.1 Normality Test

Based on normality test results in the above table shows the value of Kolmogorov-Smirnov Z of 0.684 with Asymp significance value. Sig. (2-tailed) 0.737 so that the results can be seen that the significance value of  $0.737 > 0.05$ . So it can be concluded that the residual value of the data in this study is normally distributed.

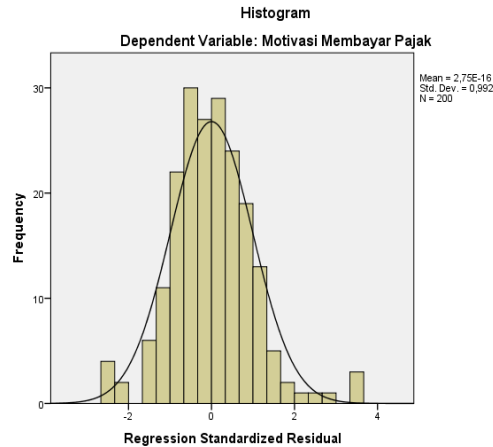


Figure 1. Histogram Normality Test Results

From the normality test results, indicating that the histogram graph has a data distribution that follows the curve of the bell shape is not tilted either to the right or left, so it can be concluded that the data in this study is normally distributed.

### 3.2.2 Linearity Test

Linearity test is done to determine the relationship between independent variables and dependent variable is linear or not.

Table 4. Linearity Test Results

No.	Correlation	Sig.
1.	$X_1 - Y$	0,343
2.	$X_2 - Y$	0,101
3.	$X_3 - Y$	0,216

Source: Primary Data Processed, 2018

Based on the table, it can be seen that the value of the significance of all correlation variables  $X - Y > 0.05$  so it can be concluded that the influence of each independent variable to the dependent variable is linear.

### 3.2.3 Multicollinearity test

Multicollinearity test aims to test whether there is correlation between independent variables.

Table 5. Multicollinearity Test Results

No	Variable	Collinearity Statistic	
		Tolerance	VIF
1	$X_1$	0,543	1,840
2	$X_2$	0,698	1,434
3	$X_3$	0,601	1,664

Source: Primary Data Processed, 2018

Based on the calculation above the tolerance shows no independent variable having tolerance value less than 0.10. In addition, the calculation of Variance Inflation Factor (VIF) value is not more than 10. So, it can be concluded that there is no multicollinearity among independent

variables in the regression model.

### 3.2.4 Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is a variance inequality from one observation to another.

Table 6. Heteroscedasticity Test Results

No.	Correlation	Sig.
1	$X_1 - Y$	0,596
2	$X_2 - Y$	0,282
3	$X_3 - Y$	0,386

Source: Primary Data Processed, 2018

Based on the table above it can be seen that all the significance value is more than 0.05, so it can be concluded that there is no heteroskedastisitas in this regression model.

### 3.3 Hypothesis Test Results

A simple regression analysis technique is used to test the first, second and third hypotheses. Next to the fourth hypothesis test is using multiple regression analysis.

H1: Knowledge Taxation positively affects the motivation to pay personal taxpayer tax at KPP Pratama Kebumen 2018.

A summary of the results of a simple regression analysis for the first hypothesis in this study is as follows:

Table 7. Regression Analysis H1

Constants	regression coefficient	$r^2$	t count	Sig.
19,983	0,282	0,27	8,646	0,000

Source: Primary Data Processed, 2018

Based on the results of the above regression, it can be determined the equation of the regression line for hypothesis 1 that is:

$$Y = 19.983 + 0.282X$$

The above equation shows that if the value of  $X_1$  is considered constant then the Motivation of Paying Taxes of Individual Taxpayers that will remain at 19.983. If the value of  $X_1$  rises 1 unit then  $Y$  goes up by 0.282

The value of determination coefficient ( $r^2$ ) of 0.274 indicates that Tax Paying Motivation is influenced by Tax Knowledge by 27%, while 73% influenced by other factors. Value  $t$  arithmetic amounted to 8.646 larger  $t$  table 1.972 and significance 0,000 which means smaller than 0.05 indicates Tax Knowledge has a significant effect on Tax Paying Motivation. Thus, it can be concluded that Knowledge Taxes have a positive and significant impact on the motivation to pay taxpayer personal taxpayer KPP Pratama Kebumen 2018, so the hypothesis accepted.

H2: The Quality of Tax Service has a positive effect on the motivation to pay personal taxpayer tax at KPP Pratama Kebumen 2018.

A summary of the results of a simple regression analysis for the second hypothesis in this study is as follows.

Table 8. Hypothesis Test Results 2

Constants	Reg. coefficient	r <sup>2</sup>	T <sub>count</sub>	Sig.
23,975	0,416	0,259	8,327	0,000

Source: Primary Data Processed, 2018

Based on regression result above, hence can be determined equation of regression line for hypothesis 2 that is:

$$Y = 23.975 + 0.416X$$

The above equation shows that if the value of X2 is considered constant then the Personal Taxpayer's Paying Motivation will remain at 23.975. If the value of X2 rises 1 unit then Y will rise by 0.416. The correlation value (r<sup>2</sup>) of 0.259 indicates that Tax Paying Motivation is influenced by the Quality of Tax Service of 25%, while as much as 75% is influenced by other factors. Value t arithmetic of 8,327 larger t table 1.972 and significance 0,000 which means smaller than 0.05 indicates the Quality of Tax Service significantly influence the Tax Paying Motivation. Thus, it can be concluded that the Quality of Tax Service has a positive and significant impact on Personal Taxpayer Motivation of KPP Pratama Kebumen in 2018, so the hypothesis is accepted.

H3: Tax Awareness positively affects the motivation to pay personal taxpayer tax at KPP Pratama Kebumen 2018.

A summary of the results of a simple regression analysis for the second hypothesis in this study is as follows:

Table 9. Hypothesis Test Results 3

Constants	Reg. coefficient	r <sup>2</sup>	T <sub>count</sub>	Sig.
25,734	0,559	0,268	8,519	0,000

Source: Primary Data Processed, 2018

Based on regression result above, hence can be determined equation of regression line for hypothesis 2 that is:

$$Y = 25.734 + 0.559X$$

The above equation shows that if X3 value is considered constant then the Motivation of Paying Individual Taxpayer Tax will be 25.734 If the value of X2 rises 1 unit then Y will rise by 0,559. The correlation value (r<sup>2</sup>) of 0.268 indicates that Tax Paying Motivation is influenced by Tax Awareness of 26%, while 74% is influenced by other factors. Value t arithmetic of 8,519 larger t table 1.972 and significance 0.000 which means smaller than 0.05 indicates Tax Awareness significant effect on Tax Paying Motivation. Thus, it can be concluded that Tax Awareness has a positive and significant impact on Personal Taxpayer Motivation of KPP Pratama Kebumen in 2018, so the hypothesis is accepted.

H4: The Effect of Tax Knowledge, Quality of Tax Service, and Tax Awareness on Tax Paying Motivation has a positive effect on the Motivation of Individual Tax Payer Tax at KPP Pratama Kebumen 2018.



Based on the results of multiple regression analysis for the fourth hypothesis in this study are as follows:

Tabel 10. Hypothesis Test Results 4

Variable		
	B	Sig
<i>Constants</i>	15,418	-
X <sub>1</sub>	0,117	0,005
X <sub>2</sub>	0,228	0,000
X <sub>3</sub>	0,280	0,000

R <sup>2</sup>	F <sub>count</sub>
0,390	41,76

Source: Primary Data Processed, 2018

Based on the above regression, it can be determined the equation of the regression line for hypothesis 4

$$Y = 15.418 + 0.0117X_1 + 0.228X_2 + 0.280X_3$$

The above equation shows that if all X values are considered constant then the Tax Paying Motivation (Y) is 15.418. If the value of X<sub>1</sub> rises 1 unit then the value of Y rises 0.117. If the value of X<sub>2</sub> rises 1 unit then Y goes up by 0.228 and if the X<sub>3</sub> rises 1 unit then Y goes up 0.280.

The value of determination  $R^2_{y(1,2,3)}$  of 0.390 indicates that Tax Paying Motivation is influenced by Tax Knowledge, Tax Service Quality, and Tax Awareness 39%, while 61% is influenced by other factors.

Result of F test count 41,768 and F table 2,685 and significance value 0,000 for Quality of Tax Service and Awareness of Taxation, and 0,005 for Knowledge Taxation meaning value of significance resulted less than 0,05 indicate that Knowledge Taxation, Quality of Tax Service, and Taxation awareness significantly influence the motivation to pay personal taxpayer tax at KPP Pratama Kebumen 2018 accepted.

## 4. Conclusions and Suggestions

### 4.1 Conclusion

This study aims to determine the effect of Knowledge Taxation, Tax Service Quality, and Tax Awareness on the Motivation of Paying Tax Individual Taxpayer in KPP Pratama Kebumen. Based on the results of the research described in the previous chapter, the following conclusions can be drawn:

- a. Knowledge Taxation has a positive and significant impact on the motivation to pay personal taxpayer tax at KPP Pratama Kebumen. It can be seen from the value of positive value of regression coefficient is 0,282 and tcount of 8,646 bigger than ttable which is equal to 1,9720 (8,646 > 1,9720) at 5% significance, and significant value of Tax Knowledge to Tax Paying motivation less than value of significance (0,000 < 0.05). Constant value of 19.983 indicates if the Tax Knowledge is considered constant, then the value of Tax Paying

Motivation will be 19,983 test results show the value of R square ( $r^2$ ) of 0.274 which means Tax Pay Taxation influenced by Tax Knowledge of 27%.

- b. Quality of Tax Service has a positive and significant impact on the motivation to pay taxes on individual taxpayers in KPP Pratama Kebumen.

It can be seen from the value of positive value of regression coefficient is 0,416 and tcount of 8,327 bigger than ttable equal to 1,972 ( $8,327 > 1,972$ ) at 5% significance and significant value of Quality of Tax Service to Taxpayer Motivation less than significance value ( $0,000 < 0,05$ ). Constant value is 23,975, this indicates if the Quality of Tax Service is considered constant, then the value of Tax Paying Motivation will be 23,975 test results show the value of R square ( $r^2$ ) of 0.259 which means that the Tax Paying Motivation is influenced by the Quality of Tax Service of 25%.

- c. Taxation awareness has a positive and significant effect on the motivation to pay personal taxpayer tax at KPP Pratama Kebumen. This can be seen from the value of positive regression coefficient is 0,559 and tcount is 8,519 bigger than ttable equal to 1,9702, ( $8,519 > 1,9702$ ) at 5% significance and significant value of Tax Awareness to Tax Paying motivation less than value significance ( $0,000 < 0,05$ ). Constant value of 25.734 which indicates if the Tax Awareness is considered constant, then the value of Tax Paying Motivation will be 25.734. Based on the test results showed the value of R square ( $r^2$ ) of 0.268 which means that Tax Paying Motivation Affected by Tax Awareness of 26%.
- d. Tax Knowledge, Tax Service Quality, and Tax Awareness have positive and significant influence together on the Motivation of Individual Tax Payer Tax in KPP Pratama Kebumen. This can be seen from the value of positive regression coefficient is 0.117, 0.228; and 0,280 and Fcount 41,768 bigger than Ftable equal to 2,685 ( $41,768 > 2,685$ ) at 5% significance. The value of significance on the Quality of Tax Service and Awareness of Taxation is 0.000 smaller than the significance value of 0.05 ( $0,000 < 0,05$ ), while the Tax Knowledge value significance of 0.005 smaller than the significance value of 0.05 ( $0,005 < 0,05$ ). Constant value of 15.418 which indicates if the Tax Knowledge, Quality of Tax Enrichment, and Tax Awareness is considered constant, then the value of Tax Paying Motivation will amount to 15.418. Test results show that the value of R square ( $r^2$ ) of 0.390 which means that Tax Paying Motivation is influenced by Tax Knowledge, Tax Service Quality, and Tax Awareness by 39%.

#### *4.2 Suggestions*

Based on the results and research conclusions that have been discussed by the researcher, then can be proposed some suggestions as follows:

- a. For Taxpayers

1) From the data of the research results indicate that Taxpayer Personal Tax Awareness to Tax Paying Motivation need to be improved. An Individual Taxpayer may raise his Tax Awareness by understanding taxes, tax rates, tax benefits, and tax benefits for the state. Understanding of taxation can be taxpayer earn by studying independently that is reading article, book, newspaper or internet. In addition, taxpayers can follow the socialization of taxation held by tax officials to increase understanding of taxpayers about taxation.

2) Positive perceptions are also indispensable. If the taxpayer has a negative perception of

the tax officer, this may impede the taxpayer to pay his tax obligations, because the taxpayer will assume the tax paid will be used by the officer for his own benefit (corruption). Thus, the taxpayer needs to change the perception to the tax officer, that the tax paid by the taxpayer is used appropriately to finance the expenditure of the state for the welfare of society.

- b. For Tax Office (KPP) Pratama as the tax collection agency, it would be better if helping taxpayers in understanding taxation. Tax officers are expected to be more intense in conducting socialization to taxpayers either directly ie collecting taxpayers at a place then conduct socialization or indirectly through the mass media or social media. Thus, it can help the taxpayer in understanding the obligations of taxation so that the motivation to pay personal taxpayer tax may increase and the impact of tax revenue in KPP Pratama Kebumen will also increase.
- c. For Further Research
  - 1) It would be better if the number of samples used by more researchers later, in order to represent a sufficient number of populations. It is expected that if the number of samples more, it will be more representative of the population large enough so that the data obtained will be more accurate.
  - 2) It is suggested for the next researcher to add other factors that can be more influential on Tax Paying Motivation. Because in this study the three factors used are used only affect 39% of Tax Paying Motivation.

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# Developing Module Ecosystem Based Lombang Beach Sumenep With Guided Inquiry Approach to Improve Scientific Literacy of Science and Science Process Skills of Students

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## Abstract

This study aims to (1) develop local potential-based learning modules at Lombang Sumenep beach ecosystem material through guided inquiry approach used as teaching materials for learners; and (2) know the effectiveness of modules developed to develop science literacy skills and students' science process skills. This design and development research uses a step developed by Borg and Gall. Field trials were taken on the basis of medium-level schools, namely SMA N 1 Batuan Sumenep and SMA N 2 Sumenep. The field trial subjects in the experimental class consisted of 56 students and the control class consisted of 55 students. The data collection instruments use, (1) questionnaires for syllabus and RPP assessment, student response questionnaires to modules, (2) test, (3) observation sheets (4) cameras. Analysis of pretest and posttest data was done by using SPSS program while the observation result was analyzed descriptively and data analysis technique using gain, independent sample t-test, multivariate test and correlation pearson test with significance level 0,05. The results of this research are (1) a module of Lombang Sumenep Coastal Ecosystem with guided inquiry approach which is feasible to be used in learning, (2) developed module can improve science literacy ability with t test result can be seen in Independent Samples Test section produce Sig value. 0.001 <0.05, and developed modules can improve the science process skills with gainscore of 0.49 in the "moderate" category. The result of MANOVA analysis shows that there are differences in the result of science literacy ability and science process skill caused by difference of learning media having significance less than 0,05.

**Keywords:** module development, local potential of Lombang Beach Sumenep, guided inquiry, science literacy and science process skills.

## 1. Introduction

The development of science and technology will bring people into the era of increasingly rapid global competition. This fact becomes a challenge in education. Education capable of supporting people in global competition is education that develops students' potential. Education has a function and purpose in Law Number 20 Year 2003 About National Education System in Chapter II Article 3, stated education has the function and purpose as follows:

"National education function to develop the ability and form the character and civilization of dignified nation in order to educate the life nation, aiming for the development of the potential of the students to become human beings who believe and piety to God Almighty, berakhlaq noble, healthy, knowledgeable, capable, creative, independent, and become citizens of a democratic and responsible.

In line with the above national educational goals, biology learning has the objectives of developing the mastery of biological concepts and principles and their interrelationship with other science and developing knowledge, skills and confidence (National Education Standards Agency, 2006). Natural Science (IPA) is concerned with how to inquire (inquiry) about nature systematically, so that science is not only a mastery of a collection of knowledge in the form of facts, concepts or principles, but also a process of discovery. Developing learners' knowledge can be done by finding (inquiry) to know the ideas of a problem.

Inquiry learning is a learning where students are encouraged to learn through their own active engagement with concepts and principles, and encourage student teachers to have experience and experiment that enable students to discover principles for themselves (Kunandar, 2011: 377). Inquiry can be developed in the learning process. The process of learning process of interaction between learners with educators and learning resources in the learning environment (National Education Standards Agency, 2006). Educators and learners are a factor in education, to achieve optimal learning objectives. Achievement of this learning objective is an indicator of the success of the learning process.

Achievement of learning depends on the selection of appropriate media, especially in an effort to develop the creativity and liveliness of learners. The module is one of the learning media that is in accordance with the nature of biology learning, with the module, learners can learn appropriately and vary in improving the motivation and passion to develop the ability to interact directly with the environment and other learning resources that enable learners self-learning according to ability and interest (Mufid, 2013). Biology learning modules through guided inquiry approach that developed is a learning medium that can help learners in solving problems related to the surrounding environment. the problem that raised the study of authentic areas, especially local wisdom as a source of learning is still rarely developed, because each region has the uniqueness of geography, geology, flora and fauna, as well as social and cultural conditions. If studied as a source of learning, would be able to explore the ability of science literacy (scientific literacy) learners, because to solve the various problems of ecological phenomena is required the ability of people who berliterasi science. Creative has the ability to develop the potential of learners through the skills and abilities to create something new, in the form of ideas and ideas that have to be a provision of learners later on when the expected goal. The advantages of biology learning module through guided inquiry approach that is the presentation of the material will be strengthened by the fact that there is environment Sumenep area. The material chosen by the researchers is the ecosystem material that includes the Lombang beach tour. So that learners are not saturated in studying ecosystem material modules that are integrated with the local potential of Lombang Sumenep beach based on this guided inquiry. Based on the above background it is necessary to conduct a research entitled "Development of Coastal Ecosystem Module Lombang Sumenep With Guided Inquiry Approach To Improve Literacy Ability of Science And Skills Of Science Process Learners".

## **2. Method**

### *2.1 Identify Subsections*

Types The research used in this study is research and development research and development. This research has been conducted in October 2017 until March 2018. The product developed is Lumen Sumenep Coast Ecosystem Module based on guided inkuiri ecosystem material to improve science literacy and science process skill of grade X students MIPA SMA Negeri 2 Sumenep and SMA Negeri 1 Batuan Regency Sumenep.

### *2.2 Participant (Subject) Characteristics*

The sample in this study are the students of class X MIPA 1 SMA Negeri 2 Sumenep and X MIPA 3 SMA Negeri 1 Batuan Sumenep. Initial test phase consists of validation of teaching materials, teaching module development, learning device development, and language practitioners, while limited field testing is the validation of education practitioners conducted by 2 biology teachers and small group test in SMA Negeri 1 Batuan by 12 people students of class X MIPA 1.

### *2.3 Sampling Procedures*

The procedure in this study developed by Borg & Gall (2002: 783-795). There are ten steps: (1) research and collect information (preliminary study), 2) planning, 3) development of initial product form, 4) initial product field test, 5) revision of initial product so as to obtain main product, 6) field test main product, 7) major product revision, 8) operational field test, 9) revision of final product, 10) dissemination and implementation. In the research and development of Lumen Sumenep Coastal Ecosystem module based on this guided inquiry, it is only up to the ninth step of Borg and Gall's research and development step that is in the step of refinement and the final product. Step ten is not done because in this step requires cost and time long enough.

#### **2.3.1 Sample Size, Power, and Precision**

Larger trials are conducted using experimental and control classes. The experimental class was conducted on the students of X MIPA 1 with the number of respondents 31 students and the control class conducted in class X MIPA 2 with the number of respondents 30 students in SMA N 2 Sumenep and the experimental class on the students X MIPA 3 with the number of respondents 25 students and the control class performed on class X MIPA 2 with the number of respondents 25 students. In the broader trial, the experimental class students were given the module of Lombang Sumenep Coastal ecosystem with guided inquiry approach, while in the control class the students did the learning activity by using the biology book of erlangga which was determined by the teacher. Prior to conducting biology learning activities, the experimental class and control class students were given pretest to determine the initial literacy test of science and at the end after the learning was completed, given the posttest.

#### **2.3.2 Measures and Covariates**

The instruments used in this development study are questionnaires, test questions, validation sheets, and observation sheets. Data processing in this research is done by using descriptive and quantitative analysis. Descriptive analysis is used to describe data as objective as possible and interpreted as close as possible to the purpose of collected data, quantitative analysis is used to test the effectiveness of Ecosystem module with local potential Lombang Sumenep Coast based

on guided inquiry to increase science literacy and science process skills on ecosystem material, The analysis used is Monova test, Independent Sample t-test, and correlation Pearsonstest.

### 2.3.3 Research Design

The design of this research as a whole using research and development research (R & D) research model. According to Borg & Gall (1983: 772) 2.3.4 Experimental Manipulations or Interventions.

Then at the end of the experimental class and control class classes are given a post-test to determine the difference of literacy ability science and students' learning process skills. The implementation of the module and the package book is done in class X for one month based on the K13 curriculum. Here is a table to clarify the design of field trials:

*Control Group Research Pretest-Posttest Design*

Group	Pretest	Perlakuan	Posttest
Kelas Kontrol	T <sub>01</sub>	X <sub>0</sub>	T <sub>02</sub>
Kelas Eksperimen	T <sub>11</sub>	X <sub>1</sub>	T <sub>12</sub>

(Adapted from Sugiyono, 2008: 112)

### 3. Results

1 Introduction (Research and Information Collecting), this preliminary study is an initial preliminary study conducted in order to collect information in the form of problems encountered at school. The target of the school that is the place for information gathering is in two State schools in Sumenep Regency in 2017-2018. The collection of information from teachers is done by using questionnaires and interviews in order to identify the problems that occur during the learning process, especially in the X class of Ecosystem materials. a. Observations conducted at SMA N 1 Batuan Sumenep which is Adiwiyata school, this school gives great attention to the utilization of the school environment as a learning resource for learners. Based on interviews with biology teachers, in addition to the use of school environments, this school has not received more attention as a contextual learning resource, and biology teachers have not given more attention to the use of learning resources in school environments, teachers have not yet created modules for the learning process in school. b. Observation is also done in SMA N 2 Sumenep, in contrast to SMA N 1 Batuan which is Adiwiyata school, SMA N 2 Sumenep is not an Adiwiyata school so the teacher has not utilized school environment as source of learning, this school has not got more attention about source of learning, the biology teacher gives more attention to the tasks to the learners, the teacher is accustomed to give direct instruction in the learning and based on the interview that the teacher has never made the module, the teacher has never made the module for learning process in school, c. The result of observation conducted in two schools, the researcher concludes that the local potential of Lombang Sumenep beach has not been utilized optimally, so that learners from all schools that have been observed, the teacher gives statement that (1) learners prefer contextual learning and according to experience them to cheat saturation in class; (2) Students do not criticize the truth of the information provided by the teacher nor the information contained in the textbook; (3) Students have not yet optimally sought and used references / other books to compare between the concepts they obtained with other concepts; (4) Less than optimal students improve their thinking ability so that students tend to see the work of their

friends; (5) Majority learning is still teacher-centered (6) teachers have not yet created modules and have not used modules for the learning process in school. Based on these identification results, the researcher will develop a learning media in the form of printed module of ecosystem material that raised the local potential of Lombang Sumenep beach with guided inquiry approach to develop science literacy and students' science process skills. 2. Planning Research (Planing), planning of this research include, planning objectives, places, and time of research, as well as the instruments required in the assessment of the product. a. Development Objectives The purpose of this development is to produce a learning module based on the local potential of Lombang Sumenep Beach which is feasible to be used to develop science literacy and science process skills. b. Place and time of research Place of study conducted in SMA N 2 Sumenep and SMAN 1 Batuan Sumenep. The time required in this study is six months from the planning process to the field test. The information gathering phase starts from October 2017 until the completion of field trials in March 2018. d. Research instruments Making the grating of the research instrument into a benchmark assessment of developed products. The finished instrument grille is then developed into a research instrument. The instruments used were instrument validation sheets, test questions, observation sheets and questionnaires. 3. Development of Design (Develop Preliminary of Product), at the stage of development, the researcher makes the product developed the development of this module includes a general description, uniqueness and local potential in Lombang Sumenep Coast with guided inquiry approach. Many local contexts or problems that can be presented into the module as a material knowledge and development of the mindset of learners. The development of this module also leads researchers to focus more on the biological concept of ecosystem material.

Modules developed to develop science literacy and science process skills. The main characteristic of the module based on the local potential of Lombang Sumenep Coast with the image of marine biota by using guided inquiry approach that the printed material teaches students in identifying problems, analyzing, hypothesizing and solving problems. At this stage of development the module has started to blend colors and images and designs suitable for developed modules, and consult the material experts and media experts so that the resulting module is feasible and useful for learners. The module consists of its component formats, cover, title page, introduction, table of contents, KD and Indicator, module usage instructions, module characteristics of Lombang Sumenep Coastal ecosystem with guided inquiry approach, concept map, introduction containing learning objectives and subject matter, learning activities consisting of materials, exercise questions, self-evaluation exercises and various cases involving Lombang Sumenep Beach, the final part of the module is a summary, glossary, bibliography and answer key.

Data obtained at operational field test stage include data of competence achievement of science literacy students are: Table 1. Percentage Achievement of Literacy Competence Science SMAN 2 Sumenep No. Aspects of Competence Percentage Competence Achievement

Tabel 1. Percentage Achievement Competence Literasi Science SMAN 2 Sumenep

No.	Aspect Competence	Percentage Achievement Competence
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1.	Explaining Scientific Phenomena	70, 90 %
	Identify science problems	71,77 %
2.	or identifying issues scientific	
3.	Using Scientific Evidence	81, 45 %

Tabel 2. Percentage Achievement Competence Literasi Science SMAN 1 Batuan

No.	Aspect Competence	Percentage Achievement Competence
1.	Explaining Scientific Phenomena	69, 24 %
2.	Identify science problems or identifying issues scientific	63 %
3.	Using Scientific Evidence	88 %

Table 1. shows the attainment of competency aspect of science literacy which is owned by the learner, at SMA N 2 Sumenep is the highest position on aspects of using scientific evidence, identifying science problems and explaining scientific phenomena. Then at SMAN 1 Rocks in table 2. The highest position on the aspects of using scientific evidence, explaining the scientific phenomenon and identifying the problem of science. Table 3. Pretest and Posttest Data Literacy Science Student Class Mean Grade Gain

Tabel 3. Data *Pretest* dan *Posttest* Literasi Science Student

Kelas	Average		Gain
	<i>Pretest</i>	<i>Posttest</i>	
Eksperimen	54,35	72,34	0,42
Kontrol	52,67	68,75	0,29

The average result of pretest literacy ability of learners is 54,35 and the posttest average of 72.34. The value of gain score in this class is 0.42 with moderate category and the result of standard gain of literacy ability of science class experiment is bigger than control class. It can be concluded if there is an improvement after the learning in the experimental class using the module of Lumbang Sumenep Coastal ecosystem with guided inquiry approach.

Table 4. Test Results t

No.	Variabel	$t_{hitung}$	Sig.
1.	Gain Score Literasi Science	3,470	0,001
2.	Gain Score Science Process Skills	5,858	0,000

The Literasi Science  $H_0$  is rejected, because the value of Sig. (0.001)  $< 0.05$ . This means that both data have an average that is not identical (significantly different). It can be concluded that there is influence of Lumen Sumenep Coast ecosystem with guided inquiry approach toward student science literacy. In line with Yanti (2015) which states that the application of GIL-based module in biology learning at SMAN 8 Surakarta shows a significance of 0.000 so that hypothesis ( $H_0$ ) is rejected, it means there is influence on science literacy of content

dimension and cognitive learning result.

From the table above can be concluded that  $H_0$  is rejected, because the value of Sig. (0,000)  $< 0.05$ . This means that both data have an average that is not identical (significantly different). Paulo, Jose C. Dela Cruz (2015) stated that the results of the study showed the T-test for the paired samples further revealed that the students improved significantly after using the module. Modules that emphasize the development of scientific process skills and scientific knowledge as a primary goal to provide varied opportunities for young scientists gain knowledge and skills to solve problems.

Table 5. Data Pretest and Posttest Science Process Skills of Student

Kelas	Average		Gain
	<i>Pretest</i>	<i>Posttest</i>	
Eksperimen	44,46	71,43	0,49
Kontrol	44,91	63,09	0,34

In the table above, it is known that the value of process science skills the experimental class is greater than the control class with the experimental gain class gain of 0.49 and the control class 0.34. It can be concluded if there is an improvement after the learning in the experimental class using the module of Lombang Sumenep Coastal ecosystem with guided inquiry approach.

Tabel 6. Average Score Aspects of Science Process Skills Student

No	Aspect Rated	Class	
		Eksperimen	Kontrol
1.	Observer	83,93	73,64
2.	Classify	80,36	67,27
3.	Communicate	84,38	77,27
	amount	248,66	218,18
	Average	82,89	72,72

Based on the above table it is known that the acquisition of the total score of students' science process skills in the experimental class is higher than the control class and the overall average in each aspect assessed from the science process skills, the experimental class is higher when compared to the control class. The average experimental class is 82.89% and the control class is 72.72%.

The results of the implementation of guided inquiry synthesis and student learning outcomes in detail as follows.

Table 7. Percentage of Learning Activity With A Guided Inquiry Approach

Aspect Percentage of Performance High School N 1 Batuan Sumenep

Aspect	Percentage of Performance High School	
	SMA N 1 Batuan Sumenep	SMA N 2 Sumenep
Issues to be Researched	87,5%	75%

Hypothesis	75%	100%
Data collection	87,5%	87,5%
Analysis Data	75%	87,5%
Conclusion	75%	91,67%

Based on the above table shows that the implementation of guided inquiry synthesis which is in value by practitioners resulted in higher guided inquiry counseling in SMA N 2 Sumenep because students are very active in the ongoing learning process, different with SMA N 1 Batuan less active in the learning process it is suspected that students have not been accustomed to using guided inquiry based module on the learning process.

Tabel 8. Result Analysis

Variabel	Probabilitas (Sig.)
Analysis Manova	0,000
Analysis correlation literasi science and scientific Proses skill	0,000

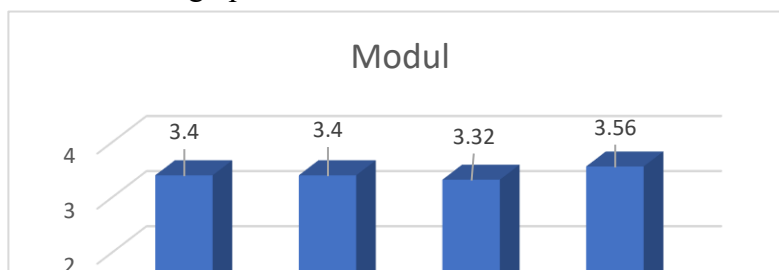
#### 4. Discussion

Analysis Manova that  $H_0$  is rejected, because the value of Sig. (0,000)  $< 0.05$ . The effectiveness of the use of Lumen Sumenep Coast ecosystem module with guided inquiry approaches to science literacy and science process skill of high school students of SMA MIPA together.

Analysis for correlation of variable of science literacy correlation and science process skill, probability value (Sig.)  $< 0,05$  ie 0.000 then  $H_0$  is rejected and  $H_1$  accepted. This means that there is a significant relationship between the variables of science literacy and science process skills. The direction of the relationship is positive (unidirectional), meaning that the higher the science literacy the higher the science process will be. The lower the science literacy the more skilled the process of science will be.

Feasibility of Lumen Sumenep Coastal Ecosystem Module with guided inquiry approach to improve science literacy and science process skill of learner is tested through expert validation test stage, result of recapitulation of validation result concluded that Lombang Sumenep Coastal ecosystem module with guided inquiry approach feasible to be used because highly qualified good. In line with Ikhsan (2016) stating that the development of inquiry-based biology modules is guided by ecosystem material for grade X high school students as a whole is included in the "Very Eligible" category.

Result of questionnaire of learner response to biology learning module based on local potential of Lombang Sumenep Coastal ecosystem with guided inquiry method with response aspect to categorized module very well. Aspects are assessed by learners in the form of biology learning modules with several points of statement on every aspect include, legibility, material, appearance, presentation and graphics and benefits.



## **Gambar 1. Results of Student's Response to Module**

### **5. Conclusion**

1. Module of learning based on local potency of Lombang Sumenep Coast with guided inquiry approach to develop science literacy and science process skill worthy to be used as one of biology material material of X class high school ecosystem. 2. Implementation of coastal ecosystem module Lombang Sumenep through this guided inquiry approach after analyzed t-test resulted in the effectiveness of the use of Lumen Sumenep Coastal ecosystem module with guided inquiry approach to science literacy of students of class X MIPA SMA. 3. Implementation of coastal ecosystem module Lombang Sumenep through this guided inquiry approach after analyzed t-test resulted in effectiveness of the use of Lumen Sumenep Coastal ecosystem module with guided inquiry approach to science process skill of students of X-Class MIPA SMA.

### **Acknowledgments**

Product development in the form of learning module based on local potency of Pantai Lombang Sumenep with guided inquiry approach in developing science literacy and science process skill have fulfilled the proper, practical and effective category. But it needs to be improved again so that learners can learn independently by using the module.

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# The Development of Learning Outcomes Test Instrument of Students' Basic Accounting Subject

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## Abstract

This research is development research that aims to develop the learning outcomes test instrument of Basic Accounting subject. The product of this research is 50 item test about multiple choice with five choices of answers. The development of this research combined ten step modified of research and development of Borg and Gall with nine stages of preparation of tests. Test instruments were tested twice, i.e. small-scale trials and large-scale trials. In small-scale trials, the reliability is 0,864. The researcher revised seven items because it is still included in the category too easy and too difficult, as well as the distinguishing and functioning of the deception, has not functioned optimally. In large-scale trials, three items still need to be revised because entry into categories is too easy and too difficult. Differentiating power begins to function optimally and degrading functionality is still not effective.

**Keywords:** Development of Instrument, Learning Outcomes Test, Basic Accounting Subject.

## 1. Introduction

The development of Indonesian society is getting faster, especially in a modern era like today. It is in line with the growth and the progress of science. This country also needs skilled workers and experts in their field to do the construction. Therefore, education becomes very important and influential to carry out the development of human resources.

Improving the quality of education cannot be separated from government intervention. During this time the government always enhance the quality of education, one of them through the Research and Development Curriculum Center in preparing a new curriculum to balance the development in the world of education.

The government replace *Kurikulum Tingkat Satuan Pendidikan* (KTSP) with the 2013 Curriculum. Unlike the previous curriculum, the 2013 Curriculum has a whole approach based on student creativity, while the teacher only acts as a facilitator. Retnawati (2016: no page) state that in this 2013 Curriculum educators not only emphasise knowledge and skills but also have changes in teaching approaches and assessment systems. The 2013 Curriculum can be used for the development of a standardised curriculum. This process standard initially focuses on exploration, elaboration, and confirmation, transforming into observing, questioning, processing, presenting, summarising, and creating.

Besides, improving the quality of education can be seen from the quality of learning and quality of assessment. The quality of learning can be obtained from the process of teaching and learning

activities. We can see the indicators of improving the quality of learning from the increase in student learning outcomes. Good learning outcomes will motivate students to always be diligent in learning and motivate teachers to be more enthusiastic in teaching. To improve the quality of assessment can be seen in the evaluation activities undertaken by teachers. Subali (2012: 1) explains that evaluation is a series of systematic and implemented activities to measure the success and efficiency of a program or learning. Evaluation activities need to be applied by teachers to regulate and control the quality of education.

Several steps must be evaluated of teachers in implementing the learning activities. Instrument evaluation of learning outcomes can be in the form of instrument test and non-test, but generally, teachers perform evaluations using test instruments to measure cognitive learning outcomes of students. Thompson (2013: 1) explains that a standardised test can provide better information about the students than a parent or teacher assessment.

Test instruments that meet the standards of test instruments are valid and reliable, considering the discrimination index and problem difficulty index. A suitable test instrument is a matter that is not either too easy or too difficult. Test instrument which is too easy does not stimulate students to heighten efforts to solve them. On the contrary, the test instrument which is too tricky will cause students to be discouraged and do not have the spirit to try again because it is out of reach. If in making a good test instrument, then the device will be able to select naturally, which students who are smart and students who are less intelligent. So that student learning outcomes can be proven scientifically through a qualitative question and able to test the ability of students.

One of the compulsory subjects for the students of class X AKKL SMK Negeri 1 Yogyakarta is Basic Accounting subject. Teachers in testing the ability of students in Basic Accounting subject generally use a test instrument in the form of a description. This form of description is selected because students need to practice such as making a journal, posting a ledger, making adjusting entries, and so on. Teachers have not yet made a double-choice test instrument whereas the teacher can use the multiple choice test instrument as a question bank to be tested by the students. Reported from news.okezone.com, starting from 2018 *Kemendikbud* applies the test by using a test instrument that requires great reasoning power called the term High Order Thinking Skills (HOTS). The use of HOTS-based test instruments should be familiarised in the students so that students are better prepared to work on test instrument that requires great reasoning power.

Based on the results of preliminary observations and analysed the data of daily examination results made by researcher toward the teacher of Basic Accounting subject at SMK Negeri 1 Yogyakarta on January 9, 2018, the test instruments developed not in following the procedures. It can be seen from the results of the validity and reliability test of daily test of class X AKKL students in Basic Accounting subjects. From the ten items in the form of essay examination developed by the teacher, valid questions are only two items. From the problem, it is also known that the reliability is very low, namely equal to 0.016. These results indicate that the developed test instrument is still far from the standard of validity and reliability. The results of the calculation of discrimination index are classified as less good so that the test instrument developed is not undoubtedly able to divide students who already understand and students who do not understand the material. Distribution of problem level is not good, the researcher found that 50% of the questions are very easy, 20% of the questions are easy, 10% is moderate, 10%

is difficult, and 10% is very difficult.

Based on this observation and analysis of the preliminary data, it can be seen that the teacher has some related problems in making a good test result learning instrument. Therefore, researchers are encouraged to conduct research entitled: "**Development of Learning Outcomes Test Instruments of Students' Basic Accounting Subject Class AKKL SMK Negeri 1 Yogyakarta Academic Year 2017/2018**".

## 2. Method

Type of research in this study is research development. The test instrument is in the form of a multiple-choice test questions totalling 50 items. Analysis of test instrument development was carried out during February until March 2018. The researcher conducted this research at SMK Negeri 1 Yogyakarta, at Jl. Kemitiran Kidul 35, Pringgokusuman, Gedongtengen, Yogyakarta. In this research, the development of instrument conducted by the researcher was through two stages, i.e. product testing and research trial. The population that in this study were students of class X SMK Accounting Department 1 Yogyakarta contains to 64 students and is divided into two classes, AKKL X 1 and X AKKL 2. While the object of this research was a set of test instrument that will be used to measure the cognitive abilities of students on the Basic Accounting subject.

The steps conducted in developing the test instrument follow ten steps of modified research and development Borg and Gall combined with nine steps of preparation of tests. According to Borg and Gall in Sukmadinata (2013: 169), there are ten steps to implement the strategy of research and development. The tenth step research and development Borg and Gall are:

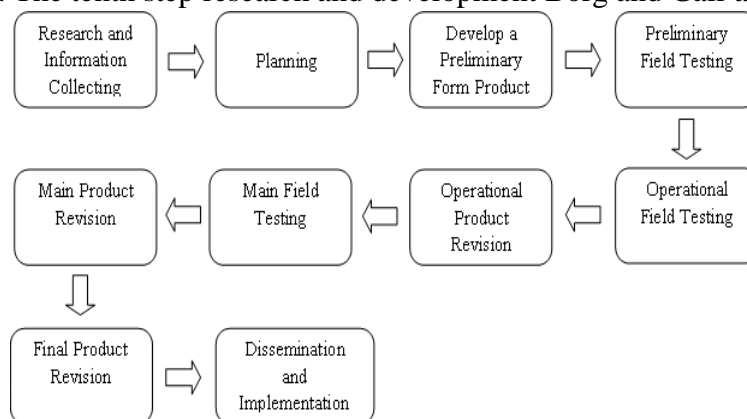


Figure 3. Procedure according to Borg & Gall Research (Sugiyono, 2015:37)

The data collected from this test instrument development research were quantitative data as the primary data and qualitative data in the form of suggestions and feedback from the respondents. Such data will provide an overview of the quality of products developed test instruments. In this study, to get data and information that is appropriate, the researcher used several data collection techniques, they are: Questionnaire, Interview, and Documentation.

The data analysis technique in this research were:

### a. Validity

Evidence content validity of a test result of learning is done through two phases, and the first is the fit between the indicator on the instrument lattice with the operational definition



of the test instrument. The second is to determine the suitability of the indicators with the item instrument. Instrument validity determination method in this research is using Aiken. The formula used is as follows:

$$V = \frac{\sum_{i=1}^{c-1} i n_i}{N(c-1)}$$

Description:

- c = the number of category
- i = the weight of each category
- $n_i$  = the number of panelists who chose the category i
- N = the number of panelists

(DjemariMardapi, 2017:44)

Validity Aiken statistically significant can be tested using a normal distribution.

b. Test Reliability

Test instrument which is made in the form of multiple-choice test questions, which means the test item by dichotomy (made up of the numbers 0 and 1), then the formula used is Kuder Richardson formula-20.

$$r_{11} = \left( \frac{k}{k-1} \right) \left( \frac{s^2 - \sum_i P_i^2 (1-P_i)}{s^2 x} \right)$$

Description:

- $r_{11}$  = overall test reliability
- $P_i$  = proportion of subjects who received a score of 1 on the item i, ie the number of subjects received subjects received a score of 1 divided by the number entire subjects
- $s^2 x$  = variance test scores x
- k = the number of parts of the test, in case of the amount of test items.

(DjemariMardapi, 2017:65)

The result of the calculation is then interpreted to the coefficient or r value as follows:

- 1) If  $r_{11}$  is equals or greater than 0,70, then thereliability of test results being test have a high reliability.
- 2) If  $r_{11}$  is smaller than 0,70, then the reliability of test result being tested does not have high reliability.

(Anas Sudijono in Ataya N.A dan Ani W, 2012:12)

c. Problem difficulties index

Difficulty level analysis was conducted to determine the level of difficulty matter so that it can be determined which questions were easy, medium and difficult to remedy the balance of proportion on the matter prepared. Balance of the proportion between the matter of easy, medium and difficult will determine the quality of a matter that is made, or in other words, a quality problem is a matter of proportion about the easy, medium and difficult balance. Analysis of the level of difficulty about is done using the formula:

$$I = \frac{B}{N}$$

Description:

I = index of difficulty for each item

B = number of students who answered every item correctly

N = number of students who give answers to the questions that are intended

(Nana Sudjana, 2013: 137)

Standard of problem difficulties level and follow up used in SMK Negeri 1 Yogyakarta is as follows:

Table 2. Standard of problem difficulties index

<b>% Score Achievement Item Test</b>	<b>Description</b>	<b>Follow-up</b>
0%-4,9%	Very Difficult	Revised
5%-50%	Difficult	Used
51%-75%	Moderate	Used
76%-95%	Easy	Used
96%-100%	Very Easy	Revised

d. Discrimination Index

According to Nana Sudjana (2013: 141), the analysis examines distinguishing test items to determine the ability of matter to distinguish students who are classified as capable (high performance) with students who are classified as less (low performance). Tests without distinguishing features will not produce the results portrayed by the students' actual ability. The common way in the analysis of differentiated power is by using a table or a criteria of Ross and Stanley with the formula:

$$DP = SR - ST$$

Description:

SR= the number of students who have wrong answer from the low performance group

ST=the number of students who answered correctly from high performance group

(Nana Sudjana, 2013: 141)

The classification of distinguish power is as follows (ArinaBahroShabrina, 2016:5):

DP: Negatif – 9% = Very Bad

DP: 10% - 19% = Bad

DP: 20% - 29% = Enough

DP: 30% - 49% = Good

DP: 50% above = Very Good

e. Distractor Efficiency

Quality posing is a good or bad size of a humbug used on every item of multiple choice questions given. Criteria for determining humbug(distractor)function well is if at least 5% selected by followers of the test. The researcher can reused the distractor which has to appropriartely functioned incoming tests. Thus, the effectiveness of the *distractor* is how good the wrong choice can outwit the test participants who did not know the answer key provided. The more participants who chose the distractor it can function properly. If the test participants ignore all option (do not select) referred to omit. Viewed concerning eliminate, an item is considered as a good item if the overlook is not more than 10% of followers tests. The classification of distractor based on the distractor's index is as follows (ArinaBahroShabrina, 2016:5):

Table 3. Index of distractor

Distractor that do not work	Criteria
0	Very Good
1	Good
2	Enough
3	Not Good Enough
4	Bad

### 3. Result

#### ***Procedures Pursued in Development of Learning Outcomes Test Instruments***

The Development of Learning Outcomes Test Instrument is an adaptation and modification of ten research and development steps of Borg and Gall model combined with the nine steps of preparation of test instruments according to DjemariMardapi. The 10 steps of research and development of Borg and Gall model are: 1) data and information collecting; 2) planning; 3) developing preliminary form a product; 4) preliminary field testing; 5) main product revision; 6) main field testing; 7) operational product revision; 8) Operational Field Testing; 9) final product revision; 10) Dissemination and Implementation. While the nine steps of preparation of tests namely: 1) Prepare the test specifications; 2) Writing tests; 3) Reviewing the test; 4) Conducting test trials; 5) Analyze the test items; 6) Fixing the test; 7) Assemble the test; 8) Conducting tests; 9) Interpreting the test results.

#### ***Validity of Developing Learning Outcomes Test Instrument by Material Expert, Measurement Expert of Evaluation, and Basic Accounting Subject Teachers***

Validation results indicate that the average of each item test is above 0,75. The magnitude of the instrument content validity index is  $V = 0,975$ . The magnitude of the validity index of 0,975 is high, higher than 0,75. From these results, it is known that the developed learning test instrument has been valid to use

#### ***Reliability Results of Learning Outcomes Test Instruments Development***

The result of the calculation shows that on small scale test, the instrument reliability is 0,864 and in large scale test the instrument reliability is 0,853. Both tests show that results are higher than 0,70, so it concluded that the study result test instrument that has been tested has high instrument reliability.

### ***Problem Difficulty Index on Learning Outcomes Test Instruments***

For the test instrument measure the student's actual ability, the test instrument should have good distribution of problem difficulties index. In small-scale trials, it is known that there are two items that categorised into very difficult category (4%), eight items categorised into the difficult category (16%), 17 items are in the medium category (34%), 18 items belong to the easy category (36%), and five items categorised into the very easy category (10%). More details can be seen in the following diagram:

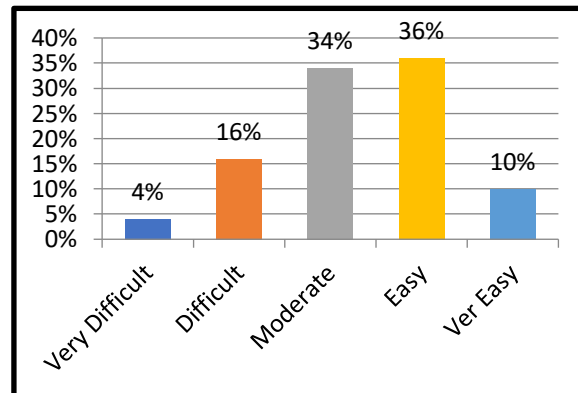


Figure 4. Problem Difficulty Index on Small Scale Trial

In large-scale trials, it is known that there is one item in the very difficult category (2%), five items categorised into the difficult category (10%), 21 items into the moderate category (42%), 21 items belong to easy category (42%), and two items are in very easy category (4%). More details can be seen in the following diagram:

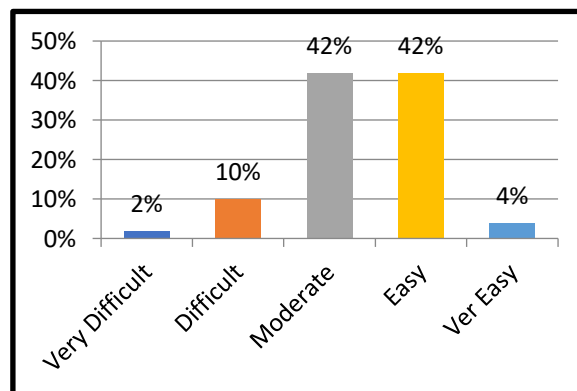


Figure 5. Problem Difficulty Index on Large Scale Trial

### ***The Discrimination Index on Learning Outcomes Test Instruments***

The researcher used discrimination index to know whether the developed test instrument can classify students who have already understood with those who have not understood the related material being tested. In this learning outcomes test instrument, small-scale test data indicates that 13 items categorised into very bad (26%), ten items categorised into bad category (20%), five items are in good enough category (10%), four items are into the good category (8%), and 18 items belong to the very good category (36%). For more details can be seen in the following diagram:

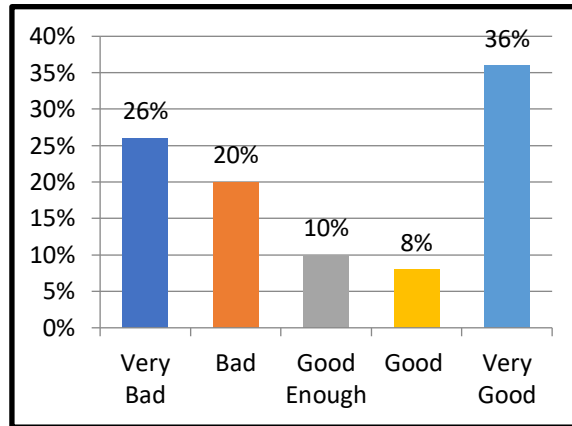


Figure 6. Discrimination Index on Small Scale Trial

In large-scale trials it is known that four items categorised into very bad category (8%), seven items categorised into bad category (14%), 13 items categorised into good enough category (26%), 21 items inside good category (42%), and five items are in very good category (10%). For more details can be seen in the following diagram:

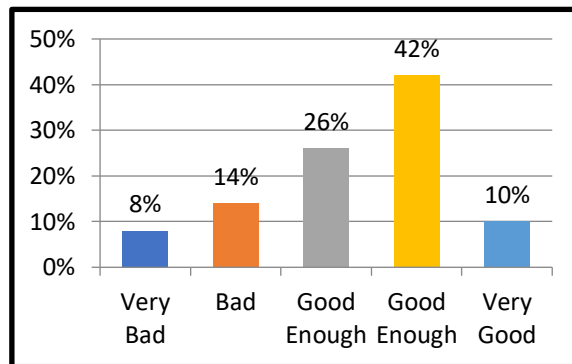


Figure 7. Discrimination Index on Large Scale Trial

***The Distractor Efficiency on the Learning Outcomes Test Instrument***

In the developed learning outcomes test instrument, the distractor used in each item should be good. In the small-scale test, the researcher found that no items that belonged to not good category, 12 items included in not good enough category (24%), nine items included in enough category (18%), 20 items included in good category (40%), and nine items included in very good category (18%),

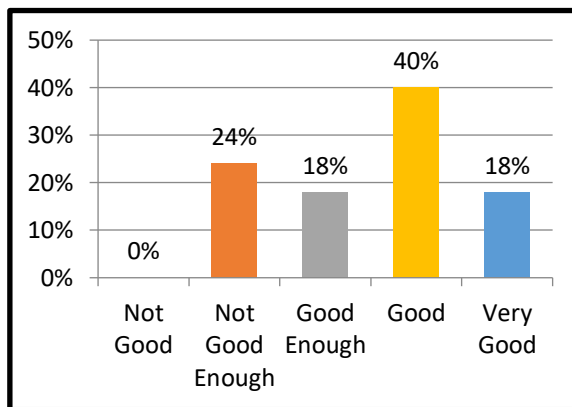


Figure 8. Distractor Efficiency on Small Scale Trial

In a large-scale trial, the researcher found that two items that included in not good category (4%), five items included in not good enough category (10%), ten items included in enough category (20%), 20 items included in good category (40%), and 13 items included in very good category (26%).

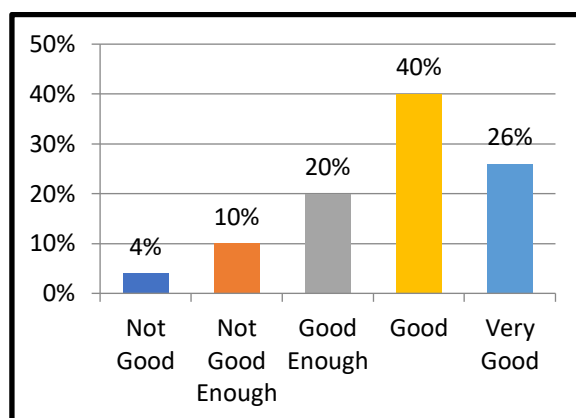


Figure 9. Distractor Efficiency on Large Scale Trial

#### 4. Discussion

Learning Outcomes Test Instrument of Basic Accounting Subject developed by the researcher is a formative test instrument in the form of multiple choice by covering material of Adjustment Journal, Worksheet, and Financial Statement. Gronlund and Linn in Purwanto, (2012: 67) explains that formative tests are tested to determine the extent to which teaching and learning activities in one program can shape the behaviour of students who become the learning objectives of the program. In this case, formative tests are used to determine whether the teaching and learning activities conducted by teachers and students during. Basic Accounting, especially on the material adjusting Journal, Worksheet and Financial Statement have achieved the purpose of learning.

In making the learning outcomes test instrument, the teacher must be willing and able to develop the test instrument in both formative and summative tests. Moreover, supported by the condition that currently the students will be tested for their ability with HOTS-based test instruments, then the teacher must be able to make the test instrument in the process requires great reasoning power. In the development of multiple-choice test instruments, teachers must also be able to create test instruments that meet reliable criteria and meet the characteristics of the item. Besides the selection of the type of test instrument to be used to measure the student's ability should pay attention to the student's condition.

#### 5. Conclusion

Based on the result of the research and discussion that had been described, it could be concluded that the Development of Learning Outcomes Test Instrument on Students' Basic Accounting Subject Class X AKKL SMK Negeri 1 Yogyakarta has met the standard test instrument.

#### 6. Suggestion

Based on the results of research, the researcher suggested as follows:

- a. For School, schools should conduct regular training on standard test instruments so that teachers are able to make good test instruments. The school provides guidance to teachers

in making HOTS-based test instruments so that students are accustomed to working on HOTS problems created by teachers.

- b. For Teacher, teachers should develop a more varied forms of the instrument (not limited to the description form). In making the test instrument teachers pay attention to the validity, reliability, and characteristics of the item so that the instrument made will be more capable to measure the actual students' ability, and teachers should take part in training on the manufacture of test instruments held by schools as well as outside schools.
- c. For Further Research, the form of developed test instruments can be more varied not only in the form of multiple choice-shaped test instruments. The development of test instruments can be more thorough in measuring capabilities in cognitive, psychomotoric, and affective shutouts. Large-scale trials should be implemented more broadly so they can produce a useful test instrument and can be used more widely. The development of test instruments is not only fixed on one formative test but also can be summative, diagnostic, or placement tests. Developing the test instrument more varied in its type so that students will feel challenging to work together.

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# The Influence of Website Quality on E-Learning Usage Continuity

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## Abstract

This research is concerning on the influence of website quality on the continuity of e-learning usage. The researchers tested the positive influence of website quality on perceived value and the positive influence of perceived value on the intention to continuance intention to use e-learning to answer the research question. The online questionnaire is distributed to the research sample, 48 lecturers who are online course creator and active users of e-learning, to gather meaningful information for the analysis. Further, data analysis is conducted by using Partial Least Square (PLS). Research result suggests that all hypothesis is proven. Website quality has a positive influence on the perceived value (H1) with P-value 0.000. Also, perceived value is proven to have a positive influence on continuance intention to use e-learning with P-value 0.000. In conclusion, website quality has a positive influence on e-learning continuance intention.

**Keywords:** Website Quality, Perceived Value, Intention to Continue the Use of E-Learning

## 1. Introduction

In the past ten years, there has been a positive trend in the development of global internet usage (Kemp, 2013, 2014, 2015, 2016, 2017, 2018). APJII, an Indonesian association of internet service providers, surveyed internet users in Indonesia in 2016 and found that 93,8% of them have been using the internet to access educational content (APJII, 2016). The finding signals that information technology and the internet has influenced life in general and education in many ways.

Internet and technology usage in education results in the invention of new learning media and system, such as e-learning. E-learning is one of the most promising and developing issues in the education sector (Chang, 2013). E-learning is described as an internet-based learning resource (Rezaei Sharifabadi, 2006) utilized to distribute independent content and conduct long-distance learning (DeGennaro, 2010). E-learning enables the users to access the material any time and anywhere and also allows the teacher to enrich the materials with various multimedia sources in an instant and a real-time manner (Surjono, 2013).

E-learning serves competitive advantage for the learning process and has been developed vastly. Indonesia is currently ranked eighth in the world, in the development of e-learning adoption with the 25% growth rate, which is above ASEAN average e-learning adoption rate (17.3%)



(Eka, 2017). Previous researchers studied factors affecting continuance intention to use e-learning by adapting DeLone and McLean (2003) model of information system success. Chiu, Hsu, Sun, Lin, and Sun (2005), Chang (2013), and Dreheeb, Basir, and Fabil (2016) suggested satisfaction as the mediator of the relation among system quality, information quality, and service quality. In addition to satisfaction variable, Chang (2013) also suggested perceived value as the mediator in the similar relationship. This research is trying to combine three dimensions of information system quality proposed by DeLone and McLean (2003) in one integrated website quality construct to earn better understanding on the relation between website quality and continuance intention to use e-learning in the learning process. This research is focusing on the influence of website quality on the e-learning continuance intention.

## **2. Literature Review & Hypotheses Development**

### *2.1. Model of Information System Success*

The evaluation of information system success is focusing on the advantage earned from the adopted system. In its early development in the 1980s, research focused on quality of the system and information in connection with users' satisfaction and impact on the individual as well as the organization. The sample of previous research is Alavi and Henderson (1981), Ginzberg (1981), Raymond (1985), and Sanders and Courtney (1985). Unfortunately, they have not been able to put a specific measurement on the success level.

In the early 1990s, DeLone and McLean (1992) introduced six dimensions to measure information system success including system quality, information quality, information system usage, users' satisfaction, individual impact and organizational impact. The six dimensions are later used to construct an applicative and straightforward model.

P. B. Seddon (1997) criticized DeLone and McLean (1992) model by scrutinizing on the logical process and causal relationship in the model. P. B. Seddon (1997) suggested an alternative model focusing more on the causal aspect of relation among taxonomy categories and separating it from information system success and behavior causal model resulted from information system success. Seddon success model includes three variables: (1) measurement of information and system quality; (2) measurement of perceived satisfaction and usefulness; (3) measurement of other information system usefulness.

DeLone and McLean (2003) proposed a revised model on information system success and evaluate its usefulness in more extensive use of information system especially in the development of e-commerce. They agreed on P. B. Seddon (1997) that unification of causal model and process would confuse people. However, they argued that the formula proposed by P. B. Seddon (1997) be considered a complicated success model and shifted the primary purpose of the original proposed model.

DeLone and McLean (2003) suggested a revised information system success model by adding service quality dimension as a new dimension to measure information system success and categorize the individual and organizational impact to one net dimension. Considering a voluntary basis in deciding the system application, DeLone and McLean (2003) remained using system use and intention development dimension as the essential dimensions in measuring success.

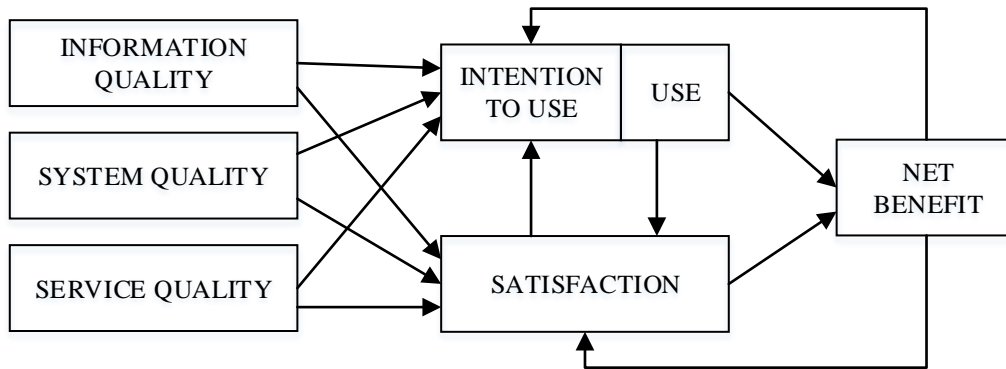


Figure 1: Success Model of DeLone and McLean (2003)

## 2.2 Website Quality, Perceived Value, and Continuance Intention

Information system (website) quality consists of three main constructs including system quality, information quality and service quality (DeLone & McLean, 2003). In the context of website quality, Kuan, Bock, and Vathanophas (2008) defined system quality as the degree to which the user's belief that the website is easy to navigate and able to interact consistently. Meanwhile, information quality is defined as the degree to which the user's belief that information provided in the website owns content attribute, preciseness, time format and preciseness. Lastly, service quality is defined as the degree to which the user's belief that the website is responsive, interactive, provide safety and protection to privacy, and effective in searching and comparing information.

P. Seddon, Kiew, and Patry (1994) and Chang (2013) tested the influence of system quality on the perceived value found a positive relationship between them. Saeed and Abdinnour-Helm (2008) and Chang (2013) tested the relationship between information quality and perceived value and found a similar positive relationship between them. Furthermore, other research also found that service quality is significantly affecting perceived value (Chang, 2013; Tam, 2000). Perceived value is defined as the aggregate valuation on consumers' perception on the use of product and services based on what they received and gave (Zeithaml, 1988). Perceived value acts as the direct antecedent of continuance intention to use e-learning and positively influences continuance intention to use e-learning Chang (2013). Based on discussed theories, this research proposes two main hypotheses as follows:

H1: Website quality positively influence perceived values

H2: Perceived value positively influence continuance intention to use e-learning

## 3. Method

### 3.1 Sample

The research sample includes lecturers using e-learning in their teaching. To determine the minimum amount of sample, the researchers use power analysis approach assisted with G\*Power 3.1.2 software (Faul, Erdfelder, Buchner, & Lang, 2009). Furthermore, A-priori power analysis for fixed model multiple regression is implemented. In detail, the predictor of single coefficient amounts to 6, error prob 0,05 with impact size medium as much as 0.15 (0,02 small; 0, 15 medium and 0,35 large) (Cohen, 1988) and power amounts to 0,08 (Chin, 1998). Based on the analysis result, it is determined that the amount of minimum sample needed is 43.

The questionnaire is distributed online to the whole population (150 lecturers). The online survey is chosen for several reasons namely easy to complete and manage, able to include various questions for any subject and provide a higher order of information as well as interactivity (Cobanoglu & Cobanoglu, 2003; Ilieva, Baron, & Healey, 2018). Vu and Hoffman (2011). Vu and Hoffman (2011) argued that online survey has become one of the most popular methods in quantitative research due to its relatively low cost and high speed. From all of the spread questionnaire, there are 48 valid responses to be analyzed.

### 3.2 Variable definition and measurement

#### 3.2.1 Continuance intention to use e-learning

Continuance intention is defined as the degree of users' intention to use e-learning system and willingness to recommend the system to others. Questionnaire design adopted from Chang (2013) is used to measure the whole construct. Furthermore it is measured by using 5 points of the Likert scale.

#### 3.2.2 Website Quality

Website quality consists of three main constructs, namely system quality, information quality and service quality (DeLone & McLean, 2003). Website quality is defined as the degree of process quality, output quality, and assurance quality wellness in e-learning. The constructs are measured by using questionnaire item introduced by DeLone and McLean (2003) and modified by Chang (2013). In detail, the constructs are measured by using 5 points Likert scale.

#### 3.2.3 Perceived Value

Perceived value is defined as an aggregate valuation on consumers' perception on the use of a certain product or service based on what they received and gave (Zeithaml, 1988). The constructs are measured by using questionnaire adapted from Chang (2013). In detail, it is measured by using 5 points Likert scale.

### 3.3 Validity and Reliability

Instrument's validity is tested by using convergent validity and discriminant validity. A construct is considered to fulfill convergent validity if its average variance extracted (AVE) is greater than 0.5 and has loading factor at least 0.60 or ideally 0.70 or more (Chin, 1998). The convergent validity of this research used 0.60 loading value in the data analysis and has commonality value not less than 0.5. Furthermore, construct is considered to fulfill discriminant validity if the loading value between latent variable and its indicator is greater than the loading value between the particular indicator and other latent variable (cross loading). The result of cross loading test is provided in Table 1.

Tabel 1. *Cross Loading*

	<b>Continuance Intention to Use</b>	<b>Perceived Value</b>	<b>Website Quality</b>
ICU1	<b>0.9293</b>	0.6453	0.5504
ICU2	<b>0.9359</b>	0.5425	0.5728
ICU3	<b>0.8724</b>	0.4161	0.4129
IQ1	0.5615	0.6794	<b>0.7539</b>
IQ2	0.5738	0.4828	<b>0.7019</b>
IQ3	0.4403	0.5607	<b>0.7786</b>
IQ4	0.2293	0.5506	<b>0.6953</b>

IQ5	0.5500	0.6280	<b>0.8466</b>
IQ6	0.4578	0.6258	<b>0.8033</b>
PV1	0.4070	<b>0.8197</b>	0.6737
PV2	0.4499	<b>0.8237</b>	0.5533
PV3	0.6040	<b>0.7902</b>	<b>0.4922</b>
ServQ1	0.2648	0.4235	<b>0.6425</b>
ServQ2	0.2488	0.4781	<b>0.7453</b>
SysQ1	0.5144	0.3475	<b>0.6063</b>
SysQ2	0.3208	0.2827	<b>0.6201</b>
SysQ3	0.2612	0.4305	<b>0.7414</b>
SysQ4	0.4525	0.4054	<b>0.6896</b>

Instrument reliability is tested by calculating Cronbach's alpha and rho alpha. An instrument is considered valid if its Cronbach's alpha is higher than 0.7 and its rho alpha is higher than 0.7 (Dijkstra & Henseler, 2015). Table 2 displays the result of validity and reliability test. Based on Table 2, all criteria of validity and reliability have been fulfilled.

Tabel 2. Validity and Reliability Test

	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Continuance Int. to Use	0.9018	0.9403	0.9375	0.8335
Perceived Value	0.7404	0.7406	0.8524	0.6582
Website Quality	0.9162	0.9289	0.9284	0.5215

### 3.4 Research Model and Hypotheses Testing

In this research, the hypotheses testing is conducted by using Partial Least Square (PLS) approach. To assist the hypotheses testing, PLS Smart 3.2.7 developed by Ringle, Wende, and Becker (2015) is used. Ho, Ang, and Straub (2003) mentioned that using PLS will provide an advantage to the researchers since it can estimate the size of a validity and reliability model measurement. Also, by using the indicator of the latent construct, PLS can produce a parameter for a structural model to measure the strength of hypothesized relation. Furthermore, hypotheses are tested by using bootstrapping function. The significance can be measured by comparing the value of t-statistic and t-table. Meanwhile, the direction of the relation (positive or negative) can be seen in the original sample column (Hartono & Abdillah, 2009). Figure 2 provides a clear picture of theoretical framework and hypothesis testing model.

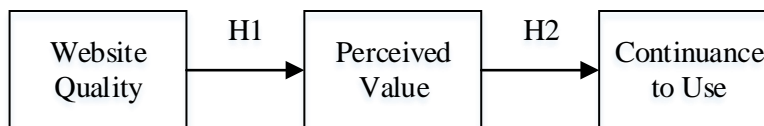


Figure 2: Theoretical Framework

## 4. Results

### 4.1 Respondent's Description

There is a fair distribution of respondents' gender in this research in which the average age is 36.32 years old. Also, on average the respondents have been using e-learning as part of the learning process for 4.09 years. Table 3 provides detailed information regarding respondent's demography.

Tabel 3. Respondent's Demography

<b>Panel A</b>				
	Amount	Percentage		
Male	26	54%		
Female	22	46%		
Total	48	100%		
<b>Panel B</b>				
	Minimum	Maximum	Mean	Std. Dev.
Age (year)	25	63	36,31	9,47
Teaching Experience (year)	1	38	9,96	8,78
Experience in using e-learning (year)	1	18	4,09	3,76

#### 4.2 Hypotheses Testing Result

Hypotheses testing is conducted by using Partial Least Square (PLS) approach to include all indicators and construct into one testing model. T-statistic and p-value are used to determine whether or not a hypothesis is supported. Furthermore, the nature of the relation can be determined by analyzing the value of the earned original sample. If the value is positive, it indicates a positive relation and vice versa. Based on the test's result, both H1 and H2 are supported (detailed information is provided in Table 4).

Tabel 4. Hypotheses Testing Result

	Original Sample	T Statistics	P Values	Keterangan
H1 Website Quality -> Perceived Value	0.6011	10.8380	0.0000	Didukung
H2 Perceived Value -> Continuance Int. to Use	0.7078	5.5626	0.0000	Didukung

## 5. Discussion

This research is attempting on retesting the impact of website quality on continuance intention to use e-learning. Unlike the research conducted by Chang (2013), this research is using course creators of e-learning having the authority and full access to use e-learning in their classes as the sample. In this case, the use of e-learning is based on a voluntary basis. Also, e-learning quality to support the success of learning process has a substantial impact on the decision to use e-learning. This research shows a positive relationship between e-learning website quality and perceived value. It indicates that website quality can improve the value of e-learning.

Naturally, an individual will tend to repeat a specific activity when he experiences value-added or finds an advantage in it. In the context of e-learning, users will remain using e-learning when they find it useful. The finding of this research provides support to Chang (2013) that perceived value positively affects continuance intention to use e-learning.

Based on the research finding, it can be concluded that website quality can indirectly affect continuance intention to use e-learning. Website quality will influence continuance intention to use e-learning when the users can gain advantage from the website throughout the learning process. In other words, when the content and features of the website are unable to create value for the users, website quality is considered to be low and unable to influence the users to continue using it.

## 6. Conclusion and Future Research

The result of data analysis indicates that website quality positively influences perceived value (H1) and perceived value positively influence continuance intention to use e-learning (H2). Further researchers can integrate other affecting factors into the model, such as technology readiness and external support. The two factors can influence information system acceptance and adoption (Nugroho, 2015; Nugroho & Fajar, 2017).

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# Income Smoothing Determinants in Indonesia Banking Industry

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## Abstract

The research aim to determine the effect of profitability, corporate value, company size and financial risk to income smoothing. Researchers would like to review the factors affecting income smoothing, at the banking companies listed on the IDX during the period of 2014-2016. The sampling method use author is purposive sampling there are 21 company of research sample or 66 sample. The analysis technique used is logistic regression with enter method and quartile analysis. The results showed profitability, corporate value and financial risk have a positive and significant effect on income smoothing, but size of the company doesn't affect on income smoothing. Quartile analysis showed that most of companies that conduct income smoothing have PBV 0.82- 1.66 and DAR > 0.8.

**Keywords:** company value, debt, income smoothing, profitability, size

## 1. Introduction

Income smoothing is a common phenomenon as management efforts to reduce reported income fluctuations. Income smoothing conducted by the manager, based on various reasons such as reducing tax payment issues (Guenther, 1994; Boynton et al., 1992), debt covenants (Watts and Zimmerman, 1986) to keep their positions safe within the company (Fudenberg and Tirole, 1996).

Income is one of the considerations for the investors. Attention from investors and stakeholders on income information, raises the problem to management activities to manage the income. The tendency of management to result in the practice of income smoothing at companies listed on the Indonesia Stock Exchange, especially the risky industries, one of which is banking. Recently Bukopin Bank, one of private bank in Indonesia, restated income for 2015, 2016 and 2017. Duru and Tsinidis (2013) stated that insurance and banking are industries that usually engage in income smoothing.

Income smoothing practice can be explained with agency theory and signaling theory. The practice of earnings management based on the agency theory approach explains the conflict of interest between the management (agent) and the owner (principal) arising from the employment contract and consensual agreement. The agency conflict arises because each party seeks to achieve and maintain the desired level of prosperity. The approach of signal theory

to income smoothing is a company management steps to provide guidance or signs about the conditions that describe the state of the company from the information and record information produced, according to Pratiwi and Mahastanti (2013).

The definition of income smoothing according to Barnea et al. (1976) is income smoothing as a deliberate reduction of profit fluctuations at some level of profit to be considered normal for the company. Meanwhile, according to Beidleman (1973) income smoothing is an attempt conducted by management to suppress the variation in profit as far as possible by accounting principles in Pratama (2012). Because banks are a service industry, the sales variables in convention with income.

Some previous studies show inconsistent results even on the same object. Research on income smoothing conducted on firms registered on Indonesia Stock Exchange (IDX) has been conducted but found inconsistent result. The research results show that company size (Anwar and Chandra, 2107; Nurliyasaki and Saifudin, 2017), profitability (Sherlita and Kurniawan, 203), financial leverage Boudiche (2013), and company value (Aji and Mita, 2010) have a positive significant effect on income smoothing. The other results found in Aji and Mita (2010) profitability and firm size have no effect on income smoothing. Table 1 present determinant factors of income smoothing.

Table 1. Determinant Factors of Income Smoothing

Determinant Factor	Sign	Company Sector	Income smoothing measurement	Researchers
Profitability	-	Basic industry and chemical sector in Indonesia	Correlation between changes in discretionary accruals and change in pre-discretionary income	Ratnaningrum (2016)
Debt (financial risk)	+	All sector in Tunisia	Variability of operating cash flow	Boudiche (2013)
Audit quality	-			
Profitability	+	All sector in Indonesia	Eckel Index	Sherlita and Kurniawan (2013)
Net profit margin	+			
Company size	+	Miscellaneous industry in Indonesia	Eckel Index	Anwar, Chandra (2017)
Dividend ratio	-			
Ownership structure	+	Pharmaceutical companies in Indonesia	Eckel Index	Nurliyasaki and Saifudin (2017)
Company size	+			
Leverage	+			

Financial Risk	+	Manufacturing	Eckel Index	Aji and Mita
Firm Value	+	companies in Indonesia		(2010)

## 2. Hypotheses Development

### 2.1. *Effect of profitability on Income Smoothing*

A high level of profitability will affect income smoothing action, since profits that appear to be highly positive fluctuate give a bad impression according to management. This is because management is afraid of not being able to meet investor expectations of the expected rate of return. Closely related to signaling theory and agency theory, management will perform income smoothing and provide good figures processing information, in order to be used to address the old investors and bring in new prospective investors, as they are more dominantly interested in stable profit information and keep them away from risks that would harm them and expect good returns (Noviana and Yuyeta, 2011; Salim, 2014). In Tax perspective, high profit will increase tax expense, so manager tend to smoothing income (Aji and Mita, 2010).

H1: Profitability affects income smoothing.

### 2.2. *The Effect of Company Value on Income Smoothing*

The value of stocks that are fluctuating and high, is an inconsistent signal on investor valuation. Management actions that are related to the information asymmetry from investors' point of view in the capital market, they are more dominantly interested in the signal processing of management figures in stable profit information, as investors will respond to it as a signal of capital market conditions from the investor's perspective (Suranta and Merdistuti, 2004). Evidence that income smoothing is driven by high stock prices, if the value of shares will signal and the market responds to such information as information in decision making and on the other side the company uses income smoothing to attract resource flows.

H2: Company value affects income smoothing

### 2.3. *The Effect of Company Size on Income Smoothing*

Companies on a large scale tend to make income smoothing and respond to information circulating in the market. This is conducted by management to give a positive signal that the condition of the company is good. Because it gets more attention from external parties (investors, creditors, analysts) then management will act to maintain its existence by way of profit-sharing. This result is supported by research in Moses (1987), Nurliyasaki and Saifudin (2017).

H3: Company size affects income smoothing

### 2.4. *The Influence of Financial Risk on Income Smoothing*

Financial risk is the ratio of debt held in the company as a source of funding and assets owned to be guaranteed. High financial risk adversely affects investors' judgment, in decisions affecting their investment, the risk is a consideration that investors will use to predict the profitability that will be obtained and potential investors will avoid companies that have a high financial risk because it does not have promising future prospects. This result is supported by research conducted by Agung and Bagus (2014), Aji and Mita (2010).

H4: Financial Risk affects income smoothing.

### 3. Method

The location of this research was conducted in the Laboratory of Indonesian Stock Exchange Investment Gallery (BEI) Faculty of Economics and Business Universitas Musamus Merauke. Population in this research is Banking company registered and active in Indonesia Stock Exchange period year 2013-2016. Determination of the sample is conducted by purposive sampling method with criteria: 1. Companies whose financial statements are published in the Indonesia Stock Exchange in each period during the period 2013-2016, 2. The Company during the observation period has never experienced a loss, 3. The company presents the financial statements in rupiah. Based on these criteria, then obtained 21 companies into the sample. Furthermore, seckel index is calculated in order to know the company of grader and not grader and generalize with 2014-2016 object of research counted 63 years.

#### 3.1. Research Variables and Operational Definition

Dependent variable in this research is income smoothing and independent variables are profitability, company value, company size and financial risk. Operational variables are presented in Table 2.

Table 2. Operational Definitions

Variable	Definition	Measurement
<b>A. Dependent</b>		
1. Income Smoothing	effort by management to reduce the profit fluctuations in the company.	$\text{Eckel Index} = \frac{\text{CV}\Delta\text{S}}{\text{CV}\Delta\text{I}}$ <p>CVΔS = dispersion coefficient of sales variations</p> <p>CVΔI = dispersion coefficient of profit variations</p> <p>The researcher uses Eckel index to measure the company doing income smoothing where if, the value is less than 1 or equal to 0 (zero) and the company that does not do income smoothing is given more than 1 (one) value.</p>
<b>B. Independent</b>		
1. Profitability	Profitability is a ratio that measures the ability of the company with the overall	$\text{ROA} = \frac{\text{Net Profit}}{\text{Total Assets}} \times 100\%$

	funds invested in the asset in obtaining profit	ROA = Return on asset
2. Company Value	The company value is a reflection of the value of the company's shares circulating within the company and sold in the capital market	$PBV = \frac{MPS}{BVS}$ PBV = Price Book Value MPS = Market Per Share BVS = Book Value Per Share
3. Company Size	The company size is measured from the book value of the assets owned by the company that is calculated by using the natural logarithm of asset value.	Natural logarithm of total assets = $\text{Ln}(\text{total assets})$ .
4. Financial Risk	Financial risk is how the company relies on external financing (Bank) to support ongoing operations and reduce financial flexibility.	$DAR = \frac{\text{total liabilities}}{\text{total asset}} \times 100\%$ Debt asset Ratio

### 3.2. Data Analysis Method

Data analysis methods and techniques used to determine the effect of independent variables on dependent variable in accordance with the objectives of the research is logistic regression analysis with the help of application analysis tools SPSS 22 software For Windows statistical. The regression model is formulated as follows:

$$\text{LN} = \frac{IS}{1-IS} = \alpha + \beta_1 ROA + \beta_2 PBV + \beta_3 \text{Total Assets} + \beta_4 DAR + e$$

To test the feasibility of the logistic regression model, then the test conducted is the test to evaluate the fit model, assess the feasibility of the regression model, test the coefficient of determination, and parameter estimation test. The next test is partial hypothesis testing (Wald Test) and simultaneous (Omnibus Test) to know the significance of the influence of independent variables. The degree of confidence used to test the research hypothesis is  $\alpha = 5\%$  (0.05).

## 4. Result

### 4.1 Descriptive statistic

Descriptive statistics present in Table 3.

Table 3. Descriptive Statistics of the Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
ROA	63	0.0017	1.05	0.029	0.131
PBV	63	0.22	3.04	1.323	0.745
Size	63	28.26	34.52	31.20	1.678
DAR	63	0.74	0.91	0.845	0.384
IS	63	0	1	0.56	0.501

#### 4.2 Fit Model

The test results of overall model fit after the data is transformed by before and after on the research model.

Table 4. Fit Model

		-2 Log likelihood	Coefficients Constant
Iteration			
Step 0	2	86.557	.223
Step 1	9	57.895	-19.156

Early -2LL value of 86.557 and Final -2 LL of 57.895 as shown in Table 4 above means a decline in value so it is concluded that the regression model used is fit.

#### 4.3 Assess the feasibility of the regression model

The test result of feasibility assessment of regression model on logistic regression in Hosmer and Lemeshow Test which is viewed based on

Table 5. Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	12.049	8	.149

The result of the assessment of the logistic regression model in Table 5 Hosmer and Lemeshowtest, found that Chi-Square statistic value is (12.049) with significance probability value (0.149). In Hosmer and lemeshow table at probability significance level 0.149 bigger than level (sig) 0.05 or 5% and chi Square value bigger than significance level meaning no difference of estimation data with logistic regression model. It can be concluded that the regression model used is feasible and fit enough to be used as an analytical tool. After conducting the feasibility test of the regression model then, the next step is to see the accuracy of classification of the model as for the results of the classification of the regression model can be seen in Table 6 presented as follows:

Table 6. Classification table

Observed		Predicted		Percentage Correct
		IS	Not Smoothing	
Step	IS	21	7	75.0
	Not Smoothing			

1	Smoothing	6	29	82.9
	Overall Percentage			79.4

The results of classification accuracy calculation after the explanatory variables included in the regression model show a value of 79.4 percent. Based on the value of the classification number, it can be explained that the number 79.4 has been very good because it has exceeded 50 percent (cut off figure) meaning that it can be concluded that the model is very good and can classify the data with income smoothing of 79.4 percent.

#### 4.4 Testing the Coefficient of Determination

Nagelkerke, s R Square is a modification of Cox and Snell coefficients, s to ensure that values vary from 0 (zero) to 1 (one). The Nagelkerke statistical model is used to measure the ability of the logistic regression model in matching the data.

Table 7. Test Result of summary model (*Nagelkerke square*)

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	57.895 <sup>a</sup>	.366	.489

The output data of spss in table 6 above shows that the independent variables in this model are able to explain profit gains of 48.9 percent and the remaining 51.1 percent are explained by other variables outside in this research model.

#### 4.5 Parameter Estimation (*Testing Regression Coefficients*)

The final stage in this test is to test the logistic regression coefficient, where the result of the calculation is as follows:

$$LN = \frac{IS}{1-IS} = \frac{-19.156+X1 201.134+X21.597 -X3 0.443+X4 34.196+e}{-19.15+X1 201.134 +X21.597 -X3 0.443+X4 34.196+e} \quad (1)$$

$$LN = \frac{IS}{1-IS} = 1,00 \quad (2)$$

As previously defined in the logistic regression model, score 1 is a “smoothing” category or a chance of success and a score of 0 is a “not smoothing” category or chance of failure. The predicted result of the parameter estimation above can be categorized that the data included in the model can be explained in the regression equation as a company really performing income smoothing practice. This is because the result of the logit value of 1 above is worth greater than the cut-off value of 0.5 percent. However, if the logit value is less than the cut-off value of 0.5, then the predicted result can be categorized as “not smoothing”. From result of equation test of logistic regression analysis, it is seen that the constant value produced is negative 19.156 with Exp (B) 0,00. Regression coefficient value of profitability variable (X1) generated positive equal to 201.134. It means that if change of profitability by 1 percent then affecting the practice of income smoothing amounted to 22.4587. Company value variable (X2) has a positive regression coefficient of 1.597. It means, if the variable value of the company increases it will affect the practice of income smoothing (Y) will increase by 4,938.

The value of regression coefficient of Company Size variable (X3) which produced negative equal to -0,443. This means that if the company size variable increased by 1 unit then the

practice of income smoothing tend to be more decreased 0.642 units assuming that other independent variables remain. The financial risk variable has a positive regression coefficient of 34,196. This means that if the financial Risk variable increases then the practice of income smoothing (Y) will increase by 709714 with the assumption of free variable remain.

#### 4.6 Hypothesis Test Results

##### 4.6.1 Partial Test (Wald Test)

Table 8 below presents the partial test output results:

Table 8. Partial Regression Calculation Result

	B	S.E.	Wald	Df	Sig.	Exp(B)
Step ROA	201.134	82.266	5.978	1	.014*	2.245E+87
1 <sup>a</sup> PBV	1.597	.607	6.932	1	.008*	4.938
LnTA	-.443	.269	2.715	1	.099	.642
DAR	34.196	10.866	9.904	1	.002*	7.097E+14
Constant	-19.156	11.276	2.886	1	.089	.000

a. Variabe(s) entered on step 1: ROA, PBV, LnTA, DAR.

\*) Significant in 0.05

The significance test of partial influence in table 8 describes the effect of independent variables on the dependent variable partially, that is, among others:

##### 1. Effect of Profitability on income smoothing

Based on Table 7, it is shown that the probability (Sig) value of profitability (ROA) is 0.014 smaller than (sig) 0.05. Then the hypothesis  $H_0$  rejected and  $H_a$  accepted, which can be explained that the profitability (ROA) has a positive and significant effect on the income smoothing of banking companies at a level of significance less than ( $\alpha$ ) 0.05 or 5 percent.

##### 2. The effect of company value on income smoothing

Based on Table 4.5, it is shown that the probability value (sig) of company value (PBV) is 0.008 which is smaller than 0.05 ( $\alpha$ ). Then the hypothesis  $H_0$  rejected and  $H_a$  accepted, which can be explained and concluded that the Company Value (PBV) have a significant positive effect on the income smoothing of banking companies at a significance level less than 0.05 or 5%.

##### 3. The effect of company size on income smoothing

Based on Table 4.5, it is shown that the probability value (sig) of company size (LnTA) is 0.099 larger and above 0.05. Then the hypothesis  $H_0$  is accepted and  $H_a$  is rejected, which can be explained and concluded that the Company Size (LnTA) has a negative and insignificant effect on the income smoothing of the banking company on the significance level over the 0.05 or 5% level (sig).

##### 4. The effect of financial risk on income smoothing

Based on Table 4.5, it is shown that the probability (sig) value of Financial Risk (DAR) is 0.002 smaller than 0.05 ( $\alpha$ ). Then the hypothesis  $H_0$  rejected and  $H_a$  accepted, which can be explained and concluded that the profitability (DAR) has positive and significant effect on income smoothing of banking companies at the level of significance less than 0.05 or 5%.



#### 4.6.2 Simultaneous Test (*Omnibus Test of model Coefficients*)

Profitability, Corporate Value, Company size and financial risk simultaneously have a positive effect on income smoothing present Table 9.

Table 9. Simultaneous Regression Calculation Result

	Chi-square	Df	Sig.
Step	28.663	4	.000
Step 1 Block	28.663	4	.000
Model	28.663	4	.000

Table 9 shows that the simultaneous model in Chi-Square (step, block and model) has no difference between the chi-square value where degree of freedom amounted to 4 is able to explain the four independent variables. Omnibus Test's Model Coefficient test results are obtained by probability value (Sig) 0.000 because the probability value (0.000) is smaller than (0.05). It can be concluded that the independent variables (profitability, company value, company size and financial risk) used statistically together (enter method) have a significantly positive effect on income smoothing of banking companies.

## 5. Discussion

### 5.1 Effect of Profitability on Income Smoothing

These findings prove empirically that the higher the profitability of banking companies registered on the IDX period 2014-2016. The results of this hypothesis are supported in Wijaya (2012), Agung dan Bagus (2014) research which states the higher level of profitability of banking companies will maintain the information, if high reported earnings bring the company in a favorable condition, because with a signal (high profit) will give full confidence to external parties (investors, debtors, and government) and draw resources into the company and give the impression that the company's performance is very good. These result opposite direction by Saedi (2012) and Ratnaningrum (2016)

The amount of net profit that can be earned on the created sales will be determined by the success in controlling costs. The accuracy and appropriateness in choosing the equipment, production methods, and capacity used are among the factors that affect the efficiency level in the cost will affect the management to level out the profit.

### 5.2 The Effect of Company Value on Income Smoothing.

The findings of this research prove that the company value has a relationship that can affect the profit gains. The results of this hypothesis is aligned in the research of Prayudi and Daud (2013) where the results of logistic regression testing with enter method found that the company value firms high positive fluctuations have a significant effect on income smoothing. This raises the appraisal of investors who consider this signal to be a bad signal. The investor's reason to take a "yes" step to invest or to choose "no" to invests because the company value is a signal in the capital market, as well as investors' respect are less sensitive to the information, whether the

result of natural processes of company operations or the result of manipulation / management engineering to attract resources.

To gain better understanding about company size and income smoothing, we divided bank into 3 category using quartile analysis. Company size and income smoothing divide in three groups of banks present in Table 10.

Tabel 10. Price Book Value and Income Smoothing

No.	PBV	Income Smoothing		Not Income Smoothing		Total	
		N	%	N	%	N	%
2014							
1	< 0,79	2	9,52	3	14,29	5	23,81
2	0,82 – 1,66	5	23,81	6	28,57	11	52,38
3	> 1,69	4	19,05	1	4,76	5	23,81
Total		11	52,38	10	47,62	21	100
2015							
1	< 0,79	1	4,76	3	14,29	4	19,05
2	0,82 – 1,66	6	28,57	7	33,33	13	61,90
3	> 1,69	3	14,28	1	4,76	4	19,05
Total		10	47,62	11	52,38	21	100
2016							
1	< 0,79	-	-	5	23,81	5	23,81
2	0,82 – 1,66	9	42,86	2	9,52	11	52,38
3	> 1,69	5	23,81	-	-	5	23,81
Total		14	66,67	7	33,33	21	100

In 2014, 2 income smoothing companies with PBV < 0,79, 5 companies with PBV 0.82-1,66 and 4 companies with PBV >1.69 . In 2015, 1 income smoothing companies with PBV < 0,79, 6 companies with PBV 0.82-1,66 and 3 companies with PBV >1.69. In 2016, no one income smoothing companies with PBV < 0,79, 9 companies with PBV 0.82-1,66 and 5 companies with PBV >1.69. According quartile analysis most of companies with PBV 0.82-1.66 conduct income smoothing.

### 5.3 Effect of Company Size on Income Smoothing.

The result of hypothesis test of company size variable with log total natural asset proxy (LnTA) shows negative regression coefficient value equal to 0,443 with significant level (sig) variable equal to 0,099 which is bigger than significant level of 0,05. It means that it can be concluded that company value with Natural log total assets proxy has negative insignificant effect to income smoothing. So in this case, **Hypothesis 3 is rejected** because the size of a large company is not proven to affect income smoothing (income smoothing) at a significant value level greater than the significant level of 0.05 or 5% with a negative regression value of 0.443 where each decrease of 1 unit of company size then the action of income smoothing will decrease.

The company size does not influence the income smoothing because the conditions on the scale of total assets of large companies are under intense scrutiny from analysts and investors. Hence

the tendency of large company is not indicated to do income smoothing. This is because large companies are not always identified with capital intensive, but they can be labor intensive. The category of the company's asset size will guarantee performance, so that companies with large assets do not have a tendency to level profit.

#### 5.4 Effect of Financial Risks on Income smoothing

The result of statistic test using logistic regression shows that the variable of financial risk with debt to asset (DAR) proxy of positive regression coefficient value is 28.116 with significant value 0.022 which is below level (sig) 0,05. This means that financial risks have a significant positive effect on income smoothing. The financial risk variable measured from the debt to asset shows the significant value level (sig) of 0.022 is smaller than the significant level (sig) 0.05 then in this case Hypothesis 4 is accepted.

Large companies often have high levels of debt assets. Management wants to show that it has the ability to complete its obligations using its total assets. It also shows that the leverage position of the average income smoothing company of 0.85 raises the presence of indicators of risky company.

Hypothesis testing results are supported by Boudiche (2013), Aji and Mita (2010), high debt to asset levels will trigger management to make income smoothing (income smoothing) in order to give full confidence to additional funders. In this case, management chose this method in order to avoid the risk of debt agreement and assessment for the creditor as the analytical tool. Because if the position of high financial risk then the company will be difficult to get additional funds that will support its operational activities and assessment on debt agreements. Watts and Zimmerman (1986) stated that manager avoid violating debt contracts, so firm with high debt equity ratio select accounting activities to avoid violating debt covenants.

To gain better understanding about financial risk and income smoothing, we divided bank into 2 category using quartile analysis. Financial risk and income smoothing divide in two groups of banks present in Table 11.

Tabel 11. Financial Risk and Income Smoothing

No	Debt Asset Ratio (DAR)	Income Smoothing		Not Income Smoothing		Total	
		N	%	N	%	N	%
2014							
1	< 0,80 (%)	1	4.76	1	4.76	2	9.52
2	> 0,80 (%)	10	47.62	9	42.86	19	90.48
	Total	11	52.38	10	47.62	21	100
2015							
1	< 80 (%)	1	7.14	-	0.00	1	4.76
2	> 80 (%)	9	64.29	11	52.38	20	95.24
	Total	10	71.43	11	52.38	21	100
2016							
1	< 0,80 (%)	2	9.52	1	4.76	3	14.29
2	> 0,80 (%)	12	57.14	6	28.57	18	85.71
	Total	14	66.67	7	33.33	21	100

In 2014, 1 income smoothing companies with DAR <0.8 and 10 companies with DAR > 0.8.

In 2015, 1 income smoothing companies with  $DAR < 0.8$  and 9 companies with  $DAR > 0.8$ . In 2016, 2 income smoothing companies with  $DAR < 0.8$  and 12 companies with  $DAR > 0.8$ . According to quartile analysis most of companies with  $DAR > 0.8$  conduct income smoothing. While the point of view of the old investor, they will ask for a high rate of return if it is at risk to be faced. Similarly, new potential investors will be attracted to companies with low financial risk in order to secure a position when they will invest. Banking companies that have high debt asset value, raises the assumption that the company does not have a promising prospect in the future.

## 7. Conclusion

Income smoothing usually engage in bank sector. Bank's position is very central, bank is intermediaries in society. Based on the research that has been conducted, it can be concluded that profitability, company value, financial risk partially has a positive and significant effect on the income smoothing of banking companies and company size doesn't affect income smoothing. This result support signaling theory. This research also show that major banks that practice income smoothing have  $PBV 0,82-1.66$  and  $DAR > 0.8$ .

Next research in income smoothing can analyze accounting activities, such loan loss provision, research and development cost and inappropriate write offs in Indonesia's bank, since that activities used by manager to smooth income (Roychowdhury, 2006). Corporate governance mechanism as agency problem also interesting to explore for further income smoothing research.

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# The Influence Service Quality and Price Have to The Customers' Satisfaction at The Swimmingpool of Yogyakarta State University

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## Abstract

Swimming pool of Yogyakarta State University is a sport facility that is for rent to the public. This study aims to determine service quality and price to the customers' satisfaction at swimmingpool of Yogyakarta State University. The problems in this research were whether service quality and price have the impact to the customers' satisfaction at swimmingpool of Yogyakarta State University. The research variables were Service Quality (X1), Price (X2), and Customers' Satisfaction (Y).

This research was descriptive quantitative. The subjects at this study were customers of swimmingpool of Yogyakarta State University, both men and women. This study consisted of 200 respondents. The sampling used in this research was by using *accidental sampling* method. The data collection technique used were survey using questionnaires. The data analysis method was using multiple linear regressions by using SPSS 23. The data analysis technique used was by converting into highly satisfactory, satisfactory, unsatisfactory, and very unsatisfactory categories.

The results show that users' satisfaction of swimmingpool of Yogyakarta State University is satisfactory. The result is the equation of multiple linear regressions. The simultaneous test (F test) shows that the service quality and price have significant influence to the customers' satisfaction simultaneously with the calculation value of 71,624 and the significance is 0.000. Partially (t test) shows that service quality has significant influence to the customers' satisfaction is (10,3%) and price has significant influence to the customers' satisfaction is sebesar (41,5%). The simultaneous determination coefficient ( $R^2$ ) is 0.520, it means that 52.00%. The customers' satisfaction at swimmingpool of Yogyakarta State University are influenced by the service quality and price while of 52.00% the remaining is influenced by other variables those are being observed.

**Keywords:** service quality, price and satisfaction

## 1. Introduction

### 1.1 Introduce the Problem

Based on observation results in the swimming pool Yogyakarta State University both in Wates and at the Faculty of Sport Science on 3 to 5 Jan uari 2018, obtained information that there is a certain time where the pool customers must share a swimming place with students who do

swimming course lecture activities . In both pools also increase the price on weekend tickets so that consumers feel the impact of the policy of swimming pool ticket price increase .

A swimming pool business is determined by the ability of the pool management itself to provide satisfactory service to its customers. Customer satisfaction can be a weapon to perform as a winner in competition but it could be the opposite, where it could backfire that can destroy the position of managers in the increasingly complex swimming pool business world . In addition to offering various services and facilities and facilities in the pool management also usually offer other products such as courses and souvenirs, improvements in information technology, physical services, and non-physical services are also intended to improve the quality of service (Ariyani, 2008).

Assessment community to pool management service affected by How the community interpreted the pool management service or service received by the customer. According to Bedi (2010) give service that quality high issomething must to achieve satisfaction maximal and loyal customers. For customer, quality service and customer satisfaction comes from an organized and professional service. It can be seen from the management efforts to maintain the quality of service and continue to improve existing facilities and infrastructure. The assessment of the quality of swimming pool services is actually based on customer loyalty in the use of pool services. Loyal customers can save up to four to five times the cost of getting new customers through promotions. This fact is a challenge for the pool industry, namely how to create a customer wishes to use the services of the pool as well as a close relationship with its customers (Suhardi, 2006).

Communities are increasingly selective in choosing swimming sports facilities to maintain their existing health and quality of health to avoid the risk of illness due to poor water quality and existing supporting infrastructure in the pool. In this case, the element of trust becomes a factor key for pool industry players for win the hearts of customers and win competition competition. Trust it is also necessary to establish and maintain long-term relationships with consumers or customers (Akbar and Parves,2009).

### *1.2 Explore Importance of the Problem*

High customer commitment to the swimming pool industry will ensure continuity indoor pool business period long. According to Kolter and Armstrong (2001: 298) a customer may experience varying degrees of satisfaction. Satisfaction and customer dissatisfaction become a hot topic discussed by industry players and companies. Customer satisfaction is determined by the quality of goods or services desired by customers, so that quality assurance is a top priority for any company or service provider, which at present is especially used as a benchmark of competitive advantage of the company or service provider. Today society has a better knowledge of service and satisfaction so that if people feel dissatisfaction with service that be accepted then customer will protest and express his disappointment. But the opposite can also apply a satisfied customer will tell my wife to others about product or service that they receive in a service provided by the pool management but in side other customer thatno satisfied will say to others about dissatisfaction (Janet, 2009).

Maintaining customer satisfaction is an obligation for every pool service provider because it will bring a lot of benefits for pool service providers. A harmonious relationship between



service quality and customer satisfaction can help shoot target market with limitations source power marketing and promotion owned (Kheng *et al.*, 2010). In order not easy to move customers, then the quality of services provided should be superior compared to the company services swimming pool others (Age, 2009).

### 1.3 Describe Relevant Scholarship

The research of Januar and Ai (2016) on the Influence of Service Quality on Customer Satisfaction At JNE Bandung Branch shows that service quality (X) consisting of reliability, certainty, reality, empathy, and responsiveness, has a significant influence on customer satisfaction with value  $p) 0.003 < 0.05$ . Some of the test results indicate that only empathy variables have a partial effect in customer satisfaction with a significant number of variables (p value) amounting to  $0.021 < 0.05$ .

In addition to product quality, prices also have a positive effect on customer satisfaction. The more affordable and according to consumer expectations the consumer satisfaction will increase. Thus, price is one of the factors that influence the business satisfy consumers. This is in line with the results of research conducted by Cynthia (2017) which states that prices have a positive and significant impact on customer satisfaction. In addition, research conducted by M. Ehsan, M. Mudasar, Hafiz (2012) which states that prices correlate to customer satisfaction as well as rising prices have been shown to have a negative impact on customer satisfaction. A major challenge for pool service managers to provide and maintain customer satisfaction. Cronin (2000) and Zafar *et al.* (2012) states that quality service take effect to satisfaction customer. Then from that, for could givesatisfaction to customer, Pool M anagement State University of Yogyakarta must do enhancement quality service.

P the too supported by Al Rousan *et al.* (2010) that stated that company services must strive for maintainquality service that superior exceeds competitor they are for earn and maintain satisfaction customer. Having satisfied customers is not enough, customers should be very satisfied because customer satisfaction leads to loyalty (Bowen and Chen, 2001). To survive in the highly competitive swimming pool service industry, pool service providers must develop strategy new for satisfying customer they. The linkage between service quality and customer satisfaction can provide creative ideas to improve service in order to earn profit competitive in the provider sector pool service .

Quality of service is one of the critical success factors that affect the competitiveness of the organization. A pool service provider company can distinguish it self from competitor with provide quality services high. Kumar *et al.* (2010) finds that quality service takeeffect to satisfaction customer. Research this also supported by Naeem and Saif (2009) and Sanka (2012). An important factor in achieving customer satisfaction is through good relationships between employees and customers (Levesque and McDougall in Siddiqi, 2011.) Employees who can quickly solve problems can increase customer satisfaction Through satisfaction, pool service providers are trying to shape trust It's better to keep an existing customer, before earn customer new (Walsh *et al.* 2005).

Agyapong (2011) study shows that there is a positive relationship between service quality and customer satisfaction. Among service quality variables that significantly affect customer satisfaction include competence, courtesy, tangible, reliability, responsiveness and communication. This study documents that service quality is the dominant route to customer

satisfaction. Indications of successful brand building strategies are found when companies provide quality services compared to other companies in the same industry.

Rahman, Kalam, Rahman, and Abdullah (2012) conducted a study aimed at identifying some of the key drivers of customer satisfaction in restaurant services. The study included the opinions of restaurant diners in the Khulna region. This research is based on empirical studies by contacting 450 customers for their valuable opinions about restaurant services. This study aims to connect several factors of service quality and restaurant prices with customer satisfaction. The researchers found that restaurant customers have negative impressions about the fairness of product and service quality, fairness of prices, staff services, the environment of restaurant, restaurant image and restaurant loyalty.

Sakhaei, Afshari, and Esmaili (2014) conducted a study to investigate the quality index of services on Internet Banking. This is an applied research study of descriptive-survey types. The purpose of this study is to understand the impact of quality factor of Internet Banking service on customer satisfaction in Iran. To study the relationship between service quality and customer satisfaction, the first hybrid model based on previous works has been proposed. Six dimensions of service quality are reliability, efficiency, responsiveness, fulfillment, security / privacy and website design have been established based on literature review. Data were collected through survey interviews with a questionnaire designed on a 5-Point Likert scale. This study evaluates the effect of service quality on customer satisfaction in Internet Banking. This study shows that Six dimensions of service quality have a significant relationship with customer satisfaction. Internet Banking and reliability have a relationship, whereas website design has at least a relationship with customer satisfaction. In this study based on the previous literature, reliability, efficiency, responsiveness, fulfillment, security / privacy and website design as an internet banking service quality dimension were identified, and serve as a proposed indicator for measuring customer satisfaction with service quality confirmed by Survey Customers. It should therefore be recognized that these indicators are presented to evaluate the quality of service and customer satisfaction as a result of Internet banking work in Iran. The results show that the reliability index has the most effective and least effective website design on customer satisfaction than any other indicator.

Iglesias and Guillen (2004) conducted research on the impact of perceived quality and price on restaurant customer satisfaction. The highly competitive environment in the restaurant sector makes it imperative that companies achieve customer satisfaction to survive in the long term. Getting customer satisfaction means experienced customers repeat the service and they become a source of effective and efficient communication, at no cost to the company. The research indicates that perceived quality has a direct and positive impact on the level of customer satisfaction, while contrary to what is expected, the total perceived price does not affect the satisfaction.

Research Malik , Muhammad Ghafoor , and Iqbal (2012) point out that brand image, service quality and price are correlated with customer satisfaction. Price increases have been shown to have a negative impact on customer satisfaction. In addition, improved brand image has resulted in increased customer satisfaction and increased brand loyalty. Quality of service has the strongest correlation and every improvement in service quality has a positive impact on customer satisfaction. This study aims to help telecommunication service providers to gain

competitive advantage in the market by getting ideas about people's preferences and then focusing areas that require improvement.

#### *1.4 State Hypotheses and Their Correspondence to Research Design*

Good service will result in customer satisfaction and is a very important factor. In general there are three possible levels of satisfaction over the quality of service, that is if the service is given below expectations, the consumer is not satisfied. If the services provided in accordance with consumer expectations, consumers will feel satisfied. If service exceeds expectations, consumers are very satisfied (Lupioadi, 2006: 194).

Consumers who are satisfied and / or very satisfied with the quality of service, he will show the magnitude of the possibility to become a loyal customer of the company. If the consumer is dissatisfied, he or she can take various actions that can harm the company and damage the company's image.

Price is one of the factors that influence customer satisfaction. Price impact is very important in creating consumer satisfaction. High prices and benefits obtained can not meet consumer desires, so consumers are not satisfied. Similarly, the low price and benefits obtained by consumers are met then the consumer will be satisfied. Thus the influence of the price is very large in the company, with the appropriate price then the consumer can be satisfied. From the above description, the authors conclude that the quality of service and price will affect the level of customer satisfaction. Hypothesis formulation in this research are:

H1: There is influence of service quality to customer satisfaction.

H2: There is a price effect on customer satisfaction.

H3: There is an effect of service quality and price on customer satisfaction simultaneously.

## **2. Method**

Research method: Quantitative research method with questionnaire.

Subjects in this study were all users of the University of Yogyakarta Swimming Pool selected randomly with a sample of as much as 20 respondents.

Data collection techniques is to distribute questionnaires to respondents.

Data analysis used is multiple linear regression analysis .

According Sugiyono (2007: 202) associated with multiple linear regression output generated through SPSS program needs to be done simultaneous test with F-test, and partial test with T-test. The explanations for each test are as follows:

### *2.1 Partial test (t test)*

T test is used to determine the influence of each independent variable to the dependent variable. The rules of decision-making in t-test using SPSS according to Ghozali (2001: 30) are:

- 1) If the probability is  $> 0.05$  then  $H_0$  is accepted and  $H_a$  is rejected, so it can be said that the independent variable can not explain the dependent variable or there is no influence between the two variables tested.
- 2) If the probability  $< 0.05$  then  $H_0$  is rejected and  $H_a$  accepted, so it can be said that the independent variable can explain the dependent variable or there is influence between the two variables tested.

### *2.2 Simultaneous test (Test F)*

Simultaneous test aims to determine the effect of all independent variables contained in the model simultaneously (simultaneously) to the dependent variable (Sugiyono, 2007: 206).

The rules of decision making in the F test using SPSS according to Ghozali (2001: 30) are:

- 1) If the probability is  $> 0.05$  then  $H_0$  is accepted, so it can be said that the independent variable from the linear regression model is unable to explain the dependent variable.
- 2) If the probability is  $< 0.05$  then  $H_0$  is rejected, so it can be said that the independent variable from the linear regression model is able to explain the dependent variable.

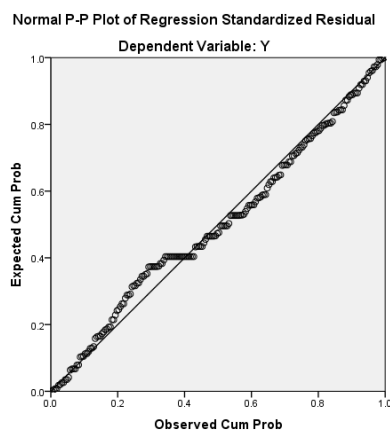
### 2.3 Coefficient of Determination ( $R^2$ )

The coefficient of determination essentially measures how far the ability of the model in explaining the variation of the dependent variable. The coefficient of determination is between zero and one. The small coefficient of determination means the ability of independent variables to explain the variation of the dependent variable is very limited. A value close to one means that independent variables provide almost all the information needed to predict the variation of the dependent variable (Ghozali, 2001: 45).

## 3. Results

### 3.1 Test Data Normality

Normality test aims to test whether in the regression model, dependent variables and independent variables both have a normal distribution or not. A good regression model is one that has a normal or near-normal distribution of data. To test whether the data distribution is normal or not, one way of looking at normality is to look at the histogram that compares the observed data with the distribution approaching the distribution normal (Ghozali, 2005: 31). SPSS output results for normality test with graph analysis are as follows:



### Normal P-P Plot of Regression Standardized Residual

### 3.2 Test Multicollinearity

A multicollinearity test is needed to determine whether there are independent variables that have similarities with other independent variables in a single model. Multicollinearity detection in a model can be seen from several things, among others:

- 1) If the value of *variance inflation factor* (VIF) is not more than 10 and *tolerance* value is not less than 0.1 then it can be said free from multicollinearity.

2) If the value of the correlation coefficient between each independent variable is less than 0.70 then the model can be declared free of the classical assumption of multicollinearity.

3) If the determinant coefficient value, in terms of  $R^2$  and  $R$  square above 0.60 but there are no independent variables that affect the dependent variable hence the model affected by multicollinearity.

**Coefficients<sup>a</sup>**

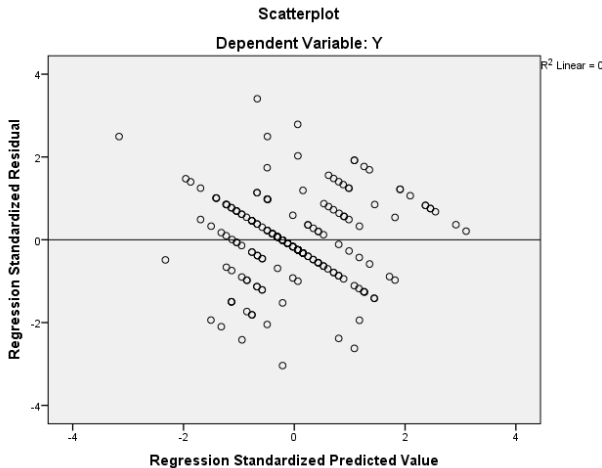
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.113	.907		2.329	.021		
	X1	.103	.015	.399	6.906	.000	.881	1.134
	X2	.415	.061	.393	6.800	.000	.881	1.134

a. Dependent Variable: Y

From the test results obtained VIF value for the variable factor Quality Service and Price is 1.134 and the value is far from 10, thus it can be concluded there is no multicollinearity.

### 3.3 Test Heteroscedasticity

The heteroscedasticity test intended to detect disorders caused by the factors in the regression model does not have the same variance. If different variance is called homoscedasticity, the regression model is good in the absence of heteroscedasticity. Heteroskedasidity test is done by using scatter plot. If there is no particular pattern indicates that the regression model is free from heteroscedasticity problems. The graph of heteroscedasticity test results are as follows:



The image shows that the spots that spread randomly, do not form a particular pattern and spread either above or below the number 0 (zero) on the Y axis , thus it can be stated that the data is free of symptoms heteroscedasticity.

### 3.4 Multiple Regression Analysis

In analyzing service quality factor ( $X_1$ ) and Price ( $X_2$ ) of the Customer Satisfaction (Y) UNY swimming pool, used multiple regression analysis.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.113	.907		2.329	.021		
	X1	.103	.015	.399	6.906	.000	.881	1.134
	X2	.415	.061	.393	6.800	.000	.881	1.134

a. Dependent Variable: Y

Based on the above table it can be explained that  $X_1 = 0.103$  and  $X_2 = 0.415$  obtained regression model is  $y = 2,329 + 0,103 X_1 - 0,415 X_2$

The regression equation has the following meanings:

- Constant of 2,329 means that if the value of service quality and price is considered fixed, then the consumer satisfaction of 2,329 points.
- Regression coefficient  $X_1$  of 0,103 means if the value of Service Quality increased by 1 (one) point while the price is assumed fixed, it will cause the increase of customer satisfaction equal to 0,103.
- Coefficient regression  $X_2$  amount 0,415 that is if value price experience increase of 1 (one) point while Quality of Service is assumed to be fixed, it will cause the decrease of customer satisfaction equal to 0,415.

### 3.5 Test Hypothesis

#### 3.5.1 Partial Test (Test t)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.113	.907		2.329	.021		
	X1	.103	.015	.399	6.906	.000	.881	1.134
	X2	.415	.061	.393	6.800	.000	.881	1.134

a. Dependent Variable: Y

Based on the above table, the obtained variable t Service Quality  $t_{\text{count}} = 6.906$  with 0.000 significance value  $< 0.05$ , this means that  $H_1$  which states the service quality affects customer satisfaction pool UNY be accepted.

While the variable price  $t_{\text{count}} = 6,800$  with significant value  $0.000 < 0.05$ , this means that  $H_2$  stated price affects customer satisfaction received UNY pool.

#### 3.5.2 Simultaneous Test (F Test)

Hypothesis test simultaneously (Test F) between independent variables in this case Quality of Service ( $X_1$ ) and price ( $X_2$ ) to customer satisfaction of UNY swimming pool. Results analysis test F could be seen in table following this:

Table Result of F Test Analysis (Simultaneously)

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	249.871	2	124.935	71.624	.000 <sup>b</sup>
	Residual	343.629	197	1.744		
	Total	593.500	199			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

Calculation results with SPSS program can be seen that  $F_{\text{count}} = 71.624$  with a significance value of  $0.000 < 0.05$ , this means that  $H_3$  which states there is the influence of prices and service quality on customer satisfaction received UNY pool.

### 3.5.3 Coefficient of Determination Test $R^2$

Tabel 4. Determination Coefficient Test

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 <sup>a</sup>	.525	.520	1.16751

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

From the table above can be seen adjusted R square of 0,520 or equal to 52.00%. This means that the influence of Quality of Service and Price jointly affect the customer satisfaction of UNY pool of 52.00%.

Based on the results of data analysis of simultaneous test and partial test, it can be seen that the variable quality of service and the price at pool UNY have a significant influence on customer satisfaction, as evidenced from the regression analysis test. The form of influence of service quality and price with customer satisfaction can be described with regression equation obtained by positive regression coefficient value, it shows that between service quality and price have positive influence to customer satisfaction. Thus it can be explained that if the service quality variable is increased by one point, it will be followed by increasing customer satisfaction. If the price is increased one point then will be followed the decline in customer satisfaction. Therefore, to ensure customer satisfaction can be realized, one effort that can be done by pool management UNY namely by ensuring the quality of service to stay good and guarantee the price in accordance with customer expectations, because the contribution of service quality and price to customer satisfaction large enough.

## 4. Discussion

In general it can be seen that the quality of service and price is an important factor in order to obtain a high level of customer satisfaction. It is shown from the results obtained simultaneously from two variables of service quality and price are significant, which means there is influence between service quality and price to customer satisfaction. From the results of the analysis of service quality can be seen that the services provided pool UNY included in the category both in accordance with the statement of most respondents. This is in accordance with the opinion of Lupiyoadi (2006: 176) which states that quality must begin from customer

needs and ends on customer perception. Because of the quality image the good is not not seen from the perception of the provider, but based on customer perception. While the customer perception of service quality is a comprehensive assessment of the superiority of a product.

According to most respondents, the physical evidence on the UNY pool is included in either category, this can be seen from the vast and robust building conditions, strategic location, immaculate employees and UNY pool planks. Besides that UNY pool is also fast in serving the consumers, meticulously in completing the transaction payment, friendly in serving customers and responsive to problems faced by customers. When viewed from the aspect of guarantee and empathy or attention, according to the statement of most pool respondents UNY easily contacted, able to explain the problems faced by customers, employees who are passionate in working, employees are able to provide clear information to the buyer.

The price given pool UNY included in either category, it can be seen from an affordable price, the price is cheaper than its competitors and the price matches the quality. In pricing need to pay attention to customer purchasing power, because the price is closely related to customer perspective. Direct customers feel the price change offered. This is in accordance with the statement Sumarni (2000: 281) that pricing is not an easy job. Often companies set prices too cost-oriented and under-assess market changes. Therefore, in determining the price should also note the purchasing power of customers so that customers do not switch to other pool service providers.

## 5. Conclusion

Based on the results of the research and discussion described in the previous chapter, the following conclusions can be drawn:

1. There is a significant influence on the quality of service to the users of swimming pool of Universitas Negeri Yogyakarta. The magnitude of the effect is 6.906, which means if the quality of service increases, the level of customer satisfaction more high.
2. There is a significant influence on the price of swimming pool users of Yogyakarta State University. The magnitude of the effect is 6.800 which means that if the price increase customer satisfaction levels will be decreased.
3. Among the variable quality of service and price, the least effect on customer satisfaction is the service quality of 0.103. While the price has a significant effect on customer satisfaction, that is equal to 0.415.
4. Quality of service, and price have a significant influence to customer satisfaction. The magnitude of the effect is 52.00%, which means that the quality of service and price have a considerable influence great to customer satisfaction.

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# Determinant Prevalence of Adults Smokers in Indonesia and Some ASEAN Countries: Comparative Study of Tobacco Products

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## Abstract

Tobacco products have always been controversial in the context of government revenues versus health costs. This study aims to analyze the demand for cigarettes and other aspects that related to cigarette consumption in Indonesia. The research approach is a comparative descriptive study of Indonesia with some ASEAN countries (Brunei, Cambodia, Laos, Malaysia, Philippines, Singapore, Thailand and Vietnam). The variables or aspects analyzed include: Smoking Prevalence, Price Level, Percentage of Excise and Tax Receipts from cigarettes. Other aspects analyzed include the estimated health costs of cigarettes and the ratio of cigarette costs to tax revenues. The results of the empirical studies show that within ASEAN, the prevalence rate of smoking for Indonesian adult men is the highest. More than half of adult males in Indonesia are active smokers. Meanwhile, almost all adult smoking prevalence in other countries in the ASEAN region is well below 50%. The relatively cheap price of cigarettes can be an indication of the high prevalence of smoking in Indonesia.

**Keywords:** ASEAN, Excise of Cigarettes, Prevalence, Tobacco Product

## 1. Introduction

One of the major global issues highlighted in regional and international trade is the rise of illicit trade (ITIC, 2013). The phenomenon is not separated from certain product characteristics categorized as sin commodity considering the serious consequences to health problems. Indonesia's Government imposes special taxes in the form of excise taxes on ethyl alcohol or ethanol products, Ethyl Alcoholic Beverages (MMEA) and tobacco products including cigarettes (2016). Among the taxable products, cigarettes contribute substantially for central government revenues. In addition, the cigarette industry also has an important role in employment.

Despite having a positive macroeconomic contribution, cigarette products are also known to have negative effects on health. Therefore, smoking bans in public areas (such as schools, public transport, hospitals, etc.) are widely applied. Limitation of cigarette consumption is also applied only for adult age (18 years and above). Not only that, the Government Regulation of the Republic of Indonesia Number 109 of 2012 on "Security of Materials Containing Addictive Substances in the form of Tobacco Products" clearly states in Article 24 paragraph (1) that every producer is prohibited to include any misleading information or signs or words, promotive

words. In article 24 paragraph (2) it is explained that in addition to the violations as referred to in paragraph (1), any manufacturer is prohibited to include the words "light", "ultra light", "mild", "extra mild", "low tar", "slim", "Special", "full flavor", "premium" or other words that indicate quality, superiority, sense of security, imaging, personality, or words with the same meaning.

Characteristics of typical tobacco consumption, has become a special study of experts. As with other commodities in general, the consumer's decision to smoke is determined by cost and benefit considerations. The basic principle applies equally, ie consumers will smoke if the enjoyment of smoking exceeds the costs to be incurred, including the health costs of smoking. Consumers are also assumed to be aware that smoking will bring the consequences of addiction. Given its peculiar nature, cigarette consumption is one of the activities that must be regulated by the state. One form of government regulation is the imposition of taxes or excise duty for every cigarette purchase. Justification of the imposition of excise duty for cigarette consumption is the existence of high enough externalities potential of the activity. For example, smoking has a negative effect on passive smoking in the form of high health costs (the health costs of secondhand smoke). Another example, smoking can have mild implications for fetal health both in the short and long term. Externality in the form of health implications for passive and fetal smokers is debated because the type of externality should be considered in individual decisions in smoking. In other words, the implications of externality that appear may not be as large as expected.

Old approaches to smoking behavior may not be enough to justify cigarette regulation. Gruber (2003) describes several important points. First, the assumption that consumers have full informed information is doubtful. Young people as novice smokers may have obtained considerable information about the dangers of smoking. But most are still less aware of the consequences of "addiction" due to smoking. A survey showed that among 56 percent of teens who say they will not smoke in the next five years, only 31 percent of teenagers actually quit smoking five years after the first survey. In contrast, as many as 72 percent of teenagers who previously claimed to be smokers, in fact it is actually 74 percent who become active smokers. Secondly, active smokers in practice find it difficult to actually quit smoking even though they really want to stop the habit.

Gruber (2003) further offers an alternative cigarette consumption model by adding time-inconsistent features in consumer utilities. Numerous studies show that it is very easy for smokers to say that it is not why they smoke "today" with the promise of stopping "tomorrow". But "tomorrow" never came. After tomorrow comes into being today, smokers return to old habits. This case may be the same as the promise of a diet that always fails to be realized. In essence, it takes self-control for smokers to really control smoking habits. From this then the excise argument as price regulation finds its theoretical grounding. Through the rules of cigarette taxes, smoking activity in the view of consumers is something that is costly. Excise instrument is not the best tools because its use can trigger smuggling of cigarettes, forgery of excise and others. However, this control is necessary.

Both the old approach and the new approach to cigarette consumption both support the government's role in regulating cigarette prices. However, the arguments raised may be different. The old approach puts more importance on the externalities of smoking, while the new approach

emphasizes the importance of excise instruments as a control tool for smokers to better control smoking. For poor household groups, the price elasticity of cigarettes tends to be higher than for rich households. That is, a price increase will actually reduce cigarette consumption significantly for poor households. Similarly, the price elasticity of cigarettes is relatively higher for adolescent smokers compared with adult groups. If judging from an old perspective, the imposition of excise will cause smokers to become worse-offs. Conversely from a new perspective (excise as controller), the imposition of excise actually has a positive implication to smokers. For further discussion, it can be traced in the article Grubel and Mullainathan (2002). The purpose of this study is to provide an overview of the prevalence of smoking in Indonesia. In addition, this study also discusses some aspects that affect the prevalence of smoking in Indonesia as well as several other countries in the ASEAN region.

## 2. Method

The data used in this research is the result of SEATCA publication for several years with focus of publication in 2014. Beside that other data is used as supporting analysis. The regression equation model used in this research is as follows:

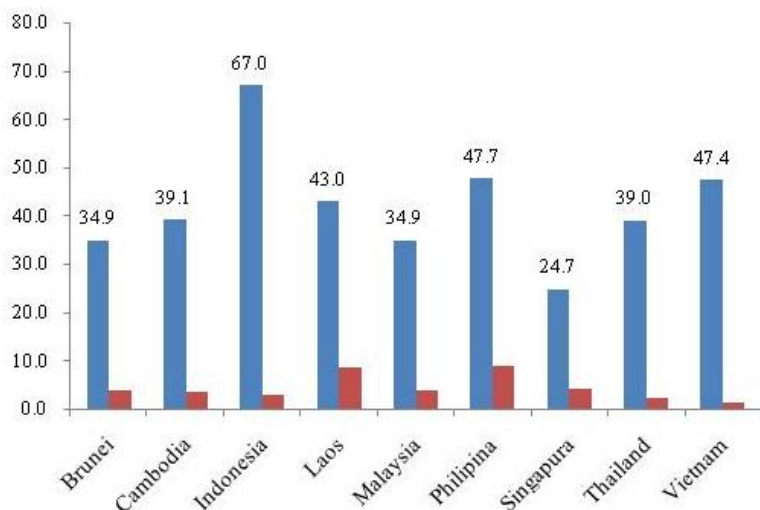
$$Y = \beta_0 + b_1X_1 + b_2X_2 + b_3X_3 + \varepsilon \quad (1)$$

In this case  $Y$  is the prevalence of smoking,  $X_1$  is the price of cigarette,  $X_2$  the excise rate,  $X_3$  is the state acceptance and  $\varepsilon$  is the error term,  $\beta_0$  is the constant,  $b_1$ ,  $b_2$ ,  $b_3$ , is the coefficient of regression slope,. The estimated problem with the Ordinary Least Square (OLS) approach is the potential for standard in-efficiency errors due to heteroscedasticity problems. To overcome this problem, the Generalize Least Square (GLS) estimation approaches using the robust standard error approach introduced by White. This approach has become the standard in the estimation of the basic regression model (Gujarati, 2003).

Another problem that becomes a serious problem in regression analysis is the potential feedback. In this case the nature of the independent variable may reverse direction into the variable described. The existence of feedback causes OLS estimators to be no longer valid. A variety of approaches are suggested by experts. In this study, all independent variables are measured in the value of variables in the previous period. Thus, all independent variables are guaranteed to have a direct influence on the dependent variable.

## 3. Results

The facts show that the prevalence rate of cigarettes in Indonesia is still relatively high (even the highest in the ASEAN Region). The 2014 South-East Asia Tobacco Control Alliance (SEATCA) report states that the prevalence of adult male smoking in Indonesia is 67 percent, while the prevalence of adult female smoking is as much as 2.7 percent. The prevalence of adult smoking in Indonesia therefore is 34.8 percent (SEATCA, 2014). In other words, more than half of adult males in Indonesia are active smokers.



**Figure 1. Prevalence of ASEAN Smoking**

Source: SEACTA, 2014

The report from SEATCA in Figure 1 above shows that active smokers are predominantly male. Female adult smokers in Indonesia are relatively low compared to other countries. In some countries, such as Laos and Philipina, the prevalence rate for adult female smoking is quite high although it does not exceed 10 percent. The high prevalence of smoking is somewhat related to the price of cigarettes in each country. There is a general trend that the lower the price of cigarettes, the lower the prevalence of smoking. The findings from the International Tax and Investment Center (ITIC) in collaboration with Oxford Economics (OE) show that the average price of 20 packets of cigarettes per pack in Singapore in 2012 was \$ 9.7. The price of cigarettes in Singapore is almost seven times higher than the price of cigarettes (with the same type) in Indonesia (ITIC, 2013). More data on the price of cigarettes in several ASEAN countries in full can be considered in the graphics as follows:



**Figure 2. Average Price of Cigarettes per pack in ASEAN (US \$)**

Source: ITIC, 2013

The average cigarette price in Indonesia is 1.4 US \$. This price is not the cheapest in ASEAN,

but it is very low compared to Singapore and Brunei. When used by the same cigarette brand, the Marlboro cigarettes, then the price of a Marlboro packet in Singapore reaches US \$ 9.6; in Brunei reached US \$ 6.47; in Thailand US \$ 2.06; The Philippines reached US \$ 1.6 and in Indonesia the cigarette brand is "only" sold for US \$ 1.3 (SEATCA, 2014). This information confirms that the price of cigarettes in Indonesia is relatively cheap.

That there is an inverse relationship between the price level and consumption has been described in many microeconomic textbooks. As already mentioned, the main problem of cigarette consumption is the potential health problems that are not light. In the release of 2013, SEATCA presents data on cigarette excise revenue in Indonesia could reach an average of US \$ 1,800 per year. Meanwhile, health costs (health costs) to be borne ranged estimated to be US \$ 13,900. With a position like this then this commodity actually even aggregate disadvantage. The ratio of estimated health costs to tax revenue could reach 7.72 percent. That is, the total revenue of cigarette excise is almost seven times lower than the estimated health cost value incurred. Compared to other countries in the ASEAN region, the ratio of health costs to excise taxes for cigarette commodities in Indonesia is highest (SEATCA, 2014).

Table 1. Cost Revenue Ratio From Tobacco

Country	Estimate Health Cost (US\$ million)	Average Tax Revenue (US\$ million)	Cost/Revenue Ratio
Indonesia	13.900	1.800	7.72
Philipina	2.860	442	6.47
Malaysia	1.338	1.107	1.21
Laos	3,34	4.9	0.68
Vietnam	143,7	395.6	0.36
Myanmar	13,2	41.74	0.32
Thailand	220	1.080	0.20

Source: SEATCA, 2014

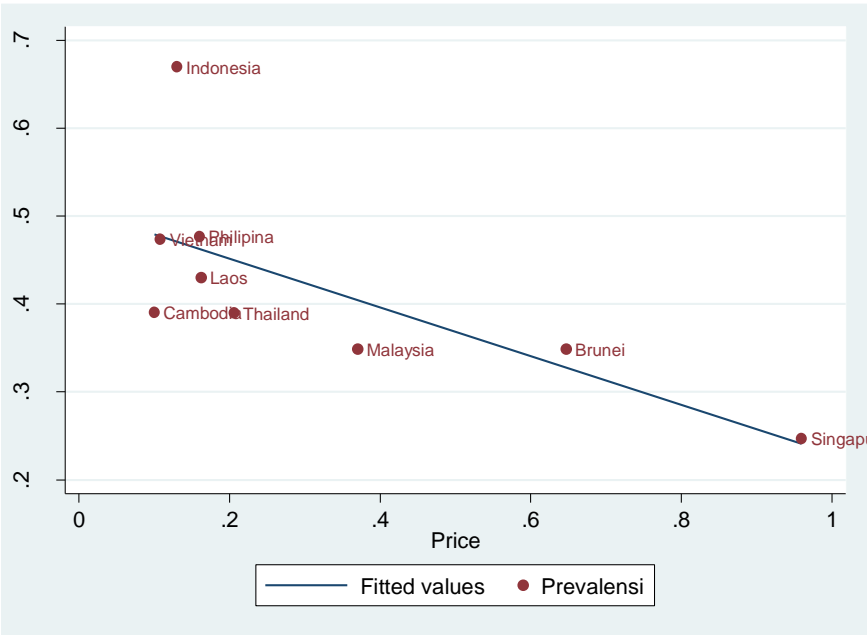
The data in Table 1 confirms that the problem of smoking in Indonesia is quite a dilemma. On the one hand, tax revenue from cigarettes is relatively large but on the other hand the estimated health costs incurred are much greater. For that we need a comprehensive study to photograph the behavior of cigarette consumption in Indonesia to be taken into consideration in the policy of cigarette excise in the long term.

Although the revenue from cigarette taxes in Indonesia is relatively high, but the cost to be incurred due to smoking is also still very large. Almost more than seven times the cost of smoking beyond excise taxes. Similar problems are also found in the Philippines. Furthermore, other countries in ASEAN do not experience problems in the ratio of cost and tax revenue of cigarettes. In some countries even the cost of smoking is lower than the total cigarette receipts. Although this data still needs to be re-verified to ensure its validity, it is logical to conclude that the high prevalence of smoking is associated with high costs.

Based on previous data it can be predicted that high prevalence of smoking may be related to price factor, excise and tax revenue. In theory, the cheaper the price of cigarettes then there is a tendency that the prevalence of smoking will be higher. This is in accordance with the basic



theory of demand which shows an inverse relationship between the price level and the level of consumption.



**Figure 3. Scatterplot Prevalence versus Price**

Figure 3 above shows a plot between the prevalence rate of adult smoking and the price level. The vertical axis is the prevalence level expressed on a scale of 0 to 1, the closer to 1 means that the larger the active smoker portion (100%). As in the flat axis is the price variable which is also expressed on a scale of 0 to 1. Scale 1 shows the price per pack rate of 10 USD. By plotting as Figure 3, the position of Indonesian cigarette consumption within the scope of ASEAN countries can be mapped more clearly. Mapping shows that Indonesia and Singapore are at each end of the spectrum. Indonesia represents a country with a very high prevalence of adult smoking with a very low price of cigarettes. The other end of the spectrum represents the country with the most expensive price of cigarettes with the lowest smoking prevalence rate. If carefully observed, Indonesia's position on the "prevalence vs price" map can be regarded as an outlier. The average price of cigarettes in Indonesia is quite cheap, but not the cheapest in the ASEAN region. Although not the cheapest, but the level of cigarette consumption in Indonesia is among the highest. Some countries, such as Vietnam and Cambodia have cheaper rates of cigarettes, but with lower smoking prevalence rates. The regression test results by including all relevant control variables yield the following estimates:

Table 2: Basic Estimation

VARIABLES	(1) Prevalence	(2) Prevalence
Price	-0.277*** (0.0690)	-0.274* (0.118)

Tax	-	0.0405 (0.241)
Revenue	-	0.167 (0.304)
Constant	0.507*** (0.0504)	0.347 (0.207)

R-squared            0.495            0.544

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The variable of interest in the model estimation in Table 2 is the price that shows the relationship between the price level and the level of cigarette consumption. Table 2 presents two columns of regression results. The first column presents the basic OLS estimation, while the second column presents the basic regression estimation by adding two control variables, namely tax and revenue. Estimation results consistently show that the relationship between smoking consumption level and price level is negative. Addition of control variables does not alter the estimation results significantly. An increase in price of 1% implies a decrease in smoking prevalence by 0.27%. Significance is achieved at a significant level of 10%.

Table 3: Estimation: Revisions

VARIABLES	(1) Prevalence	(2) Prevalence
Price	-0.215*** (0.0339)	-0.246** (0.0654)
Tax	-	0.0663 (0.123)
Revenue	-	-0.0466 (0.0816)
Constant	0.461*** (0.0225)	0.478*** (0.0804)

R-squared            0.781            0.794

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 3 reports the results of the regression test by making an important revision of issuing the Indonesian case from the sample. Magnitude price coefficient is changed but with not too many changes. The significance obtained in column (2) looks stronger. The significant difference that is noticeable is Table 2 reports R-squared of 0.54 while in Table 3 it is reported R-squared of 0.79. These results suggest that, except for the case of Indonesia, price variations can account for nearly 80% of the variation in cigarette consumption. The case in Indonesia is unique because with the price level equivalent to the average price of cigarettes in Vietnam, Laos,

Cambodia and the Philippines "should" the level of consumption or prevalence of smoking in Indonesia ranges from 30% - 40%. In Indonesia, the prevalence of recorded smoking is almost double the average ASEAN cigarette consumption (almost 70%).

Both model estimates in Table 2 and Table 3 use a robust standard error. This is done to anticipate the possibility of heteroscedasticity problems that are often encountered in cross-section studies. The use of robust standard error in this case uses the approach introduced by White.

In the model used, the two control variables namely the share of excise in the sale price (tax) and the index of revenue revenue (revenue) are not significant enough. Consumers are more affected by the final sale price compared to the amount of excise tariff. The same is true for excise duty variables. The amount of consumption is not due to the total variation in state revenues (quite the opposite, income affected by consumption). The effect of feedback on revenue variables on prevalence was not tested further in this study.

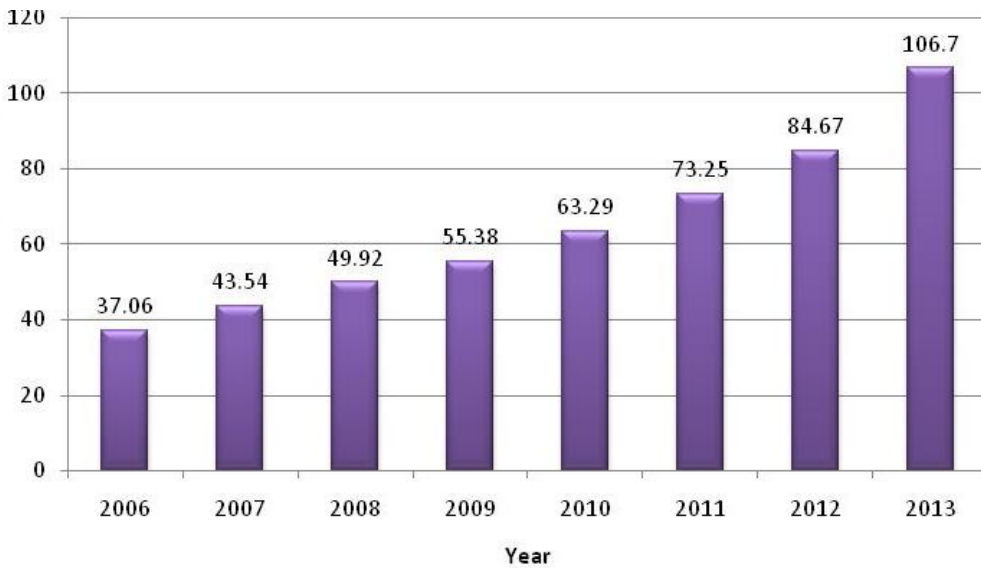
Table 4. Multicollinerities

	Price	Tax	Revnue
Price	1,0000		
Tax	0,6393	1,0000	
Revnue	-0,2454	0,2022	1,0000

Table 4 above presents the correlation coefficient between the independent variables used in this study. As can be seen, the correlation between price and tax is relatively large. This confirms the low significance of tax variables in the estimation results. It is logical to state that between taxes and prices there is a positive association.

**4. Discussion**

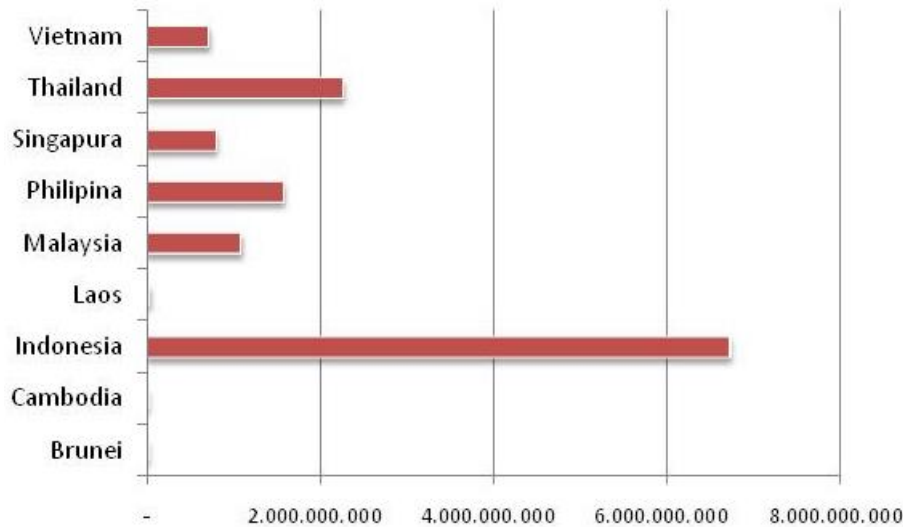
Based on the presentation of the discussion, it can be said that the disregard of the independent variables in this model is technically caused by two things: first, because of the multicollinearity for the tax variable and second, because of the potential feedback in the variable revenue. With only one significant independent variable left, is the analysis model used reliably enough? Some arguments can be presented as additional information. First, the relative magnitude of the coefficient of determination (about 80%) indicates that the variation of the independent variables together contributes substantially to the prevalence variation. Second, the price variable is a variable of interest in this research so that the existence of other independent variables may not be too crucial. The third argument, the residual test with the Shapiro-Wilk approach shows that the residual distribution is nearly normal. Thus the residual in this study meets the classical model assumption, that is random and normal distribution. On the basis of this discussion, the regression model used is good enough to be used as the basis of analysis. After the model analysis is done, substantive analysis is then performed. The high consumption of cigarettes on the one hand does provide a profit in the form of revenue of the state in substantial amounts.



**Figure 4. Tax Revenue from Tobacco in Indonesia (bil.Rp)**

*Source:* Kemenkeu, 2013

Figure 4 shows the cigarette excise revenue in Indonesia during 2006-2013. It is clear that cigarette tax revenue over the last few years has increased sharply. If in 2006 the excise revenue is still around Rp37 Trillion, then in the year 2013 has reached Rp106 Trillion. Indonesian cigarette excise revenue is even the highest in ASEAN region. Consider the graphics as follows:



**Figure 4. Tax Revenue from Tobacco ASEAN 2014 (USD)**

*Source:* SEACTA, 2014

Figure 5 above clearly shows that the country's revenue from cigarette taxes in Indonesia is the largest in the whole ASEAN region. The achievement of substantial state revenue is contributed by the number of smokers who are still very large. If traced back, the amount of cigarette consumption certainly has a positive correlation with the development of the cigarette industry in the country. Selanjutnya, the development of the cigarette industry would be good news for workers in the tobacco industry and also for tobacco farmers as the main cigarette providers. Nevertheless, cigarette consumption has a consequence that is not light to health problems.

Table 1 already confirms that the estimated health costs go far beyond the amount of cigarette excise tax receipts. Thus it can be said that the considerable state revenue from cigarette taxes in the end is not enough to cover the health costs incurred due to smoking.

## 5. Conclusion

The results showed that the problem of tobacco or cigarette products is still a quite dilemmatic phenomenon in Indonesia. On the one hand, cigarette taxes contribute to a large amount of state revenues. On the other hand, the health costs incurred by smoking are also very large. Quantitative analysis shows that the magnitude of smokers or the prevalence of adult smoking is due to the relatively cheap price of cigarettes in Indonesia compared to other countries in the ASEAN region. Space to raise the price of cigarettes through the increase of excise tariffs is still wide open. However, of course the policy of excise increase must be done carefully not only in terms of magnitude but also the timing of its implementation. In the midst of intensifying the issue of strengthening competitiveness among countries in the ASEAN region, Indonesia is a champion in cigarette production and excise revenue.

The expansion of tobacco industry through export potential is wide open. However, promotion to reduce smoking seems to be a global issue. Like it or not, Indonesia must bow to the global trend of limiting cigarette consumption. Creative ways must be found to reduce the dependence of state revenue from cigarette taxes.

## Acknowledgements

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# Teaching Economic Crisis and Stock Market Using A Movie

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## Abstract

This study describes the evaluation of teaching method that uses a movie as an instructional media to demonstrate a clear concept about the economic crisis and stock market. In this study, the movie watched by the students is movie entitled “The Big Short”, a Hollywood movie telling the chronology of Subprime-Mortgage Crisis happened in United States of America along with everything about stock market and the story of people who benefited from the crisis, which is based on the true story. The evaluation was performed by conducting the ‘quasi-experiment’ designed with non-equivalent control group. The result shows that there is a significant different learning output between the control group and the intervention group.

**Keywords:** Teaching Economics, Instructional Media, Learning Output

## 1. Introduction

Information and Communication Technology that is growing rapidly brings the significant change in various aspects of life, including education. In terms of education, it is necessary to adapt to the change related to the teaching method and its media. The media helps teachers and lecturers to convey the course materials to their students and it can make the lesson easier for the students. The advancement of science and technology has influenced the use of teaching media in schools and other educational institutions. Today's learning in schools has begun to adjust to the development of information and communication technology, and continues to push the educational paradigm (Hujair, 2009).

A challenge for lecturers and teacher of educational institutions in economics is the perception among students that economics is highly abstract, difficult, and boring knowledge (Ruder, 2010). The perceptions could be a barrier to the students to be engaged with the ideas of economics course and would exactly undermine their motivation in learning economics. To get students understanding the economics is the most important things and might be the most difficult aspect of teaching economics. The need to keep the students interested and engaged in learning economics is essential. There are many methods and media used by the lecturers and teachers to make economics interesting. Some media used to teach economics is films, or video clips.

Watts (2003) explored the relationship between economic concepts, issues and themes and those found in literature and drama. Mateer and Stephenson (2011) proposed the use of film clips to teach public choice economics while Ghent et al. (2010) teach economics which is illustrated in a popular TV show “Seinfeld”. Outstanding works were made by Gillis and Hall

(2010) who used “The Simpson” to teach policy analysis and O’Roark (2017) who teaches economics using Superhero cartoons. Other burgeoning utilizations of films in economics are Becker (2004), Dixit (2005), Mateer (2005), Sexton (2006), Mateer and Li (2008), Crisp and Mixon Jr. (2012), Al-Bahrani and Patel (2015), Levey (2015), Al-Bahrani, Holder, and Patel (2016), Cleveland and Holder (2016), and Mateer and Vachris (2017) who used films, short films, episodes of a film, and a movie to teach the basic concepts of economics.

This study analyzes the different learning output between classes or groups in understanding the economic crisis and stock market when the lecturers using a movie as an instructional media. The movie presented is a movie entitled “The Big Short”, an American movie telling the chronology of the Subprime-Mortgage Crisis caused by the shock in stock market and people who benefited from the crisis. By watching the movie, it is expected from the student that they would completely understand what is happened in USA before the crisis, which is caused by shock in the stock market of USA, occurred.

## **2. Literature Review**

Neuroscience studies concerning the function of brain have concluded that there are the different functions between right and left hemisphere of brain. Deductive tasks, the side that characterizes written and oral media, are specialized as the tasks of left brain while intuitive ones, characterizing visual media, is belongs to the right side of brain (Springer & Deutsch, 1998). It is not a new statement that the old models of teaching and learning have not activated the function of the right brain. Hence, the differences in brain functions argue for the instructional media to be used in order to activate both sides of brain. Empirical evidences suggest that different cognitive systems to process both visual and verbal media are likely used by the people (Salomon, 1979; Cowen 1984). Willingham (2009) concerned with a question “Why do students remember everything that's on television and forget what we lecture?” The answer is because the students retain ideas and concepts because of the visualization.

The above-mentioned explanations encourage many experts to teach economics using movies as the instructional media in classes. For instance, Cleveland, Holder, and O’Roark (2016) use the movie “The Hunger Game” to illustrate that the series of economic concepts including production possibilities, the role of institutions, comparative advantages, and income inequality are part of this Hunger Game world while Luccasson, Hammock, and Thomas (2011) used four cartoon shows to illustrate the principle of macroeconomics. The more popular cartoon show used to teach economics is “The Simpson” by Gillis and Hall (2010) and Hall (2014).

## **3. About “The Big Short”**

“The Big Short” is a biographical comedy drama movie of Hollywood telling what happens in America before the housing market crash known as Subprime-Mortgage Crisis and based on Michael Lewis’ Book “The Big Short: Inside the Doomsday Machine” about the 2008 financial crisis triggered by housing market bubble of USA. The movie consists of three separate but concurrent plots.

The first plot tells the story of Michael Burry, a hedge fund manager of Scion Capital and the first person finding the massive bubble in the American housing market. He invest about \$1.3 billion in Credit Default Swap, betting against mortgage-backed securities (MBS), for profit.

In the first, his clients become angry. His clients believe that creating a swap to MBS, which is known as a low risk but high profit security, is wasting capital. Under the pressure, Burry refuses to decline his swaps. Eventually, after the market collapsed, the value of Burry's fund increases by approximately 489 percent with a profit over \$2.69 billion.

The story of Jared Vennett and Front Point Partners managed by Mark Baum is a second plot of the movie. Vennett, a low-level salesman of Deutsche Bank, is the first man to understand Burry's analysis of housing bubble. He decides to sell the swaps to firms who will profit when the underlying bonds fail. One of his clients is Mark Baum, Front Point Partners Manager. Before believing in Vennett, Baum and his staffs make an investigation concerning the housing bubble in Miami market. They discover that mortgage brokers are selling risky mortgages to the Wall Street banks, creating the bubble. Baum is also find that there are dishonesty and conflicts of interest amongst the credit rating agencies. When the crash occurs, Baum's fund increases by \$1 billion.

The third plot is Brownfield Capital of Charlie Geller and Jamie Shipley. They are two young investors discovering accidentally the Jared Vennett's prospectus which motivating them to invest in swaps against MBS. They ask for help to a retired securities trader, Ben Rickert, because they are below the capital threshold for an (International Swaps and Derivatives Association) ISDA Master Agreement required to enter into trade. In short, they succeed to enter and made a profit of \$80 million when the market starts collapsing.

One of the interesting things of the movie is the cameo appearance by popular actress to explain the complexity of the financial instrument concepts such as Subprime Mortgage, Credit Default Swap, Collateralized Debt Obligations, and etc.

#### **4. Method**

This experiment is conducted in Department of Economic Education, Faculty of Economics, Universitas Negeri Malang. The population of this study is the 80 students taking the course of economic system who is divided into two classes. One class becomes control group and another is intervention group. The treatment given to the intervention group is the use of the movie "The Big Short" in teaching economics. The movie may be watched from the students twice or more. The evaluation of the use of the media is conducted by using non-equivalent control group design of quasi-experiment method as shown in Figure 1. The competence expected from the student is "Understanding crises in the world". The data to analyze are the result of the quiz that supported by oral test result concerning the crises and stock market. The data analysis used in this study is t-test analysis.



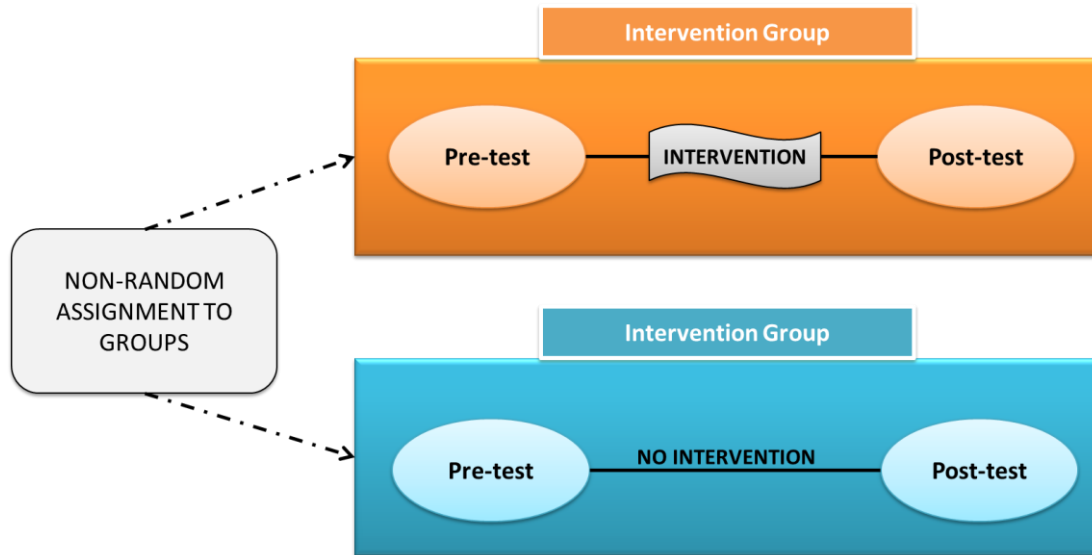


Figure 1. Quasi Experiment Method with Non-Equivalent Group Design

## 5. Results

The first stage performed in this study is conducting the pre-test. Based on the Pre-test, the average score of the test in intervention group is 58.33. The minimum score in intervention group is 42 which belongs to two students while the maximum score is 68 possessed by one student. The standard deviation of the group is 7.937884. In control group, the average score of the test is 54.9. The minimum score in control group is 36 belonged to one student while the maximum score is 67 possessed also by one student. The standard deviation of the group is 8.859881. Table 1 and Table 2 show the descriptive statistic of both the experimental and control group:

Table 1. Descriptive Statistic of Pre-test Result (Intervention Group)

Population	Mean	Mode	Min	Max	Std. Deviation
40	58.3	66	42	68	7.937884

Table 2. Descriptive Statistic of Pre-test Result (Control Group)

Population	Mean	Mode	Min	Max	Std. Deviation
40	54.9	60	36	67	8.859881

The second stage of the study is treatment stage. As we described above, the intervention group, after getting the basic concepts of crises, is asked to watch “The Big Short” while the control group learns about crises by traditional chalk and talk lectures. To get the same material, the control group is also taught and told the chronology of American’s Subprime-Mortgage Crisis by using traditional oral media—the lecturer told the story of the issue.

After the treatment, the lecturer gave both experimental and control group a post-test. The result of the post-test indicates that there is an increase of post-test result average. The average post-

test score in intervention group is 83.08. The minimum and maximum score are respectively 71 and 93. In control group, the average score is 76.95. The minimum post-test score is 62 while the maximum is 88. For more details, Table 3 and Table 4 below show the descriptive statistic of the post-test.

Table 3. Descriptive Statistic of Post-test Result (Intervention group)

Population	Mean	Mode	Min	Max	Std. Deviation
40	83.8	89	71	93	6.637771

Table 4. Descriptive Statistic of Post-test Result (Control Group)

Population	Mean	Mode	Min	Max	Std. Deviation
40	76.95	75	62	88	6.472828

To find if the movie, as the instructional media, is effective, the t-test analysis is conducted to compare the gain scores, the difference between pre-test and post-test on each group. The result of the analysis is shown in Table 5.

Table 5. Two-sample t test

Variable	Obs.	Mean	Std. Deviation	t	df	Sig.
Gain_IG	40	25.5	8.872314			
Gain_CG	40	22	7.246573			
Combined	80	23.75		1.9323	78	0.05
Mean (Gain_IG) – Mean (Gain_CG)		3.5				

alpha: 0.05

Ho: No Difference

Gain\_IG = Gain Score of Intervention Group

Gain\_CG = Gain Score of Control Group

Table 5 indicates that the t table is 1.9323 while the significant level is 0.05. The confidence level of the analysis is 95 percent. It means that there is the significant difference between the gain scores of the intervention group and the control group. Table 5 also shows that the score difference is 3.5.

## 6. Discussion

The diversity of instructional media on teaching economics is helpful for the teachers. The use of a film or movie in teaching economics will activate both right and left hemispheres of brain. Alfred Marshall (1920) remarked that ‘the economics is a study of mankind in the ordinary business of life’. It means that economics can be found in various literatures including videos or movies.

Economics concepts that have been taught only through textbooks during the course of study

can be presented and illustrated through films or movies. By watching the movie, the students can directly observe various illustrations depicting the chronology and the causes of the crisis. The presentation of “The Big Short” makes the students not quickly bored and makes them understand the materials better. Some students interviewed also stated that the movie makes them more understand the causes of the crisis. The experiment conducted shows that the use of “The Big Short” in teaching the economic crisis and the things triggered it is effective to make the course easier for students to understand it.

The effectiveness is shown by the increases of intervention group’s average gain score that is higher than the control group. The interview also indicates that the use of the movie gives the students a clear illustration about the crisis. Despite getting positive responses from the students, the use of the movie also has constraints such as language used in the movie. The low English skills of the students make them sometimes not understands what the conversation between the actors of the movie means.

## 7. Conclusion

The use of “The Big Short” to explain the economic crisis and its causes is effective. The result of the experiment shows that the intervention group has the better gain score than the control group. The interview to the students also indicates that by watching a movie, the students are no longer bored when learning economics.

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# The Impact of Mechanism Corporate Governance, Dividend Payments, and Growth Opportunities to The Earnings Quality

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## Abstrack

The aim of this research is to examine the influence of corporate governance mechanism (institutional ownership, managerial ownership, independence of commissioner, and the audit committee), the dividend payment, earnings and growth opportunities toward quality. Earnings quality was measured with earnings response coefficients (ERC). This research used samples from manufacturing companies that listed on Indonesia Stock Exchange (IDX) during 2011-2015. Based on purposive sampling technique, it got 23 companies as research samples from a total population 146 companies, there were 115 annual reports were Analyzed. there were 115 annual reports were Analyzed. The result of research Showed that the variable growth opportunities has significant influence to earnings quality, meanwhile the other variables does not have significant influence to earnings quality, that are corporate governance mechanism and dividend payment ratio. Based on the result of research, it can be concluded that the market response to earnings information reflected from earnings response coefficients not only effected by profit size. However, there were other components where Considered by the market of participants in interpreting profits, such as growth opportunities, and the other information was Announced by companies.

**Keywords:** earnings response coefficients (ERC), corporate governance mechanism, dividend payment ratio, growth opportunities

## 1. Introduction

Financial statements have become the main tool for companies to submit financial information regarding the accountability of management (Schipper and Vincent, 2003). One of the information contained in the financial statements is information of profits. Earnings information is one of the important components in the financial statements. According Sofian et al. (2011) profit is regarded as the most significant information that can guide the decision making process by the interested parties.

The importance of earnings reports for decision-making raises the need for investors to compare the inter-company profits. To understand the difference in quality that is used as an assessment that is based on profit, the necessary measurement of the quality of earnings. This study uses earnings response coefficients (ERC) as an alternative for measuring the value relevance of

information gain (Lev and Zarowin, 1999).

Beaver (1968) in Setiati and Wijaya (2004) suggested that the ERC is the sensitivity of the stock price changes to changes in accounting profit. Scott (2000) says there are several factors that affect earnings response coefficients (ERC) including the persistence of earnings, capital structure, beta, growth opportunities, and the size of the company (Nofianti, 2014). Unlike the Dechow et.al (2010) identified the discovery of the most affecting earnings response coefficients, the method of accounting, quality auditors and corporate governance, firm fundamentals, and leverage.

The assumption underlying the use ERC research is that investors respond differently to the earnings information in accordance with the credibility or quality of the accounting earnings information (Syafudin 2004 in Hidayati & Pure, 2009). Given that not all accounting profit reported by the company a profit quality information.

Some reporting accounting scandal that originated from undetected manipulation; Enron, Merck, World Com and the majority of other companies in the United States and companies in Indonesia such as PT. Lippo Tbk and PT. Kimia Farma Tbk (Boediono, 2005), PT Great River International Tbk. have involved financial reporting originated from undetected manipulation. In addition, the recent cases of financial scandal in 2015 involving a large global company from Japan Thosiba Corp., also proved to be inflated profits in the financial statements until overstated profit of 1.2 billion US Dollars since 2008. (Bisnis Indonesia; CNN Indonesia; compass; Liputan6, 2015).

The number of cases of financial scandals that provide information that companies deliver compelling financial statements that are not actually in the financial statements. Profit information that should help the parties concerned in decision-making, for their moral conduct hazard and adverse selection in the lead managers of this information can not be used as a decision maker as it may mislead users of financial statements (Abdullah, 2002). This will negatively affect the quality of earnings because it distorts the information contained in the statements of income.

The research on earnings quality as measured by the ERC already done some research beforehand. Kartikasari and Setiawan (2008) found that the mechanism of corporate governance (managerial ownership, institutional ownership, and the board of commissioners) have a positive influence on the quality. Susanti et al (2010) proved that the audit committee managerial ownership and positive effect on the quality of earnings, but the institutional ownership and board of commissioners has no effect. Tuwentina and Wirama (2014) found empirical evidence that GCG has no effect on the ERC. Uyara (2001) found a positive effect of the dividend payout ratio to ERC (Abdullah, 2002). Results Tong and Miao (2011) shows the company making the distribution has a relatively better earnings quality than companies that do not distribute dividends. Wijayanti, and Supatmi (2008), and Nofianti (2014) proved that there was no market reaction to the announcement of changes to the payment of dividends. Arfan & Antasari (2008), Murwaningsari (2008), and Naimah & Main (2006) found evidence that the company's growth positive significant effect on the ERC. In contrast to Hidayati & Pure (2009) who found that there was no effect on the growth opportunities ERC.

Based on the theory gap and research gap above, research is needed back on the factors related to the quality of earnings. This study aimed to determine the effect of mechanisms, corporate

governance payment of dividends and growth opportunities to the quality of earnings. Object of this research is manufacturing companies listed in Indonesia Stock Exchange (BEI) during the period 2011 to 2015.

Agency theory is a theory that examines the relationship of principal and agent. Based on agency theory of the separation of ownership and management company called the potential conflict with the agency conflict. Agency conflict that gave rise to the opportunistic nature of management will encourage managers to manipulate earnings. This would result in lower earnings quality.

Signaling Theory discusses how should the management (agent) is obliged to give a signal about the state of the company to the owner as a form of responsibility for the management of the company. Asymmetry of information between agents and principals will encourage companies to provide information on external financial reports. Furthermore, the manager will be motivated to deliver good information about the company to the owner. Such situations that encourage managers to act in its own interests to manipulate earnings in order to maintain the credibility of the company in the stock market.

Mechanism Corporate governance has the ability in terms of generating a financial report that contains information about the income (Boediono, 2005). There are four mechanism corporate governance that is often used in a variety of research aimed at reducing the agency conflict, namely institutional ownership, managerial ownership, the audit committee and independent board (Rachmawati & Triatmoko, 2007).

The existence of mechanisms corporate good governance within the company, expected earnings quality will be responded positively by stakeholders in decision-making as investors and creditors. The market response indicated in the stock price changes will affect the ERC. The strong market reaction to the earnings information is shown by the high ERC showed that more quality of reported earnings (Indrawati & Yulianti, 2010).

Dividends are consequences that arise because companies choose to use external funding through the issuance of shares (Budiyanto 2010 in Simanjuntak & Kiswanto, 2015). Signaling theory states that dividend announcements regarded by investors as a good signal that indicates the condition of the company. When investors need information to evaluate the quality of a company report, this information is used by investors as a decision-making tool. Furthermore, it is declared in the response by the market, reflected in the stock price.

Investors in determining investment decisions will be interested in the company's ability to generate consistent profits. The company's profit increased stably show good growth opportunities that could potentially generate earnings in the future. Conversely, a decrease in income from year to year showed earnings growth is less good. Collins and Khotari (1989) found that the higher the chance a company to grow, the higher the ERC.

Jensen and Meckling (1976) in the agency theory says that institutional ownership is one tool that can be used to reduce the agency conflict. Institutional investors believed to be able to monitor managerial actions better than individual investors, so that the higher the level of institutional ownership, the stronger the degree of control which is carried out by external parties against the company.

Their institutional ownership in the company boosted investor confidence and stakeholders resulted in reported earnings quality or information reported earnings strength earnings

response. Boediono (2005), Kartikasari and Setiawan (2008) and Indrawati & Yulianti (2010) found empirical evidence that institutional ownership positively affects the ERC.

H<sub>1</sub>: Institutional Ownership positively affects Earnings Quality (ERC)

Jensen and Meckling (1976), stating that the ownership of managerial can help align the interests between shareholders and managers, as managers come to feel the direct benefits of the decision and bear the losses as a consequence faulty decision making and improve management performance is optimal. This will minimize the actions of managers to manipulate earnings and encourage managers to produce financial statements that reflect the actual state of the company and contribute to improving the quality of corporate financial reporting. Boediono (2005), Kartikasari and Setiawan (2008), and Susanti et al, (2010) found evidence that managerial ownership has positive influence on the quality of earnings (ERC).

H<sub>2</sub>: Managerial Ownership positively affects Earnings Quality (ERC)

The presence of independent board is the concept of corporate governance that is used as a tool to reduce agency conflict and managers are expected to act in the interests of the owners. Through its role in oversight by monitoring over financial reporting, independent board is believed to affect the management in preparing the financial statements in order to obtain a quality report.

Independent board that comes from outside the company are expected to be reacted positively by the market (investors), because the interests of investors are protected Kartikasari and Setiawan (2008), Boediono(2005), Siallagan and Machfoedz (2006), and Siagian and Tresnaningsih (2011) found evidence that the independent board effect on the quality of earnings.

H<sub>3</sub>: Board of Independent Commissioners positively affects Earnings Quality (ERC)

In line with the agency theory that mechanism corporate governance through supervision and monitoring of management performance will improve management performance in generating reliable financial reports. mechanism Corporate governance through the audit committee is expected to carry out its role well, especially in monitoring the financial reporting process

Same existence of independent audit committees that have expertise in accounting and finance is a signal of the credibility and quality perception of better corporate earnings. Profit credible and good quality will be responded more strongly. This thinking is supported by the results of research Suaryana (2005), Siallagan and Machfoedz (2006), and Siagian and Tresnaningsih (2011) which shows the difference in earnings response coefficients companies that make up the audit committee and the company does not establish an audit committee.

H<sub>4</sub>: The Audit Committee positively affects Earnings Quality (ERC)

Based on the signaling theory, where the dividend announcement regarded by investors as a good signal that indicates the condition of the company. When investors need information to evaluate the quality of a company report, this information is used by investors as a decision-making tool. This will cause the market response is reflected in the share price on the dividend announcement. The market response will be higher if the reported accounting earnings quality is reflected in the sensitivity of the stock price change is called the earnings response coefficients (ERC) (Beaver et al. 1979, in Setiati and Wijaya, 2004). Research results Tong and Miao (2011) found that the company making the distribution has a relatively better earnings quality than companies that do not distribute dividends.



H<sub>5</sub>: Dividend Payout Ratio positively affects Earnings Quality (ERC)

The investment decision by investors not only see and assess the company's ability to generate profits at a certain time, but also assess the company's prospects in generating sustainable profits. This is done to assure the investment decision is correct. If the greater the opportunity to grow the company, the higher the chance of Companies gain or increase profits from the company in the future. Arfan & Antasari (2008) find evidence that the growth of the company positive significant effect on earnings response coefficients. These results are supported by a study by Collins and Kothari (1989) and Naimah and Main (2006) who found that the company's growth affect earnings response coefficients.

H<sub>6</sub>: Growth Opportunities positive and significant effect on the Earnings Quality (ERC)

Based on the description above, there are six variables are supposed to influence the ERC, such as mechanisms corporate governance (institutional ownership, managerial ownership, independent board, audit committee), the dividend payout ratio and growth opportunities.

H<sub>7</sub>: Mechanism of Corporate Governance, Dividend Payout Ratio and Growth Opportunities positive influence jointly on the Earnings Quality (ERC).

## 2. Methods

This study uses a quantitative approach to research design study hypothesis to test the effect among variables hypothesized. The population in this study are all manufacturing companies with shares listed on the Indonesia Stock Exchange (BEI) in the period 2011 to 2015, amounting to 146 companies. Sampling technique used is purposive sampling. The sampling criteria are as follows: 1). Manufacturing companies listed in Indonesia Stock Exchange (BEI) and cash dividends consecutively the period 2011 to 2015. 2) The company publishes an annual report ending December 31. 3) The financial statements are presented in rupiah. 4) The company has data completeness corporate governance and returns. stock Based on these criteria then obtained by 23 companies manufacturing.

There are seven variables used in this study consisted of earnings quality (ERC), institutional ownership, managerial ownership, independent board, audit committee, payment of dividends, and growth opportunities. Here is an operational definition of each variable:

Table 1. Variable Operational Definition

No	Variable	Operational Definition	of Measurement
1.	Earnings Quality (Y)	The amount that can be consumed in one period by keeping the ability of the company at the beginning and end of the period remained the same (Schipper and Vincent in Novianti, 2012)	Regressed Cumulative Abnormal Return (CAR) and Unexpected Earnings (UE), coefficient beta is an ERC of each company (Boediono, 2005)
2.	Institutional	Number of shares owned by institutional	Percentage of shares

No	Variable	Operational Definition	of Measurement
3.	Ownership (X1)  Managerial Ownership (X2)	shareholders such as insurance companies, banks, investment companies and other holdings except for subsidiaries and other institutions that have a special relationship ( Stice et al.,2009)  Number of shares owned by the manager(insideboard)both boards of directors and commissioners in a company out of stock which is owned by the principal,community and institutional(Downessand Goodman, 1999)	held by institutional investors on the number of shares outstanding  Percentage shares owned by the management company to the number of shares outstanding
4.	Independent Commissioner Board (X3)	Total membership from outside the company (outside directors) to the overall commissioners (Boediono, 2005)	Membership numbers are from outside the company (outside directors) of the total members of the board
5.	Audit Committee (X4)	A committee within the company responsible for overseeing the process of preparation and financial reporting, external auditors supervise and observe the internal control system (including internal auditors) (Siallagan and Machfoedz 2006 )	Size / number of audit committee
6.	Payment of Dividends (X5)	Part of the company's net profit after tax and net retained profits to holders of equity investments in proportion to their ownership share(Ang,1997)	The dividend payout ratio is calculated by way of cash dividends paid divided by net income (Wijayanti and Supatmi, 2008).
7.	Growth Opportunities (X6)	Prospects for growth in the future (Scott, 2000)	The ratio of market value to book value of equity (market-to-book ratio) (Collins and Kothari, 1989)

Data collection techniques in this study is documentation techniques. The type of data used in this research is secondary data from annual reports (annual report), daily stock price and the stock price index (CSPI) is a manufacturing company that published daily by the Indonesia Stock Exchange (IDX), Yahoo Finance (finance.yahoo.com) and related literatures specialized companies listed on the Stock Exchange in 2011-2015.

Testing the hypothesis in this study using multiple regression analysis. Multiple regression analysis is used to determine the effect of independent variables on the dependent variable with the following equation:

$$ERC_{it} = \beta_0 + \beta_1 KI_{it} + \beta_2 KM_{it} + \beta_3 DK_{it} + \beta_4 KA_{it} + \beta_5 RPD_{it} + \beta_6 PP_{it} + \epsilon \dots \text{(regression equation 1)}$$

**Description:**

ERC<sub>it</sub>: the content of the information in profit (slope  $\alpha$ ) were measured by means of regression between cumulative abnormal return (CAR) with unexpected earnings (UE)

- KI<sub>it</sub>: Owners institusonal firm i in period t
- KM<sub>it</sub>: Managerial ownership company i in period t
- DK<sub>it</sub>: BoC Independent firm i in period t
- KA<sub>it</sub>: Audit Committee of the company i in period t
- RPD<sub>it</sub>: Dividend payout ratio for firm i in period t
- PP<sub>it</sub>: Opportunities growth of the company i in period t
- $\epsilon$ : Standard error

**3. Results and Discussion**

*3.1 Classical Assumption Test*

As a prerequisite to do regression performed classical assumption to ensure that research data is valid, unbiased, consistent, and assessment of coefficients efficient regression (Ghozali, 2011). Here's a summary of the results of the classical assumption test:

Table 2. Summary of Classical Assumption Test

Classical Assumption Test	Results	Specification
Normality Test	0713> Sig:0:05	Distributed Normal
Multicollinearity	Tolerance> 0:10 and VIF <10	Non Multicollinearity
Autocorrelation	DW = 1,864	Non autocorrelation
Heteroskidastisity	Sig. > 0.05 (Test Glejser)	Non Heteroskidastisity

Source: Secondary data were processed, 2017

*3.2 Descriptive Statistics*

Descriptive statistical analysis used to determine the value of the average (mean), maximum value, minimum value and standard deviation of each variable. This analysis will facilitate observation of the variables of the study, because it can be described in broad outline each variable in the sample to be studied. Descriptive statistics are presented following table:

Table 3.Statistik Descriptive

Variables	N	Minimu m	Maximu m	Mean	Std.Deviation
Institutional Ownership	115	0	99.76	40.9976	34.950656
Managerial Ownership	115	0	25.62	1.5706	5.332083
Independent Board Commissioner	115	0	80	40.2961	13.436144
Audit Committee	115	3	5	3.2522	0.543599

Dividend Payout ratio	115	3.49	133.81	44.0588	25.265515
Growth Opportunities	115	0.34	58.48	5.3734	9.4949
Earnings Respons Coefficients	115	-5.44	5.97	-0.0127	0.924411
Valid N	115				

Source: Secondary data were processed, 2017

Hypothesis testing using multiple regression analysis in this study showed that partially only growth opportunity positive significant effect on the quality of earnings. While simultaneously all independent variables together a positive significant effect on the quality of earnings. Here are presented results of hypothesis testing both Test F and Test t as follows:

Table 4. Summary of Test Results Regression

Model	Coefficients ( $\beta$ )	Significanc e		Hypothesis
Constant	0.719			
Institutional Ownership→ERC	-0.047	0.339	0.05	H <sub>1</sub> Declined
Managerial Ownership→ERC	0.041	0.596	0.05	H <sub>2</sub> Declined
Independent Board of Commissioner →ERC	-0.06	0.71	0.05	H <sub>3</sub> Declined
Audit Committee→ERC	1.135	0.314	0.05	H <sub>4</sub> Declined
Dividend Payout Ratio→ERC	2.038	0.409	0.05	H <sub>5</sub> Declined
Growth Opportunities→ERC	0.269	0.012	0.05	H <sub>6</sub> Accepted
F Statistics	2.378	0.034	0.05	H <sub>7</sub> Accepted

Source: secondary data were processed, 2017

### 3.3 Effect of institutional ownership to earnings response coefficients (ERC)

Based on the regression test results in table 4 show that institutional ownership has no significant negative influence on the ERC that institutional ownership has no effect on the ERC. Based on data analysis of institutional ownership in this sample of 115 samples 54 samples have a stake institutional below 25% and the level of ownership of an average of 41% <50%, which indicates that the shareholding institutional remains low and the shareholding structure in the sample firms concentrated by large shareholders. This will cause problems in the form of agency conflicts between controlling shareholders to minority shareholders.

La Porta et al.(1999) showed that the concentrated ownership structure indicates level of corporate a weak governance. While the mechanism corporate governance is used as a tool to minimize the occurrence of agency conflict. If the level corporate governance is still weak the mechanism corporate governance can not be used as a tool to convince investors that the managers to act in the interests of shareholders. Therefore, in this study can not affect the institutional ownership of a company ERC.

### 3.4 Effect of Managerial Ownership to Earnings Response Coefficients (ERC)

Based on the regression test results in Table 4 show that managerial ownership has a positive effect but not significant to the ERC that managerial ownership does not affect the ERC. These results are consistent with research Kartikasari and Setiawan (2008) and Indrawati and Yulianti (2010) who found that managerial ownership does not affect the quality of earnings (ERC) and

does not support the agency theory. This is due to lack of managerial ownership as evidenced by an average of only managerial ownership of 1.57%.

Indrawati and Yulianti (2010) states that managerial ownership does not significantly influence the quality of earnings (ERC), which is caused by a small proportion of managerial ownership. Therefore, the mechanism corporate governance through managerial ownership which is expected to be used as a tool to reduce agency conflicts and participate align the interests of managers and shareholders in accordance with agency theory is not proven that, in this study the managerial ownership can not affect the ERC a company.

### *3.5 Effect of Independent Board of Commissioner to Earnings Response Coefficients (ERC)*

Based on Table 4 shows that the independent board had a positive effect but not significant to the ERC independent board that does not affect the ERC, and does not support the agency theory. These results are consistent with research Indrawati and Yulianti (2010), Susanti et al. (2010), and Kartikasari and Setiawan (2008), who found that the independent board does not affect the quality of earnings (ERC).

Based on the data analysis companies sampled in this study, researchers found that as many as 115 samples obtained an average composition of the independent board which is equal to 40.29 which indicates that the average sample of companies already have independent board composition in accordance with the Stock Exchange regulations at least 30% of the total number of commissioners. Minimum conditions commissioners establishment at least 30% is not high enough to be able to dominate the policy adopted by the board of directors (Siregar and Main, 2005) resulting in a role in monitoring the company has not been effective.

### *3.6 Effect of the Audit Committee to Earnings Response Coefficients (ERC)*

Based on the regression test results in table 4 of the audit committee have a positive effect but not significant to the ERC. These results indicate that the audit committee has no effect on the quality of earnings and in line with the research Susanti et al. (2010) and Indrawati and Yulianti (2010). Based on the data analysis companies sampled in this study the researchers found that as many as 115 samples obtained an average size of the audit committees of 3.54 which indicates that the entire sample companies already have an audit committee in accordance with the Stock Exchange regulations. However, given the empirical evidence is not found the size of the audit committee significant effect on the ERC.

According Indrawati and Yulianti (2010) the audit committee does not affect the quality of earnings (ERC) due to non-fulfillment of the audit committee characteristics such as independence, activity and audit committee size. While this research has been to meet the characteristics of the audit committee size but still does not have a significant influence on the ERC. It can be caused due to the fulfillment of the audit committee size being offset by activity and independence of the audit committee did not specify the implementation of an effective audit committee role.

### *3.7 Effect of Dividend Payout Ratio to Earnings Response Coefficients (ERC)*

Based on the regression test results in table 4 the dividend payout ratio has a positive effect but not significant to the ERC that the dividend payout ratio does not affect the ERC. Other research has also found similar things (Hill and Hartono, 2000; Wijayanti and Supatmi 2008; Nofianti, 2014) showed that there was no market reaction to the announcement of changes to the payment of dividends.

Dividend policy theory states that dividend payments can also be interpreted as a negative signal, which means that companies are increasing dividend payments may be considered companies that are not prospected in the future (Nofianti, 2014). According to Miller and Modigliani (1961) in assuming dividends are not relevant to the underlying theory of dividend policy states that the dividend payout ratio has no effect on the share price. While the ERC is the market reaction is reflected in the sensitivity of changes in stock prices. Therefore, the dividend announcement does not affect the ERC.

### *3.8 Effect of Growth Opportunities to Earnings Response Coefficients (ERC)*

Based on the results of the regression test Table 4 growth opportunities have a significant positive effect on ERC and support agency theory and supporting research Arfan and Antasari (2008), Murwaningsari (2008), and Naimah and Main (2006). These conditions indicate that the greater the chances of growing the company the higher the chances of the company getting or adding profits to the company in the future so that earnings response coefficients are also higher (Nisrina and Herawaty, 2016).

### *3.9 Effect of Mechanism Corporate Governance, Payout Ratio, and Growth Opportunities to Earnings Response Coefficients (ERC)*

Regression test results in Table 2 indicate that together or simultaneous institutional ownership, managerial ownership, independent board, audit committee, the dividend payout ratio and growth opportunities positive effect on the quality of earnings.

## **4. Conclusions and Suggestions**

The conclusion of this research is that simultaneously all the variables have a positive effect, and partially only growth opportunity variables that positively affect the quality of earnings. Suggestions for further research to use windows longer to see more accurate market reactions and use other proxies for independent variables to compare with previously used proxies. Suggestions for companies to make disclosure more broadly, because the information reported by the company to be a medium for market participants in interpreting the profits derived company, such as growth opportunities, and other information published by the company.

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# What Determinants of Academic Fraud Behavior? From Fraud Triangle to Fraud Pentagon Perspective

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## Abstract

This study aims to investigate the determinants of academic fraud behavior in the perspective of fraud triangle, fraud diamond, and fraud pentagon. Research method of this study is quantitative study to analyze the determinants of academic fraud behavior. The population of this study is students majoring in economics education of Faculty of Economics Universitas Negeri Semarang (UNNES) who are actively study during the first semester of 2017/2018 academic year. Data is collected using questionnaire. The data is analyzed by descriptive statistic and multiple linear regression. The results show that academic fraud behavior by economics education students of Faculty of Economics (UNNES) is in the low category. Plagiarism and wrong cooperation are the mostly executed of academic fraud behavior than other indicators. This study successfully explains the concepts of fraud triangle, there are pressure, opportunity and rationalization which positively and significantly affect students' academic fraud behavior. Nevertheless, this study fails to verify the concept of fraud diamond and fraud pentagon. Capability, arrogance and external do not affect students' academic fraud behavior. This paper use three concept of fraud to investigate the determinants of academic fraud behavior.

**Keywords;** academic fraud, fraud triangle, fraud diamond, fraud pentagon

## 1. Introduction

Academic fraud behavior by students and academician is fresh phenomenon in education. There is some approach that can be executed to detect determinant of academic fraud behavior by students, such as fraud triangle, fraud diamond, and fraud pentagon concept. All the three frameworks above is developed from fraud phenomenon occurred in financial sector.

The concept of fraud triangle was introduced by a criminologist named Cressey (1953), who argued that someone does something (including cheating) due to underlying reason (Abdullahi & Mansor, 2015). Next, there was development of diamond fraud concept to understand other factors that influence cheating behavior. Basically, fraud triangle can be developed for prevention and detection of fraudulent behavior by adding an element of capability. Thus, the theory is called fraud diamond, consists of incentive (pressure), opportunity, rationalization, and capability (Wolfe & Hermanson, 2004). Opportunity opens the doorway to fraud, and incentive and rationalization can draw the person toward it. However, based on the fraud diamond theory, the person also must have the capability to recognize the open doorway as an

opportunity and to take advantage of it (Ruankaew, 2016).

Next, new concept was also developed called fraud pentagon concept. Tugas (2012) proposed fifth element in fraud pentagon concept, which is external regulatory influence. If the effect of external regulation is weak then it is possible to cheat. G Tessa & Harto (2016) explained that new theory that explores more on the trigger factors of fraud is pentagon fraud (Crowe's fraud pentagon theory). Sorunke (2016) offered personality ethics as the fifth dimension in the new pentagon fraud concept. Ethics is considered to minimize the occurrence of fraud.

The concept of fraud triangle has been examined in understanding the behavior of academic cheating. Results show that there is a positive impact of academic pressure, cheating opportunities, and rationalization cheating on student academic fraud behavior (Fitriana & Baridwan, 2012; Pamungkas, 2015; Purnamasari & Irianto, 2013). There is also empirical evidence that rationalization has an effect on the student's cheating behavior while transient pressure and opportunity have no significant effect (Saidina, Nurhidayati, & Mawardi, 2017). Apriani, Sujana, & Sulindawati (2017) found that pressure and rationalization have significant effect on students' academic fraud while opportunities were not proven to significantly affect academic fraud behavior.

Some researchers have examined the concept of fraud diamond and found that opportunities, rationalizations and capabilities positively and significantly affect academic cheating behavior, whereas pressure has no effect on academic cheating behavior (Nursani & Irianto, 2013; Pratama, 2017). Capabilities affects financial fraud behavior, however other dimension of fraud have no impact on financial fraud behavior (Manurung & Hardika, 2015). In addition, another research concluded different result. They only found positive and significant effect of pressure on academic behavior. Nevertheless, other fraud diamond elements (opportunity, rationalization and capacity) cannot detect academic fraud behavior (Zaini, Carolina, & Setiawan, 2015).

Furthermore, previous researchers come into debates on fraud pentagon concept and its effect in fraudulent financial statement (Aprilia, 2017; G Tessa & Harto, 2016; Yusof, 2016). G Tessa & Harto (2016) showed that pressure has positive and significant impact on fraudulent financial statement. In addition, pressure is measured by external pressure and financial stability. However, Yusof (2016) found that only pressure that affects fraudulent financial statement. He proposed fraud diamond model after examining the fraud triangle, fraud diamond, and fraud pentagon in Malaysian companies. Nevertheless, Aprilia (2017) stated that pressure from external party is empirically found not to affect fraudulent financial statement.

Results show that there is a diversification in examining the concept of fraud triangle, fraud diamond, and fraud pentagon. Fraud pentagon (Crowe, 2011; Sorunke, 2016; Tugas, 2012) to detect academic fraud is rarely found in the previous research. Therefore, this stipulates an opportunity to investigate the issue. This study aims to find empirical evidence related to determinants of academic fraud behavior in the perspective of fraud triangle, fraud diamond, and fraud pentagon. It is expected that this result has comprehensive finding regarding academic fraud behavior phenomenon conducted by university students and its determinants.

## **2. Literatur Review**

Fraud triangle theory is the first one capable of explaining the elements that cause fraud. This theory is presented by Cressey in 1953. The fraud triangle elements consist of pressure,

opportunity, and rationalization (G Tessa & Harto, 2016). Fraud triangle concept is re-introduced by Wells (1997). Hunton et al. (2004) argue that fraud is a result of the three elements which play their own roles, namely opportunity, incentive or pressure, and rationalization. Later on, he explains that opportunity exists when the internal control is inadequate or when collusion exists, allowing the perpetrators to avoid any control. Incentive or pressure, on the other hand, is what causes someone to commit deception. Pressure can include almost everything including medical bill, expensive lifestyle, and addiction problem (Abdullahi, Mansor, & Nuhu, 2015). Wolfe & Hermanson (2004) develops a new element in the so-called fraud diamond concept. The said element is capability which is believed to be able to improve the prevention and detection of fraud. According to Wolfe & Hermanson (2004), it is impossible for deception or fraud to occur if no one has the right capability to perpetrate the deception or fraud. The said capability is an individual quality to commit deception, which drives them to find an opportunity and make use of it. Opportunity becomes their access point to commit a fraud. While pressure and rationalization could attract an individual to commit a fraud, the individual himself/herself should have the appropriate capability to identify an opportunity in order for him/her to launch a fraud tactic appropriately and gain the maximum benefits (G Tessa & Harto, 2016).

An updated theory which covers the fraud triggering factors is fraud pentagon theory (Crowe's fraud pentagon theory). This theory is presented by Crowe Howarth in 2011. Fraud pentagon theory is an extended version of fraud triangle theory presented by Cressey earlier. This theory adds two more elements fraud namely competence and arrogance. The competence described in this fraud pentagon theory bears the same meaning as capability previously explained in fraud diamond theory by Wolfe and Hermanson in 2004. Competence/capability means an employee's capability to ignore internal control, develop a concealment strategy, and control the social situation for his/her own personal benefits. Meanwhile, arrogance is the superiority attitude for having certain rights and the feeling that the company's internal control or policy are not applicable to oneself (G Tessa & Harto, 2016). Tugas (2012) also proposes fraud pentagon concept by adding external regulatory influence. Fraud will never exist if the regulators can apply the rules ruthlessly so that they will be able to manage the organization's members to comply with them.

### **3. Method**

This research is quantitative research that using causality design. This research aims to investigate the determinants of student's academic fraud behavior in the fraud triangle, fraud diamond, and fraud pentagon perspectives.

#### *3.1 Population and Samples*

The population of this research is students of Economics Education Department of Faculty of Economics UNNES consisting of those majoring in Office Administration Education, Accounting Education and Education of Cooperatives.

#### *3.2 Operational Definition of Research Variable*

The dependent variable in this research is academic fraud behavior. And the independent variables in this research are pressure, opportunity, rationalization, capability, arrogance, and external regulatory influence. These independent variables are developed from the fraud

triangle, fraud diamond and fraud pentagon concepts.

### 3.3 Method of Data Collection

The data in this research are obtained using questionnaire. The questionnaire is developed from several previous studies to capture the research variables more accurately.

### 3.4 Method of Data Analysis

The data are analyzed using descriptive and inferential statistical analyses. The descriptive statistical analysis is used to describe the research variables in the form of data mean, minimum, maximum, and standard deviation. The inferential statistical analysis used here is multiple regression analysis to test the proposed hypotheses. The hypothesis tests are conducted using the following three regression equations.

$$AFB1 = a + b_1 \text{pressure} + b_2 \text{opportunity} + b_3 \text{rationalization} \quad (1)$$

$$AFB2 = a + b_1 \text{pressure} + b_2 \text{opportunity} + b_3 \text{rationalization} + b_4 \text{capability} \quad (2)$$

$$AFB3 = a + b_1 \text{pressure} + b_2 \text{opportunity} + b_3 \text{rationalization} + b_4 \text{capability} + b_5 \text{arogance} + b_6 \text{regulation} \quad (3)$$

Description:

AFB1 = academic fraud behavior model 1

AFB2 = academic fraud behavior model 2

AFB3 = academic fraud behavior model 3

a = constant

b<sub>1</sub>, b<sub>2</sub>, b<sub>3</sub>, b<sub>4</sub>, b<sub>5</sub>, b<sub>6</sub> = regression coefficient

## 4. Results

### 4.1 Descriptives Statistics

Respondents of this research is students majoring in economic education of Faculty of Economics UNNES grade 2016 as much as 321 students. Questionnaires are distributed to the respondents. However, some questionnaires have not been answered nor submitted by the respondents. The response rate is 94,24%. In sum, data collection is described in the following Table 1.

Table 1. Data Description

No	Class	Distributed Questionnaire	Processed Questionnaire	Response Rate
1	Administration Office Education	88	76	86,36%
2	Accounting Education	93	84	90,32%
3	Cooperative Education	80	79	98,75%
4	Administration Office Education of IUP	20	20	100,00%
5	Accounting Education of IUP	20	18	90,00%
6	Cooperative Education of IUP	20	20	100,00%
	<b>Total/ Average</b>	<b>321</b>	<b>297</b>	<b>94,24%</b>

Table 2 demonstrates the descriptive statistic of research variables, consist of minimum, maximum, mean and deviation standard. It can be concluded that mean from academic fraud

behavior is 18,6054. This value means that academic fraud behavior is low. Students from Economics Education Department grade 2016 have ever conducted academic fraud behavior. In addition, pressure has mean of 20,2274, which describes that students receive low level of pressure. Moreover, the mean of opportunity, rationalization, and capability have value of 23,5251, 18,0903, and 12,7592. These mean that opportunity, rationalization and capability of students are high. Furthermore, external regulatory influence has mean of 18,1438 which categorized as high. Meanwhile, mean of arrogance is 6,8562 and describes that student's arrogance is low.

Table 2. Descriptive Statistic of Research Variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation
academic_fraud	297	10,00	34,00	18,6054	4,45840
pressure	297	11,00	33,00	20,2274	5,46205
opportunity	297	11,00	34,00	23,5251	4,27045
rationalization	297	8,00	28,00	18,0903	3,70677
capability	297	6,00	23,00	12,7592	3,46055
arrogance	297	4,00	12,00	6,8562	2,15570
regulation	297	5,00	25,00	18,1438	3,57603
Valid N (list wise)	297				

The description of academic fraud behavior of students in Department of Economics Education FE UNNES grade 2016 is described in Table 3. Results show that plagiarism is mostly conducted by students among other indicators of academic fraud behavior. In addition, students of Cooperative Education are the greatest who conduct plagiarism. This condition is presumably because students have not understood plagiarism well, especially in doing their assignment. Other academic fraud behavior which conducted by respondents is wrong cooperation. Students from Administration Office Education become the most that conduct wrong cooperation. This wrong cooperation is executed when they have exam and their friends is allowed to copy their answers.

Table 3. Description of Academic Fraud behavior

No	Class	Plagiarism	Data Fraud	Cheating	Wrong Cooperation
1	Administration Office Education	2,22	1,72	1,74	2,18
2	Accounting Education	2,07	1,38	1,56	1,94
3	Cooperative Education	2,36	1,94	1,71	2,14
4	Administration Office Education of IUP	1,85	1,65	1,67	2,15
5	Accounting Education of IUP	2,11	1,50	1,31	2,10
6	Cooperative Education of IUP	2,20	1,73	1,25	1,79
	<b>Average</b>	<b>2,18</b>	<b>1,66</b>	<b>1,62</b>	<b>2,07</b>

Table 3 shows interesting results. Students of Department of Economic Education FE UNNES have low level of cheating indicator. The statement items in questionnaire of cheating are prepare to cheat or notes, do cheating and use the notes, and copy friends' answers. Thus, students are individually realized that cheating is bad behavior. However, wrong cooperation is inevitable. It means that environmental factor (friends) greatly affects student cheating behavior.

#### 4.2 The Result of Hypotheses Testing

Hypothesis testing is conducted in three stages, which are examining factors that affect academic fraud behavior of students in the perspective of fraud triangle, fraud diamond, and pentagon fraud. In addition, this study uses three regression equations. First regression equation involves the concept of fraud triangle with pressure, opportunity and rationalization as independent variables. Results are shown in Table 4.

Table 4 shows that this study has successfully provided empirical evidence on the concept of fraud triangle. Pressure, opportunity and rationalization have positive and significant effect on academic fraud behavior, both simultaneously and partially. The sig value in the F test (ANOVA table) is 0.000 with F value of 25.685. Meanwhile, the value of sig. In pressure is 0.005, sig value. of opportunity is 0.007 and sig value. of rationalization is 0.008. The sig values are lower than 0.05, hence pressure, opportunity and rationalization affect students' academic fraud behavior. In addition, adjusted R square is 0.199, which means that pressure, opportunity and rationalization can explain academic fraud behavior by 19.9%. Whereas there remaining (80.1%) is explained by other variables outside the model.

Table 4. Hypothesis Testing and Fraud Triangle Concept

	t test			F test		
	B	t	Sig.	F	Sig.	Adjusted R Square
Constant	7,197	5,194	0,000	25,685	0,000	0,199
Pressure	0,152	2,855	0,005			
Opportunity	0,193	2,696	0,007			
Rationalization	0,210	2,678	0,008			

The next hypotheses employ fraud diamond concept by presenting capability as new independent variable. F test results show the sig value. of 0,000 with F value of 19.276. The sig value is lower than significance level (0.05), thus pressure, opportunity, rationalization and capability have simultaneous effect on academic fraud behavior. In addition, t test (table coefficients) shows the sig value. of pressure, opportunity, and rationalization are 0.005, 0.007, and 0.009, respectively, which means lower than the significance level of 0.005. Hence, pressure, opportunity, and rationalization have empirically found to positively and significantly affect academic fraud behavior. Moreover, capability sig value. of 0,616 with t value equal to -0,512 higher than level of significance 0,05. It means that the variable capability does not have significant impact on academic fraud behavior. Furthermore, adjusted R square is 0,197, meaning that factors in fraud diamond concept can explain academic fraud behavior by 19.7%. Whereas the remaining (80.3%) is explained by other factors. In sum, this study fails to completely explain the concept of fraud diamond because capability (as new variable in fraud

diamond concept) do not have positive and significant effect academic fraud behavior.

Table 5. Hypothesis Testing in Fraud Diamond Concept

	t test			F test		
	B	t	Sig.	F	Sig.	Adjusted R Square
Constant	7,145	5,136	0,000	19,278	0,000	0,197
Pressure	0,163	2,833	0,005			
Opportunity	0,198	2,736	0,007			
Rationalization	0,230	2,617	0,009			
Capability	-0,050	-0,502	0,616			

The last test examines pentagon fraud concept in understanding student academic fraud behavior. New variables are presented in this pentagon fraud concept, which are arrogance and external regulatory influence. Arrogance is considered to have positive effect while external regulatory influence variable has negative effect. The results can be described in table 6. F test (ANOVA table) shows that the value of F equal to 13,531 with sig. value of 0.000, lower than the significance level of 0.05. Thus, pressure, opportunity, rationalization, capability, arrogance, and external regulatory influence simultaneously have significant effect on academic fraud behavior.

Table 6. Hypotheses Testing in Fraud Pentagon Concept

	t test			F test		
	B	t	Sig.	F	Sig.	Adjusted R Square
Constant	8,192	3,675	0,000	13,531	0,000	0,201
Pressure	0,173	2,985	0,003			
Opportunity	0,203	2,788	0,006			
Rationalization	0,251	2,846	0,005			
Capability	0,032	0,287	0,775			
Arrogance	-0,291	-1,865	0,063			
Regulation	-0,045	-0,627	0,531			

The result of t test demonstrates the sig value. of pressure, opportunity, and rationalization are 0.003, 0.006 and 0.005, which lower than the 0.05 as the significance level. Therefore, pressure, opportunity, and rationalization have positive and significant effect on student academic fraud behavior. However, sig. value of capability is 0.775 which is greater than the significance level (0,05). Hence, capability do not have positive and significant effect on student's academic fraud behavior. In addition, arrogance has t value of -1,865 with sig value. of 0.063 and higher than the 0.05 (significance level). It means that arrogance do not have positive and significant effect on student academic fraud behavior. Moreover, external regulatory influence has t value of -0.627 and sig value. of 0.531 which is higher than 0.05 (significance level). Thus, external regulatory influence does not affect the student's academic fraud behavior. However, the

regression coefficient of external regulatory influence is negative which means that external regulatory influence variable has negative but insignificant effect on student's academic fraud behavior.

## **5. Discussion**

### *5.1 Determinants of Academic Fraud Behavior in Fraud Triangle Concept*

Results explain the concept of fraud triangle in understanding factors that affect student academic fraud behavior. Pressure, opportunity, and rationalization have positive and significant effect on student academic fraud behavior. Pressure becomes the most dominant factors among opportunity and rationalization. Pressure experienced by students will greatly affect students to cheat. Academic fraud behavior can be plagiarism, cheating, data forgery and wrong cooperation. In addition, depressed students are more likely to commit fraud than students who experience low learning pressure.

Opportunity to cheat also affect students to conduct academic fraud. If there is an opportunity, student will be more likely to commit fraud. If the opportunity is relatively small, student will not do cheating. Furthermore, rationalization has positive and significant effect on student's academic fraud behavior. Students look for excuses to commit fraud. A lot of tasks, limited time, other friends also cheating are reasons that are considered rational to support their action. Less excuses by students will lower academic fraud behavior.

These findings are supported by previous research (Fitriana & Baridwan, 2012; Fuadi, 2016; Pamungkas, 2015; Purnamasari & Irianto, 2013). However, other researchers (Apriani et al., 2017; Kusumantoro, Nurkhin, Mukhibad, & Kiswanto, 2016) fail to completely explain fraud triangle concept, because one dimension does not have significant effect on academic fraud behavior. Apriani, Sujana, & Sulindawati (2017) stated that pressure and rationalization significantly affect academic fraud behavior of accounting students in Undiksha, however opportunity has insignificant effect on academic fraud behavior. Rationalization also affect academic fraud behavior, whereas pressure and opportunity have insignificant impact (Saidina et al., 2017). Nevertheless, Kusumantoro, Nurkhin, Mukhibad, & Kiswanto (2016) showed that only opportunity that positively affect employee fraud.

### *5.2 Determinants of Academic Fraud Behavior in Fraud Diamond Concept*

This study fails to prove the concept of fraud diamond in understanding factors that affect student academic fraud behavior. New variable in fraud diamond concept is capability, which do not have positive and significant effect to student academic fraud behavior. It can be interpreted that students will not do academic fraud even though they have the capability to do so. In the concept of fraud diamond, a person will cheat if he is able to do so. Especially in the state of depression, opportunity, and excuses. However, fraud triangle dimension are the factors that have been shown to affect student academic fraud behavior.

This study is similar to previous researches that fails to completely explain fraud diamond concept in understanding factors that affect academic fraud behavior (Zaini et al., 2015). Nevertheless, there were researchers that found positive effect of capability on academic fraud (Nursani & Irianto, 2013; Pratama, 2017). However, they cannot fully prove the fraud diamond concept. They successfully demonstrated that opportunity, rationalization, and capability positively and significantly affect academic fraud behavior, and pressure does not affect



academic fraud behavior. Meanwhile Zaini, Carolina, & Setiawan (2015) found different results. They showed that pressure has positive and significant effect on academic fraud behavior, whereas other fraud diamond elements (opportunity, rationalization and capability) cannot detect academic fraud behavior.

### *5.3 Determinants of Academic Fraud Behavior in Fraud Pentagon Concept*

Fraud pentagon concept in this study is derived from Crowe (2011) who added competence and arrogance dimension and also a concept proposed by Tugas (2012) who uses external regulatory influence dimension. In Crowe (2011), a person will commit acts of cheating due to pressure, opportunity, rationalization, opportunity, and arrogance. Arrogance is an attitude of superiority to the rights it possesses, an individual feel that internal control or institutional policy does not apply to himself. Arrogance is an exaggeration shown by someone. Arrogance is a reflection of pride because he has more abilities than others. If someone has a high arrogance, then he will be more likely to commit fraud. This study unsuccessfully proves the positive and significant effect of arrogance on student academic fraud behavior. It means that arrogance is not the reason for students in Economic Education Department of FE UNNES to commit fraud. Based on the data, students have low arrogance level.

This study fails to describe the effect of external regulatory influence, like those stated in Tugas (2012). Academic fraud will not happen if the regulators are able to strictly enforce the rules and organize their member to comply the rules. This finding is similar to Aprilia (2017) who demonstrated that pressure from external party does not affect fraudulent financial statement. It is presumably because regulation in UNNES and FE is considered as weak to organize academic fraud behavior by students, However, Yusof (2016) successfully found that pressure can affect fraudulent financial statement, whereas other dimensions do not have significant effect.

## **6. Conclusion**

Academic fraud behavior by students of Economic Education Department of FE UNNES grade 2016 is low (very rare). Plagiarism and wrong cooperation are indicators of academic fraud that mostly performed by students than other indicators. This research succeeded to prove the concept of fraud triangle, consist of pressure, opportunity and rationalization to have positive and significant effect on student academic fraud behavior. Students will cheat under pressure, opportunities, and if they have justification for cheating. However, this study failed to prove the concept of fraud diamond and fraud pentagon. Capability, arrogance and external regulation influence do not have significant effect on students' academic fraud behavior. Students will not commit fraud despite having a strong capability and arrogance. Moreover, external regulatory influence also cannot reduce student academic fraud behavior.

It is recommended that Head of Department and Dean held socialization and counseling related to academic fraud (especially plagiarism) and how to detect it. Thus, students will understand more and try not to commit academic fraud. Then, students are expected to reduce academic fraud, such as wrong cooperation in completing tasks, exams, and other activities. Furthermore, they need to improve their self-confidence and independence for their study in the campus.

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# Understanding the Relationship Between Marketing Mix Strategy and Sustainable Competitive Advantage of Private University in Central Java Indonesia

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## Abstract

The purposes of this study are (1) to investigate the relationship between marketing mix strategy and sustainable competitive advantage, (2) to investigate the influence marketing mix strategy and image on positional advantage, and (3) to test image as moderating variable on the relationship between marketing mix strategy and sustainable competitive advantage. This research analyzes the perspective of student. The research design is quantitative research by adding moderating variable. The population are students at a private university in Central Java, Indonesia. The number of respondent is 189 students. The data are obtained by using the questionnaire. Descriptive analysis and moderate regression analysis are used to interpret the data. The result shows that marketing mix strategy has positive and significant effect on sustainable competitive advantage and positional advantage. Image plays its role as moderating variable on the relationship between marketing mix strategy and sustainable competitive advantage. Unfortunately, image cannot play the role of moderating variable on the relationship marketing strategy and positional advantage. Image has direct effect on positional advantage.

**Keywords;** sustainable competitive advantage; positional advantage; marketing mix strategy; image; private university

## 1. Introduction

Educational service marketing management is part of holistic study of education management and it is absolutely necessary. Educational institutions as an educational service provider needs to learn and to have some initiative to improve the satisfaction of their customers (students) because education is a set of continuous processes which influence each other. In the field of

education, marketing activity can include planning educational products, pricing (in this case the amount of tuition fee), and promoting educational service products offered by the relevant educational institutions.

Alma (2011) explains that an educational service institution is a production organization which generates educational services. Its customers are mainly students. When this producer fail to market its products, because for example their quality is not desirable to the customers, they do not give any added value, the service fails to satisfy the customer, then the service products it offers will not sell, resulting in the closure of the college for its management's failure.

The development of private universities in Indonesia shows significant fluctuation. Many private universities fail to compete with other private universities. On the other hand, some private universities can develop well and compete even with public universities. The same applies to private universities in Central Java. Many minor private universities eventually cease their operation. Some relatively major private universities also fail to keep up to date and with science and technology development. The phenomenon of private college closure by the Ministry of Research and Higher Education keep on occurring. The management of private universities becomes the source of problems. One of these problems is that the private college management fails to determine the right marketing strategies

The service marketing strategy implemented by private higher education institution is highly critical to create competitive advantage and positional advantage. Private higher education institution are highly dependent on the strategy to attract prospective students. This is different from public higher education institution which are pursued by future students. Therefore, private universities should be able to create a strategy to create its own specific advantages which distinguish it from other private higher education institution.

One theory underlying this competitive advantage is resource-based theory (RBT). According to RBT, any organization with strategy resources has competitive advantage as compared to those which have no this strategy. The resources owned by an organization are managed through marketing strategy. Li, Ragu-Nathan, Ragu-Nathan, & Rao (2006) suggest that competitive advantages can be defined as the ability of a company or in this case private universities to create a value its competitors do not have and cannot imitate. Haan (2015) tries to formulate the right competitive advantage elements for public higher education institutions. Mazzarol & Soutar (1999) also formulates the determinant factors of sustainable competitive advantage for educational institutions.

Sources of sustainable competitive advantages have been the topic of many studies in both strategic and marketing managements. Since 1960s, the framework used to reach sustainable competitive advantage is to perform a strategy which maximizes the internal power through exploitation of opportunities existing in external environment, neutralizing threats from external environment and minimizing company's internal weaknesses.

Marketing mix strategy have high impact to the competitive advantage but each elements of marketing mix have different contribution (Chumaidiyah, 2014). Miletic (2010) confirms previous finding that marketing strategy can place companies to ve superior. Nurchayati & Gozali (2015) investigate the application of competitive advantage strategy oriented towards environment at universities. Rahmawati, Hadiwidjojo, Noermijati, & Solimun, (2014) used green marketing mix strategy and it is revealed as an excellent strategy to enhance competitive

advantage in term of company's green image.

Positional advantage constitutes an organization's attempt to create different values from other organizations. Kotler (2006) suggests that the activity of positioning is an action to design the company's offering and image thus it creates its own place and value in customers' mind.

This research aims at re-testing the relationship between marketing mix strategy and sustainable competitive advantage and positional advantage. The superior image variable is presented as a moderating variable. A good marketing strategy along with superior image of a private college will create sustainable competitive advantage. The relationship between marketing mix strategy and superior image is also interesting to be tested.

## **2. Literatur Review**

### *2.1 Resource-Based View*

In the early period, there were two dominant theories of competitive advantage: the Market-Based View (MBV) and the Resource-Based View (RBV) (Wang, 2014). Sustainable competitive advantage is derived from the resources owned by the company. This perspective is known as the Resource-Based View (RBV) or resource-based perspective (Muhsin, Slamet, & Wahyudin, 2017). The theory of sustainable competitive advantage can be achieved by creating economic scale, improving management capability and technological capacity (Hameed, 2009).

The resource-based view (RBV) emphasizes the firm's resources as the fundamental determinants of competitive advantage and performance. It adopts two assumptions in analyzing sources of competitive advantage. First, this model assumes that firms within an industry (or within a strategic group) may be heterogeneous with respect to the bundle of resources that they control. Second, it assumes that resource heterogeneity may persist over time because the resources used to implement firms' strategies are not perfectly mobile across firms (i.e., some of the resources cannot be traded in factor markets and are difficult to accumulate and imitate) (Bridoux, 2003).

The resource-based view of the firm is a theory that has been explored in academic literature as a means of explaining competitive advantage and, in turn, superior performance amongst firms (Clulow, Gerstman, & Barry, 2003). In general, RBV states that the source of sustainable competitive advantage is valuable, rare, irreplicable and unsubstituted resources. The term resources here include all assets, capability, organizational processes, corporate characteristics, informasi, knowledge and so on in which these resources are under the company's control for the strategy implementation to achieve effectiveness and efficiency. Some resources may have some effect on the valuable strategy implementation process, yet some other resources may not have positive effect on the strategy implementation. A company is declared as having sustainable competitive advantage when its strategy implementation is not simultaneously done by its competitors or potential competitors, where these competitors cannot achieve the same benefits from their strategy implementation.

### *2.2 Hypothesis*

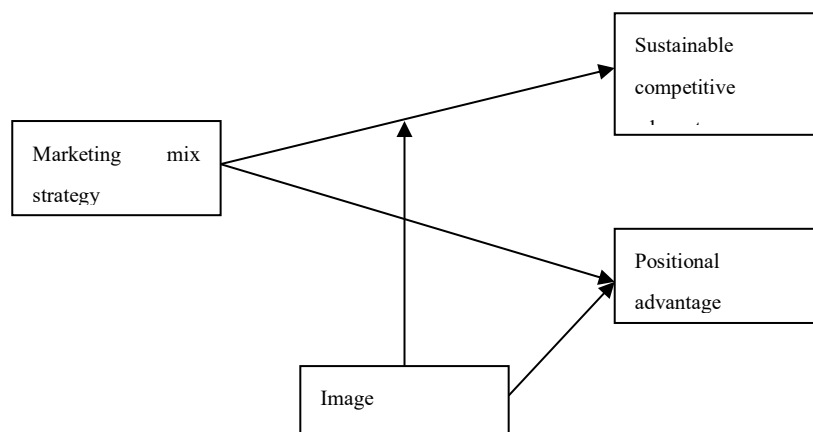
College marketing is a social and managerial process, performed either by individuals or groups, to obtain what is needed and desired through the creation of offering, exchanging valuable products with others (Muhsin et al., 2017). The management of private universities

should understand the resources they own to determine the appropriate strategy and eventually they can create sustainable competitive advantage and positional advantage.

Competitive advantage is obtained when an organization develops or acquires a set of attributes (or executes actions) that allow it to outperform its competitors (Wang, 2014). Marketing mix strategy comprises of education product (product), education place (place), tuition fee (price), education promotion (promotion), quality of people within the education, education facilities and infrastructures or services, and the education process itself (process). This marketing mix strategy should be optimizable so that it can improve the sustainable competitive advantage of this college, hence the outcomes of this college cannot be replicated by other universities.

Some researchers have found the significant influence of marketing mix strategy on (sustainable) competitive advantage (Langerak, Hultink, & Robben, 2004; Njeri, Kambona, & Odhuno, 2015; A. S. Soegoto, 2011; E. S. Soegoto, 2013; Soewartini, Sucherly, Effendi, & Kaltum, 2017). The elements of marketing mix strategy increase the competitive advantage simultaneously and significantly (Chumaidiyah, 2014). There is a significant positive relationship between marketing strategies of Nigeria money deposit banks in attaining competitive advantage (Oyefesobi & Alao, 2016).

Positional advantage is the impact of marketing strategy which is based on positioning. The positioning of private universities in essence is a promise consisting of programs, or services which have been established or made by these universities to their customers, i.e. students or other stakeholders (Muhsin et al., 2017). Thus, marketing mix strategy has some influence on positional advantage. This is consistent with RBV concept, i.e. any organization capable of managing their resources can create different value or position from other organizations. Langerak (2003) finds that market orientation has positive influence on positional advantage. The right marketing mix strategy will create sustainable competitive advantage and positional advantage. This influence will be more significant when the company has superior image. Superior image has some influence on positional advantage. The framework of thinking of this research can be seen in figure 1 below.



**Figure 1 Theoretical Background**

Based on the aforementioned explanation, the hypotheses in this research are as follows;

H1 : marketing mix strategy has positive and significant influence on private university's sustainable competitive advantage.

H2 : image can moderate the influence of marketing mix strategy on private university's sustainable competitive advantage

H3 : marketing mix strategy has positive and significant influence on private university's positional advantage

H4 : image has positive and significant influence on private university's positional advantage

### **3. Method**

This research is quantitative research. Using causality testing, this research aims to investigate the relationship between competitive advantages and marketing strategies of private university. This research uses student's perception.

#### *3.1 Population and Samples*

The population in this research are private universities in Central Java. The sample is taken using accidental sampling. 189 students from 63 private universities are taken as this research's sample.

#### *3.2 Operational Definition of Research Variable*

The variables in this research are competitive advantages and positional advantages as the dependent variable. Marketing strategy mix serves as the independent variable. Finally, superior image serves as the moderating variable. The operating definition of these variables are as follows.

- Marketing strategy mix is a combined marketing strategy used to achieve the goals of marketing educational services which have been formulated by private universities. This marketing strategy mix variable is developed from Muhsin et al. (2017). The indicators of this variable are: place, price, promotion, process, physical evidence, and people.
- Sustainable competitive advantage is defined as the advantages as indicated by the existence of advantages in the private university's unique and irreplicable educational services which match the needs and wishes of both students, or parents and students's guardians. It is measured using the indicators developed from Porter's opinion in Ferdinand (2014), namely; rarity, imitability, absence of substitute.
- Positional advantage is defined as the effort of designing the private college's educational services in such a way that it gives differences and values in the mind of educational service customers (students, parents or student's guardians). The indicators in this variable refer to previous research by Muhsin et al. (2017), i.e.; superior value of educational service user consisting of individual value, social value and relatively lower educational service costs.
- Superior image is defined as the customer or stakeholder's robust holistic understanding of the organization where it is not determined merely by how an organization is given a good name, rather also needed is the way to introduce this organization (Muhsin et al., 2017). The indicators of superior image are superior quality image, superior appearance image, superior infrastructure image, superior social image, dan superior program image.

#### *3.3 Method of Data Collection*

The method of collecting data is the tool used to obtain the data needed in a study. The data used in this research are collected using questionnaire. The questionnaire is developed from the



indicators of each variable in reference to experts' opinions. The respondents are asked to choose one alternative answer which has been provided. Each question item is given four answers using a score scale. Each question item is provided with 4 - 1 scale range with extremes S D (strongly disagree) and S A (strongly agree).

### 3.4 Method of Data Analysis

The data are analyzed using descriptive analysis and multiple regression analysis with a moderating variable. The descriptive analysis is done to obtain a description of the data collected through the research. And the multiple regression analysis is used to figure out the effect of marketing strategy mix and superior image variables on competitive advantage and positional advantage.

The multiple regression equation developed in this research consists of two equations. The first equation shows the competitive advantage variable as the dependent variable and the superior image variable as the moderating variable. The data analysis used is moderated regression analysis. The second equation shows the positional advantage as a dependent variable with the marketing mix strategy and superior image variables as the independent variables. The data analysis uses multiple regression analysis. The two regression equations are as follows.

$$SCA = b_1\text{marketing} + b_2\text{image} + b_3\text{marketing*image} \quad (1)$$

$$PA = b_1\text{marketing} + b_2\text{image} \quad (2)$$

## 4. Results

This research has been conducted in 2017. The questionnaire has been distributed to private universities in Central Java. The returned and processable questionnaire is 189 units.

Results of the hypothesis testing can be seen in tables 1 and 2 below. Table 1 shows result of the first regression equation, i.e. sustainable competitive advantage as the dependent variable. Variable marketing mix strategy serves as the independent variable and superior image variable as the moderating variable. Table 2 shows results of the second regression equation testing. Variable positional advantage serves as the dependent variable. Variable marketing mix strategy and superior image serve as the independent variables.

Table 1. Result of First Regression Equation Testing

	Standardized coefficient	t	Sig.	F	Sig.
Constant	-54.189	-3.263	0.001	38.222	0.000
Marketing mix strategy	1.640	3.819	0.000		
Image	2.084	4.855	0.000		
Marketing* image	-2.886	-3.703	0.000	0.373	
				Adjusted R Square	

Table 1 shows that the sig. Value of marketing mix strategy variable is 0.000 with a t value of 0.000. It means first hypothesis which states that marketing mix strategy has positive and significant influence on sustainable competitive advantage is confirmed. Menawhile, the sig. Value of moderating variable (marketing\*image) is 0.000, yet its t value is -3.703. It means the second hypothesis which states that superior image variable can moderate the influence of

marketing mix strategy on sustainable competitive advantage is confirmed. However, the moderating variable has negative t value, meaning it weakens the influence.

Table 2. Result of Second Regression Equation Testing

	Standardize d coefficient	t	Sig.	F	Sig.
Constant	6.979		0.000	119.808	0.000
Marketing mix strategy	0.521	7.696	0.000	Adjusted R Square	
Image	0.287	4.230	0.000	0.558	

Table 2 indicates that the sig. value of marketing mix strategy variable is 0.000 with t value of 7.696. It means the third hypothesis which states that marketing mix strategy has positive and significant influence on positional advantage is confirmed. Other data show that the sig. value of superior image variable is 0.000 with t value of 4.230. This means superior image has positive and significant influence on positional advantage. Hence, the fourth hypothesis is confirmed.

## 5. Results

### 5.1 *The Relationship among Marketing Mix Strategy, Sustainable Competitive Advantage, and Image*

Based on the research results, it is found that marketing mix strategy is proven to have positive and significant influence on sustainable competitive advantage. This is consistent with RBV view, i.e. any organization capable of managing their resources will be able to create competitive advantage. Private universities in Central Java are deemed by students capable of applying the right marketing mix strategy. Their resources management is shown by the private college managements ability in formulating marketing mix strategy.

The price strategy is embodied in the affordable and competitive tuition fee. The place strategy takes the form of easy access to the campus site. The promotion strategy can be seen from the use of many information media and advertisements (printed and online). The physical evidence strategy is done through the development and construction of learning facilities and infrastructures. The physical development includes improvement of campus entry access, parking facilities, internet connection, and et cetera. The process strategy is reflected in the campus' policy to keep on improving the learning and human resources (lecturer in particular) qualities. This result confirms previous findings (Chumaidiyah, 2014; Oyefesobi & Alao, 2016; A. S. Soegoto, 2011; E. S. Soegoto, 2013; Soewartini et al., 2017).

Superior image is found capable of moderating the influence of marketing mix strategy on sustainable competitive advantage. However, it has negative influence. The moderation kind it shows is pure moderation, it means superior image variable can be the real moderating variable. The negative influence means superior image variable weakens the influence of marketing mix strategy on sustainable competitive advantage instead. This is not consistent with RBV which states that the management of resources owned by an organization will influence its competitive advantage. And this influence will be greater when it has possessed superior image.

### 5.2 *The Influence of Marketing Mix Strategy and Image on Positional Advantage*

The testing result in the second regression equation shows that marketing mix strategy and

superior image have positive and significant influence on positional advantage. The right marketing mix strategy will create positional advantage for private universities in Central Java. This marketing strategy will create a distinguished and unique value for every private college. Day and Wensley (1988) stated that to create superior value for customers, firms must exploit their sources of advantage to obtain a positional advantage in comparison to competitors (Langerak, 2003)

As we know, some private universities declare themselves as entrepreneur-educator, for example IKIP Veteran. UNIKA Soegijapranata also has its own distinguished tagline. UDINUS declares itself as information technology campus. The right marketing mix strategy will create positional advantage. What strategy to be implemented is also an innovation as suggested by Carbonell & Rodriguez (2006). Innovation speed plays an important role directly and indirectly, through the creation of positions of advantage, in enhancing new product performance.

That is also the case with superior image. The image built by private universities will place these private college at a unique value unlike other private universities. Eventually, it will create positional advantage.

## **6. Conclusion**

We conclude that marketing mix strategy has positive and significant effect on sustainable competitive advantage. And we found that image has proven as moderating variable on impact of marketing mix strategy on sustainable competitive advantage. The impact is negative. The other result show that marketing mix strategy and image influence sustainable competitive advantage positive and significantly.

The next research result is that marketing mix strategy and superior image has positive and significant influence on positional advantage. Nevertheless, there is still an inverse relationship between positional advantage and superior image. Further research is needed to study this.

This research can still be developed even further. There are still other determinant factors of sustainable competitive advantage, such as disclosure of corporate social responsibility (Yu, Kuo, & Kao, 2017). The social activity performed by private universities will be responded to positively by prospective students and their parents. Private college will have positive impression for their CSR activities. The testing of direct relationship between superior image and sustainable competitive advantage can still be followed up.

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# The Success of The School Principal in Implementing Managerial Competencies in Madrasah Ibtidaiyah

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## Abstract

This study aims to know the performance of principal in implementing managerial competence and its role in fostering public confidence in Islamic Elementary School or Madrasah Ibtidaiyah (MI) Muhammadiyah Bolon, Karanganyar, Indonesia. This research is a qualitative research type case study. Determination of research subjects using purposive sampling technique. With these techniques the designated subjects include: principal, teachers, parents/guardians, and the community around MI Muhammadiyah Bolon. Data collection is done by technique: observation, interview, and document review. To obtain the validity of the data, used triangulation techniques sources and methods. Data were analyzed using interactive analysis techniques (Miles and Huberman, 1992). The results showed that the performance achieved by the principal in implementing managerial competence in MI Muhammadiyah Bolon, is high. The entire managerial competency standard indicators set out in regulation of the Minister of National Education of the Republic of Indonesia number 13 year 2007 as many as 16 rounds, everything is achieved effectively. In addition, the local community's confidence toward MI Muhammadiyah Bolon has increased significantly as evidenced by the many members of the community who entrust their children to be educated at MI Muhammadiyah Bolon. Various attempts are made principal in managing school organization include: the preparation of school program according to the wishes and the expectations of the community, an increase in school activities, and the growth of the image of the school in accordance with the characteristic of the Muhammadiyah organization.

**Keywords:** principal, managerial competence

## 1. Introduction

One of the interesting phenomena that happened in the last few years is the large number of schools that degenerate the quality, even some of them were forced to scatter. Such phenomena occur mainly at the private schools at both the level of basic education, or secondary education. On any level of school, the principal is the key person that determines the success of education in his or her school. The process and development of a school is very dependent on the competence of the principal. The government regulations of The Republic of Indonesia Number 28 years 1990 article 12 paragraph (1) of the basic education stated that the head of the school is one of the most important component in improving the quality of education. Considering the important of the role and the magnitude of the responsibility of a head of school in managing learning process and the quality of the school, then the school principal

must be mastering the basic of capable leadership in managing the entire elements of the school. The principal is responsible for managing the school system and the success of all school's affairs includes setting up and management of school institutions that can be accountable either to the superior or to the community that gave credence to that school. The appointment of the head of the school is set in the regulation of Educational Minister of Republik Indonesia Number 28 year 2010 about Appointment of Head of School. The regulations contained in the terms and certain qualifications that must be met to be able to occupy the post of head of school. One point of the regulation stated that the head of the school is a position given to the teachers by the Ministry of Education and Culture or the School Founder is formally to be the leader of the school which had the task of leading and carry out basic tasks and functions in the exercise of the functions of the school in accomplishing the vision, mission, and goals of the school. Muhammad Nuh (2010) suggests, the ability of the principal in Indonesia in managing school is still low, even under the Malaysia and Singapore. The principal role is directing human resources in educational units, other than as a role model. The success of a school principal is determined by choices and actions taken in addressing and resolving problems encountered as well as how to organize good management.

Structuring good management by the headmaster, is one of the determining factors in support of the achievement of the quality of the graduates of the school. The principal appointed to occupy his or her position and is responsible for coordinating all components of the school in achieving the goal of education at school. Of course the head of the school is not the only component that determines the success of the school, there are still many other factors that also influence as teachers, infrastructure, as well as the environment of the school. However the position of the principal (and teachers) are the most decisive among the various of the component. Therefore, the principal must have leadership capacity and master a number of competencies, which include the competence of personality, social, managerial, supervision, and entrepreneurship . Structuring good management is unlikely to be successful without the participation and support of the teacher who became one of the determining factors in the achievement of quality graduates. Through effective teaching and learning, the process of improving the quality of learning begins. Therefore, as the supreme leader in his/her school, the principal should be able to move all of the school's resources, especially teachers, and master the managerial competencies that are reliable in order to be able to act as well as the initiative in improving the quality of the school. Rosenholtz (Fullan, 2007, p. 140) suggests that school principals and teachers should work together in the process of goal setting which emphasized on the instructional objectives. The goal was to focus its efforts in moving the resources towards the achievement of a goal that has already been agreed upon. Principals and teachers should be active in fostering the involvement of co-workers, fostering good relations among colleagues as well as managerial relations, and the school's relationship with the community. Associated with the declining quality of education schooling in Indonesia, the report of World Bank (Mulyasa, 2011, p. 42) mentions that one of the causes is less professional the principal as *manager* education at the field level.

The role of principal is very important in the school. It is therefore not surprising if there are schools that used to be low quality, has suddenly become a winning school and was demanded by society because the head of the school succeeded in moving the entire components of the

school. The principal is the manager that responsible for applying of the principles of management in the school so that the goal is achieved properly. Terry (2003, p. 9) stated that management is an activity that is in corporate governance called *manajing* while those who do so are called managers. ,In carrying out its functions the principal does not move on its own, but rather as insiator and motivator for all components of the school.

As a leader in the school, the principal should have much experience of building relationships with others in the achievement of the objectives of the school. As a manager, the principal must be able to be a model and accompanying his subordinates in a variety of conditions. The principal in carrying out its role as a manager is not able to work alone without any support from the other various parties such as subordinate, society, and the environment. The symbols, traditions, customs and way of view of principals, teachers and school employees and problem solving that is formed of a series of activities/dynamics of the school performed in the framework of the achievement of the goal of an effective school (Muhtarom & Wangid, 2013, p. 196). A combination of human resources and the environment set up a school system.

A major concern to run the school system effectively, should focus on leadership as well as management applied in school. Armstrong (2009, p. 3) stated that management is related to the way used by a manager in realizing something. They made a goal to be achieved, the division of organizational, financial, labor and technology systems needed to achieve goals, allocate resources optimally on the activities that have been planned and ensure that such activities take place as it has been defined and planned. In Indonesia, it has set a standard of competence of the principal specified in the regulation of the Minister of National Education No. 13 year 2007. In that regulation it was described a variety of managerial competency indicators should be applied by the head of school in order to achieve the objectives of the school as well as matters related to the management processes of an organization like the school planning , organizing, human resources management, student management, curriculum and infrastructure of education, funding, public relation, evaluation and supervision that supports the achievement of educational goals. If the principal successfully manage it well, it will be visible to the ever-increasing prosperity teachers followed the teacher's performance results eventually led to the formation of teacher quality so that the achievement of the objectives of the school can be reached ( Yazid & Jabar, 2013, p. 94). The principal of Madrasah Ibtidaiyah Muhammadiyah Bolon, Colomadu, Karanganyar is a principal who successfully implement the managerial competencies at that school. The school has had only 22 students in academic year of 2011/2012 even had not hosted a national final exams because there was no grade 6. With the new head of the school, up to 2016, the school has grown rapidly with 185 students demanded by society. Many school systems are starting to switch from the old paradigm to the new one. Based on the above arguments, this study examines the performance of the principal in implementing the managerial competency in that school. The purpose of the this study are: (1) to explain the performance of the principal in the managerial competencies implemented in Madrasah Ibtidaiyah Muhammadiyah Bolon, Colomadu, Karanganyar so as to advance the school, (2) to explain the role of head of school in fostering public confidence of Madrasah Ibtidaiyah Muhammadiyah Bolon, Colomadu, Karanganyar.

## 2. Methods



This research is a qualitative research using case study approach; was carried out at the Madrasah Ibtidaiyah (MI) Muhammadiyah Bolon, Colomadu, Karanganyar, Indonesia, in January until May 2016. Determination of the subject using the technique of *purposive sampling*. With this technique obtained the subject: principal of MI Muhammadiyah Bolon, teachers as much as 5 persons selected by the criteria has been a teacher at MI Muhammadiyah Bolon for at least five years, representatives of the parent of pupils 1 person, as well as representatives of the communities that live around the school as many as 3 persons familiar with the criteria concerning the development of MI Muhammadiyah Bolon and have lived settled in the school environment at least 7 years up to year 2016.

The data obtained with observation technique, in-depth interviews, and a review of the document. The validity of the data obtained through triangulation of sources and methods. Data analysis was done with the interactive techniques from Miles and Huberman that includes four stages, namely: data collection, reduction, the display of the data and conclusions/verification.

### 3. Results

Madrasah Ibtidaiyah Muhammadiyah Bolon is located in the village of Gonggangan in the middle of rural area. This location is less strategically so that many people outside the area do not know the existence of this school. MI Muhammadiyah Bolon is one school that is under the Muhammadiyah organization management. The head of the MI Muhammadiyah Bolon succeed in applying 16 managerial competency standard in improving the quality of the school. First, preparation of school programs: conducted jointly by the principal, teachers and employees. Determination of school programs are intended as guidelines for each of the activities that will be carried out by the school. In the implementation of the school program, the principal gives credence to his subordinate such as the teacher responsible for school student areas, and areas of the curriculum. The principal doing any activities to evaluate the implementation of the program at meeting coordination held every Saturday.

*Both*, development organization of MI Muhammadiyah Bolon is done by optimizing human resources based on potential and specializing in their task and function respectively. The principal also divide tasks for teachers as the provider of the particular field, including: student, curriculum, and finance. *Third*, utilization of all resources belonging to the school by inviting teachers in competency development programs such as *workshops*, seminars and teacher achievement competition thereby able to improve their competency. In the utilization of human resources, MI Muhammadiyah Bolon partnering with outsiders either parents and community in order to fullfill the needs of the school.

*The fourth*, the management of the school towards an effective learning done with fix employment system with the position of teachers in accordance with the competency of its respective, fix the code of conduct of teachers and employees by applying fingerprints attendance thus created a high level of discipline. In addition, the school also implemented a curriculum specific to class 1 by adding the program free illiteracy Arabic. These aims to impart religious knowledge and performed children's competence is not only in terms of the nature of the academic but also religion. *Fifth*, the creation of school culture and climate that is conducive to do with conditioning clean living and islami for school and socialization to parents related to school programs so that the achievement of those program can be done together. These efforts

are able to create a positive attitude to all the school members which eventually appears mutual trust and easy to be invited to cooperate, appeared new innovations from products of thinking together, increase the culture of mutual respect, trust and a sense of family is formed between the principal with teachers, employees, and communities.

*The sixth*, the developing of the teacher and employees performance, done by guiding especially to the new teachers. In addition, the school provides higher salary for teachers than other equal schools as a form of appreciation and an increase in welfare of teachers, as well send the teachers in a wide range of the competition, seminar, as well as bringing in experts to give an extra provision of science. *The seventh*, management infrastructure was done by optimizing the utilization of means and fulfilling of the undertakings lack of the means and infrastructure by seeking support from the parent/guardian or the public. *Eighth*, management relationship with the community carried out by implementing regular meetings between the school's staff with parents each 3 months, communication with them using guardian books and student liaison visits or *home visits* to encourage the progress of the school. *The ninth*, managing students do with compiling a program development and management of some activities, such as: physical, spiritual, intellectual knowledge and skills. The student's program spelled out of the vision and mission of the school which was later elaborated in the activities of the students. MI Muhammadiyah Bolon also perform socialization to a number of kindergartens in order to be closer and more known to the community.

*The tenth*, in the managing on curriculum development, the principal applying school based curriculum (KTSP) and adopt from Comprehension Islamic Elementary School (SDIT) and also the innovation of school itself. Parts of the contents of curriculum are sourced from fieldwork in the community, the needs of students and the expectations of the public will be the competence of students after graduation from school i.e. graduates must be able to read holy Qur'an. *The eleventh*, financial management school performed by the treasurer with reference to on regulation of the Minister of National Education. The financing of its own school funding comes from government's aid called BOSS. Beyond that, the school has a donors remain from the community to help in paying teachers salary so teachers get higher salary compared to other schools. The principal is trying to realize a cheap school, students only pay money to eat and student activities, whereas the others all its free. *The twelfth*, the management of administrative work is done by empowering the officers of the school to do better.

*The thirteenth*, management of special service units, such as school health unit done on the cooperation with the clinics and provide routine counseling to students such as hand-washing, brush your teeth and preventive action on the dangers of smoking, the management of the cooperative school; car transportation for the students; and provision of healthy meals for students. *The fourteenth*, the principal active convey information through coordination between heads of schools with teachers who performed each Saturday, socializing informally to teachers in managing information systems that supports school programs. The fifteenth, utilization of information technology applied in terms of dissemination of information, include information of vacancies and the registration of teachers, information on school activities, and administration of schools implemented *online*.

*The sixteenth*, implementation monitoring, evaluation and reporting activities in accordance with the appropriate procedures have been running but not entirely yet accomplished. For

monitoring in the learning process is done with learning process supervision conducted by the headmaster to teachers who are currently teaching in the classroom, ranging from inspection the completeness of the learning device, how to teach up to the grant of a motivation to teachers when things are less passion in teaching. While the evaluation of the program is done whenever meeting coordination, and for temporary, evaluation activities performed each activity completed in order to address the shortcomings and measures as well as strategy would do for the next activity.

The role of head of school in fostering public confidence towards MI Muhammadiyah Bolon is done in various ways including organizing appropriate school programs expectations i.e. excellent in academic and noble character, the involvement of the community and parents by having a variety of school activities, and building the image of an Islamic school, clean living, discipline, and respect each other.

#### **4. Discussion**

The principal managed to implement managerial competencies referred to the Regulation of the Minister of National Education of the Republic of Indonesia Number 13 of 2007 so that it is able to manifest the MI Muhammadiyah Bolon as an effective school. Vision and mission of the school is divided into short term plans, long term plan, work plan budget madrasah (RKAM), the school work plan (RKS). The preparation of the various programs carried out jointly between the principal and teachers. Theoretically, those various programs must be prepared cooperatively both between principal and teachers to provide clarity about the purpose, objectives, how the implementation, time, and the sources used (Usman, 2011, p. 375). In the field of organization, optimization is done by involving the variety of sources owned by school, both in performing duties, authority, and principal's responsibility to work together with teachers and employees. In carrying out its task, the head of the school is assisted by the teacher who doubles as manager specific areas include: student, curriculum, and finance; by dividing duties and provide confidence to them. This kind of practice is in accordance with what is expressed by Danim (2010, p. 20) that a leader should be able to understand the strength of organization, perform the division of power and encourage the active participation of members in order to create a sense of community, so expect all the components of the organization can be responsible for achieving the objectives of the organization.

Empowerment of assets, both school's asset as well as human resources was done by keeping and maintaining the assets owned by the school, while for the improvement of human resources carried out with increased the ability of a teacher so it will improve the quality of education because teachers play an important role in determining the quality of the process and the results of the learning. Teachers and employees are also supported to attend various activities such as seminars and workshops. Implementation of the development of teachers and employees are also conducted by increasing their skills that led them to be a professional. Such policy is in line with the opinion of Mulyasa (2013, p. 67) that way which is suitable for empowering the school assets is by requiring teachers and employees to take activities, such as training, upgrading, seminars, *workshops*, and mentoring that organized by a government institution, college or institution is a *non-governmental*.

School management efforts in making changes towards effective learning in MI

Muhammadiyah Bolon done with fix employment system by placing and dividing tasks for teacher in accordance with the competencies possessed and attempting to improve the wellbeing of such teachers providing salaries of teachers are more feasible. Mulyasa, (2013, p. 78) stated that the forms of award to the teacher and the students can be either material, such as gifts, and non-material such as the grant of a certificate of appreciation and a badge. Motivation theory of Maslow also explains that the award or honour of the self is a form of human needs.

The creation of a culture and climate of the school's innovative and conducive to a good learning for students is done by creating a culture of mutual respect, mutually appreciative, harmonious relationships between teachers, employees with the principal, and to provide confidence to the teacher to manage areas of his or her respective. In the formation of the culture of the school, the role of principal is very important. (Sergiovanni, 2009, p. 137). The culture of the school contains a wide range of fundamental things such as values, symbols or the characteristics of a typical school, beliefs and mind meaning of various parties such as parents, teachers, and students conceived as a community group.

Along with the change times, to improve the knowledge of teachers in order to follow the progress of education then management of teachers and employees in MI Muhammadiyah Bolon is carried out by the recruitment of new teachers to meet the needs of teachers in the schools such. Teachers and employees a lot of that comes from *fresh graduated*, which have idealism and desire to advance, included in the *workshops*, seminars and a variety of activities accomplished teacher contest. In the improvement of the system of learning, teachers actively guide students and tried to realize the targets or objectives that have been set. Improvements were also made from the honor of teacher as a form of appreciation. The well-being of teachers will be directly proportional to the increase in performance, it is therefore one of the attempts to increase teacher performance is by observing the economic and their welfare (Yazid & Jabar, 2013, p. 100).

The management and utilization of facilities and infrastructure is done by maintaining, caring for, and seeking fulfillment shortage means, among others, with the construction of a building involving the whole teacher in seeking funding through a partnership with outside parties and parents/caregivers. This effort was done because with a good infrastructure, the society will be more interested in admising his son into a school. The availability of facilities and infrastructure is also very important because it supports the organization of the educational process in order to achieve the goals of the school, as expressed by Kowalski (2010, p. 42) that the existence of the fulfillment of the facilities and infrastructure which is an important component in the teaching and learning activities, then the achievement of the objectives of the school will be more secure.

Management of relationship with community schools done by invite caregivers and school committee to deal with apparent deliberation in solving problems facing the school, especially in terms of funding for the development of the school. In the routine meeting every 3 month, the head of school communicate to parents/caregivers the needs and purpose of the school has been achieved together. Kowalski, (2010, p. 61) suggests that parents did indeed need to be involved and communicate in the search for solutions to the needs of the school. That way the community will engage in active donature encourages the progress of the school.

Management of students started since the accepting of new students in a way to hold a presentation to kindergartens around school then held a test selection to enter MI Muhammadiyah Bolon. After their status as students, school facilitated them with a diverse range of extracurricular activities that match the interests and talents of his each and applied conditioning behave positively on students so that they have a good behavior. The process is in line with the Mulyono's opinion (2008, p. 157), that the management of students, among others, include the acceptance of new students, developing of their talent, interests, and creativity, by remaining attentive to the condition of the students either physical or psychic students.

The management and development of the curriculum and learning activities in the corresponding right to the direction and goals of the school. The curriculum used is the national curriculum plus a portion of the material that is in the adoption of the schools of basic Islam, and innovation results from the thought of school resources. Curriculum for class 1 semester 1 is not yet applying curriculum issued by the central government, but still focuses on the ability of reading, writing, and counting, both the Arabic alphabet or the latin alphabet. It is adapted to the concept and the main purpose of the madrassah, that children should be free of illiterate Arabic. Learning activity management refers to programs that have been created such as the learning preparation and syllabus, and delivery in accordance with the right ability of educators. This fits the concept of curriculum development according to Mulyono (2008, p. 155) that schools need to establish and empower curriculum development teams.

MI Muhammadiyah Bolon attempted to apply the principle of cheap school, students only pay money to eat and school worksheet. The school's operating costs are obtained from central government called BOSS while the salary for teachers retrieved from donors anyway. School finance is managed by the financial principle of accountable, efficient and transparent. The management of administration is handled by the administration officer competencies in information technology and comprehend on how to solve school administration problems.

For the problem of guidance counseling, schools are routinely held meetings every 3 months once with caregivers, give students the communication so that schools and parents can communicate through the book, and there are *home visit* by the way teachers visit the homes of students. To support the decision-making functions, the principal actively seeking information from the local office of elementary school. Decision making is done in a discussion with the teacher though finally the head of the school acting as the executor. The head of the school is also active in conveying information through coordination, dissemination as well as in the informally ways in managing information systems that supports school programs. This is in line with the Danim opinion (2010, p. 41) that in applying his roles as a leader, the principal need to communicate clearly and regularly so that the execution of the tasks runs effectively.

To support school activities include the dissemination of information to member of school, stakeholders and school teacher recruitment, MI Muhammadiyah Bolon implement information technology in the form of online system. This method is in line with the opinion of Hand & Prain (Seong, 2011, p. 530) that application of information technology in the management of the school will contribute to the success of the school, including a strong and enthusiastic leadership, a clear purpose, culture collegiality, employees and professional development for the member of the school.

Monitoring activity, evaluation, and reporting against the implementation of school programs

are already carried out but not yet fulfilled in its entirety. For monitoring in the classroom, the principal judge by way of direct supervision of the classroom process. The execution of the evaluation in order to assess the programs that have been implemented and are looking for solutions to problems that arise, done at a time when coordination meetings every Saturday, and for temporary, evaluation activities carried out after completed activities in order to correct deficiencies and establish step who needs to do next. Improvement of the quality of an organization through the implementation of managerial competencies that have been mentioned above, in line with the conclusion of the research done by Bamel, et al. (2013, p. 198). It is also confirmed by research conducted by Rangriz, & Soltanieh (2015, p. 1) which concluded that the capacity of organization and managerial competence is very determine in accomplishing the results of the organization. In this context the managerial competence is a major factor affecting the effectiveness of the organization.

The efforts of the head of school in fostering public confidence towards MI Muhammadiyah Bolon is done in various ways including organizing appropriate education expectations i.e. excellence in the field of academic and noble character, the involvement of community and parents in various *event* organized by schools, and build the image of the school through the creation of a positive school culture among others: clean living, conditioning of Islamic life, a culture of discipline and mutual respect so that when the students graduate, is expected to have good morals. This effort is in line with the opinion of Sofyan & Wibowo (2013, p. 8) that parents expect selected schools for his son, it can carry out its function properly so as to produce graduates best for her children. The trust of the community against the school was also reinforced by the results of the research done by Pramono (2011), that the confidence of the community against the school influenced among others: economic conditions of society, the condition of the school which includes the quality reputation of the school, school service, and education costs.

## **5. Conclusion**

Based on the results of data analysis, conclusions can be drawn as follows. 1) The performance of the principal of MI Muhammadiyah Bolon already comply with the standard indicator of managerial competence as set out in the regulation of the Minister of National Education Republic of Indonesia number 13 years 2007, ie: a) school program planning are done jointly through deliberation by heads of schools, teachers, and employees; b) organizational development school done by optimizing human resources in accordance with the potential and specializing in their fields, are based on job and function that already set; c) utilization of all resources belonging to the school performed with include teachers in competency development programs such as *workshops*, seminars, and sent teachers in the competition of succeed teacher competition; d) the management of the school towards effective learning is done by implementing the curriculum special school with the program Arabic illiteracy-free for low grade; e) the creation of a culture and climate of the school is carried out by holding regular meetings between the party school and parents to socialize school programs, conditioning clean living for students, islamic life conditioning, and the creation of a culture of mutual respect; f) the management of teacher and employee do with the recruitment of new teachers to meet the needs of teachers, give awards in the form of higher fees, as well as bring in expert to provide additional knowledge; g) the management of the infrastructure and facilities is carried out by

undertakings fulfilling the lack infrastructure; h) management of the relationship with the community as well as the financing is done by seeking support from the committee's thinking as well as materially and caregivers; i) management of students is done with the selection of students, preceded by the socialization to kindergarten around; improvement of learners done with the implementation of a number of development programs and management activities, such as: the construction of the physical, spiritual, intellectual and knowledge skills; j) in the managing on curriculum development, MI Muhammadiyah Bolon applying school based curriculum and adopt from Comprehension Islamic Elementary School (SDIT); (k) finance management conducted by the finance treasurer with reference on the rules already defined by the government, school funding comes from government and donors from caregivers or community; l) the management of administration refers to the principle of work division in order to help the head of school in completing the task; m) there are some special service unit in MI Muhammadiyah Bolon, among others: the health unit, cooperative, and providing healthy meals for students; n) the principal active convey information through coordination, and dissemination to teachers in managing information systems that supports school programs; o) the utilization of information technology in the dissemination of information about the school, the teacher vacancies, registration and management of administration; p) implementation of monitoring, reporting, and evaluating activities in accordance with the appropriate procedures is already running but not yet fulfilled in its entirety; 2) the efforts of the principal in fostering public confidence towards MI Muhammadiyah Bolon is done by various means including organization of school education appropriate expectations i.e. excellent in academic and noble character, the involvement of the community and parents by having a variety of school events, and build the brand of school by having the characteristic of a school.

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Visualization mapping of tourist destination in special region of Yogyakarta using Affinity Propagation method and Social Network Analysis (A Case study: post of @explorejogja instagram account in 2017)

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**Abstract**

This research was conducted in Department of Statistics Islamic University of Indonesia. The data used are primary data obtained by post @explorejogja instagram account from january until december 2017. In the @explorejogja instagram account found many tourist destinations that can be visited by tourists both in the country and abroad, Therefore it is necessary to form a cluster of existing tourist destinations based on the number of likes from user instagram assumed as the most popular. The purpose of this research is to know the most popular distribution of tourist spot, the cluster formation of tourist destinations, and central popularity of tourist destinations based on @explorejogja instagram account in 2017. Statistical analysis used is descriptive statistics, Affinity propagation, and social network analysis.

**Keywords:** destination, cluster, map, social network analysis

**1. Introduction**

*1.1 Instagram account*

Instagram contains about a variety of account content, ranging from online shop accounts that sell goods and services, campus organization accounts and also instagram accounts that promote tourism in a country or city.

Tourism is a journey from one place to another, temporary, done by individuals or groups, in an attempt to find balance or harmony and happiness with the environment in the social, cultural, natural and scientific dimension [1].

Table 1. *list of Instagram account related to tourist destination*

Number	Instagram	Post	Followers	Following
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	account			
1	Explorejogja	1729	591K	0
2	Wonderfuljogja	3250	452K	7440
3	Dolanjogja	2147	158K	216

source: <https://www.instagram.com/>

From the table above there are 5 instagram accounts that promote tourism in Yogyakarta, of the five accounts instagram explorejogja account occupy top 1 with the number of followers most as much as 591K.

### 1.2 Explorejogja

Explorejogja is an instagram account which contains photos about some interesting places in Yogyakarta Special Region (DIY). This account is also intended as a witness of the development of tourist attractions in DIY for generations to come [2].



Figure 1. *explorejogja Instagram account*

Existence means unity with the outside world. The world belongs in the structure of existence. [3]. It can be interpreted that external impulses can affect existence.

Data mining is one method of statistics that has an important role in extracting large amounts of data. Post photo data in post account instagram explorejogja require data mining in its analysis. Data posting account Instagram explorejogja is taken at the end of 2017. In this study using 313 post as a sample population of 1537 post overall from account instagram explorejogja.

### 1.3 Visualization of tourist destination mapping

Based on the background that has been described, the writer took the title "Visualization mapping of tourist destination in special region of Yogyakarta using Affinity Propagation method and Social Network Analysis ". in this case aims to see the visualization of tourist destination mapping Yogyakarta province, then grouping based on the level like as the impulse from the outside (the existence) of the user instagram and apply the graph into the map location of most tourist attractions based on the district. From these results will be obtained information and recommendations of travel destinations to facilitate tourists to know the location of existing destinations according to post account instagram explorejogja in 2017.

## 2. Method

### 2.1 Spatial Analysis

Spatial analysis is a visual inference to a map that is a combination of spatial data and attribute data. Spatial data refers to a location or position on the surface of the earth, which is the coordinates, raster or administrative boundaries of the region.

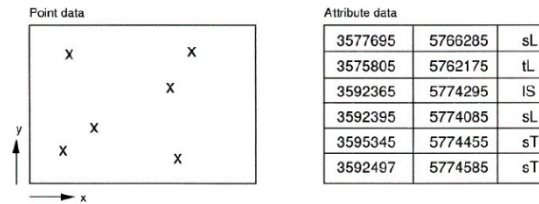


Figure 2. Differences of spatial data and attribute data[4]

### 2.2 Data Mining

Data mining is the mining or discovery of new information by searching for a particular pattern or rule from a large amount of data [5]. Data mining is also called a series of processes to explore the added value of knowledge that so far can not be known manually from a data collection [6]. Data mining has stages like in figure 1.

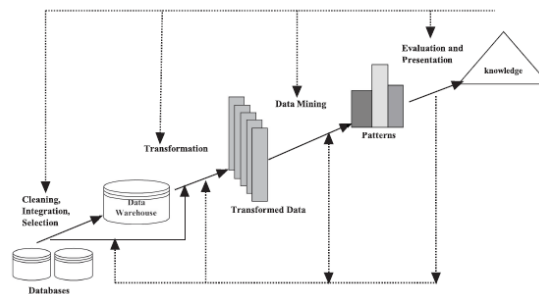


Figure 3. Data mining process

### 2.3 Affinity Propagation

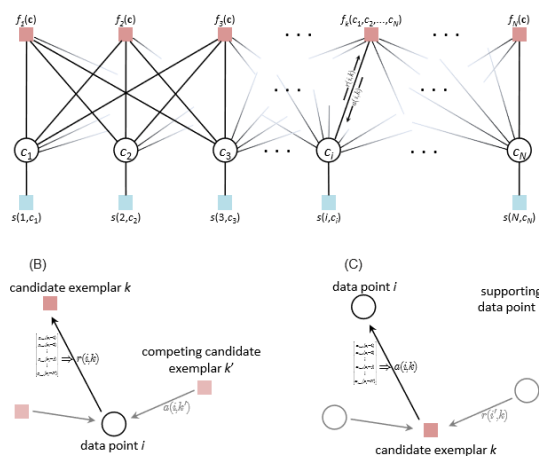


Figure 4. Affinity propagation algorithm

Affinity propagation is an exemplar-based clustering algorithm that performs belief propagation on the factor graph shown in (A). Two kinds of message are passed in the graph; responsibilities (B) are passed from variable nodes to function nodes (i.e., data points to candidate exemplars).

Availabilities are passed from function nodes to variable nodes (C), interpreted as candidate exemplars to data points [7]

$$F(c; s) = e^{\overbrace{\sum_{i=1}^N s(i, c_i)}^{\text{S sum (2.9)}} + \overbrace{\sum_{k=1}^N \log f_k(c)}^{\text{coherence constraint}}} = \prod_{i=1}^N e^{s(i, c_i)} \cdot \prod_{k=1}^N f_k(\overbrace{c_1, c_2, \dots, c_N}^c)$$

Figure 5. AP Function

Note that the first term in the exponent involves the net similarity, S, from the k-median problem, except that similarities are exponentiated to ensure F(c;s) always evaluates to a positive function. The second term contains a coherence constraint defined as follows:

which causes the function to evaluate to zero for the incoherent configuration of a cluster without an exemplar, i.e., a data point i has chosen k as its exemplar (ci = k) with k having been incorrectly labeled as a non-exemplar (ck≠k). Each component of F(c; s) is represented by a function node and each label ci is represented by a variable node. Each fk(c) term appearing in equation (1) has a corresponding function node that is connected to all variables c1,c2,...,cN. In addition, each s(i,ci) term has a corresponding function node that is connected to the single variable ci. The log of the global function F(c;s)—in this case S(c) (previously referred to as net similarity, S)—is given by the sum of all the log-functions represented by function nodes.

#### 2.4 Social Network Analysis

Social Network Analysis (SNA) is one of the analysis in data mining that connects several interrelated objects through graph. Objects in SNA called actor terms are the main focus in this analysis.

There are two types of relationships that can be explained in SNA, namely [8]:

- 1) *Directional Relations*: the type of relationship "self choices" that the relationship that occurs between actors is the choice of each actor and does not apply to each other in opposite, eg friendship relationship between A and B. If A recognizes B as a friend then not B will recognize A as his friend.

X: friendship sosiomatriks A, B and C. If it is known that A is friends with B (A → B), B be friends with C (B → C), C be friends with A (C → A), dan C be friends with B (C → B), If a relationship is dichotomous then the element of the matrix **X** ( $X_{ij}$ ), with i= A,B,C and j= A,B,C are:

$$X = \begin{matrix} & \begin{matrix} A & B & C \end{matrix} \\ \begin{matrix} A \\ B \\ C \end{matrix} & \begin{bmatrix} 0 & 1 & 0 \\ 1 & 0 & 1 \\ 1 & 1 & 0 \end{bmatrix} \end{matrix} \quad (1)$$

- 2) *Nondirectional Relations*: the type of relationship between actors symmetrical each other. Example of this relationship is the neighboring neighborhood. If A-neighbor is next door with B then it is definitely B after the house again with A. This type of relationship will be denoted by a line (without arrows) on the sosiogram. In the form of matrix notation, this relationship can be described as follows:

X: sosiomatriks next door neighbor A, B and C. If it is known that A next door neighbor with B (A-B and BA), adjacent neighbor B with C (B-C and C-B). If a relationship is dichotomous then the element of the X matrix ( $X_{ij}$ ), with i=A,B,C and j= A,B,C are:

$$X = \begin{matrix} & - & 1 & 0 \\ 1 & - & 1 & \\ 0 & 1 & - & \end{matrix} \quad (2)$$

In SNA, the relationships between actors can be valuable dichotomes and have value. The relationship is dichotomous if the relation exists then it is worth 1 and if there is no relationship will be worth 0. The relation can also be valuable so that each relationship between actors has different values, it can be worth the strength of the relationship between the actor, the intensity of the relationship or the frequency of the relationship.

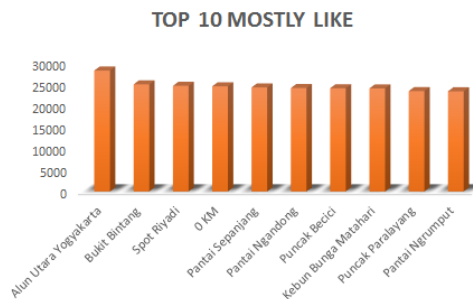
### 2.5 Research Methods

Data analysis method used in this research is descriptive analysis, tourism destination distribution in the form of web based map, non hierarchy cluster analysis that is SOM method and application of graph theory on spatial. The tools used in data analysis in this study are Ms. Excel, QGIS 2.10, and Gephi..

## 3. Results

### 3.1 Distribution of tourist destination

Instagram accounts explorejogja have a fairly large existence as an account that promotes tourist destinations contained in the province of Yogyakarta. these accounts also get a fairly positive response from instagram users, especially followers (followers) of the explorejogja account.



**Figure 6.** Top 10 of explorejogja post

From the picture above can be seen top 10 most popular tourist destination from January until December 2017. Namely is Alun Utara Yogyakarta, Bukit Bintang, Spot Riyadi, 0 KM, Pantai Sepanjang, Pantai ngandong, Puncak becici, kebun bunga Matahari, Puncak paralayang, Pantai Ngrumput.

Based on 113 tourist destinations obtained, then in the form of map web-based tourist destination with 113 point coordinates.

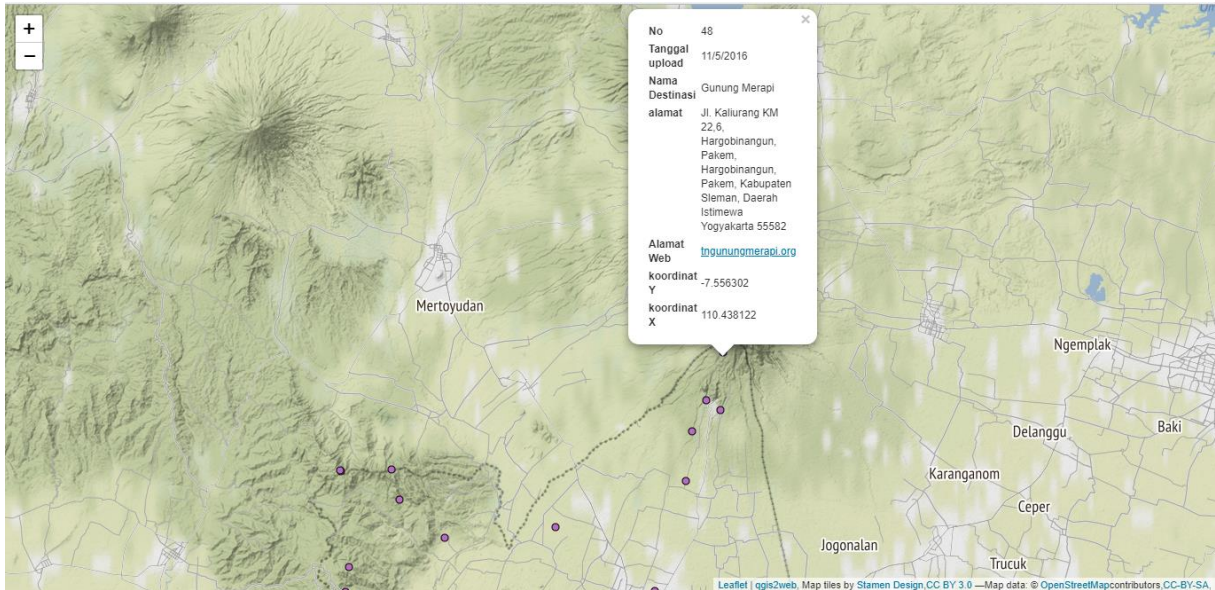


Figure 7. The map of Tourist Destination Destinations in special region of Yogyakarta

As for the explanation of tourist destinations in accordance with the coordinate point as follows:

Table 2. List of tourist destinations along with point coordinates

Destination NoNames	Coordinate point	
	Latitude	Longitude
1 Ayunan Langit Watu Jaran	-7.735783	110.132603
2 0 KM Yogyakarta	-7.80136	110.364771
3 Air Terjun Curug Gedhe	-7.824035	110.536747
.....		
113 Wisata Seribu Batu Songgo Langit	-7.931236	-7.931236

### 3.2 Affinity Propagation Cluster

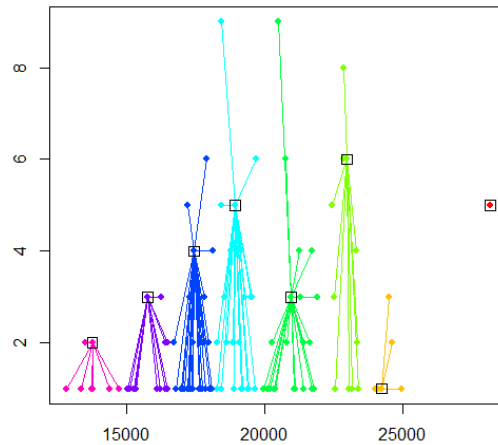


Figure 8. Cluster result

The AP method processes all objects simultaneously where  $k$  is the number of groups. So in the method also determined the number of groups formed, in this study in the form of Five groups.

Table 3. A list of tourist destinations along with point coordinates

	Cluster				
	1	2	3	4	5
Number of tourist destination	1	9	29	66	106

### 3.3 Social Network Analysis

Graf is formed based on the type of tourism consisting of 8 types. namely nature tourism, marine tourism, education, history, culture, religion, tirta, and night.

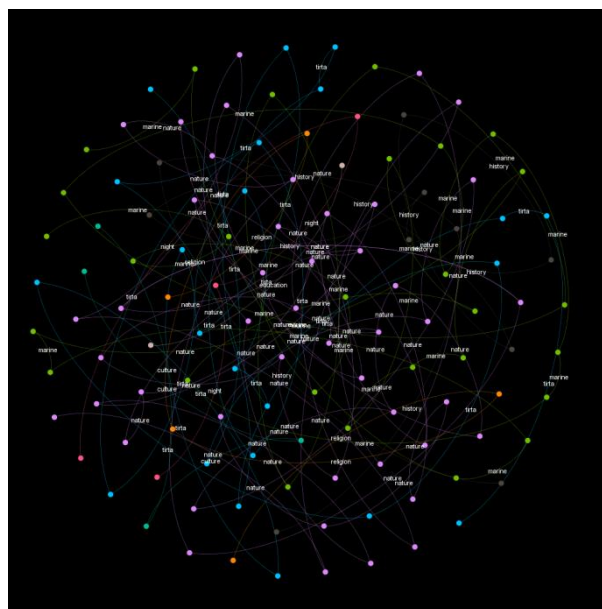


Figure 9. *tourist destinations based on the type of tourism consisting*

Based on the picture above can be seen that there are 8 different colors of the plot with purple, green, blue, brown, orange, pink, green tosca, and gray. The explanation related Graf is described in the following table:

Table 4 Explanation Graf location of the spread of tourist destinations

Number	Type of tourist	Colouring	Percentage
1	Natural tourism	Purple	38.02%
2	Marine tourism	Green	23.14%
3	Tirta tourism	Blue	18.18%
4	Historical tourism	Brown	8.26%
5	Religious tourism	Orange	4.13%
6	Night tourism	Pink	3.31%
7	Culture tourism	Green tosca	3.31%
8	Educational tourism	Gray	1.65%

#### 4. Conclusion

The Distribution of tourist destinations in Yogyakarta province is displayed in the form of a web-based dynamic map in which there are 113 points coordinates that symbolize each tourist destination. Of the 113 destinations are then obtained top 10 most popular destinations based on the number of like. Namely,. Alun Utara Yogyakarta, Bukit Bintang, Spot Riyadi, 0 KM, Pantai Sepanjang, Pantai ngandong, Puncak becici, kebun bunga Matahari, Puncak paralayang, Pantai Ngrumput.

Graf is formed based on the type of tourism consisting of 8 types. namely nature tourism, marine tourism, education, history, culture, religion, tirta, and night

Based on the conclusions obtained by the researcher wants the results of this study can be used by the Yogyakarta government, especially in the field of tourism in order to be used as a reference to improve quality and publications related tourism that has been considered popular. This is certainly in order to bring in more tourists-both from within the country and from abroad.

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# Sustainable Finance Implementation: A Case Study of An Indonesian State-Owned Bank

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## Abstract

This study analyzes the fundamental differences of sustainable finance and traditional finance using parameters by Soppe (2004). In addition to that, this study also analyzes the implementation of sustainable finance in ABC Bank using parameters from Soppe (2004) and POJK 51. Based on the case study approach supported by primary and secondary data, this study shows that ABC has fulfilled all parameters of sustainable finance implementation by Soppe (2004), such as Theory of the Firm, Human Nature of Economic Actors, Ownership Paradigm, and Ethical Framework. In addition, ABC has also demonstrated its maximum effort in fulfilling sustainable finance implementation obligations under POJK 51 which require financial institutions to apply eight principles of sustainable finance, prepare a Sustainable Financial Action Plan and sustainability report. Based on the analysis, it can be concluded that ABC has implemented sustainable finance.

**Keywords:** sustainability report, moral economic man, POJK 51, shareholder theory, stakeholder theory, sustainable finance, the theory of the firm, virtue ethics

## 1. Introduction

Discussion and debate on the concept of sustainable finance have been discussed for a long time in the international world (Cash, 2017). Varble (1972) discusses how the product development decisions within companies should take into account its impact towards environmental and social aspects, Orpen (1987) argued that society at that time has increased its pressure for companies to also consider social and environmental aspects in their decision-making process. Starik & Rands (1995) argued on how the environmental conservation initiative should be integrated within the company decision-making process. Fatemi & Fooladi (2013) argued how a short-term mindset found in traditional finance should be solved by sustainable finance with its long-term mindset. Samudhram, Siew, Sinnakkannu & Yeow (2016) argued how the triple bottom line approach could ultimately solve the current existing problem of externalities in corporate decision-making.

All of these studies happen globally yet there is no significant presence of such debate about sustainable finance in Indonesia. The absence of studies in sustainable finance in Indonesia is one of the main drives why this study was done, to begin with. This study uses a set of parameters set by Soppe (2004) to distinguish the sustainable finance concept and the traditional

finance. The parameters are Theory of the Firm, Human Nature of Economic Actor, Ownership Paradigm, and Ethical Framework. This study also uses a set of parameters set by OJK through POJK 51, which consists of the implementation of Eight Sustainable Finance Principle, Preparation of Sustainable Finance Action Plan, and Preparation of Sustainability Report.

The implementation of sustainable finance is analysed from a single case study, ABC Bank, one of the biggest State-Owned Enterprises in the banking industry with a widespread presence throughout Indonesia. ABC is also one of the select few banks who joined Pilot Project of Sustainable Finance Implementation by OJK (Otoritas Jasa Keuangan—The Authority of Financial Services) and WWF-Indonesia (World Wide Fund). ABC was chosen as the object for this study as ABC has tried to implement the sustainable finance long before a formal government regulation is promulgated; and hence, is expected to have an adequate information necessary to be analyzed using aforementioned parameters.

## 2. Sustainable Finance

Sustainable finance is a financial policy that considers company performance using triple-bottom-line criteria, which consists of people (social performance), planet (environmental performance), and profit (economic performance) (Soppe, 2004). Implementation of this concept can be seen as an effort to integrate the externalities in the corporate decision making (Lagoarde-Segot & Paranque, 2017).

According to Zink (2014), a sustainable development effort by the company has 3 (three) characteristics, namely:

- a. to consider the relationship between financial, social and environmental aspects
- b. to establish a long-term oriented mindset which considers the company's sustainability
- c. to consider the use of resources in a productive manner

The first parameter is **Theory of the firm**, a theory explaining the fundamental reason why a company was founded, to begin with (Lozano, Carpenter, & Huisingh, D., 2015). The traditional finance concept goes with the private property rights model, a theory stating that firm as the owner of firm's assets should be allowed to use and allocate all of their assets for the sole purpose of gaining as much profit as possible (de Avila Monteiro & Zylbersztajn, 2012). Private property rights model has been widely used to support the shareholder theory in which a firm's responsibility is only limited to gain profit for the shareholders and doesn't in any way extend to any other parties (Friedman, 1970). On the other hand, sustainable finance goes with the theory of triple bottom line, in which a success in an economic aspect isn't the only parameter used to measure firm's performance, instead firm should be measured in a holistic manner to also measure their performance in social and environmental aspect (Norman & MacDonald, 2004). One of the way to measure firm's social and environmental performance is by looking at firm's sustainability report, a report issued to account for firm's program in both social and environmental aspects (Mori, Best, & Cotter, 2014). Kolk & Perego (2010) also stated that issuing sustainability report might allow public to scrutiny and criticize firm's social and environmental performance, thus increasing firm's incentive to do better at both aspects.

The second parameter is **Human Nature of Economic Actor**. In traditional finance, all economic actor behavior is based on Homo economicus assumption, in which firm will act rational, completely selfish, and will judge each decision solely by the amount of profit firm

can get from such decision (Levitt & List, 2008). Instead of Homo economicus, sustainable finance-based firm's behavior on Moral Economic Man perspective, in which aside from their own utility, firm would also care about something else such as the interests of other related parties, the well-being of people whose interests are at stake, their own reputation, and their self-conception (Zsolnai, 2002).

The third parameter is **Ownership Paradigm**, a perspective by the firm as to who exactly "own" the firm. Traditional finance concurs with the perspective of shareholder theory, in which shareholder's interest is the only interest that firm has to consider in firm decision making (Friedman, 1970). This theory argues that shareholder is considered as the owner of the firm thus making interest act as the firm's goal (Lan & Heracleous, 2010). On the other hand, sustainable finance instead agrees with stakeholder theory, a theory arguing that shareholder's interest should not be the only interest considered in firm decision making as a firm should also consider the interest of every stakeholder (Sundaram & Inkpen, 2004). This does not necessarily mean that firm will not entertain shareholder interest, as stakeholder theory also acknowledge shareholder as one of the stakeholders (Freeman, Wicks, & Parmar, 2004).

The last parameter is **Ethical Framework**, a moral debate to decide what is good and right in doing business (Adhariani, Sciulli, & Clift, 2017). Traditional finance agrees with the theory of amoral manager, in which business is considered to exist in the different realm of moral judgment thus business decision should never be judged with the basis of morality (Carroll, 2000). Meanwhile, sustainable finance agrees with the concept of virtue ethics, in which firm should always have an internal push to consistently act virtuously in doing business (Soppe, 2007). Virtue ethics argues that firm should consider the morality of their decision, as it argues that the distinction of the business sphere and the moral sphere is a mere excuse for the firm not to be held accountable for their action and the impact dealt with other parties (Solomon, 2004).

This research also uses another set of parameters to judge the sustainable finance implementation using parameters set by OJK, the Indonesia Financial Service Authority. OJK provided three parameters of sustainable finance implementation issued in POJK 51/2017 about The Analysis of Sustainable Finance Implementation in Financial Services Institution, Issuer, and Publicly Listed Companies. The three parameters are the implementation of eight sustainable finance principle, preparation of both Sustainable Finance Action Plan and Sustainability Report.

The first parameter is **Implementation of Eight Sustainable Finance Principles**, a set of principle by OJK acting as a guidance to help firm integrate the concept of sustainable finance with their business operation. Only if a firm has successfully implemented these parameters can it be considered as a sustainable finance firm. The parameters included by OJK are:

- a. Responsible Investment
- b. Strategy and Sustainable Business Practice
- c. Social and Environmental Risk Management
- d. Corporate Governance
- e. Informative Communication
- f. Inclusivity
- g. Development of Superior and Potential Sector
- h. Coordinative and Collaborative

The second parameter is **The Preparation of Sustainable Finance Action Plan**, a document containing firm business plan in short-term (one year) and long-term (five years) (OJK, 2017). OJK through POJK 51 will oblige the issuance of this action plan to ensure that every company has put a maximum effort in implementing sustainable finance. This document is an additional document complementing annual report and sustainability report by providing all information relevant to firm's effort in implementing sustainable finance. The said document should at least include these expected contents:

- a. Executive Summary
- b. The process of Action Plan Preparation
- c. Determining Factor of the Action Plan
- d. Priority and Analysis of the Action Plan
- e. Follow up of the Action Plan

The last parameter is **The Preparation of Sustainability Report**. As mentioned before, sustainability report is a report issued to account for firm's program in both social and environmental aspects (Mori, Best, & Cotter, 2014). OJK through POJK 51 will oblige the issuance of sustainability report for the first time since no regulation about sustainability report has been issued before which leads to a very low level of sustainability report issuance in Indonesia (Ani & Fredy, 2017). All issued sustainability report should at least contain these following aspects:

- a. Explanation of sustainability strategies
- b. An overview of sustainability aspects
- c. Short profile of the Firm
- d. Statement of the directors
- e. Governance of sustainability
- f. Sustainability performance
- g. Written verification from an independent party, if any
- h. Feedback sheet for the reader, if any
- i. Firm's response to previous year feedback, if any

### **3. Analysis of Sustainable Finance Implementation by Soppe (2004) Parameter**

In this section, the business activities of ABC is analysed to ultimately decide whether or not their business operation has been in line with the parameters set by Soppe (2004). The first parameter to be analyzed is **Theory of the Firm**. In order to be considered successful in fulfilling the first parameter, a firm must showcase its awareness that the company was not founded solely to gain profit. To entertain this concern, the first thing to be analyzed is the reason for the establishment of a company. As a State-Owned Enterprise (SOE), the reason for the establishment of SOEs is already regulated according to the applicable legislation, namely the Law on State-Owned Enterprises (No. 19/2003). Quoting from article 2 of the Law, 5 (five) and purpose of establishment of SOE are as follows:

- a. To contribute to the development of the national economy in general and the state revenue in particular
- b. Pursuit of profit

- c. To fulfill public interest in the form of provision of goods and/or services of high quality and adequate for the fulfillment of the livelihood of the public
- d. To become a pioneer of business activities yet to be done by the private sector and cooperatives
- e. To actively provide guidance and assistance to entrepreneurs of economically weak, cooperative, and community groups.

The existence of regulations for SOEs indicates that ABC as one of the SOEs already has a fundamental reason for implementing sustainable financial concepts. Such regulation is a government effort to ensure that making profit aspect is not the only goal firms have in mind. In addition, the company's operational objectives are also contained in the Shareholder Aspiration Letter (SAL), a written letter from shareholder (in this case the Government of the Republic of Indonesia represented by the Minister of SOEs) to the Board of Directors regarding assumptions that should be used in the preparation for the budgeting as well as all targets to be achieved be it from the financial aspect, social aspect, and the environmental aspect.

As a follow up for those two aforementioned documents, ABC's business operations are not solely done for the sake of profit. This can be seen from firm's decision to increase its presence in remote areas even though it's not necessarily profitable. ABC has also deployed agents of ABC which became a firm representative in providing banking services to people in remote areas which were unable to access banking services before. This shows that ABC has been actively trying to fulfill its purpose to contribute to the national economic development by providing services finance for people in remote areas.

In addition to encouraging financial inclusion, ABC's concern for social and environmental aspects can also be seen from the Partnership and Community Development Program aimed at improving people's welfare and nature conservation. ABC's. In the partnership program, ABC actively helps SMEs to be able to grow and develop by providing low-interest rate loans and provide guidance and supervision to enable SMEs to be self-sustaining and grow as a business. Whereas in community development program, ABC cooperates with both local and international institutions with the same vision and commitment to creating a sustainable world by contributing credit and funding to fund various environmental conservation programs. This program showcases the efforts of ABC to improve people's living standards through ways that are in line with the concept of sustainable development.

Understanding the analysis above, it can be concluded that ABC has applied the concept of a triple bottom line. This can be seen as the success of ABC is no longer judged solely from the achievement of its financial aspects, but also performance on social and environmental aspects. ABC's awareness of its social and environmental performance can also be seen from the publication of sustainability report as a means for companies to account for the performance of social and environmental aspects so that the public can scrutiny and criticize company's performance in both aspects. This will incentivize firm to further achieve a higher standard of performance not only in financial aspect but also in social and environmental aspects.

The second analysis is about the **Human Nature of Economic Actor**. In order to be considered successful in fulfilling the second parameter, a company must show that in decision making process firm does not solely use profit as an absolute parameter, instead firm should also consider the impact dealt with other parties who may be affected by the decision taken by the

company.

To assess this parameter, the first thing to analyze is the company's business decision-making process. ABC has integrated the assessment of social and environmental impacts into the decision-making process, take the firm crediting process as an example. In considering credit application by a prospective client, ABC won't use client's rate of return and financial capacity as the only determinant factor in the decision-making process. Instead, ABC will also consider various risks that must be borne by ABC and related parties while also considering the impact of client's business activities on social and environmental aspects.

In order to do the aforementioned parameter, ABC has a Corporate Banking Credit Guideline Book I, a credit requirement for its prospective customers so that the credit decision also considers the customer's efforts to preserve the environment and their responsibility for all the environmental and social impacts that will arise. This is done by requiring prospective customers to include documents such as AMDAL (Analysis on Environmental Impact) in their credit applications. Specifically, for companies with the potential of having a significant impact on the environment, ABC will also only process their application only if the firm has passed the Company's Environmental Performance Rating Program (PROPER) by the Ministry of Environment and Forestry, an assessment by said ministry to assess the company's compliance with the applicable environmental regulations in Indonesia. ABC will only process applications of companies categorized as blue, green, or gold companies, indicating that the company has been proven to comply with all regulations relevant to their respective business activities.

ABC would also oblige prospective clients from several industries to provide an industry-specific requirement. For instances, prospective clients from palm oil industry should also be certified by RSPO and ISPO for their credit application to be processed further. Through the use of these various standards in the credit application process, it can be concluded that ABC has showcased its concern about the impact of its actions on other parties, something that became one of the characteristics of moral economic man.

The third parameter is **Ownership Paradigm**. In order to be considered successful in fulfilling the third parameter, a company must showcase its understanding that the interests of shareholders can't be the only interest firm's decision based upon. Companies that implement sustainable finance are companies that understand the interests of all stakeholders of the company and strive to meet the interests of all stakeholders and not shareholders alone.

To be able to assess this parameter, the first thing to be analyzed is the vision statement of the company. Based on the financial statements of 2017, the vision of ABC is to become a financial institution that excels in service and performance. ABC also explains excellence in services means that ABC can be a partner for its customers by providing comprehensive financial services. While superior in performance means ABC as a financial institution can create added value for many parties such as customers, investors, employees, community, and industry.

From the firm vision statement mentioned above, it can be seen that ABC doesn't solely focus on the fulfillment of the interests of shareholders. This is evident from the company's vision statement that clearly states that one of the company's goals is to create added value for the stakeholders. Each stakeholder referred to in the vision has passed a process for them to be considered as one of the firm stakeholders. To determine who are the stakeholders of the company, ABC also performs stakeholder identification in the period 2016. In determining the

stakeholders for the company, ABC uses the principles of Dependency, Responsibility, Tension, Influence, Diverse Perspectives, and Proximity. From these principles, 9 stakeholders were then selected. Those selected stakeholders are customer, shareholder, employee, trade union, supplier, business organization, NGO, and media.

After selecting nine stakeholders of the company, ABC then determined various stakeholder engagement strategies for each stakeholder. This is done to ensure that ABC understands the interests and expectations of the stakeholders. Stakeholder engagement by ABC is different for each stakeholder. This distinction between methods is undertaken to ensure that the firm has the most effective way to gain the aspirations of each of the stakeholders for further follow-up by management in the company's decision-making process. For example, ABC periodically held an internal survey to understand employee's perspectives, or to shareholders, who, as discussed in the previous sub-chapter, have Shareholder Aspiration Letter to convey their interests and expectations to ABC. Judging from this action, it can be concluded that ABC has used the stakeholder theory approach in determining whose interest their action based upon.

The last parameter is **Ethical Framework**. In order to be considered successful in fulfilling the last parameter, a company must show that the company uses virtue ethics theory as the basis of moral judgment on a decision taken by the company. That is if the company does a virtuous behavior because of the internal push to become a virtuous company, not because of an existing regulation. Other than that, the other things that can be assessed are how much effort made by ABC as a company to be a virtuous company, judging from the reasons for decision-making, as well as other ABC's efforts to socialize the values considered good by the company.

There are several ABC policies that showcase its characteristic as a company that implements virtue ethics. For example, ABC has shown awareness that ABC is a part of a larger community and has its own role in society. This is why ABC often support the effort of nature conservation and develop the economy through CSR program which has been explained previously. This illustrates that ABC is engaged as a part of the community and continuously strives to benefit society in accordance with the capacity of ABC as a company.

In addition to that, ABC has also been active in trying to encourage its employees to behave virtuously both in business context and in the daily life context. For that, ABC has compiled two guides, namely Code of Conduct and company principles. The ABC Code of Conduct contains 14 points set up to regulate the relationship between ABC employees and all stakeholders in conducting business activities. Meanwhile, ABC principle is a work culture and behavior expected from all employees of ABC. All of the aforementioned guidance also become the basis of ABC to encourage all employees from the board of directors, management, to employees in general to always behave virtuously.

Something also noteworthy is the fact that ABC also considers the integrity of new employees in the recruitment process. This is because ABC believes that people who have a good personality in everyday life will also behave well in business activities. New employees with a good personality are also expected to absorb and internalize all of the ethical guidance more easily.

Taking into account all of the explanation above, it can be concluded that ABC has implemented the concept of virtue ethics. This can be seen from the active efforts of ABC to consistently continue to show a virtuous characteristic both in decision-making and on policies and



regulations set by ABC for its employees.

After assessing the implementation of sustainable finance in ABC with all parameters set by Soppe (2004), it can be concluded that ABC has implemented the concept of sustainable finance. This is the result of the analysis of the entire set of parameters which indicates that ABC is a company that has applied the concept of sustainable finance based on a set of parameters set by Soppe (2004).

#### **4. Analysis of Sustainable Finance Implementation by POJK 51 Parameter**

Aside from using the parameters set by from Soppe (2004), this study also analyzes the preparation of ABC in applying sustainable financial concepts under the Regulation of the Financial Services Authority Number 51 / POJK.03/2017 on the Implementation of Sustainable Finance for Financial Services Institutions, Issuers, and Public Companies. There are three parameters used by OJK, namely the implementation of eight sustainable financial principles, the preparation of Sustainable Finance Action Plan, and the preparation of sustainability reports. This section is mostly trying to assess the preparation process of ABC to face the guidelines in POJK 51. This is because currently ABC is still in the process of preparing the implementation of POJK 51 and will apply it in the 2019 period. This applies to all aspects except the preparation of sustainability reports that have been done by ABC even before POJK 51 is legalized. The first parameter to be analyzed is the **Implementation of Eight Sustainable Finance Principle**. All this time, ABC has implemented the concept of sustainable finance even if there is no regulation for firm to do so. This indicates that the implementation of sustainable finance comes from the internal drive of the company and not just the fulfillment of the obligations provided by the regulator. Since 2009, ABC also uses some guidelines in implementing sustainable finance such as the use of GRI standards in the preparation of sustainability reports, the standards of responsible investment in the processing the credit application, and stakeholder engagement in determining the target of firm's CSR program. Although it has implemented various aspects of sustainable finance, the implementation has not been as integrated as POJK 51 expected it to be.

In this case, ABC has actually implemented all of these principles, but the concern of ABC related to the legalization of POJK 51 is the possibility of a different perspective between ABC and OJK. As an illustration, although both recognize that companies must apply the principle of responsible investment, but ABC and OJK don't necessarily have the same view of the theory. This is because so far, the concept of responsible investment applied by ABC is an interpretation of ABC itself and not based on regulations compiled by OJK. This might be the reason why at some cases ABC and OJK might have a different view.

To solve the problem, ABC has formed a task force team with special tasks to prepare the application of sustainable financial concept based on parameters provided by POJK 51. The team consists of several parties from the Division of Medium and Small Business Risk, Corporate and Multinational Division, and Corporate Communications and Secretarial Division. The objective of this team is to evaluate the ongoing sustainable finance implementation of ABC and adapt it to the parameters of POJK 51. The task force team is also tasked with identifying the shortcomings of the current sustainable finance implementation at ABC. This is done to ensure that both ABC and OJK have the same view towards the implementation of

sustainable finance in the company.

Since ABC felt that firm has already implemented most of these concepts even before POJK 51 was validated, ABC also believes that sustainable financial implementation based on POJK 51 will not significantly alter ABC's business operations. This is because the possibility of change is only on the part of disclosure as it must be tailored to the structure expected by POJK 51. Although there is still a tiny possibility that ABC has not implemented one or two concepts, but it is still reasonable considering that ABC has been implementing the concept of sustainable finance without definite guidance and at that time there was no regulation that specifically regulates the implementation of sustainable finance in financial institutions. That being said, its effort to evaluate and categorize its business activities to suit POJK 51 structure is highly commendable.

The second parameter is the preparation of **Sustainable Finance Action Plan**. The Sustainable Financial Action Plan is one of the entirely new documents required by OJK to be prepared by all financial services institutions in Indonesia. ABC is now entering the early preparation stage to develop the action plan. The task force team mentioned in the previous section also plays a major role in preparing the action plan. This is because one of the main outputs of the cross-division team is the company's action plan structured based on the regulations on the POJK 51. The action plan itself must be issued by the company on December 31<sup>st</sup>, 2019 at the latest.

There are two obstacles faced by ABC in the application of the concept of sustainable finance. The first problem facing ABC is the absence of a benchmark that can be used as a guide in the preparation of the report. This is because RAKB is a document that has never been compiled before in Indonesia so that the absence of documents that can be used as a guide enough to inhibit the preparation process of RAKB by ABC. ABC has been using only POJK 51 and its attachment and explanation as a guide. However, with limited POJK 51 guidance, this first drafting of the RAKB is the result of ABC interpretation and understanding of the newly enacted POJK 51.

The second problem faced by the company is the low understanding of internal ABC employees on the concept of sustainable finance. This is because the understanding is not comprehensive and evenly because only certain divisions alone who understand the concept of sustainable finance. This makes it difficult to implement sustainable finance that requires joint efforts of all parties and related divisions within the company. To solve all of those problems, ABC establishes an intensive communication with OJK to get direction from OJK. This is done to ensure that the interpretation used by ABC towards POJK 51 is an interpretation expected by OJK. In addition to that, ABC also establishes communication with WWF-Indonesia to get guidance as well as supervision in drafting the action plan. Moreover, WWF-Indonesia also frequently conducts training for ABC employees to develop the internal competence of ABC about the concept of sustainable finance.

The last parameter to be judged is the preparation of **Sustainability Report**. ABC is the first state-owned bank in Indonesia to issue a GRI (Global Reporting Initiative) -based Sustainability Report. Since 2009, ABC has consistently continued to issue sustainability reports on a regular basis as separate reports from annual reports. This is a form of transparency over the efforts to realize the company's vision and face the challenges of sustainability. This sustainability report is structured in accordance with GRI G4 standards and guidelines using the in-accordance rules

by selecting core options, in which the report contains essential elements of the sustainability report.

ABC also periodically update the GRI standard based on the development of GRI standard itself. This change can be seen in the 2012 sustainability report when ABC still use GRI G3.1, whereas in the 2013 sustainability report ABC has already use GRI G4 standard, the newest and most updated one. This indicates that ABC is constantly striving to update the standards that the company uses to maintain the relevance of the standards used so it won't get left behind by the rapidly evolving world of business.

Just like the financial statements, ABC's sustainability report is published through the company's official website to facilitate public access to the information available on the sustainability report. Prior to publication, ABC's sustainability report is checked and verified by a third party to ensure compliance with the standards used. In 2016 ABC sustainability reports are reviewed by NCSR, an independent organization focused on the implementation and proliferation of sustainable finance concepts in Indonesia. In 2017 ABC's sustainability report is reviewed by SR Asia, a non-profit international organization that provides testing services for compliance with GRI sustainability reports and AccountAbility AA1000 standards, a company performance assessment standard in the accountability and sustainable development aspects of the company.

## **5. Conclusion**

Based on all analysis and discussion that has been done in the previous chapters, it can be seen that ABC has fulfilled all parameters by both Soppe (2004) and POJK 51. In Theory of the Firm, ABC has shown the implementation of triple bottom line concept, as the company acknowledged that they're not founded solely to gain profit, but also to improve social welfare, preserve the environment, and contribute to development in Indonesia. While in the Human Nature of Economic Actor, ABC has shown the characteristic of moral economic man, because, in the decision-making process, the company takes into consideration the impact of its business decisions for society and the environment alongside its economic rationale.

In Ownership Paradigm, ABC has demonstrated the implementation of stakeholder theory by establishing nine stakeholders of the company whose respective interests must be fulfilled by the company and the shareholders are not the only party whose interests must be fulfilled. Meanwhile, in the Ethical Framework, ABC has shown that ABC is a company that has a drive from within the company to become a company that behaves virtuously. It is seen as ABC always try to behave virtuously in any condition by using various guides prepared by the company.

In an effort to implement The Eight Sustainable Finance Principle, ABC has established a task force team. The team is tasked to identify the shortcomings of the ongoing implementation of sustainable finance at ABC and make a necessary adjustment in accordance with OJK Sustainable Financial Roadmap and POJK 51. In preparing the Sustainable Finance Action Plan, ABC has also established communication with third parties. Given the absence of benchmarks that can be used by ABC to serve as guidance on the drafting of the action plan, ABC has actively engaged in communication and working with OJK and WWF-Indonesia for guidance during the process of drafting the action plan. To comply with the expected requirements of

sustainability report in POJK 51, ABC has also made adjustments to the sustainability report. Given that there has been no regulation officially regulating the structure of the sustainability report for financial services institutions in Indonesia, ABC is currently and is adjusting its sustainability report to the provisions of POJK 51.

Judging by the fact that ABC has successfully fulfilled each and every parameter of sustainable finance implementation from both Soppe (2004) and POJK 51, it can be concluded that ABC has implemented the sustainable finance concept in accordance to the relevant parameter.

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# The Influence of the subject of financial management and the income of the parents on the behavior in managing the financial

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## ABSTRACT

The purpose of this study is to determine the effect of the course of Financial Management and Income of Parent on Behavior in Managing Financial Students of Commerce of the State University of Medan train program 2013. This research is an *ex-post facto* research. The population of research are all of students in commerce train program 2013 which is totally 110 person. The sampling technique used is a random sampling. Data analysis techniques used are Multiple Linear Regression, (t-Test), (F-Test), and ( $R^2$ ). The result showed that; 1) Variable financial management courses had positive and partially significant effect on behavior in managing finances with  $t_{count} > t_{table}$  ( $3.075 > 1.697$ ). 2) Income parents variables also have a positive and partially significant effect on behavior in managing finances with  $t_{count} > t_{table}$  ( $5.117 > 1.697$ ). 3) There is a positive and significant influence between financial management courses and income parents simultaneously to behavior in managing finance with the value  $F_{count} > F_{table}$  ( $16.336 > 3.32$ ). From calculation coefficient of determination obtained R Square equal to 0.521 or 52.1%. So it can be concluded that there is a positive and significant Influence of Financial Management Courses and Income Parents to Behavior in Managing Finance in students STUDY PROGRAMS BUSINESS MANAGEMENT EDUCATION 2013.

**Keywords:** Financial Management Courses, Income Parents, Behavior in Managing Finance

## 1. Introduction

Education on finance can overcome the lack of knowledge and skills regarding financial management. One of the intelligences that must be possessed by modern humans is financial intelligence, the intelligence in managing personal financial assets.

Personal financial management is one application of the concept of financial management at the individual level. Financial management that includes planning, management and financial control activities, is essential to achieve financial well-being. Planning activities include activities to plan the allocation of income earned to be used for anything. Management is an activity to manage / manage finances efficiently. While control is an activity to evaluate whether the financial management is in accordance with the planned / budgeted. Widayati (2012: 278-279) says that the financial decisions taken by an individual include how much money should be consumed each period, whether there are advantages and how the excess is invested or in the tube and how to fund investment and consumption. Further, (Chinen and Endo, 2012) say that individuals who have the ability to make correct decisions about finance will not have financial problems in the future and show healthy financial behavior and be able to determine

the priority of non-wants.

Table 1.1 Monthly Financial Data

Amount of Pocket Money	%	Monthly Spending	%
Rp. 2.500.000	5,4	Rp. 3.000.000	-
Rp. 2.000.000 - Rp. 2.500.000	7,2	Rp. 2.500.000 - Rp. 3.000.000	-
Rp. 1.500.000 - Rp. 2.000.000	19	Rp. 2.000.000 - Rp. 2.500.000	17,2
Rp. 1.000.000 - Rp. 1.500.000	9	Rp. 1.500.000 - Rp. 2.000.000	7,2
Rp. 500.000 - Rp. 1.000.000	38	Rp. 1.000.000 - Rp. 1.500.000	29
<Rp. 500.000	21	>Rp. 500.000	19

Source: The results of observations of researchers

From the above data, it can be seen that the students spend all the money they receive every month. Not even a few students admitted to borrowing to others (indebted).

Students as a younger generation not only face increasing complexity in financial products, services and markets, but they are more likely to bear the financial risk of a bigger future. Economic learning and financial management can be obtained at university education with related courses. In the Faculty of Economics State University of Medan (UNIMED) students have studied knowledge about economics and obtained the subject of financial management, so that should students of Faculty of Economics, State University of Medan have proper financial management because student of Faculty of Economics have received knowledge about financial management in lecture .

Tabel value of financial management

No	class	Value							
		A	%	B	%	C	%	E	%
1	A – Reguler	4	9,8	21	51	16	39	-	-
2	B – Reguler	16	38	26	62	-	-	-	-
3	Ekstensi	8	30	18	67	-	-	1	3,7
	<b>Jumlah</b>	<b>28</b>		<b>65</b>		<b>16</b>		<b>1</b>	

Source: The results of observations of researchers

Based on the above data can be seen that still low level of knowledge of students about financial management, even though they have studied financial management courses. This course should be useful for managing money, which includes processes, forecasting and financial planning, financial management, financial control, and decision making.

According to Ahmadi (2007: 229) states that the economic status of parents affect the behavior and experience of his son. Parental income differences will have an impact on the emergence of differences in understanding and perception, thus forming different behaviors in managing finances. Parents with fewer incomes tend to give little children spending money so they are difficult to manage their finances because they are limited. And conversely, parents who have high incomes will provide more spending money so they can split money to be saved for unexpected purposes so they can manage finances well.

Based on the opinions of experts and the description shows that the income of parents will affect the level of financial management of a student.

Table Percentage of Parent's Revenue

<b>The amount of parental income</b>	<b>amount</b>	<b>%</b>
> Rp. 3.500.000	12	11%
Rp. 3.500.000 s/d Rp. 2.500.000	25	22,7%
Rp. 2.500.000 s/d Rp. 1.500.000	32	29%
Rp. 1.500.000	27	24,5%
< Rp. 1.500.000	14	12,7%
<b>Total</b>	<b>110</b>	<b>100 %</b>

Source: The results of observations of researchers

This indicates that most of the income of parents of students of Management Program Medan State University Medan academic year 2013 are at the middle to lower levels. For that students tend to be unable to manage finances because of the difficulty of the parents' economy and a small amount of spending money, making it difficult for them to share the spending money that parents have given and they can not afford to save, even they spend the money given by parents because the money is right pasan to meet their needs and sometimes they even borrow to a friend.

## **2. Literature Review**

### *2.1 Understanding Financial Management Course*

One of the notions of financial management is: Sartono (2001: 6) "Financial management is the management of funds both associated with the allocation of funds in various forms of investment effectively and fund raising efforts to finance investment or expenditure efficiently. Similar definitions, Horne (in Kasmir, 2010: 5) defines financial management as all activities related to the acquisition, financing and management of assets with multiple objectives. While the function of efficient decision-making according to him is divided into 1 ) decisions relating to investment 1) Financing; 2) Asset management.



So it can be interpreted that financial management is an activity planning, budgeting, inspection, management, control, search and deposit funds owned by someone or organization / company.

### *2.2 Parent Revenue*

According to Reksoprayitno, 2009: 12 (Munawaroh et al, 2015: 5-6) income or income is money received by a person and company in the form of salaries, wages, interest and profit as well as various benefits, such as health and pensions.

According to law no. 17 Year 2004: "Income is any additional economic capability received or obtained by a Taxpayer, whether originating from Indonesia or from outside Indonesia, which may be used for consumption or to increase the taxpayer's wealth concerned, by name in any form".

Based on the above statement can be concluded that the income of parents is any form of reply received as a reward or compensation for contributions to the production process by parents.

### *2.3 Behavior in Managing Finance*

Gitman, 2002 (Zahro: 2014: 15) says, "Personal financial behavior is the way in which individuals manage the source of funds (money) to use as decisions on the use of funds, determination of sources of funds, and decisions for pension planning".

According to Hilgert, Holgart and Bayerly, 2003 (Dwiastanti, 2015: 102) that a person's financial behavior will be seen from how well a person manages savings and other expenses.

Based on some of the above understanding can be concluded that the behavior of managing finance is the overall condition of a person or individual to plan and apply an activity that includes planning, control, and decisions in personal finance or individual self control.

In Heck's opinion (2002: 13) that there are 9 personal financial behaviors. In the following list, the first four were identified by researchers as "planning behaviours" and the next five as "implementing behaviours":

1. set financial goals;
2. accurately estimate costs;
3. estimating revenue appropriately;
4. planning and budgeting a person's spending;
5. consider several alternatives when making financial decisions;
6. adjust to meet emergency financial situation;
7. meet deadlines or bills on time;
8. successfully fulfill the financial objectives; and
9. Successfully implement the expenditure plan

## **3. Methods**

This research was conducted at the Faculty of Economics, State University of Medan, which is located at Willem Iskandar Pasar V Medan Estate, Percut Sei Tuan, Deli Serdang Regency. This study was conducted in the even semester of the 2016/2017 Year Learning.

As for the population of this study are all students of education management of the State University of Medan academic year 2013 with the number of students as many as 110 people consisting of 3 classes, namely:

### *3.1 Sample*

According Arikunto (2013: 174) "if the subject of research is less than 100, then better taken all so that the research is a population study. If the number of subjects is more than 100, it can be taken 10-15% or 20-25% of the number of population. The sampling technique in this study using random sampling technique is random sampling. Then the sample will be taken by 30% of each class.

### 3.2 Data collection technique

To obtain accurate data in this study, the data collection techniques used by researchers are Observation, Interview, Documentation and Questionnaire.

### 3.3 Data analysis technique

#### Multiple Linear Regression Calculations

Multiple linear regression analysis is used to determine the effect of marketing management knowledge and business skills on business readiness. Sugiono (2012: 67) states that multiple linear regression equations can be searched by using the equation of, that is:

$$b_1 = \frac{(\Sigma X_2^2)(\Sigma X_1 Y) - (\Sigma X_1 X_2)(\Sigma X_2 Y)}{(\Sigma X_1^2)(\Sigma X_2^2) - (\Sigma X_1 X_2)^2}$$

$$b_2 = \frac{(\Sigma X_1^2)(\Sigma X_2 Y) - (\Sigma X_1 X_2)(\Sigma X_1 Y)}{(\Sigma X_1^2)(\Sigma X_2^2) - (\Sigma X_1 X_2)^2}$$

### 3.4 Partial Hypothesis Testing (t test)

The t or partial test is used to test whether the independent variables (X1, X2) have partial effects on the dependent variable. Then used t test by using the formula as follows:

$$t_{hitung} = \frac{bi(\beta_i)}{SE(\beta_i)}$$

### 3.5 Simultaneous Hypothesis Testing (Test F)

To test the hypothesis simultaneously used the formula:

$$F_h = \frac{R^2/k}{(1-R^2)/(n-k-1)} \quad (\text{Sugiyono, 2010: 266})$$

### 3.6 Coefficient of Determination (R2)

The coefficient of determination gives the proportion or percentage of the total variable in the Y variable described by the regression model. The value ranges from 0 to 1. The small value of R2 means the ability of the independent variables to explain the dependent variable is very limited. Coefficient value is close to 1, meaning the model is appropriate to explain the relationship between independent variables with the dependent variable.

$$R^2 = \frac{JKR}{JKT} \times 100\%$$

## 4. Discussion

### 4.1 Effect of Financial Management Course (X1) on Behavior in Managing Finance (Y)

Based on data processing with SPSS 21 program, it is known that t\_hitung variable of Financial Management Course is 5,117 while ttable value at df = n-k = 33-3 = 30 with alpha significance level (α) 0,05 (5%) is 1,697. This shows the t\_count > t\_table (5,117 > 1,697) so that it can be concluded that the first hypothesis (H1) is accepted, that there is a positive and significant influence between the Financial Management Course (X1) to the Financial Management

Behavior (Y) Student Prodi Pendidikan Tataniaga stambuk 2013 State University of Medan. For more details can be seen in the table below

Result of Hypothesis Test Calculation (X<sub>1</sub>) Against Y

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	52.606	4.197		12.535	.000
	Mata Kuliah					
	Manajemen Keuangan	.254	.050	.677	5.117	.000

a. Dependent Variable: Managing Financial Conduct

**Effect of Parent Income (X<sub>2</sub>) on Behavior in Managing Finance (Y)**

Based on data processing with SPSS 21 program, it is known that  $t_{hitung}$  variable of business skill is 4,721 while  $t_{table}$  value at  $df = n - k = 33 - 3 = 30$  with significance level alpha ( $\alpha$ ) 0,05 (5%) is equal to 1,697. This indicates  $t_{count} > t_{table}$  ( $4.271 > 1.697$ ) so that it can be concluded that the second hypothesis (H<sub>2</sub>) is accepted, that there is a positive and significant influence between Parent's Revenue (X<sub>2</sub>) on Behavior in Managing Finance (Y) State University of Medan. For more details can be seen in the table below

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	37.118	8.625		4.303	.000
	Pendapatan					
	Orang Tua	.535	.125	.609	4.271	.000

a. Dependent Variable: Perilaku Mengelola Keuangan

**The Effect of Financial Management Course (X<sub>1</sub>) and Parent Income (X<sub>2</sub>) on Behavior in Managing Finance (Y)**

The results of this study indicate that there is a positive and significant influence between Financial Management Course (X<sub>1</sub>) and Parents Income (X<sub>2</sub>) to Behavior in Managing Finance (Y) Student of Education Stage Management Program 2013 Medan State University. Furthermore, based on the calculation of multiple linear regression obtained equation  $Y = 39,529 + 0,182 X_1 + 0,227 X_2$  which means if variable of Financial Management Course (X<sub>1</sub>) and Parent Revenue (X<sub>2</sub>) not change (zero), hence Manage Financial (Y) 39,529 units. If the variable of the Financial Management Course (X<sub>1</sub>) increases 1 (one) unit while the Parent Income (X<sub>2</sub>) is considered fixed, it will increase the Financial Accounting Period by 0.277. If the income variable (X<sub>2</sub>) increases 1 (one) unit while the Financial Management Course (X<sub>1</sub>) is fixed, then the Financial Management Behavior will increase by 0.182 units.

Based on hypothesis testing simultaneously (Test F) obtained value  $F_{count} > F_{table}$  (16,336 > 3,32), which means that there is positive and significant influence between Financial Management Course (X1) and Parent Revenue (X2) to Behavior in Managing Finance (Y) Student Prodi Education Train Stage 2013 State University of Medan.

Based on the test coefficient of determination (R2) obtained R Square number of 52.1%. It shows that the percentage of contribution of independent variable to dependent variable is 52,1% while the rest 47,9% is influenced by other variable outside this research. For more details can be seen in the table below

ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	371.305	2	185.652	16.336	.000 <sup>b</sup>
	Residual	340.937	30	11.365		
	Total	712.242	32			

a. Dependent Variable: Perilaku Mengelola Keuangan

b. Predictors: (Constant), Pendapatan Orang Tua, Mata Kuliah Manajemen Keuangan

## 5. Conclusion

- 1) Based on the result of partial hypothesis test (t test), it can be concluded that  $t_{count} > t_{table}$  (5,117 > 1,697) with alpha ( $\alpha$ ) 0,05 (5%) significance level. Thus the first hypothesis (H1) is accepted, ie there is a positive and significant influence between the Financial Management Course (X1) on Behavior in Managing Student Keunagan (Y).
- 2) Partial test results hypothesis test (Test t), it can be concluded that the value of  $t_{count} > t_{table}$  (4.271 > 1.697). Thus the second hypothesis (H2) is accepted, ie there is a positive and significant influence between Parent Revenue (X2) on Behavior in Managing Finance (Y).
- 3) From the calculation of hypothesis test simultaneously (Test F), it can be concluded that the value of  $F_{count} > F_{table}$  (16.336 > 3.32) with 95% significance level and alpha ( $\alpha$ ) 0.05 (5%). Thus the third hypothesis (H3) is accepted, ie there is a positive and significant influence between Financial Management Course (X1) and Parent Revenue (X2) on Behavior in Managing Finance (Y).
- 4) Based on the calculation of coefficient of determination (R2) obtained R Square of 3.12 or 52.1%. This indicates that the percentage of contribution of independent variable influence (Subject of Financial Management and Parent Income) to dependent variable (Behavior in Managing Student Finance of Education Management Program Satmbuk 2013 State University of Medan equal to 52,1% while the rest 47,9% influenced by variable other than this research.

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# Analyzing Determinants Of Overdue Installment in A Financial Technology Company in Indonesia: Case Study of A Sharia-Based Financial Technology Company in Indonesia

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## Abstract

This research has an objective to find the determinants of overdue installment in a Sharia-based financial technology company. The method used is a multi-linear regression. The sample of data is obtained from one sharia-based financial technology company in Indonesia regarding their borrower's characteristics and credit characteristics from March 2017 until February 2018. The independent variables used in this research are the type of product and type of intermediary since these variables are unique variables and only found in this Sharia-based financial technology company. The independent variables are supported by control variables that consist of product price, monthly installment, tenor, the percentage of margin, monthly income, gender, and type of e-commerce. For the dependent variable used is the overdue installment which is represented by the lateness to pay the installment more than the designated day of payment. After running the multi-linear regression, the independent variables that have a statistically significant relationship to the dependent variable is BMT as a type of intermediary and there is no category of the type of product which significantly determine overdue installment. In addition, control variables which have a significant effect are tenor, female as gender variable, and monthly income. Meanwhile, the remaining variables are proven to be statistically insignificant. The researchers recommends the company to be more cautious about the variables which have significant effect on overdue installment. For future research, it will be better to use data in a longer period of time from this company to get more accurate result and Otoritas Jasa Keuangan as Financial Services Authority in Indonesia should specify the regulations regarding the provision of micro financial institutional which regulate specifically about loan or financing procedures especially in micro financial institutions in order to decrease the rate of the non-performing loan or financing.

**Keywords:** determinants, financial technology, multi-linear regression, overdue installment

## 1. Introduction

Financial technology phenomenon has emerged in Indonesia. Based on Daily Social Financial technology Report 2017, the number of financial technology player in Indonesia is keeping growing. The growth was about 39 per cent in 2016 – 2017. The number of Indonesia Financial technology players is estimated reach 188 companies in which 109 of them has registered in AFTECH, an association of Financial technology players in Indonesia (DailySocial.id, 2017). As of May 2018, there are 51 Indonesian Financial technology players that has registered in OJK (Otoritas Jasa Keuangan , 2018).

This research study about financial technology in the lending sector. A financial technology company that refers to Islamic finance become the subject of this research. Before financial technology exists, Islamic finance actually has offered innovative financial services to the under-served market. However, in fact, the features offered by Islamic finance cannot attract the typical western investor and even part of the Muslim population which prefer to choose a bank in a conventional way. It might occur since rather than giving out personal loans, Islamic banks prefer to invest in an asset or venture directly through the Sharia-specific *musharakah* and *mudarabah* products. This practice can decrease the possibilities to get more customers (Todorof, 2018). In addition, Islamic finance can face the occurrence of the credit gap. It can be shown by the condition that there is only 26 per cent which has a credit from a financial institution even with the fact that 76 per cent of enterprise in MENA has a bank account. The solution must be executed immediately in order to narrow the credit gap which is estimated to be more than US\$ 140 billion (Luna-martinez & Diaz, 2016). Adopting financial technology become one solution that can end the condition stated before. The analysis of sharia-based financial technology suggests that financial technology is particularly appropriate for the needs of Islamic financial services, especially in Islamic countries. The development of sharia-based financial technology is able to increase the services efficiency and Islamic financial inclusion (Todorof, 2018).

Meanwhile, the company that becomes the research subject is a Sharia-based financial technology company in Indonesia that offers installment services. The installment is a sharia-based installment which does not use the interest system, however, the company used *murabahah*. The contract of sale in *murabahah* occur in the case that the cost is known by the buyer, and the buyer agrees to add on top of this cost in a certain amount as a profit to the seller (Boumediene, 2011). The company that has granted the proposed installment will buy the installed products in the online shop and deliver products to the borrowers. The borrowers can make an installment without complicated requirement as well as in financial institutions such as a bank. This condition definitely can attract the customers to make an installment in such kind of a financial technology company compare than conventional financial institutions, because of easiness and time needed to grant the proposed installment. However, the occurrence of a payment default in financial technology company especially in the lending sector cannot be denied. Financial technology company will be more exposed by payment default risk since the company does not apply 5C analysis in assessing proposed installment. The 5C analysis which is an abbreviation for Character, Capacity, Capital, Collateral, and Condition analysis become a guide for the financial institutions for assessing the quality of proposed credits. Payment default occurs when the borrowers are unable to repay the installments in a designated time of payment or deadline for the installment payment that has been approved by the company and the borrowers. Otoritas Jasa Keuangan as The Financial Services Authority in Indonesia reported that at the December 2016 Ratio of Non-Performing Loan (NPL) in the financial technology sector is 0.60 per cent. This ratio was increasing to 0.99 per cent in December 2017 and it can be decreased to 0.53 per cent in April 2018 (Otoritas Jasa Keuangan, 2018). This ratio has not included the ratio of NPL for an unregistered financial technology company in Otoritas Jasa Keuangan. In addition, the Ratio of Non-Performing Loan probably increases as

the activity of financial technology in Indonesia increase. Therefore, along with the willingness of financial technology companies in Indonesia to keep growing and serving financial activities to the customer, the companies should make the Ratio of NPF become the main concern. The objectives of the research are to determine the determinants that can affect the non-performing financing. Since the research subject is a sharia-based company, this study will use a unique variable that only found in this sharia-based company which are the type of product and type of intermediary. In addition, these variables will be supported by control variables.

The study of determinants of a payment default is widely done, either in a financial technology company or financial institutions that offer lending services. However, the study of the determinant of payment default in Sharia-based financial institutions especially in financial technology company has relatively limited literature. According to the previous studies that study about determinant of non-performing loan or non performing financing, there are some variables which commonly come from credit characteristics and borrowers' characteristic which can significantly determine the payment default rate. This research uses a unique variable that only found in this sharia-based company which are the type of product and type of intermediary. In addition, they will be supported by control variables. Control variables are used in order to generate an accurate regression result. They are generated from the variables that commonly used in the previous studies with a related topic.

Type of product represents the products that are being repaid or installed. Type of product can be considered as the purpose of financing since all of the financing offered by the company is consumptive financing or borrower propose financing to buy something to fulfil their needs and/or wants. The variable has 7 categories which are handphone, notebook, camera, home furnishing, electronics, fashion, and others. Type of product is included as one of the variables since this research refers to the previous study conducted by Serrano-Cinca, Gutierrez-Nieto, & Lopez-Palacios (2015) that use the same variable. According to their research, loan purpose is one of the variables that can determine default in the peer-to-peer lending platform in the United States. A loan of purpose variable has 14 categories in their research and there are 10 categories which significantly explain default. The research considers the type of product become one variable since the company can provide complete data of this variable. In addition, both of research has similar subject research which is a financial technology company, so that is the reason why the researchers used a type of product as the independent variable. Type of product is used by this research since according to Council of Indonesia Ulema or Majelis Ulama Indonesia (2017), the products which are sold for sale must be in accordance with Islamic rules. Meanwhile, the company that becomes research subject is a sharia-based company so, it is important for the company to know the purpose of financing by knowing the type of product which will be installed as the company provides installment for the consumptive purpose. Based on the previous study stated before, this research has constructed the hypothesis.

$H_0$  : The type of products insignificantly affect overdue installment

$H_1$  : There is at least one type of products that significantly affect overdue installment

Type of intermediary is an intermediary or channels or connection which is used by borrowers to propose the financing. In that company, the company will approve the financing proposal if the borrowers already have an account in a platform and have joined the group working with the company. There are three kinds of group, which are an agent, BMT (Baitul Maal wa



Tamwil ), and other companies. The agent is built by a group of people headed by one representative. The person which become representative will help the company to assess financing proposal from a borrower who becomes the member of his or her agent. BMT is one of sharia-based microfinance institutions in Indonesia. The member of BMT, which has become a business partner with the company, may apply for financing and the employee of the company which becomes a business partner with this financial technology company as well. Therefore, this variable will have three categories and category of the company will be a base value in the statistic analysis. Type of intermediary is used as one of an independent variable since research conducted by Everett (2015) found that membership in a group with enhanced monitoring is associated with lower default rate, while these three intermediaries are in the form of groups which consist of several people with enhanced monitoring. Enhanced monitoring means that every member can always be monitored by the group itself. Besides that, the reason why the type of intermediary is used as independent variables because the company wants to know among that three channel, what kind of channel that give qualified borrowers or even unqualified borrowers. Based on the previous study stated before, therefore this research has constructed the hypothesis.

$H_0$  : Percentage of margin insignificantly affect overdue installment

$H_1$  : There is at least one type of intermediary that significantly affect overdue installment

Product price is the total price of the product which is being repaid or installed. Product price can be considered as loan amount since the amount of money lent to the borrowers is at the price of the product which is going to be installed. This research adopts product price as one of the variables since some of the previous studies also used loan amount as their independent variables. Lin, Li, & Zheng (2016) and Everett (2015) found that loan amount has a significant relationship to default loan or non-performing loan. Either Everett (2015) or Lin, Li, & Zheng (2016) used financial technology company as their research subject as well as what this research has done. Those previous study found that loan amount significantly affects the default in a financial technology company. Referring to the research conducted by Wulandari, Putri, Kassim, and Sulung (2015), the price of an acquired asset is an important determinant in murabahah contract agreement for the bank since this price will become the reference to set margin, tenor, and the risk associated with the payment. The price should be known by parties involved in murabahah agreement initially in order to make clear contract agreement.

Monthly Installment is the amount of money that has to be paid every month due to the installment. Monthly installment is included as one of the control variables as this research refers to the previous study conducted by Lin, Li, & Zheng (2016). According to their research, monthly installment or monthly payment play a significant role in the defaulted loan. Their study is adopted by this research since both of them have similarities in research subject, which is a financial technology company.

The tenor is loan age or duration of the installment. Referring to the research by Wulandari, Putri, Kassim, and Sulung (2015), intrinsic characteristics become determinant which is critical in the contract model agreement in murabahah and one of the intrinsic characteristics is tenor. That is the reason why tenor is assumed as control variables that can predict the overdue installment besides because the company can provide complete data of tenor.

Percentage of Margin is an additional cost in a certain amount as a profit divided by product

price or the amount of financing. It is called financing rate in research conducted by Sukmana (2015). His research shows that between non-performing financing and financing rate are found to be cointegrated. Therefore, it concludes that there is a long run equilibrium governing the relationship among the variables. The margin is important especially in the Islamic perspective as it describes the murabahah transaction. Both principal and margin should be stated in murabahah contract agreement since it is included as a shaman (price). The margin in murabahah is slightly different with the rate set by conventional banking since in Islamic financing, it is prohibited to set margin more than one time. Margin should be stated initially when the financing will be started. Therefore, the statement before support this research to make a percentage of margin as control variables besides because the research subject is able to provide complete data of this variable.

Monthly income is borrowers' income in a month. This research adopts monthly income as a control variable since there are related previous studies that used income also. One of them is research conducted by Serrano-Cinca, Gutierrez-Nieto, & Lopez-Palacios (2015). Their research obtained data from Lending Club, the biggest US P2P Lending Site. The result shows that annual income can determine the probability of default. According to the research conducted by Wulandari, Kasim, Sulung, and Putri (2016), 5C's specific requirement is applied in the pre-financing process. With the use of 5C analysis, certainly, income becomes an aspect that is taken into consideration as one of the indicators in 5C analysis. Therefore, that is the reason why monthly income is commonly used for credit assessment.

Gender will have two categories, which are female and male. Male category becomes a base value in the statistic analysis. Gender already used by the previous study to check the determinant of credit default. Empirical result conducted by Lin, Li, & Zheng (2016) show that gender plays a significant role in loan default. According to their research, the female has a negative relationship to the credit default. This research adopt research conducted by Lin, Li, & Zheng (2016) since both of them have similar research subject which is a financial technology company.

Type of e-commerce means e-commerce used by borrowers to buy the products which are going to be installed. According to the previous studies, there is no widely known model that uses a type of e-commerce variable to determine payment default in a financial technology company. It might be caused by the business model of financial technology which is not all of them work or cooperates with e-commerce. However, previous research conducted by Wang (2001) study about how demographic characteristic, cognitive characteristic, and psychological characteristics affect attitude individual/organization toward online shopping. The research found that perceived risk on online shopping, which represents a cognitive characteristic, have a negative effect on attitude toward online shopping. Similarly, risk-taking propensity, which represents a psychological factor, is positively associated with attitude toward online shopping. Even though there is no previous study that reveals the relationship between the type of e-commerce chosen for non-performing financing in a financial technology company, this research is going to use a type of e-commerce as one of an independent variable since the company as a research subject is able to provide complete data on e-commerce used by borrowers. By using this variable, the company hopes that the result will provide an overview of which e-commerce that contribute qualified borrower and which company do not.

The overdue installment is the number of days passed where the borrowers could not accomplish their obligation to pay the installment. This research used overdue installment as the dependent variable, a variable being tested or measured by changes in independent variables. The overdue installment is used as a dependent variable since the company as a research subject in this research can provide the data about the number of days passed by borrowers in paying the installment. The company is also still a small company that was established for only a year and the company will find the difficulty in terms of availability of money if borrowers pay the installment late even though it is less than 90 days. Therefore, the overdue installment in days is used as a dependent variable in this research and multi-linear regression is used as a method since the dependent variable is a continuous variable.

## **2. Method**

The subject of this research is a sharia-based financial technology company in Indonesia. This research used a quantitative approach which is begun with problem identification. This research studied the literature which is acquired from the journal, internet sources, report, and book. After that, the researcher collect primary data which is installment data provided by the sharia-based financial technology company. After the data has been gathered, the data should be analyzed by using multi-linear regression. The outcome of the regression are going to be discussed in order to generate the conclusion and recommendation .

### *2.1 Data Collection*

The research used primary data which come from online installment data provided by the sharia-based ifnancial technology company in Indonesia which become the reseach subject. The data is included as primary data since, the reseacher obtain data from database of the company which is confidential and the company does not publish the data in online source. The data which is going to be analyzed is all of online installment which is provided by the company from March 2017 until February 2018. The amount of online installment observed in this research is 290 observations. The independent variables and dependent variable can be identified on each of online installments.

### *2.2 Data Analysis*

Multi-linear regression is used for statistical method to analyze the data. Before, conducting multi-linear regression, there are some of classical assumption which must be considered. The classical assumptions are normality test, multicollinearity test, heteroscedasticity test, and auto-correlation test. This research did not apply normality test since since the sample of data in a research exceed 100 observations, so normality test is not necessary. Autocorrelation also did not be used by this research as the data of this research is cross-sectional data while autocorrelation case commoly occur in time series data (Gujarati, 2009). This research used two ways to test multicollinearity, those are using VIF test and correlate test. As the research had a relative high number of observations, this research applied Breusch-Pagan Test to check the heteroscedasticity. Finally, multi-linear regression was used to build the linear equation and found out the relationship between independent variables and dependent variable.

### *2.3 Operation of Variables*

This research has two variables which are important to be determined. Those are independent variables and dependent variables. The dependent variable is variable that being tested or it is

influenced by the independent variables. Meanwhile, the independent variable is the variable that give impact to the dependent variable. There are 2 independent variables in this research, which are the type of product and type of intermediary, while besides these variables are included as control variables. The control variables are product price, monthly installment, tenor, the percentage of margin, monthly income, gender, and type of intermediary. Meanwhile, the dependent variable is the overdue installment. On the basis of the regression result, this research can obtain the findings by constructing the model which is considered from previous studies conducted by Nasih (2013), Sukmana (2015), Lin, Li, and Zheng (2016), Serrano-Cinca, Gutierrez-Nieto, and Lopez-Palacios (2015), Everett (2015), and Suciati (2008).

$$y = c + \beta_1 (\text{type of product}) + \beta_2 (\text{type of intermediary}) + \beta_3 (\text{control variables}) \quad [1]$$

Where :

$Y_i$  = Maximum Overdue Date

c = constant, expected value where all of independent variables equal zero

$\beta_i$  = The coefficient for each independent variables

Below is the description of every independent variable consist of the main independent variables and control variables. The main independent variable is the type of product and type of intermediary, while the remains are control variables.

Table 4 TABLE OF VARIABLES

Independent Variables	Definition	Type of Variables	Category
Type of products	Products that are being repaid or installed	Binary/Dummy	<ul style="list-style-type: none"> <li>• Handphone</li> <li>• Notebook</li> <li>• Camera</li> <li>• Home Furnishing</li> <li>• Electronics Accessories</li> <li>• Fashion</li> <li>• Others ( Basis Value)</li> </ul>
Type of intermediary	Intermediary used to propose credit or installment which is in the form of groups consist of several people as a member.	Binary/Dummy	<ul style="list-style-type: none"> <li>• Agent</li> <li>• BMT</li> <li>• Company (Basis Value)</li> </ul>
Product Price	The price of goods that are being repaid or installed	Continuous	-
Monthly Installment	The amount of money that has to be paid every month	Continuous	-
Tenor	Duration of installment	Continuous	-
Percentage of margin	Percentage of margin to the goods price	Continuous	-
Monthly income	Borrowers' income every month	Continuous	-

Gender	Borrowers' gender	Binary/Dummy	<ul style="list-style-type: none"> <li>• Female</li> <li>• Male (Basis Value)</li> </ul>
E-Commerce	E-commerce used by borrowers to buy the goods that are being repaid or installed	Binary/Dummy	<ul style="list-style-type: none"> <li>• Tokopedia</li> <li>• Lazada</li> <li>• Bukalapak</li> <li>• Blibli</li> <li>• Others (Basis Value)</li> </ul>

### 3. Results

Since some of the independent variables which are product price, monthly installment, and monthly income, have multicollinearity, then the regression analysis was separated become three models. Tenor and percentage of margin also had multicollinearity, so the percentage of margin was removed from the regression model. Below is the table of three regression model analysis with their different variable.

Table 5 TABLE OF VARIABLES ON EVERY MODEL

Variables	Model 1	Model 2	Model 3
<b>Dependent</b>	Overdue Installment	Overdue Installment	Overdue Installment
	Type of Products	Type of Products	Type of Products
	Type of Intermediary	Type of Intermediary	Type of Intermediary
	Control Variables:	Control Variables :	Control Variables :
<b>Independent Variables</b>	<ul style="list-style-type: none"> <li>• Product Price</li> <li>• Tenor</li> <li>• Gender</li> <li>• Type of E-Commerce</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly Installment</li> <li>• Tenor</li> <li>• Gender</li> <li>• Type of E-Commerce</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly Income</li> <li>• Tenor</li> <li>• Gender</li> <li>• Type of E-Commerce</li> </ul>

This research build three regression model with the same independent variables which are the type of product and type of intermediary, and same dependent variables. However, the control variables used in every model is different. The three regression models are made since there is multicollinearity between variables.

#### 3.1 Model 1

The first regression model consists of 6 independents variables and 1 dependent variable.

Table 6 TABLE OF VARIABLES OF MODEL 1

Dependent Variable	Overdue Day
	<ul style="list-style-type: none"> <li>• Type of Product : Handphone, Notebook, Camera, Home Furnishing, Electronics Accessories, Fashion, Others (Basis Value).</li> <li>• Type of Intermediary : Agent, BMT, Company (Basis Value).Products Price</li> </ul>

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Independent Variable	Control Variables :
	<ul style="list-style-type: none"> <li>• Product Price</li> <li>• Tenor</li> <li>• Gender : Female , Male (Basis Value)</li> <li>• Type of E-Commerce : Tokopedia, Lazada, Bukalapak, Blibli, Other (Basis Value)</li> </ul>

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VIF Test and Correlate test proved that there is no multicollinearity between independent variables. However, this regression model has heteroscedasticity, therefore regression model needed to be estimated using *robust standard error* on STATA.

From the table, we could see the result of F-test is F(15, 274) with 2.80 and Prob>F with 0.0005. This means the overall regression model is statistically significant. It indicates that the regression model could be used to predict the dependent variable. Meanwhile, the result for R-squared is 0.1356 or 13.56%, this explain the total variation of this regression model is 13.56%. This is considered small, due to there is another factors that could affect overdue installment other than what is used in this research.

Table 7 TABLE OF F-TEST RESULT ON MODEL 1

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<b>Number of obs</b>	290
<b>F (15,274)</b>	2.74
<b>Prob &gt; F</b>	0.0006
<b>R-squared</b>	0.1356
<b>Root MSE</b>	11.312

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Table 8 TABLE OF REGRESSION RESULT OF MODEL 1

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<b>Overdue</b>	<b>Coef</b>	<b>Robust Std. Err.</b>	<b>T</b>	<b>P&gt; t </b>
Handphone	1.553338	3.400838	0.46	0.648
Notebook	5.977326	4.561215	1.31	0.191
Camera	-0.72269	3.937362	-0.18	0.855
Home Furnishing	0.508676	4.669619	0.11	0.913
Electronics Accessories	-2.00048	3.344202	-0.6	0.55
Fashion	-1.08119	3.433202	-0.31	0.753
Agent	0.527323	1.517186	0.35	0.728
<b>BMT</b>	<b>7.273223</b>	<b>2.831527</b>	<b>2.57</b>	<b>0.011</b>
Product Price	9.53E-08	4.23E-07	0.22	0.822
<b>Tenor</b>	<b>0.421388</b>	<b>0.170632</b>	<b>2.47</b>	<b>0.014</b>

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<b>Female</b>	<b>-4.49592</b>	<b>1.332665</b>	<b>-3.37</b>	<b>0.001</b>
Tokopedia	2.484534	1.902504	1.31	0.193
Lazada	3.821177	2.185037	1.75	0.081
Bukalapak	1.849716	1.930667	0.96	0.339
Blibli	1.5883	2.463042	0.64	0.52
<u>_cons</u>	-0.44208	3.870102	-0.11	0.909

According to the result in Table 5, the multi-linear equation for this regression model is

$$\begin{aligned}
 y = & 1.553338 (\text{handphone}) + 5.977326 (\text{notebook}) - 0.72269 (\text{camera}) \\
 & + 0.508676 (\text{home furnsihsing}) - 2.00048 (\text{electronics accessories}) \\
 & - 1.08119 (\text{fashion}) + 0.527323 (\text{agent}) + \mathbf{7.273223} (\mathbf{BMT}) + 9.53e \\
 & - 08 (\text{product price}) + \mathbf{0.421388} (\mathbf{tenor}) - \mathbf{4.49592} (\mathbf{female}) \\
 & + 2.484534 (\text{tokopedia}) + 3.821177 (\text{lazada}) + 1.849716 (\text{bukalapak}) \\
 & + 1.5883 (\text{blibli}) - 0.44208
 \end{aligned}$$

[2]

According to the result of equation 2, significant variables are BMT, tenor, and female. For type of intermediary, BMT are proven has statistically significant relationship to the overdue installments. Compare than company as basis value, in case that the borrowers who propose financing through BMT increase, the maximum overdue day increase as much as 7.27 days. The coefficient of tenor is 0.421388. It can implies when tenor increase by one month, overdue day is also increasing 0.421388 day. Meanwhile for gender, male category become the basis category of gender. In the regression model, female has negative relationship, meaning that compare than male, in case that the female borrowers who propose financing increase, the maximum overdue decrease 4.50 days. The remains variables are not significantly affect overdue installment.

### 3.2 Model 2

The second regression model consists of 6 independents variables and 1 dependent variable. The differences between first model and second model is product price which is replaced by monthly installment.

Table 9 TABLE OF VARIABLES OF MODEL 2

<b>Dependent Variable</b>	Overdue Day
<b>Independent Variable</b>	Type of Products : Handphone, Notebook, Camera, Home Furnishing, Electronics Accessories, Fashion, Others (Basis Value). Type of Intermediary : Agent, BMT, Company (Basis Value)
<b>Control Variable</b>	Control Variables : • Monthly Installment

- 
- Tenor
  - Gender, Female, Male (Basis Value)
  - Type of E-Commerce : Tokopedia, Lazada, Bukalapak, Blibli, Others (Basis Value)
- 

VIF Test and Correlate test proved that there is no multicollinearity between independent variables. However, this regression model has heteroscedasticity, therefore regression model needed to be estimated using *robust standard error* on STATA.

From table, we could see the result of F-test is F(15, 274) with 2.80 and Prob>F with 0.0005. This means the overall regression model is statistically significant. It indicates that the regression model could be used to predict the dependent variable. Meanwhile the result for R-squared is 0.1356 or 13.56%, this explain the total variation of this regression model is 13.56%. This is considered small, due to there is another factors that could affect NPF other than what is used in this research.

Table 10 TABLE OF F-TEST RESULT OF MODEL 2

<b>Number of obs</b>	290
<b>F (15,274)</b>	2.74
<b>Prob &gt; F</b>	0.0006
<b>R-squared</b>	0.1356
<b>Root MSE</b>	11.312

Below is the result of second regression model.

Table 11 TABLE OF REGRESSION RESULT OF MODEL 2

<b>Overdue</b>	<b>Coef</b>	<b>Robust Std. Err.</b>	<b>T</b>	<b>P&gt; t </b>
Handphone	1.530517	3.421095	0.45	0.655
Notebook	6.012623	4.635665	1.3	0.196
Camera	-0.7036427	3.986142	-0.18	0.86
Home Furnishing	0.538616	4.690902	0.11	0.909
Electronics Accessories	-2.001449	3.34728	-0.6	0.55
Fashion	-1.052144	3.453296	-0.3	0.761
Agent	0.5303922	1.522993	0.35	0.728
<b>BMT</b>	<b>7.262832</b>	<b>2.843058</b>	<b>2.55</b>	<b>0.011</b>
Product Price	0.000000563	0.00000258	0.22	0.827
<b>Tenor</b>	<b>0.4479356</b>	<b>0.1931514</b>	<b>2.32</b>	<b>0.021</b>



<b>Female</b>	<b>-4.486824</b>	<b>1.331507</b>	<b>-3.37</b>	<b>0.001</b>
Tokopedia	2.496569	1.897177	1.32	0.189
Lazada	3.818125	2.199405	1.74	0.084
Bukalapak	1.837638	1.921295	0.96	0.34
Blibli	1.531119	2.451713	0.62	0.533
<u>_cons</u>	-0.6446685	4.187436	-0.15	0.878

According to the result in Table 8, the multi-linear equation for this regression model is

$$\begin{aligned}
 y = & 1.530517 (\text{handphone}) + 6.012623 (\text{notebook}) - 0.7036427 (\text{camera}) \\
 & + 0.538616 (\text{home furnishing}) - 2.001449 (\text{electronics accessories}) \\
 & - 1.052144 (\text{fashion}) + 0.5303922 (\text{agent}) + \mathbf{7.262832 (BMT)} \\
 & + 5.63 \times 10^{-7} (\text{monthly installment}) + \mathbf{0.4479356 (tenor)} - \mathbf{4.486824 (female)} \\
 & + 2.496569 (\text{tokopedia}) + 3.818125 (\text{lazada}) + 1.837638 (\text{bukalapak}) \\
 & + 1.531119 (\text{bibli}) - 0.6446685
 \end{aligned}$$

[3]

According to the result of equation 3, significant variables are tenor, BMT, and female. BMT is proven has statistically significant relationship to the overdue installments. Compare than company as basis value, in case that the borrowers who propose financing through BMT increase one, the maximum overdue day increase 7.26 days. The coefficient of tenor is 0.4479356. It can implies when tenor increase by one month, overdue day is also increasing 0.4479356 day. Meanwhile for gender, male category become the basis category of gender. Meanwhile, female has negative relationship, meaning that compare than male, in case that the female borrowers who propose financing increase, the maximum overdue decrease as much as 4.49 days.

### 3.3 Model 3

The third regression model consist of six independent variables and a dependent variable. The difference between third model and first or second variable is product price or monthly installment which is replaced by monthly income.

Table 12 TABLES OF VARIABLES OF MODEL 3

<b>Dependent Variable</b>	<b>Overdue Day</b>
	Type of Products : Handphone, Notebook, Camera, Home Furnishing, Electronics Accessories, Fashion, Others (Basis Value).
	Type of Intermediary : Agent, BMT, Company (Basis Value).Products Price
<b>Independent Variable</b>	Control Variables :
	<ul style="list-style-type: none"> <li>• Monthly Income</li> <li>• Tenor</li> <li>• Gender : Female, Male (Basis Value)</li> </ul>

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- Type of E-Commerce : Bukalapak, Blibli, Lazada, Tokopedia, Others (Basis Value)
- 

VIF Test and Correlate test proved that there is no multicollinearity between independent variables. However, this regression model has heteroscedascity, therefore regression model needed to be estimated using *robust standard error* on STATA.

From table, we could see the result of F-test is F(15, 274) with 3.28 and Prob>F with 0.0000. This means the overall regression model is statistically significant, that indicates that the regression model could be used to predict the dependent variable. Meanwhile the result for R-squared is 0.1505 or 15.05%, this explain the total variation of this regression model is 15.05%. This is considered small, due to there is another factors that could affect NPF other than what is used in this research.

Table 13 TABLE OF F-TEST RESULT OF MODEL 3

Number of obs	290
F (15,274)	3.28
Prob > F	0.0000
R-squared	0.1505
Root MSE	11.214

Below is the regression result of model 3.

Table 14 TABLE OF REGRESSION RESULT OF MODEL 3

<b>Overdue</b>	<b>Coef</b>	<b>Robust Std. Err.</b>	<b>T</b>	<b>P&gt; t </b>
Hand phone	2.349366	3.285575	0.72	0.475
Notebook	7.334442	4.673194	1.57	0.118
Camera	-0.302984	4.027107	-0.08	0.94
Home Furnishing	1.269634	4.476245	0.28	0.777
Electronics Accessories	-2.012883	3.284841	-0.61	0.541
Fashion	-1.193933	3.347189	-0.36	0.722
Agent	-0.5078128	1.54901	-0.33	0.743
<b>BMT</b>	<b>6.397037</b>	<b>2.873752</b>	<b>2.23</b>	<b>0.027</b>
<b>Tenor</b>	<b>0.393958</b>	<b>0.1670027</b>	<b>2.36</b>	<b>0.019</b>
<b>Monthly Income</b>	<b>-4.80 x 10<sup>-7</sup></b>	<b>1.42E-07</b>	<b>-3.38</b>	<b>0.001</b>
<b>Female</b>	<b>-4.87871</b>	<b>1.338893</b>	<b>-3.64</b>	<b>0.000</b>

Tokopedia	1.421059	1.713028	0.83	0.408
Lazada	2.734115	2.095577	1.3	0.193
Bukalapak	0.8831124	1.79521	0.49	0.623
Blibli	1.04383	2.336962	0.45	0.655
<u>_cons</u>	2.874755	3.822242	0.75	0.453

According to the result in Table 11, the multi-linear equation for this regression model is

$$\begin{aligned}
 y = & 2.349366 (\text{handphone}) + 7.334442 (\text{notebook}) - 0.302984 (\text{camera}) + 1.269634 (\text{home furnishing}) \\
 & - 2.012883 (\text{electronics accessories}) - 1.193933 (\text{fashion}) - 0.5078128 (\text{agent}) \\
 & + \mathbf{6.397037} (\mathbf{BMT}) - \mathbf{4.80} \times 10^{-7} (\mathbf{monthly\ income}) + \mathbf{0.393958} (\mathbf{tenor}) \\
 & - \mathbf{4.87871} (\mathbf{female}) + 1.421059 (\text{tokopedia}) + 2.734115 (\text{lazada}) \\
 & + 0.8831124 (\text{bukalapak}) + 1.04383 (\text{bibli}) + 2.874755
 \end{aligned}$$

[4]

According to the result from equation 4, for type of intermediary, there are 2 categories in this regression model which are agent and BMT, while company category as basis category. BMT has statistically significant relationship to the overdue installments. It has coefficient 6.397037, meaning that compare to company, if the borrowers who propose financing through BMT increase, so the maximum overdue increase as much as 6.40 days. The coefficient of monthly income is  $4.80 \times 10^{-7}$ . This result indicates that every ten million of increase in monthly income, the maximum overdue days experienced increase of 4.80 days also. Meanwhile the coefficient of tenor is 0.393958. This result indicates that every one month of increase in tenor, the maximum overdue day is being affected as much as 0.393958 day. In this regression model, male category become the basis category of gender. For female, it has coefficient  $-4.87871$ , meaning that compare to male, if female borrowers increase, so the maximum overdue decrease 4.88 days.

#### 4. Discussion

According to the three regression model, there is no category in type of product which is significant to the overdue installment. Therefore, based on this variable, there is no enough evidence to reject  $H_0$ . This result is inconsistent to the research performed by Serrano-Cinca, Gutierrez-Nieto, and Lopez-Palacios (2015). Referring to their findings, there are more than one category in loan purpose which are significantly affect to the non-performing loan. The different result can occur might be caused by the category between these two variables, type of product or loan purpose, which are not same, even though both variables describe the same thing which is purpose of financing or loan. Meanwhile BMT as type of intermediary is significantly affect the overdue installment. BMT has positive effect to overdue installment with different coefficient in these three models. It means that compare than the company as basis value, in case that the borrowers who propose financing through BMT increase, the maximum overdue day increase as much as the coefficient in regression result. Therefore,  $H_0$  is

rejected. The company should be aware of it. Even though a partnership between this company and BMT can make the company get more borrowers, but on the other hand, some of the borrowers who propose financing through BMT cannot pay an installment on time. Therefore, this partnership must be reviewed by the company since the presence of partnership should give benefit to all of the parties involved. BMT can be said as micro financial institutions or LKM (Lembaga Keuangan Mikro) since BMT conduct activities of business development and community empowerment (Otoritas Jasa Keuangan, 2014). As a financial authority institution in Indonesia, Otoritas Jasa Keuangan (OJK) has made the rules about micro financial institution supervision which regulate how to supervise those institutions. However, OJK does not specifically explain how the institutions should conduct an appraisal of credit or financing. Therefore, until now every micro financial institution have their own way to assess the credit or financing proposed by their clients. This condition might be an answer why the borrower who proposes financing through BMT have a higher risk.

Table 15 REGRESSION RESULT OF THREE REGRESSION MODELS

	Model 1	Model 2	Model 3
Type of Product			
Hand phone	1.553338	1.530517	2.349366
Notebook	5.977326	6.012623	7.334442
Camera	-0.72269	-0.7036427	-0.302984
Home Furnishing	0.508676	0.538616	1.269634
Electronics Accessories	-2.00048	-2.001449	-2.012883
Fashion	-1.08119	-1.052144	-1.193933
Product Price	9.53E-08		
Monthly Installment		5.63 x 10 <sup>-7</sup>	
Tenor	0.421388	0.4479356	0.393958
Monthly Income			-4.80 x 10 <sup>-7</sup>
Type of Intermediary			
Agent	0.527323	0.5303922	-0.5078128
BMT	7.273223	7.262832	6.397037
Gender			
Female	-4.49592	-4.486824	-4.87871
Type of E-Commerce			
Tokopedia	2.484534	2.496569	1.421059

Lazada	3.821177	3.818125	2.734115
Bukalapak	1.849716	1.837638	0.8831124
Blibli	1.5883	1.531119	1.04383
Cons	-0.44208	-0.6446685	2.874755

Referring to the first and second, the control variables which significantly determine overdue installment are tenor and female as gender. However, there is additional significant variable which is proven by third model regression. The variable is monthly income. In three regression model, tenor has positive relationship to the overdue installment. This result indicates that every one month increase of tenor, the overdue installment increase. This is inconsistent with the research conducted by Akhwa-Sekyi (2016). The research found that tenor significantly gives negative effect to non-performing financing. It means that the shorter the tenor, the harder it is for the borrower to pay the installment. The difference might be caused by the different type of research object since the research object of Akhwa-Sekhyi's research is the business customer of a bank in Ghana while in this research, the object of the research is the borrower who wants to get financing for consumptive purposes. It is reasonable that for business customer who has longer tenor has lower risk since as time goes by there is possibilities that their business become more stable so the customer will be more capable to pay installment on time. On the other hand, this research's findings are consistent with the research performed by Suciati (2008). The research that conducted by Suciati (2008) showed that tenor has a significant effect. The similar result occur might be caused by both of the research subject is company which provide loan or financing for consumptive purpose. In addition, tenor has positive relationship might be caused by uncertainty in the future. The uncertainty occurs because of sudden need or uncertain economic condition, for example, the price of fuel increase, the borrower is terminated, or other conditions that make the borrower cannot pay installment.

Another control variable that has a significant effect on dependent variable is monthly income, Monthly income has negative relationship to overdue installment. This finding is consistent with the research conducted Serrano-Cinca, Gutierrez-Nieto, & Lopez-Palacios (2015) that income has significant effect to explain default loan. The difference is that the research which is conducted by Serrano-Cinca, Gutierrez-Nieto, & Lopez-Palacios (2015) used annual income as the variable while this research used monthly income. The research performed by Suciati (2008) and Bachman, et al., (2011) also found that income or salary has significant effect to determine default loan. This significantly toward overdue installment is a reasonable result. According to Beckman (1962) capacity in credit indicate the capability to pay when a debt is due and the capability of the borrower to pay the debt can be measured by his or her income. Therefore, in the case of monthly income is getting higher, the capacity of borrowers to pay the installment is better and vice versa. The borrowers who have higher income also will not be overwhelmed by uncertain economic condition, for instance rising of the basic needs' price because they have more chance to do some investment and benefits which generated from investment can be used to face the uncertainty in the future.

Female as a control variable is also significantly affect the overdue installment. The relationship

between overdue installment and female is negative. It indicates that compared to male, if female borrowers increase, so the maximum overdue will decrease as much as coefficient generated from regression result. These findings are consistent with the findings get by Lin, Li, & Zheng (2016). The research also shows a negative statistical significance for female and non-performing loan. This consistency might be caused since both of the research investigate in the financial technology industry. Female has lower risk since commonly, male acts as a head of the family, whose wife, children, parents, brothers, or sisters depend on him. Moreover, the borrower only has middle or lower income, but some of his family still depend on him. It can make the capacity of the borrower to pay the installment is getting lower and the probability to have a default is higher. Therefore, assessing the borrowers' family condition become important before giving loan or financing to the borrowers. In case of assessing credit, creditor usually uses 5C Principles that consist of character, capacity, capital, collateral, and condition.

## **5. Conclusion and Recommendation**

The objective of this research is to find the determinants of non-performing financing in a sharia-based financial technology company that become the object of this research. The independent variables used are type of product and type of intermediary. The independent variables are supported by control variables that consist of product price, monthly installment, tenor, monthly income, gender, and type of e-commerce. The independent variables are used since the variables are unique and only found in this sharia-based fintech (financial technology) company and it refers to the previous studies. The dependent variable is overdue installment which is represented by the lateness to pay the installment more than the designated day of payment. The variables are obtained from the data which is provided by the company as the subject of this research. The research build three regression models which each of model use different of control variables.

### *5.1 Conclusion*

Based on first regression model, there are one independent variable and two control variables which are statistically significant to dependent variables. Those are:

- BMT (Baitul Maal wa Tamwil) which has positive relationship to dependent variable. Therefore,  $H_0$  is rejected.
- tenor which has positive relationship to dependent variable
- Female which has negative relationship to dependent variable

Meanwhile the remaining variables are not statistically significant to dependent variable.

According to second regression model, there are one independent variable and two control variables which are statistically significant to dependent variables. Those are:

- BMT (Baitul Maal wa Tamwil) which has positive relationship to dependent variable. Therefore,  $H_0$  is rejected.
- Tenor which has positive relationship to dependent variable
- Female which has negative relationship to dependent variable

Meanwhile the remaining variables are not statistically significant to dependent variable.

The result of third regression model shows that there are one independent variable and three control variables which are statistically significant to dependent variables. Those are:

- BMT (Baitul Maal wa Tamwil) which has positive relationship to dependent variable.

Therefore,  $H_0$  is rejected.

- Tenor which has negative relationship to dependent variable
- Monthly income which has positive relationship to dependent variable
- Female which has negative relationship to dependent variable

Meanwhile the remaining variables are not statistically significant to dependent variable.

Aside from the factors analyzed in this research, there are also other factors that could affect the ability of borrower to fulfil their installment. Borrower assessment such as grade or sub-grade have proven the occurrence of default loan. More borrower characteristic such as housing situation, marital status, education level and working place also have relationship to the probability of default loan. Credit history such as default history and revolving line utilization has explained the probability of default loan.

### 5.2 Recommendation

The suggestion that I could derive from this research is :

- 1) The company needed to be more cautious to the borrower who has higher tenor and/or lower monthly income. This could be done also to the borrower who propose financing through BMT. Female borrowers should have higher score compare than male when proposing the financing. Overall all of the variables which have significant effect to the non-performing financing must have higher weight on assessing the borrowers.
- 2) For future research, it will be better to use data in longer period of time from this company instead of only using data for a year. Even though the reason why this research used data for one year because the company still operate for only one year. Using data in longer period of time will create the result that cover a biggest set of population and be more accurate. Trying to use more independent variables is also recommended to observe greater picture among the determinants of non-performing financing on a financial technology company.
- 3) Otoritas Jasa Keuangan as Financial Services Authority in Indonesia should specify the regulations regarding the provision of micro financial institutional which regulate specifically about loan or financing procedures especially in micro financial institutions in order to decrease the rate of the non-performing loan or financing in those institutions.

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# Foreign Related Parties Transactions as Tax Avoidance Strategy in Indonesia: The Role of Corporate Governance

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## Abstract

This study researches on tax avoidance practice through foreign related party transaction and the effect of corporate governance on the relationship between the shareholder's tax expenses and foreign related party transaction. Different from other studies that use related party transaction entirely, this study uses a foreign related party transaction. Related party transaction will be beneficial only if it is done on the company with different tax rate. If it is done in Indonesia that has a flat income tax rate, foreign related party transaction can be used to avoid tax. Using data from 301 listed companies in Indonesia, this study finds that tax avoidance in Indonesia is undertaken by increasing foreign related party transaction. The use of foreign related party transaction can tell more about tax avoidance strategy compared to related party transaction in totally. The related party transaction to a country with a lower tax rate can be one of tax avoidance strategy in Indonesia to get a tax benefit. This study also finds that the corporate governance can weaken the effect of the shareholder's tax expenses on the related party transaction meaning to lower the tax avoidance practice through the mechanism of related foreign party transaction.

**Keywords:** tax avoidance, tax expenses, related party transaction, marginal tax rate, corporate governance.

## 1. Introduction

Economic growth makes related party transaction (RPT) increased, especially in developing countries. PriceWaterhouseCoopers (2011) estimated that nowadays, 2/3 from the happening transactions in developing countries are RPT linked to transfer pricing scheme. Zhang (2008) stated that the increase in RPT has happened continuously with increasing number. Along with the increasing of RPT, Fama & French (2001) reported that there was a decreasing dividend payment by the government.

Su *et al.* (2014) proved that a RPT correlated negatively with company dividend payment. If the correlation of related party transaction is high, commonly the dividend will be paid low and vice versa. Disappearing dividend trend and the increasing of related party transactions indicate changes in the pattern of corporate cash flow to shareholders. The use of a RPT will affect the tax of the company if the transactions done are on two different tax rates, so the tendency used in the tax avoidance is a transaction to another country with different tax system and tax rates. The trend of increasing RPT through transfer pricing schemes in developing countries can be

caused by the concentrated company ownership. This kind of ownership in the developing countries causes the major shareholder to do RPT that may benefit them. RPT is used by the major shareholders to transfer corporate wealth to them and disadvantage the minor shareholders (Cheung *et al.*, 2006; Jian & Wong, 2004; Kohlbeck & Mayhew, 2004). This is also suitable with the tunneling concept (Johnson *et al.*, 2000) which stated that a family company prefers transactions with their own company to transfer assets and corporate wealth to themselves. As the major shareholders, they can easily influence management policy. It leads into a great opportunity for expropriation for the major shareholder. Expropriation can be one way that shareholders use to earn cash and avoid taxes. One of them is through a RPT.

The phenomenon of transfer pricing and tax avoidance occurs almost all over the world. However, in developing countries, the problem of transfer pricing becomes more complex because of the weak tax administration system and the inadequate database control (PriceWaterhouseCoopers, 2011). McKinsey Global Banking Pool data published by the Indonesian Center for Business Data (PDBI) shows that the funds of Indonesian people in Singapore reached 3,000 trillion rupiahs. It is almost 2 times the amount of Indonesian Budget (APBN).

As a developing country, Indonesia also has a concentrated ownership on family Claessens *et al* (2000). This ownership increases the chance of expropriation associated with type II agency conflict. Hence, it becomes an interesting study to do since the most happening of expropriation is through RPT and transfer pricing (Cheung *et al.*, 2006; Su *et al.*, 2014). However, research on related party transaction is still rarely done in Indonesia (Utama *et al.*, 2010). A large number of Indonesians funds in foreign countries is one tendency indication of transfer pricing through related party transaction in Indonesia. The case of Panama Papers also shows that this practice is done not only in Indonesia but also around the world. In addition, several major tax cases such as PT Asian Agri Resources's tax arrears also show that tax avoidance through RPT in transfer pricing schemes is a real challenge to taxation in Indonesia (Dharmasaputra, 2013). This study will answer the question of corporate tax avoidance strategy in Indonesia through foreign related party transaction.

Not all RPT are conducted for tax purposes. RPT can be both abusive and efficient (Utama *et al.*, 2010). RPT can be done for the company's efficiency as well as other non-tax reasons. Tax benefit on related party transaction can only occur if the company transfers the profit to the company with lower tax rates. On the case in Indonesia which has a flat tax rate, the RPT will benefit if it is done overseas especially to those with different tax rates. This study will examine the effect of shareholder's tax expenses on foreign RPT.

Different from other studies, the measurement of the shareholder's tax expenses of this study used two approaches (i) the overall corporate tax expenses (corporate tax expenses and dividend tax expenses), and (ii) the relative tax expenses which is the ratio of tax rate in Indonesia and the tax rate on the country in which the RPT is done. It should be noted that the differences in taxes that can be caused by this foreign related party transaction.

An adequate corporate governance practices will also reduce agency conflict types I and II, thereby reducing the possibility of conducting RPT that could disadvantage the minor shareholders. Nevertheless, as far as researchers' concern, a study that links corporate governance as a moderation of the relationship between the tax expenses and RPT is still rare.

Commonly, testing the role of corporate governance is only done using a macro size such as investor protection law or only relying on the quality of auditors, audit committees and the like. It certainly can not provide an adequate result of study because of the size of corporate governance that is only able to cover a small part of corporate governance.

This study used corporate governance measurement with ASEAN Corporate Governance Scorecard approach at an enterprise level. The use of corporate governance measurement with the company's approach is expected to provide better information than using the country-level approach. This is due to the differences in governance which is also taking place at the company level, not only at the country level. Each company tends to have different corporate governance practice so the use of corporate governance at the country level will ignore the characteristics of this corporate difference. In addition, the use of the ASEAN Corporate Governance Scorecard which contains items on sound corporate governance practices will provide better information than merely measuring investor protection.

This study also examined the role of corporate governance in tax avoidance practices through the mechanism of foreign RPT. Tax avoidance through RPT is likely to have high tax risks, with strictly enforced legal arrangements. The Government has issued various regulations related to related party transaction such as regulations on Transfer Pricing Document as well as Article 18 on Indonesian Law about Income Tax. In addition, the regulation of common transactions is also done strictly by the government. Tax avoidance through a RPT will also only benefit the major shareholder, and often neglects the minor shareholders to be in conflict with the principles of good corporate governance. This study will provide empirical evidence related to tax avoidance through foreign RPT of as well as the role of corporate governance in the practice of tax avoidance.

### *1.1. Tax Avoidance and Related Party Transaction*

RPT through international transfer pricing schemes is one of the mechanisms by multinational corporations to avoid income taxes (Chan *et al.*, 2010). A survey conducted by Ernst & Young (2013) found that since 1995, the issue of transfer pricing by a multinational company has become a major issue in international taxation. Pappas (2012) conducted a study in China and found that tax avoidance through RPT with transfer pricing scheme resulted in losses in China up to US\$ 4.7 billion annually.

The use of transfer pricing method can avoid the company from double taxation. Companies can also artificially distribute profits from companies in a country with a high tax rate to companies in countries with low tax rate (PriceWaterhouseCoopers, 2011). Mostly, the practice of transfer pricing for tax avoidance is difficult to detect because of its complexity. As a means of enhancing the company's global advantage, transfer pricing practices affect the company's shares through profits, dividends, stock rate and capital returns (Sikka & Willmott, 2010).

In Indonesia, the embezzlement cases resulting from related party transaction happen quite often. One of the most notorious cases of tax embezzlement in Indonesia is the tax embezzlement case through the transfer pricing mechanism done by Asian Agri Resources. Tax embezzlement in Asian Agri Resources was done by selling Crude Palm Oil to overseas affiliates at a price below the market price and then be resold to the real buyer at a high price. The practice of transfer pricing causes the tax expenses of Asian Agri Resources in the country can be suppressed. The country is estimated to have an income tax loss of Rp 1.5 trillion due to

tax embezzlement done by Asian Agri Resources (Dharmasaputra, 2013). Various studies and cases show that high tax rates will cause the company to do a related party transaction with transfer pricing schemes to avoid a large number of tax expenses. Tax avoidance practices using a RPT is also conducted to avoid high dividend taxes. Through a RPT, the company may pay dividends that should be subject to dividend tax. Chen & Gupta (2011) found that the effect of imputed credit positively affects the delivery of overseas dividends. Chen & Gupta (2011) also found that on high dividend tax conditions, a company tends to do RPT to minimize their taxes. Various efforts are done by companies to lower the tax costs that they have to pay. Dividends in Indonesia are on a double taxation which is levied on retained earnings (corporate income tax) and taxes on dividends in it, causing the amount of tax paid in Indonesia to be high in some neighboring countries of Indonesia. It can also increase the tendency of companies to do RPT in order to distribute income of companies in Indonesia to be an income to companies in the country with the cheaper tax system and can be extracted into dividends or shareholders' earning at lower tax rates. Based on the explanation above, the first hypothesis for this study is that the shareholder tax expenses positively affect foreign related party transactions.

### *1.2. Tax Avoidance, RPT, and The Role of Corporate Governance*

High shareholder tax expenses will cause the company to do a RPT to avoid high tax payment. However, tax avoidance practice through RPT is not always beneficial for shareholders. Abusive RPT will only benefit the major shareholders compared to the minor ones since the RPT is used as one way to exploit the wealth of the minor shareholders (Cheung *et al.*, 2006). As one of the company's mechanisms to minimize the possibility of expropriation by the major shareholders to the minor shareholders, corporate governance is expected to protect the minor shareholders and reduce agency costs by minimizing abusive RPT. It is not in accordance with business ethics and fair treatment for shareholders. Hence, it will defy the main principles governed by good corporate governance. Tax avoidance through RPT will provide benefits only to the controller, while it will disadvantage the minor shareholders.

Good corporate governance practices will improve fairness among shareholders (Matten & Crane, 2005). It is corroborated by the Lo *et al.* (2010) who found that the quality of corporate governance plays an important role in deterring the transfer pricing manipulation on RPT. Good corporate governance should be effective in reducing opportunistic management behavior (Chen *et al.*, 2009).

As a monitoring mechanism, corporate governance is expected to minimize this unfair practice as it violates the corporate governance principles. Although tax avoidance using a related party transaction may also not be violating the law, it is not an ethical behavior and only partial to the major shareholder. Based on the explanation above, the second hypothesis of this study is that the positive effect of shareholder tax expenses on related party transaction is weakened by the corporate governance practices.

## **2. Research Methodology**

### *2.1. Sample*

The population of this study was all non-financial listed companies on the Indonesia Stock Exchange (IDX) in 2010 up to 2015. It was set from 2010 considering the issuance of Indonesian Law number 36 of 2008 about income tax changing the previous rule which is

Indonesian Law number 17 of 2000 about income tax. These changes have implications for the corporate income tax and dividend tax that the company provides. To avoid loss carry forward issues, this study eliminated sample of companies reporting negative earnings. Companies that did not do foreign related party transaction or experience corporate actions such as merger and acquisitions were not used as samples. After selecting the samples, there are 301 companies.

## 2.2. Variable

Following Jacob (1996), related party transaction ( $RPT_{it}$ ) is measured by (1) the amount of foreign RPT sales (RPTS), the amount of foreign RPT purchase (RPTP), amount of foreign RPT Account Payable (RPTL) and amount of foreign RPT Account Receivables (RPTA). The shareholder tax expenses ( $TAX_{it}$ ) is measured using a combination of corporate tax rates and the effective tax rate on dividends (double taxation). In sensitivity testing, the researcher uses the relative tax burden by comparing the shareholder's corporate tax burden in Indonesia and the shareholder tax expenses in the affiliated company ( $DIFFTAX_{it}$ ).

Then, following Yeh *et al.* (2012) the company size ( $ASET_{it}$ ) uses the natural logarithm of the company's total assets at the end of the year. Following Fama & French (2001), the company growth opportunity ( $GROWTH_{it}$ ) was measured using the percentage of total asset growth. Following Kang *et al.* (2014), profitability ( $ROA_{it}$ ) is measured using the ratio of earnings before the tax was compared to total assets. Following Yeh *et al.* (2012), the firm's leverage rate ( $DER_{it}$ ) is measured using the total of account payable ratio of the company compared to the total equity of the company. Corporate governance ( $CG_{it}$ ) is measured using a checklist developed from the ASEAN Corporate Governance Scorecard.

## 2.3. Research Design

To test our hypothesis, we use some of the following equations.

$$RPT_{it} = \beta_0 + \beta_1 TAX_{it} + \beta_2 ROA_{it} + \beta_3 DER_{it} + \beta_4 GROWTH_{it} + \beta_5 \ln(ASET)_{it} + \beta_6 CG_{it} + \epsilon_{it} \dots \dots \dots (1)$$

$$RPT_{it} = \beta_0 + \beta_1 TAX_{it} + \beta_2 ROA_{it} + \beta_3 DER_{it} + \beta_4 GROWTH_{it} + \beta_5 \ln(ASET)_{it} + \beta_6 CG_{it} + \beta_7 TAX_{it} * CG_{it} + \epsilon_{it} \dots \dots \dots (2)$$

The first hypothesis is tested using model 1. We expect to have score  $\beta_1 > 0$ , meaning that the shareholder tax expenses positively affect the RPT. It means that the company conducts tax avoidance practices through RPT activities. The second hypothesis uses model 2, the hypothesis is accepted if  $\beta_7 < 0$  which means corporate governance weakens the positive relationship between shareholder tax expenses and amount of foreign RPT.

## 3. Results

### 3.1. Descriptive Statistics

The total sample of research after ommiting data outliers was 301 samples. The average of sample growth is 17,04% with profitability level equals to 11,06% and DER equals to 98,69%. The CG ratio was 53.28% indicating that the average sample has a good CG. The tax expenses were on 10% to 45% with an average of 32.01%. A 10% value is earned on the property company, which is calculated by comparing the paid tax expenses and the sales made. This is due to the consequence of the tax on the final property. Related party transaction is dominated

by RPT Sales with an average of 44.32%, followed by RPT Purchase of 19.33%. RPT account Receivables and account payable have balanced value for about 7.9% and 7.6%.

**Table 1: Descriptive Statistics**

VARIABLE	N	Minimum	Maximum	Mean	Std. Deviation
ASET	301	34372658505	245435000000000	10712968241999	27294150929102
GROWTH	301	-,20	1,15	,1704	,18750
ROA	301	,00	,42	,1106	,10101
DER	301	,01	4,03	,9869	,82773
CG	301	,08	,88	,5328	,19046
TAX	301	,10	,45	,3201	,05455
RPTS	301	,00	13,62	,4432	1,64546
RPTP	301	,00	5,76	,1933	,65872
RPTA	301	,00	2,29	,0792	,24477
RPTL	301	,00	1,98	,0760	,20369

### 3.2. Tax Expenses and Foreign Related Party Transactions

This study tested RPT in several ways. First, the researcher used the number of RPT on sales, purchases, payable and receivables accounts to a foreign country that had been scaled up by the assets. Second, the researcher uses RPT data wholly to prove that foreign related party transactions are the one used as tax avoidance strategies in Indonesia. Separating foreign RPT that provides tax benefits becomes important. Third, to prove that foreign RPT providing tax benefits by utilizing marginal tax rate, researchers use the relative tax expenses as a measurement of corporate tax expenses. The relative tax expenses are the tax expenses that is the ratio between the corporate tax expenses in Indonesia and corporate tax expenses in which the foreign RPT is done. This is to prove that the utilization of marginal tax rate through foreign RPT is a tax avoidance strategy used by companies in Indonesia.

**Table 2. Hypothesis 1 Test**

Variable	RPTS		RPTP		RPTA		RPTL	
	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob
C	-7.679891	0.0000***	-1.522777	0.0000***	-0.761702	0.0000***	-0.578436	0.0000***
<b>TAX</b>	<b>6.213086</b>	<b>0.0000***</b>	<b>1.496881</b>	<b>0.0000***</b>	<b>0.188045</b>	<b>0.0000***</b>	<b>0.452799</b>	<b>0.0000***</b>
ROA	-0.628531	0.0000***	0.049578	0.2329	-0.002384	0.8359	-0.016907	0.2185
DER	-0.111463	0.0000***	0.027113	0.0000***	-0.010487	0.0000***	0.024977	0.0000***
GROWTH	-0.117703	0.1412	0.048083	0.0472**	0.008358	0.0895*	-0.009123	0.0681*
LOG(ASET)	0.225407	0.0000***	0.039124	0.0000***	0.026319	0.0000***	0.016669	0.0000***
<b>CG</b>	<b>-0.526774</b>	<b>0.0000***</b>	<b>-0.044363</b>	<b>0.0079***</b>	<b>-0.018071</b>	<b>0.0013***</b>	<b>-0.045546</b>	<b>0.0000***</b>
N	301		301		301		301	
Adjusted R2	0.526062		0.484684		0.392683		0.391897	
Prob(F-stat)	0.000000***		0.000000***		0.000000***		0.000000***	

\* significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

In Table 2, by using foreign RPT data, the test gave consistent results for all sizes of foreign RPT. The robust result proves that the high tax expenses of shareholder encourages the company

to do RPT, either through sales, purchases, accounts receivable, and account payable to minimize the payable tax. In general, the overall results give significant results with probability values below 1%. It proves that the company conducts tax avoidance practices through foreign related party transactions. The results also show that good corporate governance of a company tends to negatively affect the foreign RPT.

RPT done by a company can be either abusive or efficient. Several related party transactions are conducted for efficiency and performance improvement. Researchers try to test the shareholder's tax expenses and all RPT (domestic and overseas) for sales, purchases, accounts receivable and accounts payable. This test provides evidence that non-foreign related party transactions can not provide tax benefits for the company.

**Table 3. Hypothesis 1 Test Using Whole Related Party Transaction (domestic and foreign)**

Variable	RPTS		RPTP		RPTA		RPTL	
	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob
C	2.452445	0.0067	0.645004	0.3735	0.540590	0.0003***	0.191394	0.1834
<b>TAX</b>	<b>2.052741</b>	<b>0.0067***</b>	<b>0.769282</b>	<b>0.2054</b>	<b>0.002080</b>	<b>0.9865</b>	<b>0.137137</b>	<b>0.2549</b>
ROA	-0.826308	0.0171	-0.242511	0.3834	-0.111165	0.0501*	0.040040	0.4680
DER	0.116852	0.0894	0.243818	0.0000***	0.044061	0.0001***	0.071235	0.0000***
GROWTH	-0.176666	0.1795	-0.021185	0.8415	-0.042514	0.0492**	0.003755	0.8582
LOG(ASET)	-0.078843	0.0124	-0.026697	0.2915	-0.015826	0.0023***	-0.008585	0.0877
CG	0.175723	0.4830	0.402822	0.0467	-0.041914	0.3078	0.089627	0.0258**
Adjusted R2	0.075488		0.070613		0.098779		0.127186	
Prob(F-stat)	0.000055***		0.000109***		0.000002***		0.000000***	
N	301		301		301		301	

\* significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

The result of the study using RPT entirely (domestic and foreign) gives different results compared to the use of only foreign RPT. In the whole of RPT, only sales transactions that affect with a probability value of 0.0067, it is lower than foreign RPT with a value of 0.0000. The adjusted R square values for these two data also give contrasting results. Consistently, foreign RPT have a higher adjusted r square value compared to the whole RPT. The overall results testing can be seen in table 3. It proves that not all RPT can be used as a tax avoidance. Foreign RPT providing tax benefit is the one that can be used by the company to conduct tax avoidance practices.

### 3.3. Tax Avoidance and Corporate Governance

Research on tax avoidance practices and corporate governance provides varied results. Those were not consistent results. On RPT related to purchases and account payable, corporate governance has a positive influence which means supporting the company to avoid taxes through RPT scheme. However, in foreign RPT in account receivable, the test result supports the hypothesis. The test results provide a negative value which means that corporate governance weakens the positive relationship between the shareholder's tax expenses and RPT. This result supports the second hypothesis of the study stating that the positive effect of shareholder tax expenses on RPT is weakened by corporate governance practices.

**Table 4. Hypothesis 2 Test**

Variable	RPTS		RPTP		RPTA		RPTL	
	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob
C	-11.76911	0.0001***	-1.071699	0.0000***	-0.813067	0.0000***	-0.531518	0.0000***
TAX	6.072389	0.0133**	-0.144637	0.3653	0.316994	0.0001***	0.077102	0.4806
ROA	-1.261353	0.1070	0.025740	0.5989	-0.007605	0.6120	-0.022093	0.1049
DER	-0.256755	0.0124**	0.029932	0.0001***	-0.010673	0.0000***	0.027096	0.0000***
GROWTH	-0.284567	0.4071	-0.002766	0.8962	0.008894	0.1588	-0.020249	0.0099***
LOG(ASET)	0.388443	0.0001***	0.040805	0.0000***	0.026608	0.0000***	0.019869	0.0000***
CG	-3.121009	0.0531*	-1.092585	0.0000***	0.060779	0.1458	-0.393339	0.0000***
<b>TAX*CG</b>	<b>7.280853</b>	<b>0.1129</b>	<b>3.495756</b>	<b>0.0000***</b>	<b>-0.232917</b>	<b>0.0585*</b>	<b>1.018242</b>	<b>0.0000***</b>
Adjusted R2	0.158013		0.407877		0.392867		0.609433	
Prob(F-stat)	0.000000***		0.000000***		0.000000***		0.000000***	
N	301		301		301		301	

\* significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

Testing using whole RPT gives slightly different results. Of the four-related party transaction type, corporate governance moderation only affects on RPT of account payable and the result is positive. It means that corporate governance supports tax avoidance practices through RPT. These different results can be caused by purchase and account payable transaction that belong to transactions from a third party to the company. RPT such as purchases can be efficient because purchases and account payable to affiliates can be often beneficial for to the company, such as longer terms for account payable or cheaper rates.

**Table 5. Hypothesis 2 Test Using Whole RPT Data**

Variable	RPTS		RPTP		RPTA		RPTL	
	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob
C	2.712999	0.0043***	0.792138	0.2981	0.478065	0.0021***	0.277506	0.0652*
TAX	0.409468	0.8337	-0.158671	0.9197	0.396412	0.2149	-0.405960	0.1914
ROA	-0.826977	0.0171**	-0.242889	0.3832	-0.111004	0.0501*	0.039818	0.4685
DER	0.109841	0.1126	0.239858	0.0000***	0.045744	0.0001***	0.068917	0.0000***
GROWTH	-0.183215	0.1647	-0.024884	0.8148	-0.040943	0.0582*	0.001591	0.9395
LOG(ASET)	-0.081943	0.0098***	-0.028447	0.2643	-0.015082	0.0038***	-0.009609	0.0565*
CG	-0.152643	0.7275	0.217395	0.5386	0.036883	0.6071	-0.018897	0.7864
<b>TAX*CG</b>	<b>3.299460</b>	<b>0.3613</b>	<b>1.863198</b>	<b>0.5226</b>	<b>-0.791762</b>	<b>0.1812</b>	<b>1.090463</b>	<b>0.0585*</b>
Adjusted R2	0.074972		0.068743		0.101214		0.134855	
Prob(F-stat)	0.000095		0.000218		0.000002		0.000000	
N	301		301		301		301	

\* significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%



#### **4. Discussion**

This study shows that foreign RPT are used as corporate tax avoidance strategy in Indonesia. Foreign RPT can create tax benefits due to differences in tax rates between countries. A high shareholder tax expenses in a country will encourage companies to do RPT in countries with lower tax rates. The shareholder tax expenses have a positive effect on the foreign RPT, but it does not affect the RPT entirely. It strengthens the evidence that foreign RPT are used by companies as a tax avoidance strategy.

RPT will not be able to benefit companies if those transactions are only done between companies in Indonesia. It happens as Indonesia has adopted a flat tax rate since 2009. Hence, the RPT can not transfer the corporate tax expenses as the tax expenses that have to be paid obtains the same tax rate. If the transaction is done between countries, the tax benefits will be obtained. The three test results provide consistent results to support the first hypothesis of this study which states that the shareholder tax expenses positively affect foreign RPT.

Testing on the effect of corporate governance toward the relationship of shareholder tax expenses and RPT is conducted to see the effect of corporate governance moderation on the relation of shareholder's tax expenses and RPT. Companies that have good corporate governance are expected to provide fair action among shareholders. Hence, it can reduce the positive influence of shareholder tax expenses on a RPT.

As one of the company's mechanisms to minimize the possibility of expropriation done by the major shareholders to the minor shareholders, corporate governance is expected to protect minor shareholders and reduce agency costs by minimizing abusive RPT. One of which is tax avoidance done through RPT. This study suspects that corporate governance weakens the positive relationship between shareholder tax expenses and RPT.

The result of this study indicates that in the RPT, especially account receivable, corporate governance will tend to weaken the relationship between the shareholder's tax expenses and related party accounts receivable. Corporate governance provides a role to avoid high related party account receivables due to the high shareholder tax expenses. However, corporate governance tends to increase tax avoidance practices through RPT of purchases and account payable. This inconsistent result is allegedly affected by RPT that can be both abusive and efficient (Utama *et al.*, 2010). On the efficient transaction, the corporate governance will support so that the relationship will be positive. Otherwise, if the RPT is abusive, corporate governance will weaken the relationship.

The controlled variables in this study such as profitability, leverage, growth in corporate assets, as well as company size also provide consistent result such as testing without using moderating variables. The profitability tends to negatively affect a RPT. The leverage has a positive and negative effect depending on the type of RPT. At the same time, the growth of the company is negatively linked to the RPT. Assets relate consistently positive to all RPT. In general, the test result supports the second hypothesis of this study. It states that the positive effect of shareholder tax expenses on RPT is weakened by corporate governance practice, particularly on related party accounts receivable.

#### **5. Sensitivity Test**

Foreign RPT will provide tax benefits if there is a difference between the tax rate in Indonesia

and the destination country of the RPT. Corporate profit must be transferred to a country with lower tax rates to obtain tax benefits. Tax avoidance can only be done if the company is able to move profit in countries that provide a larger marginal tax rate. The researcher conducts an additional test to ensure that the foreign RPT is conducted to obtain tax benefits. Researcher uses the size of the tax expenses of shareholders of the relative tax rate ( $DIFFTAX_{it}$ ), which is the difference between the corporate tax rate in Indonesia and the tax rate in the destination country of the RPT. A positive value on the relative tax rate signifies the lower tax rate compared to the tax rate in Indonesia and vice versa.

The test provides a result which is consistent with the previous test. It proves that when the shareholder tax expenses are high, the company will tend to do RPT to countries with lower tax expenses. It shows that foreign RPT is used as a corporate tax avoidance strategy in Indonesia by utilizing the difference in tax rates. Shareholder tax rates in Indonesia which tend to be expensive due to double taxation problems are minimized through foreign RPT. A company transfers its wealth to its subsidiary/parent company in the foreign country to obtain tax benefits. The complete result of the test can be seen in table 6 and 7. This result is consistent with the tests on model 1 and supports the first hypothesis of the study in which shareholder tax expenses positively affect foreign RPT. It proves that foreign RPT is used as tax avoidance strategy in Indonesia.

Table 6. Sensitivity Test Hypothesis 1

Variable	RPTS		RPTP		RPTA		RPTL	
	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob
C	-9.133801	0.0000***	-2.776581	0.0000***	-0.940976	0.0000***	-0.959899	0.0000***
<b>DIFFTAX</b>	<b>0.328656</b>	<b>0.0067***</b>	<b>0.908035</b>	<b>0.0000***</b>	<b>0.030520</b>	<b>0.3063</b>	<b>0.238765</b>	<b>0.0000***</b>
ROA	-0.198983	0.3157	0.394409	0.0001***	-0.013613	0.3457	0.012087	0.4525
DER	-0.284468	0.0000***	0.084482	0.0001***	-0.012636	0.0000***	0.025874	0.0000***
GROWTH	-0.120241	0.4764	0.280971	0.0354**	0.010819	0.1655	-0.038084	0.0000***
LOG(ASET)	0.350946	0.0000***	0.105181	0.0000***	0.036134	0.0000***	0.036350	0.0000***
CG	-0.056962	0.6897	-0.377092	0.0000***	-0.048059	0.0000***	-0.057315	0.0000***
Adjusted R2	0.608428		0.630575		0.382731		0.809308	
Prob(F-stat)	0.000000***		0.000000***		0.000000***		0.000000***	

\* significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

The researcher also examined the effect of corporate governance on the relationship between shareholder tax expenses and foreign RPT. Different from the results of the two previous models, the test result in Table 7 provide consistent evidence supporting the second hypothesis of the study stating that corporate governance will weaken the positive relationship of shareholder tax expenses to RPT. Company with good corporate governance tends to refuse tax avoidance action through foreign RPT, as it would disadvantage the minor shareholders and increase corporate risk.

Table 7. Sensitivity Test Hypothesis 1

Variable	RPTS	RPTP	RPTA	RPTL
----------	------	------	------	------

	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob
C	-8.885694	0.0000***	-3.127941	0.0009***	-0.933602	0.0000***	-0.667215	0.0000***
DIFFTAX	2.590158	0.0069***	1.016957	0.3200	0.045027	0.4646	0.142822	0.2868
ROA	-0.414408	0.0189**	0.334495	0.2917	-0.014513	0.3697	0.057003	0.0965*
DER	-0.214857	0.0000***	0.041183	0.4087	-0.012400	0.0000***	0.020465	0.0019***
GROWTH	0.026802	0.8930	0.382820	0.2083	0.009579	0.2553	-0.014416	0.7711
LOG(ASET)	0.332252	0.0000***	0.114186	0.0009***	0.035803	0.0000***	0.026109	0.0000***
CG	0.248514	0.0940*	-0.074073	0.7887	-0.044598	0.0157**	-0.074014	0.0248**
<b>DIFFTAX*CG</b>	<b>-4.193094</b>	<b>0.0117**</b>	<b>0.582807</b>	<b>0.7524</b>	<b>-0.028674</b>	<b>0.8082</b>	<b>0.018694</b>	<b>0.9542</b>
Adjusted R2	0.491863		0.136458		0.377393		0.071755	
Prob(F-stat)	0.000000***		0.000082***		0.000000***		0.001856***	

\* significant at 10%; \*\* significant at 5%; \*\*\*significant at 1%

## 6. Conclusion

RPT is a thing that can not be denied at this time. The whole world has become borderless, so transaction between countries is not an extraordinary thing anymore. RPT can be easily done by the company, so that tax rates between countries can be one of the bargaining power of countries in the world. Low tax rates will provide a greater incentive for the company because it can provide a high return for the company. Like water, the whole company will look for countries that provide the most competitive tax rates. It should be an input for all tax regulators around the world, especially Indonesia, to pay attention to tax rates and tax system.

This study strongly proves that foreign RPT is used by a company as a tax avoidance strategy. The company chooses to avoid taxes through foreign RPT since it is considered capable to provide tax benefits for companies compared to if using domestic RPT. The result of this study supports Sikka & Willmott (2010) stating that the tax expenses affect the increasing of RPT. This study also proves that corporate governance has an important role in minimizing tax avoidance practices through foreign RPT. It is because tax avoidance through RPT will compromise the interests of minor shareholders and increase the risk of the company.

This study provides several contributions. First, it is the first study to look RPT in tax construction by comparing taxes between the country from which and to which the RPT is done. By looking at the different tax rate, the bias of the efficient RPT can be avoided. Second, this study also proves that the use of a RPT variable entirely in measuring tax avoidance practices is inappropriate. It happens since there are various considerations of the company in doing a RPT. RPT will only provide benefits if it is done with the company on the different system and tax rates. In the future, a study linking tax avoidance and related party transaction should make a wide difference to the marginal tax rate.

Third, this study provides empirical evidence on the role of corporate governance towards tax avoidance practices through the mechanism of foreign RPT. Till today, there are very few studies examining the role of corporate governance in the relationship between shareholder tax expenses and RPT. Disclosure of the corporate governance role is an important thing done by researchers so that it can be an input for capital market regulators and taxation in conducting supervision. Finally, this study is expected to be an input for the government, especially Indonesia which has a relatively high tax rate compared to other countries to start considering

cost and benefit on a tax rate and traditional tax system that caused double taxation in Indonesia. As the flow of water, investment will always look for countries with a tax system that can give them the most optimum benefits.

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# The Effect of Company Size, Leverage, and Corporate Governance Mechanism on Earnings Management In Sub Sector of Food and Beverage Companies Listed on IDX

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## Abstract

This research aims to analyze the effect of Company Size, Leverage, Independent Boards of Commissioner, Audit Quality, and Managerial Ownership on Earnings Management in Manufacturing Companies of Food and Beverage Sub Sector listed on IDX 2014-2016 partially and simultaneously. This research was a causal study research. Population of this research were Food and Beverage Companies listed on IDX 2014-2016. The research used purposive sampling method and 13 companies were selected as sample of the research. The data analysis techniques were simple and multiple linear regression analysis. The results of the research show that Company Size has no effect on Earnings Management (significance value 0.616). Leverage has no effect on Earnings Management (significance value 0.855). Managerial Ownership has no significant effect on Earnings Management (significance value 0.119). Independent Boards of Commissioner has a positive and significant effect on Earnings Management (significance value 0.009). Audit Quality has a positive and significant effect on Earnings Management (significance value 0.011). Meanwhile, Company Size, Leverage, Independent Boards of Commissioner, Audit Quality, and Managerial Ownership simultaneously have a significant effect on Earnings Management (significance value 0.029).

**Keywords:** Earnings Management, Company Size, Leverage, Independent Boards of Commissioner, Audit Quality, Managerial Ownership.

## 1. Introduction

### *1.1 Introduce the Problem*

In Indonesia, there are companies listed on Indonesia Stock Exchange (IDX), and some are not listed. The companies that listed on IDX should prepare audited financial statements by Public Accounting Firm before publication. Statement of Financial Accounting Concept (SFAC) No. 1 states that earnings information is a main focus to assess the performance or accountability of the management. In the companies, there are different interest between the owner (principal), and manager (agent) of the companies. The principal is motivated to enter into a contract and endorse themselves with ever-increasing profitability. Meanwhile, the manager as an agent is motivated to maximize the fulfillment of economic and psychological needs, such as in obtaining investment, loan, or compensation contract (Salno & Baridwan, 2000).

The large companies have special attention from external parties because the companies with large size can generate big earnings as well. Sawir (2004) stated that the size of the company can determine the level of ease of companies obtain funds from the capital market. The size of

the company also determines the bargaining power of the financial contract. Creditors as a lenders of funds also make accounting information for maintenance financial ratios, such as leverage (Priantinah, 2009: 99-109). Solvability (leverage) is illustrated to see the extent to which a company's assets are financed by debt compared to their own capital (Kasmir, 2013: 41).

The case of accounting fraud occurred in IDX, there are the case of PT. Kimia Farma Tbk, PT. Indofarma Tbk, PT. Lippo, and PT Ades Alfindo indicates the existence of earnings management practices that started from the detected manipulation of earnings. The case of earnings management that occur indicates that the implementation of corporate governance mechanism has not been well implemented (Firmansyah, Pratomo, & Yudowati, 2016: 1552). According to the Forum for Corporate Governance in Indonesia (2006) corporate governance is a set of rules governing relationships between shareholders, managers of companies, creditor, governments, employees and other internal and external rights holders, or in other words a system that regulates and controls the company.

The proportion of independent commissioners has a fundamental responsibility to encourage the implementation of good corporate governance principles in order to perform the task of supervising and giving advice to directors effectively and more value-added for the company (Surjadi & Tobing, 2016: 69). The managers of the company have a better understanding about internal information and prospects of the company in the future rather than the owner of the company. When the companies have managerial ownership, it is expected that managers will act in accordance with the wishes of the principal because the manager will be motivated to improve their work. The audited financial statements that have a quality, relevance and reliability result conducted by qualified auditors.

The population used in this research is a manufacturing companies of food and beverage sub sector listed on IDX during 2014-2016. It is because the manufacturing companies of food and beverage sub sector has a fluctuating sale. At certain times, such as Ied Mubarak, Christmas, and New Year, the sales will increase compared to the ordinary day. Therefore, management will probably do some actions considered as earnings management to make the profits generated by the company remains stable. Based on the description, the researcher took the title "The Effect of Company Size, Leverage and Corporate Governance Mechanism on Earnings Management in Manufacturing Companies of Food and Beverage Sub Sector Listed on IDX 2014-2016".

### *1.2 Explore Importance of the Problem*

The important problem of this research are as follows:

- a. The earnings information in the income statement becomes the main focus of financial statement's users. In addition, information of earnings is often served as the target of engineering through opportunistic management actions to maximize its satisfaction.
- b. The conflict between the owner and management may create the tendency of earnings management.
- c. The manager is motivated to maximize the fulfillment of economic and psychological needs.
- d. Large companies have access to acquire loan, so it able to generate more earnings as well.
- e. Companies that have high debt will have the tendency to break the debt agreement.

- f. Some cases of earnings management in Indonesia shows that the companies have not fully uphold the principles of good corporate governance.

## **2. Literature Review**

### *2.1 Financial Statements*

The financial statements are summary of recording the financial transactions which occur during the relevant year. These financial statements are made by management in order to account for the duties imposed on them by the owners of the company and as a report to external parties of the company. The financial statements are the main media for the companies to communicate financial information to the stakeholders.

### *2.2 Earnings Management*

Earnings management is disclosure management in the sense of purposeful intervention in the external reporting process, with the intent of obtaining some private gain (Schipper, 1989: 92). De Angelo (1986) stated that the concept of accrual model has two components, namely non-discretionary and discretionary components. The discretionary accruals component is the part that allows managers to intervene. This is because managers have the ability to control it in the short term. This component consists of the assessment of receivables, recognition of future warranty expense and capitalization assets. On the contrary, the non-discretionary component accruals are determined by other factors that the manager can not supervise.

### *2.3 Agency Theory*

Agency theory discusses the existence of agency relationships, where a principal delegate work to agent who does the job. The problem is that the principal can not verify whether the agent has done something appropriately. Then, the problem of risk sharing that arises when the principal and agent have different attitudes toward risk. Jensen & Meckling (1976: 305-360) stated that the agency relationship is a contract between the manager (agent) and the owner (principal). These relationships sometimes cause problems between agents and principals. The Principal wants a greater return on its investment in the company, while the agent wants a big compensation or incentive for its performance. According to Scott (2000), there are two kind of asymmetry information :

- a. Adverse Selection

Adverse selection is a type of asymmetry information where as one or more parties conducting a business transaction or a potential business transaction have more information on the other party.

- b. Moral Hazard

Moral hazard is a type of asymmetry information where as one or more parties conducting a business transaction or a potential business transaction can observe their actions on the settlement of their transactions. Meanwhile, the other parties can not do this kind of work.

### *2.4 Company Size*

Company size is basically the grouping of companies into several groups, including the large, medium and small companies. According to Husnan & Pudjiastuti (2007: 45) company size is a scale used to classify the size of companies, and can be known in various ways, among others, according to total log assets, stock market value and others. The classification of company size in accordance with *Undang-undang No. 20 Tahun 2008* is divided into 4 category, namely



micro, small, medium, and large.

### 2.5 Leverage

Solvency or leverage ratio is the ratio used to measure the extent to which the assets of the company are financed by debt. This means how much debt burden borne by the company compared to its assets. In a broad sense, it is said that solvency ratios are used to measure the ability of the company to pay all its obligations, both short-term and long-term if the company is liquidated (Kasmir, 2008 :151).

### 2.6 Corporate Governance Mechanism

According to the Forum for Corporate Governance in Indonesia (2006) corporate governance is a set of rules governing relationships between shareholders, managers of companies, creditor, governments, employees and other internal and external rights holders, or in other words a system that regulates and controls the company.

#### 1) Independent Board of Commissioners

Independent Boards of Commissioner is a member of the Board of Commissioners from outside the Issuer or Public Company and meets the requirements as an Independent Boards of Commissioner in accordance with *Peraturan Otoritas Jasa Keuangan No. 33/ POJK. 04/ 2014*.

#### 2) Audit Quality

Audit quality can be measured using the Public Accounting Firm size ( Big Four and Non Big Four). DeAngelo (1981) has theoretically analyzed the relationship between audit quality and the size of the Public Accounting Firm.

He argued that a large auditor would have more clients and a total fee would be allocated among his clients. The research also argues that large auditors will be more independent, and therefore, will provide a higher quality of audit. Auditor size is related to audit quality.

#### 3) Managerial Ownership

Managerial ownership is the ownership of a company's shares by the management. Management which have managerial ownership not only functions as a manager, but also as a shareholder. In general, it can be stated that a certain percentage of managerial ownership tends to influence earnings management action (Boediono, 2005).

### 2.7 State Hypotheses and Research Design

#### 2.7.1 The Effect of Company Size on Earnings Management

Company size is a scale used to classify the size of companies, and can be known in various ways, among others, according to total log assets, stock market value and others (Husnan, 2007: 45). There are various proxies that are typically used to represent the size of a company, such as number of employees, total assets, and total sales. The large companies are more concerned with the community, so they are more cautious in doing financial reporting. Then, the companies should be report the condition more accurate.

The Large companies have a special attention from external parties. This is because the large companies can generate big earnings as well. Sawir (2004) state that the size of the company can determine the level of ease of companies obtain funds from the capital market. The size of the company also determines the bergaining power of financial contract.

The research conducted by Herlambang & Darsono (2015: 1-11) show that company size has a negative and significant effect on earnings management. This is indicated that the larger

company size, the less earnings management. Therefore, it can be concluded that company size has a negative and significant effect on earnings management.

H1 : Company Size has a negative and significant effect on Earnings Management.

#### 2.7.2 The Effect of Leverage on Earnings Management

Leverage as an estimator of the inherent risk of the company. When the company has a high leverage ratio, it indicates that the company is not solvable, its total debt is greater than its total asset (Kasmir, 2013: 16). Since leverage is a ratio that calculates how much funding the creditors provide, as well as the ratio that compares the total debt to the total asset of a company. If the investor sees a company with high assets but the risk of leverage is also high, it will think twice to invest at the company. Management's decision try to keep the leverage ratio from rising. The magnitude of leverage can affect the earnings management action. Husnan (2001) states that high leverage caused by mismanagement in managing corporate finance or improper implementation of strategy from the management. Due to the lack of supervision leading to high leverage, it will also increase the oppurtunistic actions such as earnings management to maintain the performance of shareholders and the public.

Referring to the debt covenant hypothesis which states that if a company deviates from a debt agreement that has been made based on earnings, the more likely management of the company chooses accounting procedures that shift the accounting earnings from the next period to the current period (Watt & Zimmerman, 1986) in Naftalia (2013).

The research conducted by Naftalia & Marsono (2013: 1-8) found that leverage has a significant effect on earnings management. These result indicates that company with high leverage ratios mean higher proportion of debt compares to the proportion of assets will tend to manipulate in the form of earnings management. Incresead leverage will lead to improved earnings management practices. Therefore, it can be concluded that leverage has a positive and significant effect on earnings management.

H2 : Leverage has a positive and significant effect on Earnings Management.

#### 2.7.3 The Effect of Independent Board of Commissioners on Earnings Management

Board of commissioners as the top of the company's internal management system have a important role in the company, especially in the implementation of good corporate governance. Independent Boards of Commissioner is a member of the boards commissioners from outside the issuer or public company and meets the requirments as an independen boards commissioners accordance with *Peraturan Otoritas Jasa Keuangan no. 33/POJK. 04/2014*.

According to Klein (2002) The Board of Commissioners who come from outside the company or outside director may influence the action of earnings management. Higher number of independent commissioners, the more controlling action that can reduce the action of earnings management. Therefore, it can be conclude that independent boards of commissioner have a negative and significant effect on earnings management.

H3 : Independent Boards of Commissioner has negative and significant effect on Earnings Management.

#### 2.7.4 The Effect of Audit Quality on Earnings Management

Meutia (2004) defines audits as a process to reduce the misalignment of information between managers and shareholders by using external parties to authorize the financial statements. DeAngelo (1981) defines Audit Quality as a combined probability for detecting and reporting

material errors in financial statements. Audit quality is seen as an ability to enhance the quality of corporate financial reporting. With high audit quality is expected to increase the confidence of the investors. Audit quality is proxied by Public Accounting Firm Size (Big Four and Non Big Four).

Herusetya (2009) state that when the company using the Public Accounting Firm (Big Four), the Audit Quality is high, then the Earnings Management that occurred in the company is low. In addition to Indonesia, Rusmin (2010) in all non-financial corporations in Singapore in 2003 found the Size of Public Accounting Firm negatively related to Earnings Management. Therefore, it can be conclude that audit quality has a negative and significant effect on earnings management.

H4 : Audit Quality has a negative and significant effect on Earnings Management.

### 2.7.5 The Effect of Managerial Ownership on Earnings Management

Managerial Ownership is the amount of shares owned by company's management. The different motivations will result in different levels of earnings management, such as between managers who are shareholders and managers who are not shareholders. A certain percentage of ownership by management tends to affect earnings management (Boediono, 2005). When the ownership of shares owned by the manager then the manager will act in line with the interests of shareholders, it can minimize the opportunist behavior of managers. In low stock ownership, incentives for possible opportunistic behavior of managers will increase (Shleifer & Vishny, 1986) in Herawaty (2008). Therefore, it can be conclude that managerial ownership has a negative and significant effect on earnings management.

H5 : Managerial Ownership has a negative and significant effect on Earnings Management.

### 2.7.6 The effect of independent variable interaction simultaneously to the dependent variable.

H6 : Company Size, Leverage, Independent Boards of Commissioner, Audit Quality, and Managerial Ownership simultaneously has a significant affect on Earnings Management.

## 3. Method

### 3.1 Dependent Variable

The measurement of earnings management using the discretionary accrual proxy (DAC) using the modified Jones model (Dechow et.al, 1995: 193-225). Earnings management can be measured through discretionary accruals calculated by way of excluding total accruals (TAC) and nondiscretionary accruals (NDA). The calculation are as follows:

- a. Measure the total accrual by using modified Jones model.
- b. Calculates the accruals value estimated with the OLS (Ordinary Least Square) regression

$$TAC_t / TAt-1 = (\beta)1 (1/TAt-1) + (\beta)2(\Delta REV_t / TAt-1) + (\beta) 3 (PPE_t / TAt-1) + e$$

Information:

TAC <sub>t</sub>	= total accruals in period t
TAt-1	= total assets of period t-1
(Δ)REV <sub>t</sub>	= change of revenue in period t
PPE <sub>t</sub>	= property, plan, and equipment period t
(β)1,(β)2,(β)3	= regression coefficient
e	= error term (Error)

c. Calculating the nondiscretionary accruals model (NDA)

$$\text{NDTACT}_t = (\beta)1 (1/\text{TAt-1}) + (\beta)2 [(\Delta \text{REV}_t - \Delta \text{RECE}_t) / \text{TAt-1}] + (\beta)3 (\text{PPE}_t / \text{TAt-1}) + e$$

Information:

NDTACT<sub>t</sub> = non accrual discretionary in year t

TAt-1 = total assets of period t-1

(Δ) REV<sub>t</sub> = change of revenue in period t

(Δ) RECE<sub>t</sub> = change of accounts receivable in period t

PPE<sub>t</sub> = property, plant, and equipment period t

(β)1,(β)2,(β)3= fitted coefficient obtained from the regression

result on the total accrual calculation

e = error term

d. Calculating Total Accrual Discretionary

$$\text{DTACT}_t = (\text{TACT}_t / \text{TAt-1}) - \text{NDTACT}_t$$

Information:

DTACT<sub>t</sub> = total discretionary accrual year t

TACT<sub>t</sub> = total accruals year t

TAt-1 = total assets of period t-1

NDTACT<sub>t</sub> = non accrual discretionary in year t

### 3.2 Independent Variables

The independent variables in this research are Company Size, Leverage and Corporate Governance Mechanism. The proxies to be used in measuring Corporate Governance include, Independent Boards of Commissioner, Audit Quality, and Managerial Ownership.

#### 3.2.1 Company Size

Company size can use asset benchmarks. This is because the total assets of companies can be simplified into natural logarithms (Ghozali, 2006). Company size can be calculated by:

$$\text{Company Size} = \text{Natural Log (Total Assets)}$$

#### 3.2.2 Leverage

The leverage is the ratio of total debt of the company to the total assets owned by the company and showing how much the company depends on the creditor in the equity financing of the company. Leverage can be calculated by:

$$\text{Leverage} = \frac{\text{TL}_t}{\text{TAt}}$$

Information :

TL = Total debt in period – t

TA = Total assets in the period – t

#### 3.2.3 Independent Board of Commissioners

The existence of an independent commissioner in a company may affect the integrity of a financial statement produced by management. If the company has an independent commissioner then the financial report presented by management tend to be more integrity. An Independent Board of Commissioners at least 30% (thirty percent) of the total members of the Board of Commissioners, has fulfilled the guidelines of Good Corporate Governance in order to maintain independence, effective and right decision making. The proportion of Independent Board of

Commissioners are calculated by dividing the number of Independent Board of Commissioners with total members of the Board of Commissioners (Veronica, 2005).

$$IBC = \frac{\text{The number of IBC}}{\text{Total member of IBC}}$$

Information :

IBC = Independent Board of Commissioners

### 3.2.4 Audit Quality

The measurement of Audit Quality in this research using the size of Public Accounting Firm. If the company is audited by a large Public Accounting Firm (Big Four) then the audit quality is high and if audited by Public Accounting Firm (Non Big Four) then the audit quality is low. Audit quality in this research is measured by non-metric (ordinal) data, with a value of 1 if audited by Big Four and 0 if audited by Non Big Four.

### 3.2.5 Managerial Ownership

Managerial Ownership is the amount of shares owned by management of total shares outstanding (Herawaty, 2008). In this research, Managerial Ownership is measured by using dummy variable that is value 1 for companies that have Managerial Ownership and value 0 for companies with no Managerial Ownership.

### 3.3 Description of Data

This research used a secondary data in the form of audited financial statements. The financial statements are obtained from the official website of Indonesia Stock Exchange namely [www.idx.co.id](http://www.idx.co.id). The population in this research is manufacturing company of food and beverage sub sector listed on IDX 2014-2016. The amount is 39 companies. The sample that used in this research is purposive sampling technique. Based on the criteria that have been determined, then obtained the number of samples of 13 companies for every year. The samples in this research is done by using purposive sampling method, that is determination of sample based on suitability of certain characteristics and criteria. The characteristics and criteria are as follows:

- a. Manufacturing Companies of Food and Beverage Sub Sector listed in Indonesia Stock Exchange (IDX) during 2014-2016.
- b. Companies that publish annual financial statements for the period of December 31, 2014-2016 which have been audited.
- c. The company has complete data of Company Size, Leverage, Independent Board of Commissioners, Audit Quality, Managerial Ownership, and the data to detect Earnings Management (Net Income, Cash Flow, etc).

## 4. Results

### 4.1 Hypothesis Test (Simple and Multiple Regression Analysis)

#### 4.1.2 The First Hypothesis

Table 2. The Result of First Hypothesis

Variable		Constant	Coefficient	Value of R		Value of T		
				R <sup>2</sup>	Adj.R <sup>2</sup>	T <sub>count</sub>	T <sub>table</sub>	Sig.
X1	Y	-2.058	0.037	0.007	-0.020	0.506	1.684	0.616

it can be seen that the  $t_{count}$  is 0.506. If this value compared with the  $t_{table}$  at the level of significance 5% that is 1.684. Then, the value of  $t_{count}$  is smaller than  $t_{table}$  ( $0.506 < 1.684$ ). The

significance value is 0.616, this is more than 0.05. Therefore, it can be concluded that there is no significant effect between Company Size with Earnings Management.

#### 4.1.3 The Second Hypothesis

Table 3. The Result of Second Hypothesis

Variable		Constant	Coefficient	Value of R		Value of T		
				R <sup>2</sup>	Adj. R <sup>2</sup>	T <sub>count</sub>	T <sub>table</sub>	Sig.
X2	Y	-1.015	-0.022	0.001	-0.026	-0.184	1.684	0.855

it can be seen that the  $t_{count}$  is -0.184. If this value compared with the  $t_{table}$  at the level of significance 5% that is 1.684. Then, the value of  $t_{count}$  is smaller than  $t_{table}$  (-0.184 < 1.684). The significance value is 0.855, this is more than 0.05. Therefore, it can be concluded that there is no significant effect between Leverage with Earnings Management.

#### 4.1.4 The Third Hypothesis

Table 4. The Result of Third Hypothesis

Variable		Constant	Coefficient	Value of R		Value of T		
				R <sup>2</sup>	Adj. R <sup>2</sup>	T <sub>count</sub>	T <sub>table</sub>	Sig.
X3	Y	0.726	3.673	0.171	0.148	2.759	1.684	0.009

it can be seen that the  $t_{count}$  is 2.759. If this value compared with the  $t_{table}$  at the level of significance 5% that is 1.684. Then, the value of  $t_{count}$  is greather than  $t_{table}$  (2.785 > 1.684). The significance value is 0.009, this is less than 0.05. Therefore, it can be concluded that there is a significant effect between Independent Boards of Commissioner with Earnings Management.

#### 4.1.5 The Fourth Hypothesis

Table 5. The Result of Fourth Hypothesis

Variable		Constant	Coefficient	Value of R		Value of T		
				R <sup>2</sup>	Adj. R <sup>2</sup>	T <sub>count</sub>	T <sub>table</sub>	Sig.
X4	Y	-1.294	0.541	0.161	0.139	2.669	1.684	0.011

it can be seen that the  $t_{count}$  is 2.669. If this value compared with the  $t_{table}$  at the level of significance 5% that is 1.684. Then, the value of  $t_{count}$  is greather than  $t_{table}$  (2.669 > 1.684). The significance value is 0.011, this is less than 0.05. Therefore, it can be concluded that there is a significant effect between Audit Quality with Earnings Management.

#### 4.1.6 The Fifth Hypothesis

Table 6. The Result of Fifth Hypothesis

Variable		Constant	Coefficient	Value of R		Value of T		
				R <sup>2</sup>	Adj. R <sup>2</sup>	T <sub>count</sub>	T <sub>table</sub>	Sig.
X5	Y	-0.818	-0.342	0.065	0.039	-1.598	1.684	0.119

it can be seen that the  $t_{count}$  is -1.598. If this value compared with the  $t_{table}$  at the level of significance 5% that is 1.684. Then, the value of  $t_{count}$  is smaller than  $t_{table}$  (-1.598 < 1.684). The significance value is 0.119, this is more than 0.05. Therefore, it can be concluded that there is no a significant effect between Managerial Ownership with Earnings Management.

#### 4.1.7 The Sixth Hypothesis

Table 7. The Result of Sixth Hypothesis

Variable		Constant	Coefficient	Value of R		Value of F		
				R <sup>2</sup>	Adj. R <sup>2</sup>	F <sub>count</sub>	F <sub>table</sub>	Sig.

X1	Y	1.425	-0.023	0.304	0.199	2.887	2.500	0.029
X2			0.154					
X3			3.497					
X4			0.282					
X5			-0.360					

it can be seen that the  $F_{count}$  is 2.887. If this value compared with the  $F_{table}$  at the level of significance 5% that is 2.500. Then, the value of  $F_{count}$  is greater than  $F_{table}$  ( $2.887 > 2.500$ ). The significance value is 0.029, this is less than 0.05. Therefore, it can be concluded that there is a significant effect between Company Size, Leverage, Independent Boards of Commissioner, Audit Quality, and Managerial Ownership with Earnings Management.

## 5. Discussion

### 5.1 Company Size

Based on the results of the research, the company size measured by natural logarithm of total assets does not affect on earnings management. It shows that company size may not necessarily increase or decrease the possibility of earnings management. Investor in decision-making not only focus on company size, but also on the other aspect, such as profits and future business prospects. There are other criteria that can be used as a proxy of company size, such as stock market value, equity, and sales (Riyanto, 2008: 313). Based on the data, Company Size in Food and Beverage Companies listed on IDX 2014-2016 are dominated by companies in medium size (70%). It may cause company size have no effect on earnings management. Research's result is inconsistent with research conducted by Herlambang & Darsono (2015: 1-11) and Purnama (2017) which shows that firm size has a negative and significant effect on earnings management. The results of this research support the research conducted by Astuti, Nuraina & Wijaya (2017: 501-504), and Setyaningtyas & Hadiprajitno (2015: 3237) which found that company size has no effect on earnings management.

### 5.2 Leverage

The results of this research indicate that leverage has no effect on earnings management. This shows that the high or low leverage does not encourage management to make earnings management. The large or small leverage can not determine the existence of earnings management in food and beverage companies. This research indicate that the average of leverage owned by each company is low (0.466). It show that 46 % of total assets of the company financed by debt, and 54 % of the assets financed by equity. Total debt of company is still able to be covered by companies's asset. It may cause leverage have no effect on earnings management. This research is inconsistent with several researches such as Astuti, Nuraina & Wijaya (2017), Pradito & Rahayu (2015), and Naftalia & Marsono (2013: 1-8) which found that leverage has a positive and significant effect on earnings management. This research supports the research conducted by Putri & Titik (2014: 238) and Jao & Pagalung (2011) which found that leverage has no significant effect on earnings management.

### 5.3 Independent Boards of Commissioner

The results of this research indicate that the larger the number of independent commissioners of the company, it can improve earnings management. It is because the greater the independent

board of commissioners will cause the decline in supervisory functions and can disrupt them in decision-making. This research is inconsistent with research conducted by Herlambang & Darsono (2015: 1-11), Nabila & Daljono (2013: 1-10), and Prastiti & Meiranto (2013: 1-12) that independent board of commissioners have a negative and significant impact on earnings management. This research supports the research conducted by Prabowo (2014) which states that independent commissioners have a positive and significant impact on earnings management.

#### *5.4 Audit Quality*

The results of this research indicate that the audit quality has a positive and significant impact on earnings management. It show that the companies audited by the Big Four are indicating of greater earnings management compared to companies audited by Non Big Four. In fact, companies audited by the Big Four do not prove capable of limiting the company's earnings management practices (Luhgiatno, 2010: 15-31). Ardiati (2003) found that Big Five clients reported higher amounts of discretionary accruals than Non Big Five clients. According to Ardiati (2003: 408-426), the audit of financial statements is not intended to detect the occurrence of earnings management, but the audit is conducted to improve the credibility of financial statements. This research is inconsistent with the research conducted by Iswara (2017) and Rahadi & Asyik (2017) which found that the Audit Quality had a negative and significant impact on earnings management. This research supports the research conducted by Fitria (2013) and Ardiati (2003: 408-426) which states that the quality of auditors has a positive and significant effect on earnings management.

#### *5.5 Managerial Ownership*

The results of this research indicate that managerial ownership has no effect on earnings management. Earnings Management is determined by the motivation of management. The different motivations will produce a different amounts of earnings management. When viewed from the data used in this research, it is known that the concentration of share ownership by manageris to little. It causes managerial ownership to have no significant effect on earnings management. This research is inconsistent with research conducted by Mahariana & Ramantha (2014: 519-528) which found that Managerial ownership negatively affects earnings management. This research supports the research conducted by Putri & Titik (2014: 238) which found that managerial ownership has no effect on earnings management.

## **6. Conclusion**

- 1) Company Size has no a significant effect on Earnings Management. The company size may not necessarily increase or decrease the possibility of earnings management. The company size is not the only consideration for investors in decisions-making. However, there are any other important factors to consider in making investment decisions, such as the profits of the company and future business prospects.
- 2) Leverage has no significant effect on Earnings Management. This result shows that high or low leverage does not encourage management to make earnings management. The companies that have a large or small leverage can not determine the existence of earnings management in food and beverage companies. Based on statistical data of leverage from



this research indicate that the average of leverage owned by each company is low, so total debt of company still able to be covered by their asset.

- 3) Independent Boards of Commissioner has a positive and significant effect on Earnings Management. The greater the independent board of commissioners will cause the decline in supervisory functions and can disrupt them in decisions-making.
- 4) Audit Quality has a positive and significant effect on Earnings Management. Companies audited by the Big Four are indicative of greater earnings management compared to companies audited by the Non Big Four. Public Accounting Firm (Big Four) do not prove to be able to limit the company's earnings management practices.
- 5) Managerial Ownership has no significant effect on Earnings Management. The management that owns the company's shares can make various efforts so as to increase the bonus motivation and impact on the increasing of earnings management.
- 6) Company Size, Leverage, Independent Boards of Commissioner, Audit Quality, and Managerial Ownership simultaneously has a significant effect on Earnings Management. The value of  $F_{count}$  is 2.882 is greater than  $F_{table}$  which is 2.500. Then, the significance value is 0.029. Its smaller than 0.05.

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# Experimental Evidence: Does Clawback Provision Change The Earnings Management Method From Accrual To Real Activity?

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## Abstract

Clawback provision reduces the manager's intention to perform misstated financial statements because the board of directors will recoup the compensation paid to their managers, based on the managers' misstated financial reports. The purpose of this study is to examine the effectiveness of clawback's adoption to reduce the intention to manipulate earnings, different from previous research, this study uses the setting in countries with high uncertainty avoidance and low individualism culture because national cultures give important explanations about the variances of the effectiveness of compensation schemes. The study shows that the adoption of clawbacks decreases the intention to perform earnings manipulation, especially accrual manipulation. However, clawbacks lead to managers executing earnings management method that is harder for the regulators and auditors to detect.

**Keyword:** Clawback provisions, accrual manipulation, real activity manipulation, earnings manipulation

## 1. Introduction

Earnings has an important role in the evaluation of company performance that encourages managers to manage earnings. Earnings management refers to the use of personal judgment in reporting and in structuring the transactions to alter the financial reports to either mislead some stockholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on the reported accounting numbers (Healy and Wahlen, 1999). To prevent earnings management, many companies have recently adopted a policy of "compensation recovery", commonly known as clawback. Clawback is a provision authorizing the board of directors to cover the compensation paid to their managers, based on the incorrect financial statements of managers (Chan et al., 2015)

Previous studies have tested the effectiveness of clawbacks. Chan et al. (2012) and DeHaan, Hodge & Shevlin (2013) found that after the adoption of clawbacks, misstated financial statements decreased. But the recent research stating that clawbacks carry unexpected consequences. Chan et al. (2015) showed that companies which adopt clawbacks change their earnings management method from the accrual's manipulation to the real activity's manipulation, since the latter is not easily detected by regulators and auditors. Initially, the clawback model was designed by regulators to improve earnings qualities or elevate the integrity of financial statements. In reality, however, clawbacks lead to managers executing

earnings management that is harder for the regulators and auditorsto detect (Chan et al., 2015). Subsequently, the majority of the previous studies use the setting of companies listed on the US Stock Exchange (Chan et al., 2012; Datta and Jia, 2013; Chan et al., 2015), however the effectiveness of clawback's adoption by countries with different cultures has rarely been documented in the previous research.

Schuler (1998) stated that national cultures give important explanations about the variances of the effectiveness of compensation schemes. Han *et al.* (2010) found that the cultural dimension of uncertainty's avoidance and individualism explains the earnings management practices in certain countries. Countries with high uncertainty avoidance and low individualism( such as Indonesia), have a lower earnings management level than countries with low uncertainty avoidance and high individualism (such as the US). The present study are, therefore aimed at first testing whether the implementation of compensation clawback in Indonesia, i.e. a country with high uncertainty avoidance and low individualism levels, is effective in reducing the intention to practice earnings management. Second, whether clawback cause a change in earnings management methods from accrual to real activity manipulation

The present study has an important implication by providing recommendations to managers and regulators concerning the possibility of the adoption of clawback compensation schemes in countries with cultures that are different from the clawback initiator countries. This study is different from previous studies in that, first, it uses the setting of a country with different cultural dimensions; the majority of the previous studies use the setting of companies listed on the US Stock Exchange. Secondly, the majority of the previous studies make use of secondary data (Chan et al., 2012; Iskandar-Datta and Jia, 2013; Chan et al., 2015); the present study uses an experimental design seeing that, in Indonesia; clawback compensation schemes are still rarely used.

## **2. Literature Review**

### *2.1 Clawback on Earnings Management*

#### 2.1.1 Clawback

Clawback is one form of recovery provision introduced by Section 304 of the Sarbanes-Oxley Act (SOX) in 2002. The Securities and Exchange Commission (SEC) seeks to clawback performance-based compensation paid to the CEOs and CFOs of public companies if previously generated financial statements have been requested to be restated as a result of misconduct.

According to Prospect Theory (Kahneman and Tversky,1979,1992), people receive greater disutility from the losses than the utility they receive from equivalent benefits. Therefore, the individual must work harder to avoid penalty than to get bonuses from equal amounts of dollars. Hannan et al. (2005) found that individuals prefer to pursue a higher effort to avoid punishment rather than receive a bonus of an equivalent dollar amount.

Clawback has a penalty or loss feature. Clawback adoption leads managers to work harder to avoid any action that leads a penalty or clawback. Earnings management increases the risk of detection by auditors and regulators, triggering a clawback. Therefore, companies implementing clawback provisions have better financial reporting quality than non-adopting firms to reduce detection risk (DeHaan, Hodge and Shevlin, 2013).

### 2.1.2 Earnings Management

There are several methods of earnings management in the corridor accounting standards that are: First, accrual manipulation, i.e. the manipulation of earnings through the manipulation of discretionary accruals. A discretionary accrual is one that is used to decrease or increase the earnings reported by the management selecting the accounting policies subjectively (Scott, 2009), for example managers choose the accelerated depreciation method over the straight-line method to decrease reported earnings. Second, the manipulation of real activity, defined as a deviation from the normal operating activities of a company motivated by the desire of its management to provide a false understanding to stakeholders that certain financial reporting objectives have been achieved through the normal operating activities of the enterprise (Roychowdhury, 2006). In other words, real earnings management involves attempts to alter the reported earnings by adjusting the timing and scale of the underlying business activities, for example by reducing discretionary spending such as R&D expenses, Selling, and General & Administrative (SG&A).

Each earnings manipulation method has its costs and consequences. Accrual manipulation does not have a direct influence on cash flows, so that it only has a small possibility of destroying the company's value (Badertscher, 2011). Since accrual management is conducted within the reporting standards, the possibility of it being detected by investors, regulators, and auditors is lower than in the case of fraud. Real activity manipulation is done by reducing the discretionary expenses so that this has an impact on cash flows. In the long run, real activity manipulation has a negative impact on the optimal business activities and has the potential to destroy the company's value (Badertscher, 2011). Earnings manipulation through real activities makes it possible for the company to elevate short-term profits and return of shares, but this trend will reverse to the level before earnings manipulation started after three years (Chan et al. 2015). In spite of having an impact on the cash flow, the detection risk of real activity manipulation is lower than that of accrual manipulation (Badertscher, 2011) since the decrease in the discretionary expenses, such as R&D, will not become a focus for inspection by the auditors or regulators.

### 2.1.3 Clawback provision and Earnings Management

Several previous studies to test the effectiveness of clawback to reduce the level of earnings management. Denis (2012) found that markets and auditors see the improvement in the quality of financial reports after the implementation of clawbacks. First, the adoption of clawbacks is a signal to the boards of directors that companies have a larger commitment to greater financial integrity. Second, the auditors' erroneous belief that a firm which adopts the clawback provisions will issue more accurate reports leads them to examine the firm's financial statements less carefully, thereby reducing the likelihood that they will find a material misstatement that requires a restatement. Therefore the voluntary adoption of the clawback provisions does not, in fact, lead to more accurate financial statements (Denis, 2012). This is in accordance with findings from recent research showing that clawback carries unexpected consequences. Chan et al. (2015) found that companies in the US that adopt clawbacks change their earnings management method from accrual manipulation to real activity manipulation. Graham, Harvey and Rajgopal (2005) found that managers prefer real activity manipulation to accrual manipulation, seeing that the former is harder for auditors and regulators to detect, so

that this option offers less risk of being found out.

On the whole, the empirical evidence shows that the earnings manipulation method with the biggest risk of detection is accrual manipulation, followed by real activity manipulation. Managers prefer real activity manipulation since it is carried out and hidden in transactions that are seemingly legal, so that it is hard for auditors and regulators to detect. Clawback compensation schemes are able to reduce the earnings management methods that are easy to detect but have increased the use of earnings manipulation methods that are difficult to detect. We, therefore, propose the following hypotheses.

H1: After the adoption of clawback, the intention to manage earnings decreases.

H2a: After the adoption of clawback, the intention to perform accrual manipulation decreases.

H2b: After the adoption of clawback, the intention to perform real activity manipulation increases.

### **3. Method**

#### *3.1 Experimental Design*

To test the hypotheses outlined in the previous section, a series of experimental sessions were conducted, lasting for approximately 45 minutes each. The experiment consisted of three parts. First, the participants were told they were in a bonus compensation scheme, which was then changed to a clawback compensation scheme. Second, the participants' earnings were calculated for each of the previous parts. Third, they answered questions about their understanding of the experiment and demographic characteristics in the exit questionnaire.

The 2 x 1 within subjects design, with repeated measures of the dependent variable, was used to examine the likelihood of participating in earnings management behavior. In all the scenarios, the participants were asked to assume the role of the CFO in a fictitious organization and make decisions based on the proposal presented in the scenario.

The participants are master's level accounting students who have work experience. Because of their work experience, participants are expected to have sufficient background knowledge to complete the experimental task. Elliot et al., (2007) stated that using a student sample is an acceptable methodological choice if the students have sufficient background knowledge to complete the task. Another reason for the use of students as participants are: First, the purpose of this study is to test a theory; this theory should hold regardless of the population, indicating a student sample is appropriate (Croson, 2007). Second, students are readily available, have fewer time restrictions, and are more likely to give their full attention (Jones, 2013).

#### *3.2 Manipulated Variables*

##### *3.2.1 Compensation Scheme*

Two compensation schemes were used: A bonus scheme and a clawback scheme. First, The compensation scheme provided is a bonus scheme. In the bonus scheme, if the company achieves its profit targets, the participants will get a bonus. The participants were asked to select an alternative proposed proposal to achieve the profit targets. If they choose the alternative, then they will get a bonus in accordance with the alternative answer they selected. The experimenter invited an auditor to examine the participants' answers and detect any manipulation of the earnings. If a participant is caught doing earnings' manipulation, he/she will be given a reprimand card by the auditor. Second: the compensation scheme is changed to

clawback. In the clawback scheme, the participants were informed that the Financial Services Authority had issued a new policy; the clawback compensation scheme. In this scheme, if a participant is caught undertaking earnings' manipulation, the bonus that had been awarded would be slashed. Participants were given cases similar to normal bonus schemes, and were asked to select the available proposals to obtain the targeted profits. The experimenter examined the participants' answers to detect any manipulation of the earnings.

### 3.2.2 Measured Variables

The measured variables in this study include the intention to perform earnings management.

### 3.2.3 Intention to Perform Accrual Manipulation and Real Activity Manipulation

Each participant was given one scenario and asked to select three proposals. The scenarios were modified from Clikeman and Henning (2000). The first proposal was to measure the intention of performing accrual manipulation. Participants evaluate a proposal to delay recognition of maintenance costs until the following year. To assure that the participants understand that the scenario is in accordance with the accounting standards, this scenario is provided: "While you are aware this does not violate the accounting standards, you are concerned that this may affect the comparability of the financial statement from one year to the next."

The second proposal is to measure the intention to perform real activity manipulation through cutting maintenance costs. To assure that the participants understand that the scenario is in accordance with the accounting standards and has a low detection risk, this scenario is given: "While you are aware this does not violate the accounting standards and has a low detection risk, you are concerned that this short-term advantage will disappear afterwards."

The third proposal is about not undertaking any profit manipulation, although the targeted profits have not been achieved. The participants answered questions relating to their intentions regarding the proposals made in the scenarios. The first question was: "What is the degree of possibility of you performing earnings manipulation?" The scale provided five options; 1 indicating extremely disagree and 5 extremely agree. Secondly, the participants then answered two questions related to their intentions regarding each proposal made in the scenario. One question used a positive mode: "What is the possibility that you do or choose the proposal?" The other question used a negative mode: "What is the possibility that you reject the proposal?"

### 3.3 Manipulation Check

Three questions were asked for the manipulation check. First, to ensure that the participants understood the changes in the compensation schemes, the question asked: "Will there be punishment, in the form of cutting the bonus, if earnings management is detected?" Second, to make sure that the participants understood the acceptability under the accounting standards, the question asked whether or not they believe the proposal they chose is in accordance with the accounting standards. These questions were asked at the end of the survey.

### 3.4 Monetary Incentives

The participants receive compensation depending on their choice of proposals and this compensation will be withdrawn if it is detected that they have done earnings manipulation. The amount of the retracted bonus depends on the selected proposals. A detailed description is presented in Table 1. The participants know they will be paid, based on the scheme. Payments averaged from \$2 to \$16 after any clawback or bonus cutting.



Table 1. Manipulation Used In Each Experiment

PANEL A: Compensation Scheme

Proposal number	Proposal given	BONUS		CLAWBACK	
		Bonus received by participant	Outside/within corridor of accounting standards	Detection risk	Bonus cutting*
Proposal A	Doing accrual manipulation by delaying recognition for machine maintenance and repair	Selecting proposal A will increase profits by 20%. CFO will receive compensation of 20% for net profit or \$10	Within the corridor of accounting standards	Moderate	Cut \$6
Proposal B	Doing real activity manipulation by reducing expenses for machine maintenance and repair	Selecting proposal B will increase profits by 20%. CFO will receive compensation of \$10	Within the corridor of accounting standards	Low	Cut \$4
Proposal C	Not doing manipulation	Selecting proposal D will cause target profit not to be achieved. CFO will receive compensation of \$5	Within the corridor of accounting standards	None	No cutting

\*) the amount of bonus deducted is based on the level of detection of the selected proposal

**4. Result**

The following table shows the descriptive statistics for the 266 participants. The average age of the participants is 24.69 years. Their average GPA is 3.41. Their average full time working experience was 1.97 years. Male participants comprised 43% of the sample, and females 57%.

Table 2. Participants' Demographic Information

	Min	Max	Mean	Standard Deviation
Age	22	36	24.69	2.75
GPA	3	4	3.41	0.49
Work experience	1	5	1.97	1.24
		N	%	
Male		114	43%	

Panel A of Table 3 shows the test results of the intention to perform earnings manipulations for each of the conditions. Panel B shows the overall analysis, as well as the resulting simple main effects.

Table 3 Results of Experiment

Intention to Do Earnings Manipulations: Influence of Compensation Scheme

Panel A: Descriptive Statistics—Means Intention to Do Earnings Manipulation (Standard Deviations)

	Row Means
Bonus	2.32 (.98)
Clawback	1.98 (0.90)

Panel B: Analysis of Variance Results and Simple Effect Tests

Compensation Scheme and CEO Pressure on Intention to Manipulate Earnings

Source	Statistics	Two-tailed <i>p</i> -value
Compensation Scheme	13.75	< 0.01

These research findings show that compensation schemes have a significant influence on the intention to perform earnings’ manipulations. For the bonus compensation scheme, the intention to perform earnings manipulation is higher (2.32) compared to that for the clawback scheme (1.98) ( $F = 13.75; p < 0.000$ ). This finding supports H1 in that the adoption of the clawback compensation scheme decreases the intention to perform earnings manipulation.

The hypotheses testing for H1a-H1b is done by testing the choice of earnings manipulation methods taken by the participants to achieve the targeted profits. Table 4 shows the testing results to find whether or not compensation schemes have an influence on the participants’ preferences when selecting the earnings manipulation methods. **Table 4.** Results of Experiment

Panel A: Descriptive Statistics—Means Intention to Do Earnings Manipulation (Standard Deviation)

	Accrual Manipulation	Real Activity Manipulation	No Manipulation
Bonus	2.45 (1.13)	3.00 (1.14)	3.39 (1.12)
Clawback	1.87 (1.07)	3.58 (1.26)	3.71 (1.32)

Panel B: Analysis of Variance Results and Simple Effect Tests

### Compensation Scheme and Religiosity on Choice of Profit Manipulation Method

Source	Accrual Manipulation		Real Activity Manipulation		No Manipulation	
	Statistics	Two-tailed $p$ -value	Statistics	Two-tailed $p$ -value	Statistics	Two-tailed $p$ -value
Compensation Scheme	4.26	< 0.05	9.86	< 0.01	2.29	0.13

The intention to use accrual manipulation under the bonus scheme is higher (2.45) compared to that under the clawback scheme (1.87) ( $F = 4.26$ ,  $p < 0.05$ ). Changing to the clawback compensation scheme results in a lowering of the intention to commit accrual manipulation. H1a is supported.

Conversely, in the intention to use real activity manipulation, after the adoption of clawback, real activity manipulation turns out to be increasing. The mean score for the intention to use real activity manipulation under the bonus scheme (3.00) increases to 3.58 with the clawback scheme ( $F = 9.86$ ,  $p < 0.01$ ), so H1b is supported.

Additional testing was conducted to test whether the compensation scheme affects the intention of not manipulating earnings. The results show that compensation schemes do not have any influence over the intention not to perform earnings manipulation. For the bonus scheme, the intention not to perform earnings manipulation (3.39) is lower than that in the clawback compensation scheme (3.71); the difference is, however, not significant.

## 5. Discussion

Findings of the study show that the adoption of clawbacks does not eliminate all the types of profit manipulation; since after the adoption of clawbacks, the intention to perform real activity manipulations becomes even higher. This is due to the fact that the use of real activity manipulation represents a deviation from the optimal operating decision, such that it is not likely to be deemed improper by the auditors and regulators. This finding is consistent with that of Chan *et al.* (2015) in that the use of the real activity manipulation method heightens after a company adopts clawbacks, while the use of accrual manipulation decreases for the reason that accrual's use is easily detected by auditors or regulators, which triggers clawbacks.

## 6. Conclusion

The results show that the change of the compensation scheme from a bonus scheme to a clawback scheme caused unexpected consequences. The change to the clawback scheme causes the intention to use the real activity manipulation method to increase, although the intention to use accrual manipulation decreases. This is caused by the fact that accrual manipulation tends to attract more scrutiny from auditors and regulators. High accounting accruals are more likely to be associated with accounting restatements, which trigger clawbacks. On the other hand, real activity manipulation is considered to be a less risky option than accrual management. Real activity manipulation is only a slight possibility of it being regarded as inappropriate by auditors and regulators.

The results of this study carry implications on the implementation of clawbacks in countries

with high levels of uncertainty avoidance and low levels of individualism. In countries with these characteristics, an individual will take greater care when selecting an earnings management method to achieve the targeted profit. This is done to avoid uncertainty in the compensation received. Future research may possibly add cultural variables at the individual level to examine the effectiveness of clawbacks.

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# Corporate Social Responsibility (CSR) in the hotel and lodge sector in KwaZulu-Natal, South Africa

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## Abstract

Corporate Social Responsibility (CSR) has gained in prominence in the tourism and hospitality sector. Despite the increasing focus of CSR as promoting and enhancing sustainable and responsible environmental management practices, there is limited research that examines CSR in the hospitality sector and in relation to accommodation establishments in particular. The literature also highlights that where research exists, there tends to be a focus on developed contexts rather than developing countries such as South Africa. Thus, this study contributes to this growing and important area of research by focusing on hotels and lodges in KwaZulu-Natal to address limited knowledge in this area, especially in the South African developing context, drawing on primary data collected using a case study approach. This article presents the results of an online survey conducted with 60 hotel and lodge managers targeting all 141 hotels and lodges located in KwaZulu-Natal. The structured questionnaire sought information on the profile of the accommodation issues and CSR aspects. The structured questionnaire was complemented with key informant interviews to solicit qualitative information and probe further results emanating from the quantitative data. The results indicate that hotels and lodges in KwaZulu-Natal support CSR activities. Hotels and lodges use local labour, bought goods and services from the local community, donated to local charities and purchased fair trade products. CSR is often done in partnership with other stakeholders. Despite widespread support of CSR, concerns were raised about quality issues.

**Keywords:** corporate social responsibility (CSR), accommodation establishments, hotels, lodges, Kwazulu-Natal

## 1. Introduction

Tourism is seen as an “extractive industry as it operates by appropriating environmental resources and transforming them for sale in consumer markets” (Garrod & Fyall, 1998: 199). Yasarata, Altinay, Burns and Okumus. (2010: 346) asserts that there exists a “natural contradiction between the danger of destroying the environment and the commercial imperatives”. Although tourism has been identified as a potential economic saviour for many countries, “the economic repercussions for destinations with visibly exhausted or polluted natural environments, can be severe” (Williams & Ponsford, 2008: 2). In this context, unpacking the responsibility of the tourism sector has increased in prominence. Corporate Social Responsibility (CSR) is part of this focus but is an under-researched area. Bohdanowicz

(2006) assert that literature on CSR is scarce. CSR is defined as “the management of a company’s positive impact on society and the environment through its operations, products or services and through its interaction with key stakeholders such as employees, customers, investors and suppliers” (Holcomb, Upchurch & Okumus, 2007: 462). Furthermore, Kang, Chiang, Huangthanapan and Downing (2015: 125) state that “CSR is a complex term defined as the active and voluntary contribution of enterprise to environmental, social and economic improvement”.

Calveras (2015) states that CSR is playing an increasingly prominent role in today’s business environment, which includes the tourism sector. Accommodation establishments are now faced with the pressure to give attention to environmental and social considerations at every phase of their business venture, “from the preparation and application of site plans and business programmes and policies to daily routine practices” (Erdogan & Baris, 2007: 604). Recently, the hospitality sector has emerged as pioneers in sustainable tourism and is now focusing on environmentally sustainable good practice aimed at energy reduction, recycling, waste management, water management and social projects. Bostwick (2007:1) argues that “no matter what you call them, eco-hotel, eco-lodge or green hotel, they are all part of the ‘greening’ of the tourism industry, representing a conscience effort on the part of hotels to promote themselves as environmentally, and quite often socially, conscience entities”. In the past few years, an increasing number of accommodation establishments have also initiated many CSR initiatives in an effort to conserve the environment and reduce social problems (Lee & Park, 2009). However, limited research exists. Kang *et al.* (2015), for example, assert that while there has been increasing interest in CSR within the hotel industry; empirical support and research in the area is scanty and tends to focus mostly on financial performance in Western contexts. This article examines CSR in hotels and lodges in KwaZulu-Natal to address limited knowledge in this area, especially in the South African developing context, drawing on primary data collected using a case study approach.

## **2. Literature review**

CSR is also known as social responsibility, corporate citizenship, corporate sustainability (Grosbois, 2012; Holcomb *et al.*, 2007) and responsible tourism (Frey & George, 2010; van der Merwe & Wocke, 2006). Garay and Font (2012) further define CSR as the “active and (sometimes) voluntary contribution of enterprise to environmental, social and economic improvement”. Information on a company’s CSR activities is often used in decision making by investors, governments and consumers (Grosbois, 2012; Valiente, Ayerbe & Figueras, 2012). One of the most widely used definition of CSR is that put forward by the World Business Council for Sustainable Development which states that “CSR is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workplace and their families as well as the local community and society at large” (Grosbois, 2012: 897). However, opposing views have been highlighted in terms of the benefits of CSR.

On one hand, CSR can decrease shareholders’ wealth because a commitment to environmental protection can crowd out other more productive investments, detract the firm from the earnings power of the physical assets of firm or putting companies in an economic



disadvantage. However, CSR can also increase shareholders' wealth because it allows firms to earn profit above the return on its tangible assets. Tackling CO<sup>2</sup> emissions allows firms to lower the cost of complying with future environmental regulations, drive down operating costs, improve their firm image, enhance the loyalty of key stakeholders and enhance the firm's performance (Hsu & Wang, 2013: 195).

Studies also show that in some cases there is resistance to embrace CSR. For example, Kang *et al.* (2015) state that while the National Statistics Office that local privately-owned hotels account for 90% of the in hotels in Phuket, despite the devastating impacts of the 2004 Tsunami which brought attention to the importance of CSR in the region; there remains an indifference or unwillingness to incorporate CSR into their business strategies and operation.

According to Garay and Font (2012), competitiveness and competitive advantage is seen as the driving force behind CSR. Rodriguez and Cruz (2007: 826) assert that "improving the organisation's social performance means altering its behaviour to reduce the harm done and to generate beneficial outcomes for society". A study conducted by Holcomb *et al.* (2007) suggests that Marriott Hotels and Accor hotels have the highest reporting of CSR initiatives. Many hotels also report socially responsible activities in the form of charitable donations. Furthermore, a large number of hotels report having a clear policy relating to suppliers and business partners, employee volunteer programmes and many companies made some mention of social responsibility in their vision and mission statements. Outbound tour operators have also shown a move towards sustainability practices as evidenced by their pilot project in the 1990s, and the International Federation of Tour Operators sought to engage its members in "proactive and social actions" (Weaver, 2006: 77).

CSR is linked to sustainable development. The Triple Bottom Line reporting is considered a comprehensive approach to achieving sustainable tourism. The Triple Bottom Line approach to sustainable tourism implies that sustainability incorporates social, economic and environmental responsibilities. Gimenez, Sierra and Rodon (2012) argue that environmental considerations must be incorporated in all aspects and levels of business planning and management. Environmental sustainability entails the responsible use of resources and a reduced environmental footprint of the company. The focus is generally on waste reduction and management, pollution control, efficient use of energy, a reduction in harmful emissions and the conservation of resources for future generations. Social equity indicates equitable opportunities, an enhancement in quality of life for local communities and respect for socio-cultural norms. Economic efficiency pertains to economic viability of the tourism product and its destination and satisfaction in consumer demand. Through socially and environmentally responsible actions, tourism businesses should produce sustainable economic benefits (Gimenez *et al.*, 2012). Fundamentally, Assaf, Josiassen and Cvelbar (2012: 596) deduce that the Triple Bottom Line approach to sustainable tourism "relates to a firms' need to generate economic welfare (that is, profit), while also caring for the society (that is, people) and the environment (that is, the planet)". The Bruntland Report marked a "watershed in thinking on environment, development and governance" (Sneddon, Howarth & Nogaard, 2006: 253) and indicated that "environmental protection should be accorded primary status in policy development" (Tzchentke, David & Lynch, 2008: 126). The Report also emphasised ethical considerations regarding human-environment relationships and placed the environment as a

crucial factor of international governance (Sneddon et al., 2006). A ‘triangle’ of sustainable development emerged from this Report which highlighted economic responsibility, social inclusion and environmental stewardship as the “bedrock of 21<sup>st</sup> century politico-environmental thinking” (Yasarata *et al.*, 2010: 346).

Lannelongue and Gonzalez-Benito (2012) claim that the CSR implies that a corporation has a responsibility not only to its shareholders but also to all stakeholders who are affected by the firm. Corporations are accountable to society and Wood (1991) states that responsibilities go beyond the legal and economic to include ethical and discretionary responsibilities. According to Lee and Park (2009: 105), “companies execute CSR activities for various benefits: to improve corporate images, to enhance the morale of their employees, to improve employee retention rates, to build sound relationships with governments and communities, and to respond to the growing expectations of customers and social groups”. Rodriguez and Cruz (2007) further maintain that a higher level of CSR improves the profit levels of hotel firms. Kim, Kim and Mattila (2016) state that creating a positive image is a key driver among hospitality firms and CSR assists in this regard.

The hotel industry is steadily showing signs of an uptake in social and environmental strategies and actions through social and environmental training programmes, monitoring of environmental costs and savings, green purchasing policies, recycling programmes and energy and water saving initiatives (Chung & Parker, 2010). Additionally, Bunleung, Butcher and Fredline (2014) state that CSR continues to attract interest from tourism businesses and many hotel companies are engaged in CSR activities. The hotel sector has, to date, engaged in a number of operational practices aimed at protecting the environment (Sucheran & Bob, 2015). Energy, water and waste management issues are the most common attribute of hotel environmental actions and programmes. Graci and Dodds (2008: 252) believe that hotels are not convinced to engage in sound environmental practices purely because it is “the right thing to do”. Generally, the reasons why hotel managers engage in sound environmental actions is due to the perceived economic and other benefits derived from environmental management and being responsible. Some of the key reasons for hotels engaging in sound environmental practices are legislative controls, cost savings, gaining a competitive advantage, consumer demand, improving environmental quality, employee awareness, risk management and improving investor relations (Bunleung *et al.*, 2014; Graci & Dodds, 2008; Kang *et al.*, 2015; Rahman, Reynolds & Svaren, 2012). Improving a hotels’ environmental and social performance can also help create an environmentally-friendly environment for staff and customers, helps the company gain a competitive advantage and raises the corporate image of the business (Hsieh, 2012; Mensah, 2006; Tortella & Tirado, 2011).

Tsai, Tsang and Cheng (2012: 1151) indicate that “assessing the hotel employees perceptions on the environmental activities of their hotel could provide hotel management with information from an insider point of view because they are the ones that transmit CSR statements to actions”. They further stated that employee-related environmental practices can also enhance the employee’s responsibility towards the business. Hotels with environmental commitments should “invest in human capital training, education and communication to support corporate environmental management practices” (Tang, Shi & Liu, 2012: 3). The importance of CSR in Africa is reinforced in that it is one of the four areas of operation that the Heritage

Environmental Certification Programme evaluates businesses on (Heritage Environmental Management Company, n.d.):

- Management systems and procedures which entail the development of environmental policies and procedures.
- Resource management which focuses on the measurement of resource use.
- Management activities such as procurement, transport, design and construction, biodiversity management, training and emergency response procedures.
- CSR in terms of how the business impacts on the community.

Accommodation establishments and tour operators are also evaluated using this criteria. The Green Leaf Environmental Standard (GLES, n.d.) is another example of the promotion of CSR in promoting sustainable best practices in the tourism sector which is briefly summarised below. The GLES was initiated in 2007 by United Kingdom tour operators and the Wilderness Foundation and was piloted to South African accommodation establishments in 2008. It is an international standard which focuses on the consumption of natural resources and aims to educate and create awareness of environmental management issues. Developed and owned by the Wilderness Foundation, the GLES also focuses on CSR and sustainable best practices. The programme operates internationally through the Wilderness Network in the United States, United Kingdom and Germany. Their national office is situated in Port Elizabeth, South Africa. The intention of the GLES was to address the current environmental issues facing Africa and South Africa and providing solutions to environmental problems. The programme measures and certifies responsible economic, environmental and social best practice in various industry sectors. Within the tourism sector, GLES offers accreditation in the accommodation, tour operator, hospitality related services and events and conferencing. A team of Green Leaf verifiers independently audit the on-site environmental and social operational and design indicators of these establishments. The National Accommodation Association in South Africa (NAA-SA) has partnered with Green Leaf to enable its members to have access to Green Leaf and make use of its toolkits and best practice methods (GLES, n.d.). GLES (n.d., 5) highlights three spheres of influence (core, responsible and restorative) which informs the standards developed. The core sphere of influence assesses issues such as policy, water, energy, waste, purchasing and communication within the built and operational environment (GLES, n.d.). Elements of transportation, distribution, enterprise development, CSR and carbon reduction are measured in the responsible sphere of influence; and procurement neutrality, carbon neutrality and water neutrality are examined at the restorative sphere of influence. These are assessed within the built environment, operational environment, and the wider local and national community. In particular, GLES standards are based on water management, energy management, waste management, baseline management, green procurement, policy and effectiveness, distribution and transport, CSR, enterprise development and carbon emissions reduction (GLES, n.d.).

The Imvelo Responsible Tourism Awards is a South African example of best practice. The Federated Hospitality Association for South Africa initiated the Imvelo Responsible Tourism Awards Scheme which focuses on the awareness of environmental management across various sectors of the tourism industry. The award programme was introduced in 2002 to coincide with

the World Summit on Sustainable Development held in South Africa in 2002. Imvelo means 'nature' in the Nguni language. The Imvelo Awards are aligned to the National Minimum Standard for Responsible Tourism, the Responsible Tourism Guidelines for South Africa and United Nations World Tourism Organisation's Global Code of Ethics. Award categories are based on excellence in social involvement, environmental management, business empowerment, human resource development, single resource management and economic impact on the business.

It is important to note that positive attitudes towards CSR does not necessarily translate to changes in behaviour and investments. Dodds and Joppe (2005) found that only up to 5% of the travel market would pay higher prices for sustainable products. In Portugal, Do Valle, Pintassilgo, Matias and Andre (2012) found that only 15% of tourists were willing to pay tourist accommodation tax. Twenty-eight percent of Canadian travelers (Graci & Dodds, 2008) claimed that they would pay a premium price for ethical and sustainable hotels. In Delhi, only 15% of hotels guests were willing to pay more for an environmentally-friendly hotel and few were willing to absorb environmental and CSR costs (Manaktola & Jauhari, 2007). Tzschentke, Kirk and Lynch (2008) also found that passing the cost onto consumers was viewed as a constraint. It is also important to note, as indicated by Story and Neves (2016: 111), that there has been increasing scepticism and suspicion around CSR practices: "greenwashing, ethical scandals, and inconsistent practices (such as laying off employees but increasing CEO pay) are common examples of activities that alienate key stakeholders and often leave them cynical regarding an organisation's motivations".

The literature indicates that the concept of CSR is gaining ground in relation to tourism generally and the accommodation sector more generally. Additionally, sustainability and sustainable tourism has influenced how CSR is conceptualised and monitored which has also been receiving increasing attention in the last few decades. A number of environmental and CSR initiatives have emerged with accommodation-specific indicators and certification criteria. A number of accommodation establishments have increased their CSR efforts which focus largely on environmental (energy, water and waste management) and social (education and training, livelihood and poverty reduction support and empowerment programmes) aspects. CSR, as well as the implementation of other management practice such as environmental auditing and certification schemes, indicate a voluntary attempt to embrace social and environmental responsibility. The literature indicates that accommodation establishments face a number of different incentives and obstacles in the implementation of CSR and environmental management.

### **3. Methods**

The case study is accommodation establishments (specifically hotels and lodges) in KwaZulu-Natal. South African Tourism (2011) states that KwaZulu-Natal is also known as the Kingdom of the Zulus and is famous for its good weather, two United Nations Environmental Scientific and Cultural Organisation world heritage sites, majestic mountains, blue flag beaches, a mix of cultures and incredible scenery and wildlife. Statistics South Africa (2011) indicates in KwaZulu-Natal has a population of 10.8 million people of a diverse cultural mix. KwaZulu-Natal is the second largest contributor to South Africa's GDP and KwaZulu-Natal is a popular

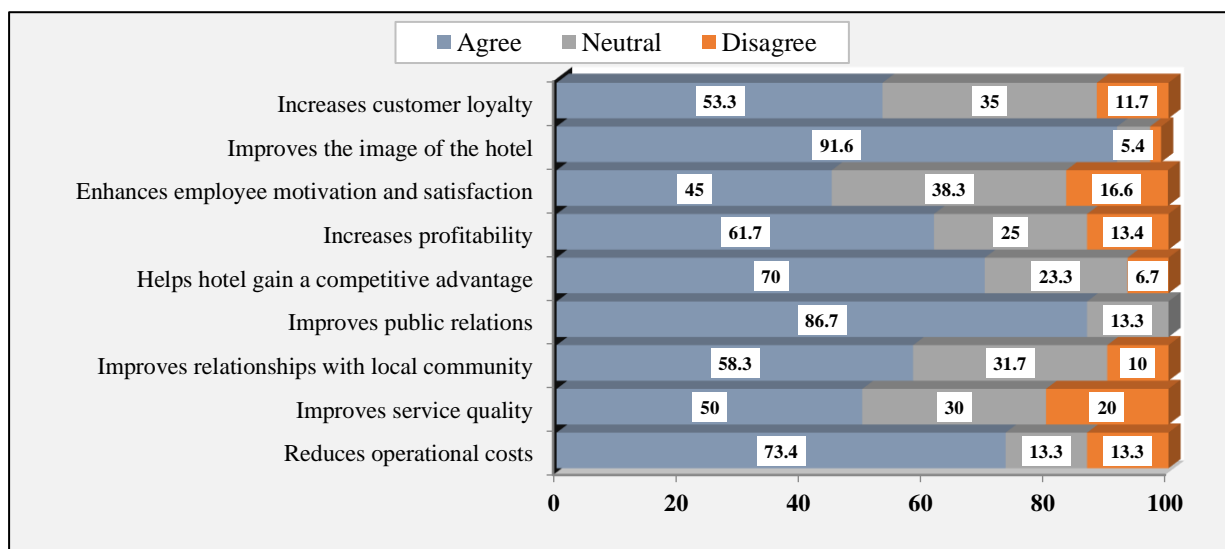
tourist destination for both domestic and international visitors due to its pleasant climate, spectacular mountain ranges, beaches, games reserves, battlefields and diverse cultures (Tourism KwaZulu-Natal, n.d.). The province comprises eight tourism regions: South Coast, Greater Durban, North Coast, Zululand, Elephant Coast, Pietermaritzburg, uKhahlamba Drakensberg and Battlefields; all of which have tourism facilities including accommodation establishments. Tourism KwaZulu-Natal (2011) indicates that KwaZulu-Natal has 8.3 million domestic and 956 550 foreign visitors to the province annually with the average domestic spend being R710 while the average foreign spend is R7 215 and total market values being R5.6 billion for domestic visitors and R8.75 billion for foreign visitors. Additionally, Tourism KwaZulu-Natal (2011) notes that the average length of stay was 4.6 nights for domestic visitors and 6.8 nights for foreign visitors with the main domestic source markets being KwaZulu-Natal and Gauteng and the main foreign source markets being the United Kingdom, United States, France, Germany and Australia. According to South African Tourism (2011), KwaZulu-Natal received 16.8% of all foreign tourist arrivals in 2011 which quantified to 1 551 525 bed nights. The research specifically examines CSR in hotels and lodges in KwaZulu-Natal. The Tourism Grading Council of South Africa [TGCSA] (2011) defines hotels and lodges as formal accommodation establishments offering full or limited services, with lodges usually being located in natural areas. TGCSA (2011) further indicates that 387 lodges and 532 hotels in South Africa had been star graded with KwaZulu-Natal having 65 star graded lodges and 77 hotels. A structured questionnaire was conducted targeting all hotels and lodges in KwaZulu-Natal. In particular, self-administered questionnaires were targeted at hotel managers from a comprehensive list of star graded hotels and lodges in KwaZulu-Natal which was obtained from the TGCSA. The general managers of the selected hotels were contacted telephonically and informed about the purpose of the study and asked to participate in the study. An online survey link was thereafter sent to all managers who were willing to participate in the study. The questionnaire was compiled using the Google Documents internet survey software package and included questions on the profile of the accommodation establishments, environmental management practices and CSR. In total, 60 managers responded to the survey, giving a response rate of 42.6% (given that there were 141 hotels and lodges in KwaZulu-Natal). The quantitative data was analysed using the Statistical Package for Social Scientists (SPSS). Quantitative data was complemented with qualitative data in the form of key informant interviews with purposively selected hotel and lodge managers, relevant industry associations, governments departments and non-governmental organisations.

#### **4. Results**

Mensah (2006) argues that it is imperative to identify and evaluate the characteristics of hotels as this affects environmental and social actions. The 60 hotels and lodges included in this study varied in size with a large proportion of hotels and lodges (68.3%) being between 1 to 50 rooms with the rest having 51 to 100 rooms (18.3%) and 101 to 200 rooms (11.7%). Only one accommodation establishment had more than 200 rooms. Accommodation in South Africa and KwaZulu-Natal is star graded from 1 to 5 stars by the TGCSA which is an independent quality assessment that confirms what facilities one can expect at an accommodation establishment where 1 star hotels indicate very basic facilities and 5 star hotels indicate the highest quality. In

relation to star grading, 45% of the hotels and lodges were 3 star hotels and lodges and 33.3% were 4 star hotels and lodges. The rest consisted of 1 star hotels and lodges (8.3%), 2 star hotels and lodges (6.7%) and 5 star hotels and lodges (6.7%). Seventy percent (70%) of hotels and lodges in the study did not belong to a hotel chain while the rest did. Those who belonged to hotel chains belonged to Tsogo Sun and City Lodge groups, Protea Hotels, the Gooderson Leisure group, Signature Life hotels and Sun International.

Managers were asked about the benefits of environmental management for hotels and lodges since, as indicated in the literature review, CSR is closely linked and perceived as a responsible environmental management practice. In terms of the benefits of environmental management, Figure 1 indicates that improving the image of the hotels and lodges was the most cited benefit (91.6%) of environmental management for hotel managers. This was followed by improving public relations (86.7%), reducing operational costs (73.4%), helping a hotel gain competitive advantage (70%), increasing profitability (61.7%), improves relationships with the local community (58.3%) and improving customer loyalty (53.3%). Half of the hotels and lodges in the study viewed improving service quality as a benefit of environmental management. Additionally, 45% indicated that it enhances employee motivation and satisfaction. The key informants also highlighted similar benefits to those identified in Figure 1.



Perceived benefits of environmental management (n=60)

Similar studies showed contrary findings. Penny (2007), for example, found that hotel managers disagreed that environmental performance increased customer loyalty. According to Kasim (2009), more than half of hotel managers of Kuala Lumpur hotels indicated that energy and water savings would not be appreciated by customers. Tzschentke *et al.* (2008) claim that this may be attributed to the drop in standards that guests may usually associate with an environmentally-friendly establishment and the hotel's fear of falling short of guest's expectations.

Han and Kim (2010: 667) note that although green elements of a hotel may sometimes be offset for an inferior quality product or service, "green attributes in a hotel should not be seen as an

alternative to quality of service”. Empirical information demonstrates that environmentally-conscious customers are occasionally willing to do without a little convenience but are unwilling to continually sacrifice quality, luxury and conveniences (Manaktola & Jauhari, 2007; Rahman *et al.*, 2012). Therefore, environmentally-friendly hotels and lodges have to maintain high levels of service quality in order to retain its customers (Han & Kim, 2010). The findings differ from those of this study that showed that the majority of the respondents (92%) indicated that environmental management was an important issue for their establishments. This was reiterated by key informants who stated that there are political, social and economic pressures for the accommodation sector to be environmentally and socially responsible.

Customer loyalty is also linked to levels of environmental awareness and Graci and Dodds (2008) believe that consumer demand and loyalty only increases as their level of environmental awareness increases. A good company image creates a competitive advantage and environmental actions also lead to increased competitiveness in hotels (Rivera, 2002). Improving the image of hotels and lodges was cited by 92% of managers in the study as the key benefit of environmental management. Also, 70% of hotels and lodges believed that sustainable environmental management practices gave their hotel a competitive advantage. According to a study undertaken by Penny (2007) on environmental management in the Macao hotel sector, managers strongly believed that environmental management would bring about economic benefits and contribute to the hotel’s brand image and competitiveness. Environmental performance of hotels is beneficial to the image of the company and its competitive advantage especially when faced with pressure from stakeholders (Wolfe & Shanklin, 2001). For example, in 1997 the Canadian government announced that it would only use the services of domestic hotels that had in place sound environmental management programmes, thereby compelling the industry to become environmentally conscious (Graci & Dodds, 2008). However, Jarvis, Weeden and Simcock (2010: 85) note that due to claims of green-washing and consumer skepticism, “most ecolabels in tourism and hospitality are run as public relations exercises for funding bodies to show that they are doing their bit”. Often a mistake is made by describing a ‘green’ hotel as an environmentally-friendly establishment. Being green or sustainable denotes economic viability, social inclusion and conservation of the natural environment.

Only slightly more than half of the respondents indicated that environmental management improves relationships with local communities. This was substantially different from the key informants, all of whom identified improving relationships with local communities as a critically important business and socially responsive imperative for the accommodation industry. They also indicated that CSR needs to go beyond limited job creation and projects which tend to be a one-way relationship between accommodation establishments and local communities. What needs to be developed, key informants argued, is for meaningful partnerships to be developed. This entails engaging with local communities. This is an aspect that relates directly to CSR which is examined next.

CSR as indicated in the literature review is the voluntary contribution of businesses to social, economic and environmental improvement. Globally, companies are urged to look beyond maximising profits and to include environmental and social objectives in their management style (Frey & George, 2010; Grosbois, 2012). Figure 2 illustrates that hotels and lodges in KwaZulu-Natal have made significant progress in terms of their CSR actions. Specifically, all

respondents stated that their establishments used local labour, 96.7% bought or procured local goods and services, 86.7% donated to local charities and 78.3% purchased fair trade products. The high levels of CSR activities among hotels and lodges in the study can be attributed to global pressure on companies to become socially responsible, consumer demand for responsible products and the increase in CSR awareness and application. The United Nations (UN) has set out the UN Guiding Principles on Business and Human Rights and appeals to the tourism industry to engage in business responsibility that respects human rights (Tourism Concern, 2012). ‘Going green’ was emphasised by the key informants as well which many indicated included supporting environmental projects as part of CSR programmes. This, one key informant stated, has benefits for people and the natural environment.

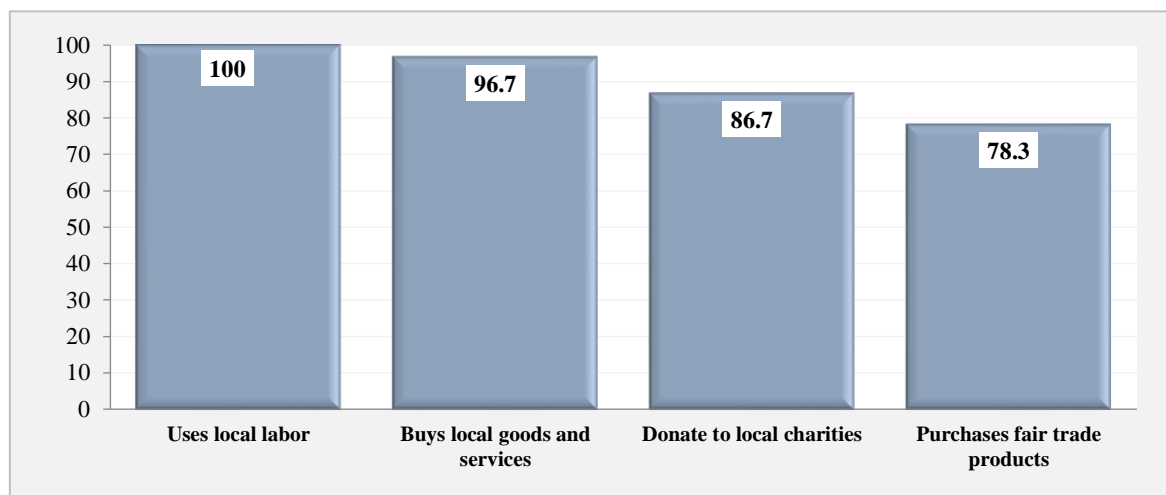


Figure 2: Social responsibility practices of hotels and lodges: Multiple response ( $n=60$ )

As indicated earlier, all hotel managers in the study claimed to use local labour. However, this research did not probe the extent and nature of local labour used which should be investigated further. Tourism’s biggest cash injection into the local economy is from wages to local staff and therefore the importance of local employment should not be ignored. According to Rogerson and Visser (2004), the tourism sector has the greatest potential to reduce unemployment and hotels in South Africa have made significant progress in terms of local employment. The Western Cape’s Mount Nelson Hotel, for example, offers a four year training programme to three chefs and four hotel management candidates from disadvantaged communities. The Sandal Montego Bay in Jamaica offers training to young local community members in all aspects of resort operations. On completion of the training programme, apprentices are either employed at Sandals or are given certificates and recommendations to work at other hotels (Ashley, Goodwin, McNab, Scott & Chaves, 2006). A few of the key informants indicated that several of the accommodation establishments that they work and interact with support a range of training programmes which include skills directly linked to the accommodation sector, adult-based education programme and business development capacity-building. Whilst the study reveals that all hotels and lodges in the study use local labour, Irandu (2006) cautions that jobs offered to locals are often low-skilled and low-paying. For example, it was found that in Kenyan hotels 36% of locals were hired as maintenance officers, 36% as



cooks and 12% as cleaners. In Spain, 59% of hotels employ locals from the surrounding community (Garay & Font, 2012).

Figure 1 reveals that 96.7% of hotels and lodges in the study claim to buy local goods and services. The hotel sector has significant linkages with a number of sectors in the local economy. Money spent by tourists on the local economy directly increases the household incomes in communities. A study of hotels on Kenya's coast revealed that tourist class hotels bought their food products and roofing material from the local community (Irandu, 2006). Leslie (2007) found that majority of accommodation establishments in Cumbria, England purchased their goods from the local community and Garay and Font (2012) found that 80% of hotels consumed local products in Catalonia, Spain. In the Dominican Republic, Outback Safaris offers local rural excursions and the rural people earn approximately US\$1 300 per month from the sale of local products to tourists (Ashley *et al.*, 2006). They found that in Barbados, beauty products made with locally grown herbs is supplied to the Sandy Lane Hotel and Spa. Furthermore, the Sandals Resort Farmers Programme in Jamaica initiated by the Sandals Group started in 1996 with only ten farmers supplying two hotels with fresh produce. The programme grew substantially and by 2004 more than 80 farmers were supplying hotels across Jamaica. Local farmer's sales increased more than 55 times in three years. However, one of the major challenges with the purchase of local goods and services is that often the quality, quantity and reliability of supply is inadequate. At the same time local producers cannot access finance to improve their production process. Furthermore, tourism businesses in Cape Town maintain that local suppliers are associated with insufficient quality standards and quality capacity and will only use local suppliers once these issues have been addressed (Frey & George, 2010). This concern was also supported by the key informants who stated that while there is a desire to use local products among the accommodation establishments, non-competitive pricing and the quality of services and products were deterring factors.

According to Figure 1, 86.7% of hotels and lodges in the study donate to local charities. A number of hotel chains in South Africa have contributed to local community projects and charities. The Three Cities group of hotels and lodges in South Africa has embarked on an educational project, *'Make a Difference'*, that assists disadvantaged learners from the Ifafa Junior Primary school on the KwaZulu-Natal south coast. Three Cities has purchased amenities for Grade R learners and have repaired the school's jungle gym (Three Cities, 2011). City Lodge hotels in association with Food and Trees for Africa have introduced the *"I'm Kind"* programme. The programme has set up a fully-fledged garden and a number of new trees at the Mother Touch Academy at Diepsloot. Guests making online bookings on the City Lodge website can select Food and Trees for Africa of Hospice and City Lodge makes a donation on their behalf (Reynard, 2012). Protea Hotels is proudly associated with the *'Reach for a Dream'* project that helps children who have been diagnosed with life-threatening diseases. Protea hotels have helped raise awareness and funds for this cause. Additionally, the hotel group is associated with the *"Afrika Tikkun – Developing Communities in South Africa"* programme. Protea hotels has donated R155 000 to this organisation to be used for child and youth development and equipment and resources for a new classroom and principals office. In 2003, Protea Hotels also initiated a bursary fund to support previously disadvantaged students attending any national hotel school. To date, the fund has contributed R1 887 000 in the

development of 142 students (Protea Hotels, n.d.). Tsogo Sun's flagship entrepreneurial development programme "*Book-A-Guesthouse*" offers training and development support to women in the tourism industry to successfully operate their own guesthouses and bed and breakfast establishments. Over the past seven years the programme has supported more than 62 such establishments. Tsogo Sun also provided R7 million in seed capital to a 100% black owned bookstore called SKOOBS which contains a coffee shop and over 6 000 book titles (Tsogo Sun, n.d.). Similar projects were identified in this study in relation to donating to local charities with the most prominent being support of education (including funding libraries, crèches and schools as well as providing bursaries and scholarships for post-matriculants), health facilities (especially primary health care clinics), feeding schemes and indigenous gardens (including food production projects). Supporting sport and environmental clean-up events and activities were also identified in this study as key projects. One key informant stated that hotels and lodges choose CSR projects that they are passionate about and align closely with their business strategy. This resonates with Calveras' (2015) assertion that hotels adopt CSR practices as part of its product differentiation strategy and those that increase their productivity and profile. Kim *et al.* (2016: 10) states that CSR choices made by the hospitality sector needs "to be congruent with the image of the company and its client base". Thus, hotels are motivated to participate in CSR activities to conform "to a larger extent to the view of strategic CSR, rather than that of altruistic CSR" (Calveras, 2015: 399). This indicates that hotels engage in CSR because it makes good business sense. It is not only the accommodation sector that supports CSR efforts. Spenceley (2007), for example, examined the extent to which tour operators in South Africa were engaging in responsible environmental practices and found that 66% of tour operators in South Africa stated that they had positive impacts on local communities through employment creation, purchasing local products and using local services. However, high crime rates, low skills, poor service quality and language barriers may act as challenges to CSR in South Africa (Frey & George, 2010).

Marcus and Goodman (1986) strongly opposed the integration of CSR into core business as they believed that CSR entailed businesses sacrificing their business and profits for citizenship and wasting the time of managers and company funds. However, a number of studies showed a positive relationship between CSR and business profitability (Lee & Park, 2009). Whilst Frey and George (2010) claim that only 2% of tourism establishments worldwide are participating in responsible tourism, Bohdanowicz, Zientara and Novotna (2011) claim that hotels have made substantial progress with CSR and were the pioneers amongst all businesses to apply comprehensive CSR activities as part of their business management. According to Grosbois (2012), 109 of the largest 150 hotel companies in the world reported some degree of CSR. This is similar to this study that shows high levels of CSR involvement. The majority of respondents (75%) in this study indicated that reducing social inequality is an important consideration for their establishments. Furthermore, almost equal proportions (73%) stated that CSR contributes to building positive relationships with local communities which is key to sustainable business operations and tourism more generally. Thus, there is an intention among most accommodation establishments to improve the quality of life of local communities and CSR is an avenue to achieve this. Similar findings were noted by Grosbois (2012) who found that popular CSR goals amongst hotels were improving the quality of life in local communities and involving

employees in CSR activities. Similarly, according to Kasim (2004), Hilton Corporation, Accor Group and the Marriott Group provided comprehensive information on their CSR activities on their websites. Approximately 80% of these chains engaged in social responsibility linked to charitable donations with lesser attention given to green issues.

It is also important to note that CSR is often conducted in collaboration with other public sector and industry partners. Specifically, the main partners identified by both the key informants and the hotel managers who were interviewed were government departments, other accommodation establishments and other businesses, especially in the same local area. Furthermore, the majority of respondents supported programmes with in-kind contributions (85%) with slightly fewer respondents (76.7%) indicating cash donations. Most provided in-kind contributions and cash donations. It was noted by the key informants that while there was increasing pressure to promote and implement sustainable and responsible environmental management practices (including CSR), the resources required (especially financial) were constraining efforts. The costs of hotels investing in CSR activities targeting local communities were also highlighted by Bunlueng *et al.* (2014) as a factor influencing ability and willingness to participate in CSR activities.

## **5. Conclusion**

Hotels and lodges that engage in CSR activities aspire to enhance their positive image in the marketplace. CSR helps develop and strengthen a hotel's reputation and a bad reputation can lead to low occupancy rates and low repeat patronage (Tsai *et al.*, 2012). Hotels and lodges in the study showed a positive contribution to CSR actions. All hotels and lodges claimed to use local labour, bought goods and services from the local community, donated to local charities and purchased fair trade products. The hotel sector has important linkages with local businesses and the support of local businesses increases these linkages in the local economy. In spite of their strong support of local businesses, accommodation establishments were however concerned about quality standards of local products. In addition to contributing to local employment, a number of hotels and lodges in the study offered training programmes to candidates from disadvantaged communities. Donations to local charities included cash donations as well as the contribution to community development projects. A number of these projects were aimed at reducing social and economic inequality in communities.

Accreditations schemes have been considered as promising self-regulatory environmental measures and should be widely encouraged. An important contribution has been in the area of CSR. Hotels and lodges need to realise that CSR activities can present a powerful public relations strategy for hotels and lodges which in turn can lead to competitive advantage and financial rewards. It is imperative that the hospitality sector creates stronger linkages with other sectors to ensure utilisation of local products and services. Furthermore, quality standards for local products and services must be regulated to ensure guest satisfaction. Industry needs to also engage supply chains as suppliers are faced with sustainability challenges and collaboration between suppliers and hotels must be encouraged.

The hotel and lodge sector has clearly become part of the green and social revolution as many hotels have increased their environmental and social commitment largely in the form of energy management, water management, waste management and CSR programmes. Future research in

relation to CSR in particular should focus on an examination of specific CSR programmes and the impacts thereof. This should include beneficiary surveys to enable feedback to be provided so that the accommodation sector, that clearly desires to participate in CSR programmes, can better identify projects and assess CSR efforts.

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# Construct Validity and the Coefficient Reliability of Spiritual Attitude Scale to Measure the Spirituality for High School Students

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## Abstract

This research aims to investigate the construct validity and the coefficient reliability of the spiritual attitude scale to measure the spirituality for high school students. The spirituality as the attributes of psychology is continuously interested to further investigate and look for the meaning and purpose in human lives and in spiritual experiences. Although it is hardly practical to discuss the definition, the measure of such attribute is another thing. This research instrument is an inventory model of summated rating scale containing 23 items. Quantitative data analysis is used to test the evidence of the instrument's construct validity and the coefficient reliability. The results are revealing that there are eight factors extracted with eigenvalues over 1.0 from the total instruments questionnaire. The instrument reliability regarded as the coefficient of the construct reliability supported with the Cronbach's alpha values is 0.796.

**Keywords:** construct validity, reliability, spirituality

## 1. Introduction

Spirituality as the psychometric properties has been variously defined. Declaring the exact meaning of spirituality somewhat becomes a difficult thing (Fisher, 2016). The most unclear discussion of the spiritual aspect emphasized on the issue of the transcendent element (Koenig, 2009, pp.283-291). The present study implies that spirituality as a personal belief in God or a higher power in the religious adherents (Good, 2006, pp.39-53). Another outstanding theory described spirituality as a complex construct including existential and religious dimensions (Hungelmann, 1996, pp.262-266). It refers to the affective experiences of positive feelings from the person's ability to understand the purpose in life-related to personal, communal, and transcendental aspect (Soleimani *et al.*, 2017, pp.1981-1997). Spirituality becomes one of the most prominent subjects in the media and various discipline (Moberg, 2002) also in many salient factors especially in human health integrated with the internal forces (Azarsa, 2015, pp.309-320).

Spirituality is an intrinsic component of human being, unpredictable and multidimensional. spirituality is a personal search for the purpose and the meaning in life (Tanyi, 2002, pp.500-509). Piercy (2013) considers the term of spirituality has been a popular thing to be discussed in the field of academic behaviour to promote the educational improvement. The spirituality is related to the humanitarian aspect that refers to the personal methods used in searching the meaning of life (puchalsky *et al.*, 2009, pp. 885 – 904). Ubale & Abdullah (2015), spirituality is very influential on the increase of human good behavior towards the environment.

Although it is hardly practical to discuss on the definition of spirituality, which is a multidimensional concept (Hill, 2000, pp.51-57; Cook, 2011, pp.539-551) including many



domains involved such as personal, communal, environmental, and transcendental domain. The measure of this term is more popular in the research field of mental health, human existence, and social well-being. However, this major property of psychometric which related to the existential and religious dimensions is infrequently and less practiced in the scope of education particularly in student achievement and academic behaviour.

One of the most important and fundamental concepts in the social psychology is attitude competency (Bidjari, 2011, pp.1593-1597). Fishbein and Ajzen (1975) have defined attitude as a person's location on a bipolar evaluative of affective dimension with respect to some object, viewed as predisposing the individual to perform various overt behaviours. In Relation to the spiritual term, the attitude can be explained as the person predisposition to designate their response to prevalent situation with an internalization of specific dimension correlating with their religious understanding and spiritual conception.

Spiritual attitudes are always defined as same as to the religious attitudes, Hill *et al.*, (2000, pp. 51-57) affirms that spiritual attitudes are separate from religious attitudes. The level of spiritual circumstance can be a complement one's religious level. Spiritual is more popular with the human feelings, thoughts, and behaviours. Religious attitude also has a positive relationship with the belief and human's life satisfaction (Bigdeloo & Bozorgi, 2016, pp. 58-66). Zohar & Marshal (2004, pp. 62) argue that the spiritual has no connection with the religious doctrine or a certain belief. Religious doctrine must have a limitation to the essential meaning of a certain religious beliefs and ignoring others.

This paper intended to investigate the construct validity and the coefficient reliability of the spiritual attitude scale to measure spirituality for the high school students through the quantitative data analysis which has been obtained from the research sample.

## **2. Method**

The method used in this paper was a survey research with a quantitative approach. This study aimed to test the construct validity and the coefficient reliability of an instrument which can be used to measure students' spirituality through spiritual attitude in senior high school.

### *2.1 Participants*

This study involved 294 participants from High School student. Those students were chosen to use purposive cluster sampling with the status of study (2<sup>nd</sup> grade student), Moslem students, located at Yogyakarta, Indonesia. The sample of this study was composed mostly of female students, it was about two-thirds from the total participants. The whole respondents in this study are representing two major groups of living society which are coming from the urbanites and the rural students.

### *2.2 Instrument*

The Spiritual Attitude Scale composed of four subscales, namely, resignation (to God), thank God, sincerity and righteousness. Every subscale has 5-7 items, (resignation to God: Q1-Q5; thank God: Q6-Q10; sincerity: Q11-Q16; righteousness: Q17-Q23). This instrument is divided into two parts: demographic information for the entire participants and the second consist of 23 items of Spiritual attitude drawn by the Islamic religious term which is used three-point of the summated rating scale. The concept of designing the instrument was performed as in fig. 1 below:

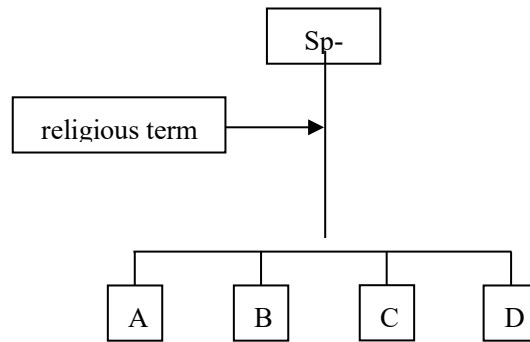


Figure 1. Conceptual Diagram

- Sp-Att → Spiritual Attitude
- A → Resignation (to God)
- B → Thank God
- C → Sincerity
- D → Righteousness

### 2.3 Construct validity

Construct validity needs a definition with the specified conceptual circumscription (Newman, 2002, pp. 18-24) and more focused with the particular attributes of the variable rather than concerned with the values or scores gained from the instrument (Salkind, 2000). Construct validity emphasizes on logical analysis and investigates the relationships of the data analysis based on theoretical consideration.

Construct validity explains the extent to which performance on the test is consistent with the constructs in a particular theory consideration. The present study was also concerned with investigating the construct validity for the research instrument.

### 2.4 Coefficient Reliability

Reliability refers to the consistency of measurement that is how consistent test score or other evaluation result are from one measurement to another (Miller *et al.*, 2009, pp. 107). A reliable instrument will give the same results on every measurement, although measurements are made at the different times. The instrument is considered as a reliable instrument when it used repeatedly to measure in the same symptoms and the results obtained are relatively stable and consistent.

### 2.5 Data Analysis

The primary data obtained from the instrument research were analyzed using SPSS 16.0 software program. To analyse the quantitative data, three statistical procedures were employed in order to answer the research question. *First*, descriptive analyses used to explain the distribution of respondents based on demographic variables. *Second*, the Exploratory Factor analysis (EFA) applied to obtain factor extracted and to investigate the construct validity of the items used in the instrument. And *Third*, Cronbach's alpha applied to estimate the coefficient reliability of the instrument.

## 3. Results

Basic information regarding to the demographic characteristics were obtained from each participants of research sample. The most widely respondent sample is from the female students (64.3%) while the Male gender fill up one third of the total respondent (35.7%). Those participants divided into two major living society which come from the urbanites (39.5%) and rural area (40.5%) while the left amount come from other living group (20%). All of the respondent were participated in this research by giving their demographic information and filling the instrument up by answering the questionnaire respectively.

Table 1. The Research's Sample demographic

		Freq	%	Valid %	Cumulative %
Sex	Male Students	105	35.7	35.7	35.9
	Female Students	189	64.3	64.3	100.0
Ethnicity	Javanese	294	100.0	100.0	100.0
	Other	-	-	-	100.0
Living Society	Urbanites	116	39.5	39.5	39.5
	District	57	19.3	58.8	58.8
	Rural Area	119	40.5	99.3	99.3
	Other	2	0.7	100.0	100.0

*Note.*  $N = 294$ .

Table 1 above was explaining that this study involving 294 students with the two group sex distribution, 105 out of them were the male students while the remaining others were female. The proportion of the female students is about two-thirds from the total respondent sample entirely. All of them was taken by the purposive random sampling technique, but the proportion arrangement for the total amount of the participants was another thing. The whole research participants were coming from the mono-ethnic, Javanese, with no including another ethnic representation at all.

The following information regard to the sample demographic was describing the respondent's living society. It was divided into three large groups and a small cluster which is less than 1% of the total number of the sample. Those three large groups consisting of 119 rural students, the slightly below these number were the urbanites which were 116 students, and the last group was the students who come from the district area, the place between the rustic and the urbanite, were just consisting less a half than the two previous group, and just accumulated of 57 students.

### 3.1 Factor Analysis

A principal component analysis with varimax rotation was performed to test the 23 questionnaires of the research instrument to investigate the unidimensionality evidence. By employing this method, the raw data gained from the entire respondent were analysed through data reduction using SPSS 16.0. The use of the data reduction in factor analysis was to investigate the number of questionnaires that shaped into a new cluster dimension. The result

of the exploratory factor analysis was explained that eight factors were extracted and shaped into a new factor group questionnaire. Every factor was indicated by the eigenvalues over 1.0. (4.353 – 1.079) as shown in Table 2 below:

*Table 2. Total Variance Explained*

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% Variance	of Cumulative %	Total	% Variance	of Cumulative %	Total	% Variance	of Cumulative %
1	4.3**	18.9**	18.9**	4.3**	18.9**	18.9**	1.8**	7.8**	7.8**
2	1.4**	6.4**	25.4**	1.4**	6.4**	25.4**	1.7**	7.7**	15.6**
3	1.3**	6.0**	31.4**	1.3**	6.0**	31.4**	1.7**	7.5**	23.1**
4	1.3**	5.9**	37.3**	1.3**	5.9**	37.3**	1.7**	7.4**	30.5**
5	1.2**	5.4**	42.8**	1.2**	5.4**	42.8**	1.6**	7.3**	37.9**
6	1.2**	5.2**	48.1**	1.2**	5.2**	48.1**	1.6**	7.3**	45.2**
7	1.1**	4.8**	52.9**	1.1**	4.8**	52.9**	1.5**	6.5**	51.8**
8	1.0**	4.6**	57.6**	1.0**	4.6**	57.6**	1.3**	5.8**	57.6**
9	.9**	4.1**	61.7**						

Table 2 was performed the total variance for the entire questionnaires to explain the implication of the spiritual attitude term for high school students. The first component has the great index of eigenvalues rather than the following numbers. It has the total cumulative for the extraction sums of squared loadings about 19 in percent while the other components were just about 5 to 6 percent. In such a case, it could be described that the spiritual attitude scale has the unidimensionality due to the first component of eigenvalue index was above twice numbers than the subsequent number. In the other hand, the 23 questionnaires in this instrument could explain the spiritual attitude above 57.6 percent in the term for high school students.

All of these component factors and the unidimensionality evidence are shown in Scree plot in fig. 2. The most dominant factor is displayed in the first factor which has multiple eigenvalue rather than the remaining factor.

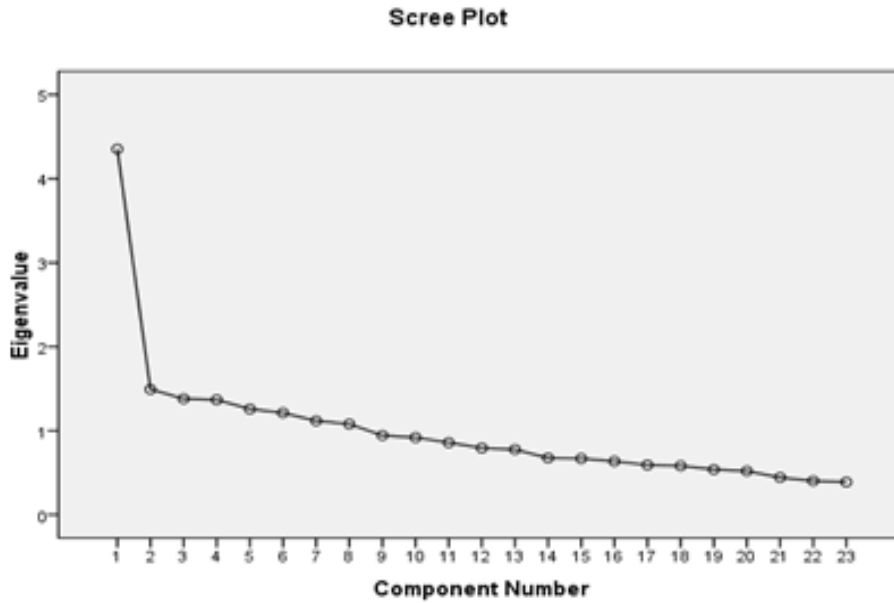


Figure 2. Component Number of Factor eigenvalues

Figure 2 showed that the construct of spiritual attitude as the research instrument in this study has the unidimensionality evidence. The slope line for the first component was higher and more inclined than the following components. Due to the previous explanation, the whole questionnaires in the spiritual attitude scale for this research was accepted to be used in measurement purpose.

Based on the result of the factor extraction in table 2 above, there are eight factors shaped for the 23 questionnaires. In order to investigate the loading factor for every partial questionnaire in the Spiritual attitude scale, it could be identified by the result of the factor analysis. The output of the rotated component matrix was performed a set of value index which was shown in table 3 below:

Table 3. Rotated Component Matrix<sup>a</sup>

No. item	1	2	3	4	5	6	7	8
Q1								.785
Q2								.566
Q3						.728		
Q4						.606		
Q5						.523		
Q6			.756					
Q7			.687					
Q8			.511					
Q9							.796	
Q10							.571	
Q11				.723				
Q12				.635				
Q13				.636				
Q14		.608						
Q15		.675						
Q16		.674						
Q17	.510							
Q18	.668							
Q19	.571							
Q20					.631			
Q21					.707			
Q22					.459			
Q23					.586			

*Note.* Extraction Method: Principal Component Analysis

a. 8 components extracted.

Table 3 showed that every factor extracted from the analysis represents an indicator of a subscale for the research instrument. Hence, the data analysis results lead that each subscale consists of two indicators. The varimax rotation was used to describe the component matrix. Table 3 also showed that the entire questionnaires which shaped into a new factor had the coefficient of loading factor more than 0.40 (0.511 – 0.796). Based on this result of the data reduction using the exploratory factor analysis, the coefficient value of loading factor indicated

that the Spiritual Attitude Scale has an acceptable internal consistency.

Based on the result of the data analysis that is shown in Table 3, it can be described that there are eight factors extracted from the data of the instrument questionnaires. The value index of loading factor for the entire questionnaire was above 0.40 (0.511 – 0.796). therefore, the whole questionnaire is acceptable to use in this research instruments. In the same table above can be found also that the number of the questionnaire in every subscale were divided into two part and shaped into a new factor. Although it was split into two dimensions for every subscale, it was not interpreted another construct of measurement. Hence, every subscale has two specific indicators as performed in table 4, (Resignation to God: G1 – G2; Thank God: T1 – T2; Sincerity: S1 – S2; and Righteousness: R1 – R2).

Table 4. Result of the Factor extracted

Subscales	Indicator	Number of Questionnaire
Resignation (to God)	<i>G1</i> <i>being grateful for the result after maximum effort</i>	2 (Q1 & Q2)
	<i>G2</i> <i>Recognizing human's limitation</i>	3 (Q3 – Q5)
Thanks God	<i>T1</i> <i>Admit to all God best creatures</i>	3 (Q6 – Q8)
	<i>T2</i> <i>Feeling happy to do God's order and to leave his prohibition</i>	2 (Q9 & Q10)
Sincerity	<i>S1</i> <i>Being honest to do for favor</i>	3 (Q11 – Q13)
	<i>S2</i> <i>Not to be hopeless at failure</i>	3 (Q14 – Q16)
Righteousness	<i>R1</i> <i>Being consistent with God's order</i>	3 (Q17 – Q19)
	<i>R2</i> <i>Being consistent with God's prohibition</i>	4 (Q20N- Q24)
Sp-Att Scale (Total)		23

Table 4 shows that the four subscales as proposed in the first concept of the instrument construction were extended into eight dimensions. Based on table 4, every subscale has two derivative factors. Resignation (to God) as the first subscale which containing 5 questionnaires was divided into two number of indicators, the term of being grateful for the result after maximum effort with 2 items and the term of recognizing human's limitation with 3 questionnaires. The second subscale of Spiritual Attitude Scale, Thank God, was also divided into the dimension of admitting to the God best creatures with 3 representative questionnaires and the aspect of feeling happiness with God's order and his prohibition with 2 numbers of the questionnaire.

The next subscale for the spiritual attitude designation was the dimension of human sincerity. The six numbers of questionnaires in this subscale were separated into the two derivative factors. Being honest to do for a favor as the first section with 3 items and the second section of sincerity indicated by the feeling of not to be hopeless at failure with the same amount of questionnaires as the section before. The following subscale in the research instrument was to indicate human righteousness in the way of their religious adherent.

The fourth subscale of the Spiritual Attitude Scale was also divided into two part, the first group number of questionnaire was constructed to indicate the consistency of human being with God's order with 3 questionnaires and to indicate human consistency to do with God's prohibition with 4 numbers of questionnaire as the second part of righteousness subscale. The total number of the questionnaire for the Spiritual Attitude Scale in this study has 23 questionnaires.

### 3.2 Reliability

Reliability is an essential characteristic of a good between the test and the obtained scores. Reliability is required to obtain the instrument validity and the investigation of both reliability and validity can be defined as complementary aspects of identifying, estimating and interpreting different sources of variance in the scores [20]. Coefficient reliability of the instrument was employed to test the consistency of the measurement and was used as an estimation of how much the instrument would give the same result under the same conditions. The estimation of reliability in this research was evaluated with internal consistency coefficients which reflect unidimensional concept. The index values of the Cronbach's alpha coefficients for the instrument measurement was performed in table 5.

Table 5. Descriptive Statistics of the Instrument

Subscales	Number of Questionnaire	M	SD	Cronbach's $\alpha$ if items deleted
Resignation (to God)	5	13.18**	1.72***	0.782
Thank God	5	12.61**	1.64***	0.782
Sincerity	6	16.83**	1.63***	0.779
Righteousness	7	19.23**	2.01***	0.780
Sp-Att Scale (Total)	23	61.86**	5.12***	0.796

The instrument to measure the spirituality through spiritual attitude for high school student has a moderate good reliability estimation and proofed by the Cronbach's alpha coefficient 0.796 (above 0.70) for the entire subscales in the Spiritual Attitude Scale with 23 questionnaires. The index of the alpha coefficients would decrease if one or more of the subscale are deleted. This instrument has the alpha coefficient 0,782 if the first subscale (Resignation to God) is deleted and it also has the same alpha coefficient (0.782) if the second subscale of the instrument (Thank God) is deleted. The Spiritual Attitude Scale without the measurement of the sincerity subscale has the alpha coefficient 0.779. The estimation of reliability decreased to 0.780 if the fourth subscale of the instrument, Righteousness, is deleted.

The result of the quantitative data analysis through descriptive statistical using SPSS 16.0 performed that resignation (to God), as the first subscale in this instrument, has the mean value of 13.18 and the score of standard deviation 1.72. The next Spiritual Attitude dimension, Thank God, has the smallest value of the mean index 12.61 and has the standard deviation 1.64. The Sincerity dimension which represented with six questionnaires performed the mean score about 16.83 and the smallest index of the standard deviation which just explained 1.63, a slight number under the previous subscale. Whereas the forth subscale has the highest index for the mean score and the standard deviation, it has 19.23 for the mean score and 2.01 for the standard



deviation. The total questionnaires of the Spiritual Attitude Scale have the mean score 61.68 and 5.12 score for the standard deviation taken from 294 sample students.

#### **4. Discussion**

The aim of this research paper was to test the evidence of construct validity and the construct reliability of an instrument to measure the spirituality as an inventory to assess the attitude competency in education. To achieve these goals, a number of respondents were involved in this research. Table 1 shows a fair information of the respondents, there is sixty-four percents of female respondents while only thirty-six percent is male, those participants are Muslim students which is met based on the purpose of collecting research sample.

The following table shows that using this research instrument to measure student spiritual attitude will point the total variance explained out about 57.66%. The first component is the dominant factor rather than the others, it can explain 18.9% out of the total variance and has the higher eigenvalues (4.353) which are more than twice from the second factor and it continuance. Number eight of the shape factor is the lowest of an acceptable factor which has a value of 1.079 (slightly above 1.0). A clearly visual appearance for these result is shown in Scree plot in Figure 1.

The spiritual attitude scale consists of four subscales named Resignation (to God), Thank God, Sincerity, and Righteousness. That subscale was derived from the Islamic religious term which containing 23 questionnaires (Resignation to God: Q1–Q5; Thank God: Q6–Q10; Sincerity: Q1–Q16; and Righteousness: Q17–Q23). Resignation to God is performed to describe the student attitude towards their feeling of being grateful for every effort they have made and how they recognize their limitation to make such a thing if there is no God assistance. The second subscale is Thank God, this dimension represents the spiritual attitude of feeling happy to do God's order and to leave his prohibition, it also represents their attitude to admit all of God best creatures. Sincerity is addressed to explain how the students are being honest to do for a favor without expecting any rewards and will not despair and being hopeless at every failure for their effort to make. The last subscale is righteousness which has a purpose to present the students' attitude of being consistent with both God's order and his prohibition.

Table 5 shows the Cronbach's alpha coefficient of the research instruments to address the third research question and to indicate the reliability estimation of the spiritual attitude scale. In summary, the whole questionnaire in the spiritual attitude scale has a good coefficient index 0.796 (above 0.70). This index of the reliability coefficient will be declined if one or more subscales in the spiritual attitude scale are deleted, for the example, as pointed out in the same table if the first subscale is deleted the index of Cronbach's alpha coefficient will be reduced to 0.782. this decrease value is slightly below the index reliability coefficient for the total scale.

#### **5. Conclusion**

The recent study has shown that the construct validity of an instrument to measure spirituality through spiritual attitude for high school students were evaluated and investigated through quantitative data analysis. This instrument consists of four considered subscales that derive from the Islamic religious term to reveal the spiritual attitude especially for students named Spiritual Attitude Scale. This Instrument contains 23 questionnaires used three-point of the summated rating scale. The results present that the recent instrument has the qualification to be used and supported by the results of the data analysis employing exploratory factor analysis. Spiritual attitude scale also has a high sufficient index of reliability estimation proofed by the computation of Cronbach's alpha. However, this research paper has limitations. The research

sample was taken by the purposive sampling technique, henceforth, it just represented the same population. In this case, the purpose of taking the sample determined by the particular characteristics, all the sample are Muslim and there is no significant value for the variance of their age. Therefore, the next research has to cover more general characteristics if possible in order to get the more significant result and able to accomplish such scale.

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# The Impact of Zakat Empowerment Program on The Village (A Case Study on The Village Development Program by Badan Amil Zakat Nasional Serang Regency)

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## Abstract

Poverty becomes major problem in Indonesia. Based on geographical condition, the poverty rate in Indonesia is dominated by the rural community. Zakat is an instrument which has function to reduce the poverty rate. Zakat can reduce poverty if managed properly. BAZNAS is an institution that has the authority to manage zakat in Indonesia. Serang regency is a regency in Indonesia which consists of 326 villages. With amount of village in Serang Regency, reducing the poverty rate in the village is very important. To reduce poverty rate in the village, BAZNAS Regency Serang has been implementing the village development program. This research aims to analyze the Impact of zakat empowerment program on the village development program by BAZNAS Serang Regency. The program in 2016 and 2017 conducted in Sindangsari and Tamiang village. Therefore, the research is conducted in both village. The zakat impact index are used to analyze the impact of zakat on the village. The result indicates that the impact of zakat empowerment program in Tamiang and Sindangsari Village is enough. Based on this research can be concluded that the zakat empowerment program is enough to impact the mustahik's zakat on Tamiang and Sindangsari Village.

**Keywords:** poverty, ZAKAT, empowerment program

## 1. Introduction

Poverty by Beik and Pratama (2015) is still a problem in the world especially for developing countries like Indonesia. Based on data from the Central Bureau of Statistics (BPS) in 2017, the number of poor people in Indonesia is 26.58 million people or 10.12% of the total population of Indonesia. The spread of poverty in Indonesia is still dominated by people living in rural areas. This can be seen from 10.27 million poor people living in urban areas and 16.31 million others living in rural areas.

This poverty rate according to Pratama (2015) can be an evaluation material for this nation to find the right instrument for poverty reduction. One of the efforts to reduce the poverty rate in Indonesia according to Canggih et al (2017) is by equitable distribution of income between capable and unable. Equitable income in Islam can be done with zakat. Pratama (2015) added zakat is an Islamic instrument used to distribute wealth and income.

Distribution of income by zakat according to Beik (2009) can solve the problem of poverty. Anis and Kassim (2016) argue that one effective way to reduce the problem of poverty in a Muslim country is zakat. Olanipekun et al (2015) added zakat is a unique instrument for reducing poverty by transferring wealth from the rich to the poor.

Huda et al (2014) argues that zakat has not received enough attention from Muslim intellectuals especially in the field of research related to the development of zakat management. The proper management of zakat according to Canggih et al (2017) will bring about an equitable distribution of wealth. In addition, Faisal (2011) added the good and optimal zakat management by the zakat institution will have a positive impact for poverty alleviation and community welfare.

The good zakat management should also be applied in Indonesia. The good zakat management is expected to reduce poverty and improve people's welfare. The management of zakat in Indonesia is regulated in the Law of the Republic of Indonesia Number 23 Year 2011. Under this law, the institution which has zakat management authority nationally is Badan Amil Zakat Nasional (BAZNAS).

Although the management of zakat has regulations and institutions, according to Huda et al (2014) the management of zakat still has problems to be solved. One of the priority issues in the management of zakat is the low effectiveness of the zakat utilization program. The effectiveness of zakat empowerment program should be done with the principle of appropriate to be able to give *maslahat* to mustahik. Ayuniah et al (2017) added the zakat distribution program is one of the important factors in the success of zakat impact on development.

Indonesia should have empowered zakat effectively to rural areas. The effectiveness of zakat empowerment programs in rural areas will reduce the level of poor people in the village. The effectiveness of the program requires further measurement and evaluation. Therefore, this program is important to measure its effectivity. This is done so that the empowerment of zakat can be effective and have a positive impact for the recipient.

Banten is one of the provinces in Indonesia. Based on BPS data in 2016, Banten has 12.2 million people. Banten is one of the most populous and populated provinces in Indonesia. Based on its administrative area, Banten is still largely dominated by rural areas with a total of 1,551 villages. The poverty rate in Banten in 2016 was 5.36 and became one of the lowest in Indonesia. Despite having low poverty rate but Banten province has the highest open unemployment rate in Indonesia. The Open Unemployment Rate (TPT) in Banten Province in August 2017 was 9.28%. By this rate, Serang regency is being the district with the highest unemployment rate in Indonesia.

National Amil Zakat Agency (BAZNAS) Serang Regency as the institution of zakat management of Serang Regency has the authority to manage zakat of Serang Regency. This management is intended to reduce the level of poverty and improve people's welfare. BAZNAS Serang District in order to collect and distribute zakat has done its job well. This can be seen from increasing the collection and distribution zakat every year.

In order to manage the zakat fund effectively, BAZNAS Serang regency makes the village development program. The aim of program is to foster the village to be more productive. By developing the village to be more productive, it will create an independent and prosperous society. Zakat funds distributed to the village development program are expected to be empowered effectively and will improve the welfare of the community and reduce the poverty level of the village community.

In 2016 and 2017 BAZNAS Serang Regency distributes zakat to Sindangsari and Tamiang

Village. This village according to Djamiluddin (2018) was chosen based on its feasibility as a decent village. Based on the above exposure can be seen the importance of the effectiveness zakat empowerment program. Therefore, it is important to measure the empowerment zakat program.

## **2. Literatur Review**

The term zakat according to Hafidhuddin (2002) is part of the property with certain conditions that required Allah SWT to the owner to be submitted to the recipient who is entitled to certain conditions. Ali (1988) added the terms of the obligatory property of zakah is a treasure that reaches nisab, haul and measure. According to Prihatini et al (2005) zakat is one of the funds or treasures of society that can be used to help people who are unable to meet the needs of his life.

Zakat according to the Law of the Republic of Indonesia Number 23 Year 2011 can be empowered for productive efforts in the handling of the poor and improving the quality of the people. The empowerment of zakat for productive business is done after the basic needs of zakat recipients are fulfilled. Based on this, zakat in Indonesia can be empowered for productive business. Productive businesses with zakat funds are given for the purpose of handling poverty and improving the quality of people. Although it can be empowered for productive enterprises, this empowerment can be done after the needs of zakat recipients are fulfilled.

The empowerment of zakat in Indonesia, must be done in accordance with the living culture of Indonesian society. Indonesia is a country where most of the people still live in rural areas. With the dominant number of villagers, Nasila (2014) argues that living in unity is a habit for people living in rural areas. Therefore, life in togetherness is a characteristic of Indonesian people living in rural areas. The zakat empowerment program that is appropriate to the life of Indonesian society must be done effectively.

Effectiveness according to Nasila (2014) refers to the results achieved or seen from the achievement of goals. The success of an organization looks at the organization's goals but also the mechanisms of self-defense and pursues its goals. Machfiroh (2015) describes the concept of effectiveness as an attempt to evaluate the course of the organization. This concept is one of the factors to see the need to make significant changes to the form and management of the organization or not.

## **3. Methodology**

### *3.1 Data Collection Method*

This study is conducted to analyze the impact of the zakat empowerment program in the village development program by Badan Amil Zakat Nasional (BAZNAS) Serang Regency. Therefore, this study uses primary and secondary data. According Darmawan (2016) primary data is data obtained directly from sources or respondents. Secondary data is data obtained from documents or research reports from agencies or agencies that support the nature of research.

Before measuring impact of zakat. Understanding the village development program by Badan Amil Zakat Nasional Serang Regency is very important. Therefore, to find out the village development program by Badan Amil Zakat Nasional (BAZNAS) of Serang Regency interview and documentation is conducted. The interview was conducted with Vice Chairman II Field

Distribution and Empowerment of BAZNAS Serang regency to know the village development program by BAZNAS Serang Regency. In addition, documentation method on the village development program by the BAZNAS of Serang Regency was also conducted.

To analyze the impact of the village development program by BAZNAS Serang Regency, data collection method was obtained through interviews and questioners to mustahik's zakat. The questionnaires and interview to mushatik's zakat is used to see the impact of zakat empowerment programme. Therefore the sample is needed to represent receipt program. The most appropriate sample for measuring the impact of zakat empowerment programs is the direct program beneficiaries. The village development program of BAZNAS of Serang Regency in 2016 and 2017 is conducted in Tamiang and Sindangsari villages. Mustahik recipients of village development program in each village is 100 people. Sample determination is done by Slovin formula.

$$n = \frac{N}{1+Ne^2} = \frac{100}{1+100(0.2)^2} = 33,33 \text{ or } 34$$

Based on this formula, 34 recipients is needed for every villages as sample.

### 3.2 Data Analysis Method

To find out The village development program, descriptive analysis method is used. To analyze the impact of zakat, method of data analysis used in this research is Zakat impact index. The index is used to measure the impact zakat on mustahik's zakat. The zakat impact index is an indicator in the national zakah index used to measure the impact of zakat on mustahik. The impact of zakat on mustahik can be assessed from the material, spiritual, life expectancy, literacy and access to education. Therefore, at this stage used counting methods made by local and international institutions. These methods are the CIBEST Welfare Index, human development index modification, and index independence.

Table 1. Zakat Impact Index

Indicator	Variable	Value Weight	Categories				
			Very Weak 1	Weak 2	Enough 3	Strong 4	Very Strong 5
Zakat Impact Index	CIBEST welfare index	0,4	0-0,20	0,21-0,40	0,41-0,60	0,61-0,80	>0,80
Index	HDI Modification	0,4	0-0,20	0,21-0,40	0,41-0,60	0,61-0,80	>0,80
	Independency index	0,2	Not Work	Unfixed Work	Fixed Work or Business	Fixed Work or business and saving	Fixed work, business and saving

Resource: Nurzaman, et al (2017)

The CIBEST Welfare Index (Center of Business and Economic Studies) is a model for measuring poverty and welfare in Islamic perspectives. Measurement of this index is done by measuring the ability to meet material and spiritual needs. The CIBEST Welfare Index, created

and developed by Beik and Arsyanti (2015) divides the condition of a home or family into four categories according to its ability to meet material and spiritual needs. The four categories are:

1. Prosperous Family (Quadrant I) is a family that is in positive areas both material and spiritual needs. This shows that families in this quadrant are rich in material and spiritual.
2. Poor Family Material (Quadrant II) is a combination of positive spiritual needs and negative material needs. This indicates that families in this quadrant are rich in spiritual but material-poor.
3. The Spiritual Poor Family (Quadrant III) is a combination of positive material needs and negative spiritual needs. This indicates that the family in this quadrant is rich in material but poor spiritual.
4. Absolute Poor Family (Quadrant IV) is a combination of negative material needs and negative spiritual needs. This indicates that families in this quadrant have negative material and spiritual conditions.

Modification of Human Development Index (HDI) is a measurement that aims to see the impact of zakat on the life of a mustahik household based on health and education aspects. Modification of HDI measures the impact of zakat by looking at improvements in survival standards as reflected in the level of health, literacy levels, and access to education that are part of the Human Development Index. Independence index is used to measure the welfare of the recipients of zakat.

#### **4. Result**

##### *4.1 The Village Development Program by Badan Amil Zakat Nasional (BAZNAS) Serang Regency*

The Village Assistance Program of Badan Amil Zakat Nasional (BAZNAS) of Serang Regency has been developed since 2008. This program is conducted in order to support sustainable development and development of the quality of life of the community as poverty reduction. Zakat funds in this program are used for poverty alleviation.

BAZNAS Serang regency develops the village assisted program as a form of empowerment of the recipient of zakat, especially the poor and needy. This program is an empowerment program in accordance with the mission of zakat which emphasizes the change of the mustahik condition of the helpless into a prosperous and self-reliant society. In addition, the program can optimize the community to be more effective and efficient in economic and social dimension because it is implemented in the form of community.

The village assisted program is a community development program that integrates social aspects (education, health, religion, environment, and other social aspects) and comprehensive economic aspects whose main roles are sourced from zakat to promote society. The guided village program includes community development activities in various aspects of life so as to manifest a society that has power in education, health, economy and religious life called community *caturdaya*.

The village assisted program has six principles that must exist in the concept and stage of program implementation and is embedded in the managers and program participants. Six principles of the assisted village include community-based, Islamic sharia, participation, benefit, sustainability and synergy.



The main goal of the pilot village program is the realization of a prosperous and independent community. In addition, the program has a special purpose:

1. Growing awareness and awareness of beneficiaries about quality life.
2. Growing participation towards community self-reliance.
3. Growing social and economic social network.
4. Creating a sustainable empowerment program in realizing community welfare and independence

#### 4.2 The Zakat Impact of The Village Development Program on Tamiang Village

Table 2. Zakat Impact Index on Tamiang Village

Variable	Skor	Index	Indicator	Index	Skor	Catogories
CIBEST Welfare Index	4	0,75	Zakat Impact	0,55	3	Enough
HDI Modification	2	0,25				
Independency Index	4	0,75				

Based on the CIBEST welfare index, the mustahik household welfare in Tamiang Village earns a value of 0.76. Therefore, household welfare can be classified as criterion 4 which means strong. These results indicate that the village program built by BAZNAS of Serang Regency conducted in Tamiang Village can improve the welfare of the recipients. The 0.75 CIBEST welfare index represents 75% of recipients of the BAZNAS-assisted village program in Serang District in Tamiang Village classified as material and spiritual well-being.

The Human Development Index modification variables obtained an actual index value of modified HDI of 0.37. Therefore, the value of the index entered in category 2 which means weak. The value of HDI obtained is 0.25 indicating that the household mustahik if viewed from the side of education and health is in a weak condition

The independence index of Tamiang Village is 3.502, which means the mean mustahik of Tamiang Village and is in category 4. It is seen from the entire head of the mustahik family Tamiang Village has had a steady job. In addition, the majority of family heads also have savings. Therefore, this situation illustrates that the family head mustahik Tamiang Village has a permanent job or business and have savings. These results indicate that the independence of the mustahik household of Tamiang Village is good, with an index value obtained of 0.75.

Based on the index of Zakat impact of Tamiang Village then obtained is a value of 0.55 which fall into the category enough. Therefore, it can be interpreted that the program of guided village of BAZNAS of Serang Regency in Tamiang Village has enough impact on beneficiaries.

#### 4.3 The Zakat Impact on The Village Development Program on Sindangsari Village

Table 3. Zakat Impact Index on Sindangsari Village

Variable	Skor	Index	Indicator	Index	Skor	Categories
CIBEST Welfare Index	3	0,5	Zakat Impact	0,45	3	Enough
HDI Modification	2	0,25				
Independency Index	4	0,75				

Based on the CIBEST welfare index, household welfare the recipients of the village development program by BAZNAS Serang Regency in Sindangsari village received a score of 0.44. Therefore, household welfare can be classified as criterion 3 which means enough. These results indicate that the village development program by BAZNAS Serang Regency conducted

in Sindangsari Village can improve the welfare of the recipients. Index the Cibest welfare of 0,5 represents 50% of beneficiaries of the assisted village program of BAZNAS in Serang regency in Sindangsari village is classified as a material and spiritual welfare. Therefore, the village program built by BAZNAS of Serang Regency can improve the welfare and reduce the poverty of Sindangsari village mustahik.

Based on the above table can be seen that the variable modification of HDI obtained an actual index value of Modified HDI of 0.395. Therefore, value the index entered in category 2 which means weak. Index value of HDM modification the obtained is 0.25 indicating that the household is mustahik if in terms of education and health are in a weak condition.

Mean of self-reliance of mustahik households Sindangsari Village is 3.502 which means the mean mustahik of Sindangsari Village is in category 4. This is seen from the whole family head mustahik Sindangsari Village has have a steady job. In addition, the majority of family heads have also been have savings. This describes the head of the family mustahik Sindangsari Village has a permanent job or business and has savings. These results indicate that the independence of the household mustahik Sindangsari village is good, with the index value obtained by 0.75.

Based on the value zakat impact index in Sindangsari Village, then Sindangsari Village obtained 0.45 which fall into the category enough. By hence it can be interpreted that the program of guided village of BAZNAS Serang Regency conducted in Sindangsari Village is enough to impact on the recipient benefits.

#### *4.4 The Comparison of Zakat Impact Index on Tamiang dan Sindangsari Village*

Based on the value of welfare, health, education, and independence can be seen the impact of zakat development program for mustahik Sindangsari and Tamiang Village. The Zakat Impact Index of Sindangsari and Tamiang villages get a value of 0.45 and 0.55 which means enough. This indicates that the village development program is enough to impact the mustahik of Sindangsari and Tamiang villages. Based in the value zakat impact index, the value of zakat impact index on the mustahik of Tamiang Village more greater than the value of zakat impact index on the mustahik of Sindangsari Village. By hence it can be concluded that the village development program has a stronger impact against the mustahic of Tamiang Village compared to the mustahik of the village Sindangsari.

## **5. Conclusion**

Based on previous exposure it can be concluded that the program the village built by Badan Amil Zakat Nasional (BAZNAS) Serang Regency is community development programs by integrating social aspects (education, health, religion, environment, and other social aspects) and aspects comprehensive economy whose main funding comes from zakat to promote society. In its application in Sindangsari Village and Tamiang, a pilot village program covering economic, educational, health, and religious.

In addition, the Impact of village development programs for recipients in Sindangsari and Tamiang Village are enough. Based on this can be interpreted that the program of the target villages is enough to impact for mustahik in Sindangsari and Tamiang Village. Nevertheless, the impact of zakat on health and education the recipients are still very weak. Based on the zakat impact index, the recipients Tamiang village got better value than mustahik Sindangsari Village. This makes zakat impact index for the mustahik in Tamiang Village better than

mustahik in Sindangsari Village.

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# Development of Character Education Evaluation Models On Economic Learning Groups

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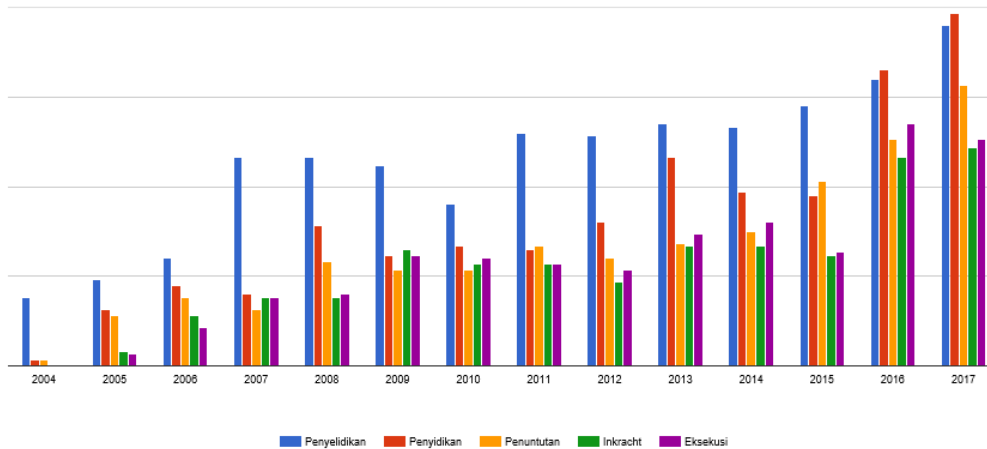
## Abstract

One of the big challenges in efforts to evenly develop development in Indonesia is corruption. When looking at the data of criminal acts of corruption released by the KPK, the amount of corruption that occurs actually increases in number from year to year. One way to increase public awareness so as not to commit acts of corruption is through character education. Character education has been planned and implemented several years ago. But no one has stated and guaranteed that the application of character education is in accordance with what was planned. This study aims to develop a Character Education Evaluation Model in the Economics Learning Group. The results of the study are as follows: 1) Character education evaluation model suitable for evaluating character education in the economic learning groups so that it can provide information about the state of student character education is an evaluation model that accommodates or represents the assessment of both parties (students and educators), simple, and clear in their application. 2) The quality of the evaluation instrument for character education from the instrument construct can be seen through FGD activities followed by experts in their fields. 3) The quality of the character education evaluation instrument is seen from the reliability and validity of the instrument through FGD results and statistical analysis for factor analysis.

**Keywords:** development of evaluation models, character education, economic learning

## 1. Introduction

Indonesia as a developing country certainly needs development in all lines of life. One of the big challenges in the effort of equitable development is corruption. Up to now, even though the supervision system has been so layered, it is suspected that corruption leakage is still high. This is because the concept of supervision still uses a formal supervision system not factual. The impact of corruption in addition to the funds that have become real development is increasingly low, giving rise to people's apathy which in turn reduces the development mission itself. When looking at data on corruption acts released by the KPK, the number of corruption that occurred in Indonesia actually increased in number from year to year.



Source: Anti-Corruption Clearing House  
 Figure 1 Number of Corruption in Indonesia in 2004 - 2017

Acts of corruption that mushroomed almost at every level of society can be called "social diseases". The application of penalties carried out by law enforcers and social sanctions that will be received after receiving punishment by the previous law enforcers as if it did not cause a deterrent effect on the perpetrators. Today, the culprit is increasing. Therefore, it is necessary to find the cause of the moral decline and the solution. To overcome these "social ills", the best solution is needed. So far, improvements have only been made in an increasingly tight system so that corruption perpetrators cannot be infiltrated. That way the amount of corruption will decrease. But unfortunately, public awareness of the problem of morality is still ignored. Not many of them think that corruption is a common action so that even if it is going to take action it is not a problem. On this basis, people who have the potential to take action tend to try to get a gap to take action. How closely is a system, if there is still intention and there is no awareness to become better then those communities will also look for ways. Therefore, acts of corruption tend not to diminish. Thus, the best way to overcome the problem is by increasing the awareness of the community that the action is not good to do.

One way to increase public awareness is through character education. According to Licknona (1991: 6), character education is defined as a deliberate effort to help students to understand, pay attention to, and apply character values. Character formation certainly cannot occur in a short time. Character building takes a long time so character education needs to be taught in universities so that continuity occurs. With this, character education is expected to create superior character in the community. Character education cannot be separated from the role of schools, parents, and the community. This is what Vess said (2003:1):

*... commission defined the term character education as any deliberate approach by which school personal, often in conjunction with parents and community members, help children and youth become caring, principled and responsible.*

Character education is defined as an effort made by school residents, parents, and the community in general to form students to be caring, principled and responsible people. Thus,

the effort to characterize students is not only the responsibility of the school, but the support of parents and the community is also important.

School is one of the central elements in the formation of community character. At present, schools face major challenges in implementing the existing education system. Besides school aims to develop knowledge (cognitive) and skills (psychomotor) of students, schools are also required to develop the character of students. Schools are required to play an important role in helping solve various fundamental problems in terms of forming individuals who behave ethically and have integrity, or the development of personal and social values among students. Howard; Berkowitz; and Schaeffer (2004: 188), states that the toughest challenge in the development of character education for schools that run their education systems based on general education is always grappling with ethical issues and concerns over the low social and moral values of students.

The role of schools has a major influence on students' moral development. Guided guidance starting from input, process, output, and impact needs to be the main focus of the school. In this case, including the evaluation system provided to find out whether an action is appropriate and runs according to the corridor or not. Therefore, the school must enter the character components in each stage of learning evaluation. Wangit (2013) states that character education must be able to change students to become morally responsible individuals, think critically and creatively, and can direct themselves in achieving their future goals. While the core of character education is basic human values such as honesty, kindness, generosity, courage, freedom, equality, and respect.

To support the realization of the ideals of character building, the government through the National Long Term Development Plan (RPJPN) in 2005-2025 placed character education as a foundation for realizing the vision of national development, namely "creating a noble, moral, ethical, cultured, and based society Pancasila philosophy. "In response to the vision of the development plan, the 2010-2025 National Character Building Policy has a purpose for:

Membina dan mengembangkan karakter warga Negara sehingga mampu mewujudkan yang ber-Ketuhanan Yang Maha Esa, berkemanusiaan yang adil dan beradab, berjiwa persatuan Indonesia, berjiwa kerakyatan yang dipimpin oleh hikmat kebijakan dan permusyawaratan perwakilan, dan keadilan sosial bagi seluruh rakyat Indonesia (Pemerintah Republik Indonesia, 2010:4)

The aim of the National Policy on Nation Character Building in 2010-2025 is certainly not foreign to all Indonesian people. This is because the purpose was stated in the opening of the 1945 Constitution so that the importance of character education has been realized since the beginning of Indonesia's independence. But unfortunately, the implementation of character education in Indonesia is not functioning properly. This is evident from the still widespread "social disease" even though character bulding has been inflated since Indonesia's independence and included in the curriculum through the subjects of Religion and Civics Education (Civics) as well as a curriculum that has been changed to support character education.

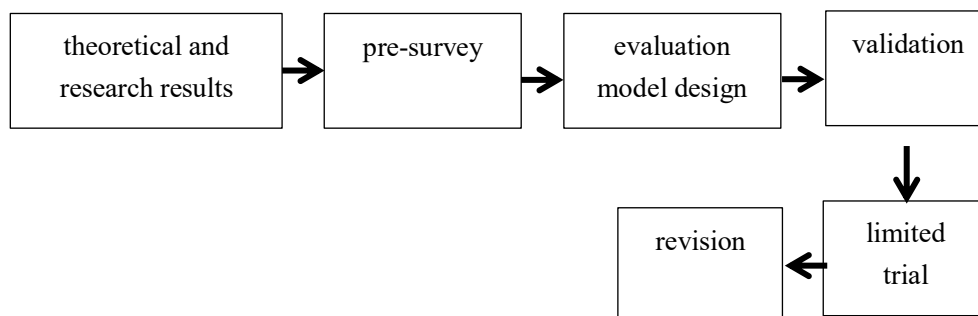
Character education has been planned and implemented several years ago. But no one has stated and guaranteed that the application of character education is in accordance with what was

planned. This is because both the government and education units do not have a character education evaluation model that is able to evaluate students' character education in an appropriate, efficient and effective manner. With the evaluation model, it is expected that schools can capture information about the current state of the students' character so that they can be corrected appropriately.

In this connection, this study aims to develop a Character Education Evaluation Model in the Cluster of Economics Learning. This research will be applied at the university level, especially at the Faculty of Economics because there is no evaluation model for character education at the University level and considering the importance of sustainable character education. The characters or attitudes that exist in this evaluation are the characters or attitudes that are commonly owned by the community such as Honest, Disciplined, Responsible, Collaborative, Courteous, Confident, Self-Sufficient, Creative, Innovative, Never Give Up, Courage to Take Risks, and Efficient.

## 2. Method

This research includes development research, which is developing an evaluation model using the Research & Development approach developed by Borg and Gall (2007:775). The development procedure was implemented with nine steps but in this study only six steps, namely 1) theoretical and research results, 2) pre-survey, 3) evaluation model design, 4) validation, 5) limited trial, 6) revision because in this study only produced a valid and reliable instrument draft. When described in a chart, the procedure is as follows:



Source: Borg and Gall (2007:775)

Figure 2 Research and Development (R&D)

The purpose of this study was to produce a model of Character Education Evaluation in the Economics Learning Group. This character education evaluation requires information obtained through observation, interviews, and questionnaires. The results of this evaluation are input for those responsible for implementing learning to take future policies in order to improve character education in a family of economic learning. This research has been conducted at the Faculty of Economics, and Postgraduate Yogyakarta State University, in March - May 2018. Validation and testing of instruments is carried out in March 2018, data collection in the field is carried out in April 2018 until May 2018.



Validity test by experts and practitioners aims to improve whether the draft is feasible and valid to be a model for evaluating character education in the family of economic learning. And assess whether the statement items in the questionnaire have described the indicators of each attitude. The testing of construction validity in this study was carried out by factor analysis or Confirmatory Factor Analysis (CFA).

### 3. Results

An instrument is declared valid if the Kaiser Meyer Olkin value (KMO) is greater than 0.05 and the value of Measures of sampling adequacy (MSA) is above 0,05. The results of factor analysis can be seen in the following:

Table 1 Appropriateness Analysis

<b>Variables</b>	<b>Bartlett's Test Results</b>	<b>KMO (Keizer Meyer Olkin)</b>	<b>Evidence</b>
Honest	0,000	0,697	Valid
Discipline	0,000	0,760	Valid
Responsible	0,042	0,509	Valid
Collaborative	0,000	0,523	Valid
Polite	0,000	0,790	Valid
Confidence	0,000	0,856	Valid
Independence	0,000	0,702	Valid
Creative	0,000	0,768	Valid
Innovative	0,000	0,771	Valid
Never give up	0,000	0,862	Valid
Courage to Take Risks	0,000	0,685	Valid
Efficiency	0,000	0,628	Valid

Source: Processed Data

Based on the analysis output in the table above, it is known that the Keizer Meyer Olkin coefficient (KMO) for all variables is greater than 0.50 and the significance of Bartlett "s Test = 0.00 ( $\geq 0.05$ ). This shows that these variables are valid so they are suitable for use. Data can be analyzed by factor analysis. In this study, a construct or variable is said to be reliable if it gives the value of Cronbanch Alpha > 0.60 (Ghozali, 2013). So if the value of Alpha Cronbanch from each variable is Honest, Disciplined, Responsible, Collaborative, Courteous, Confident, Self-Sufficient, Creative, Innovative, Never Give Up, Courage to Take Risks, and Efficient more than 0.60 then each of these variables considered reliable. Reliability test results are presented in the following description:

Table 2. Reliability Test Results

<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>Evidence</b>
Honest	0,636	Reliable
Discipline	0,710	Reliable
Responsible	0,223	Unreliable
Collaborative	0,638	Reliable
Polite	0,697	Reliable
Confidence	0,839	Reliable
Independence	0,709	Reliable
Creative	0,782	Reliable
Innovative	0,814	Reliable
Never give up	0,827	Reliable
Courage to Take Risks	0,705	Reliable
Efficiency	0,510	Unreliable

Source: Processed Data

The reliability test results show that the Cronbach's Alpha coefficient of all the variables to be studied is greater than 0.60 so it can be stated that most of these variables are reliable, while the unreliable variables are responsibility and efficient variables.

#### **4. Discussion**

##### *4.1 Character Education Evaluation Model*

The character education evaluation model departs from the success of a learning not only in terms of the cognitive and skills of the students. But learning success is also seen from the assessment of the character (attitude) of students as well. Many examples have been found, many people are smart and skilled at something, but lack positive characteristics so that they use themselves for things that are not good.

In this study, only focused on the assessment of character education (attitude). To conduct character assessment, it is necessary to determine what character or attitude is the aspect of assessment. From the character or attitude that will be assessed, it can be seen the indicators of each character. Through these indicators, assessment techniques can be developed.

The assessment technique of this character education evaluation model uses only two assessment techniques, namely self-assessment by students (students) and observation sheets by education (lecturers). Because by using two assessment techniques it has represented an assessment technique other than the valuation technique used. Assessment techniques other than assessment techniques used are journal sheets and peer assessments. Journal sheets are essentially the same as observation sheets which are both observed by educators (lecturers). While peer assessment is almost the same as self-assessment because it uses the same indicator as the assessment. While peer assessment is almost the same as self-assessment because it uses the same indicator as the assessment. After going through self-assessment and observation sheets, the students' character values or attitudes will be known.

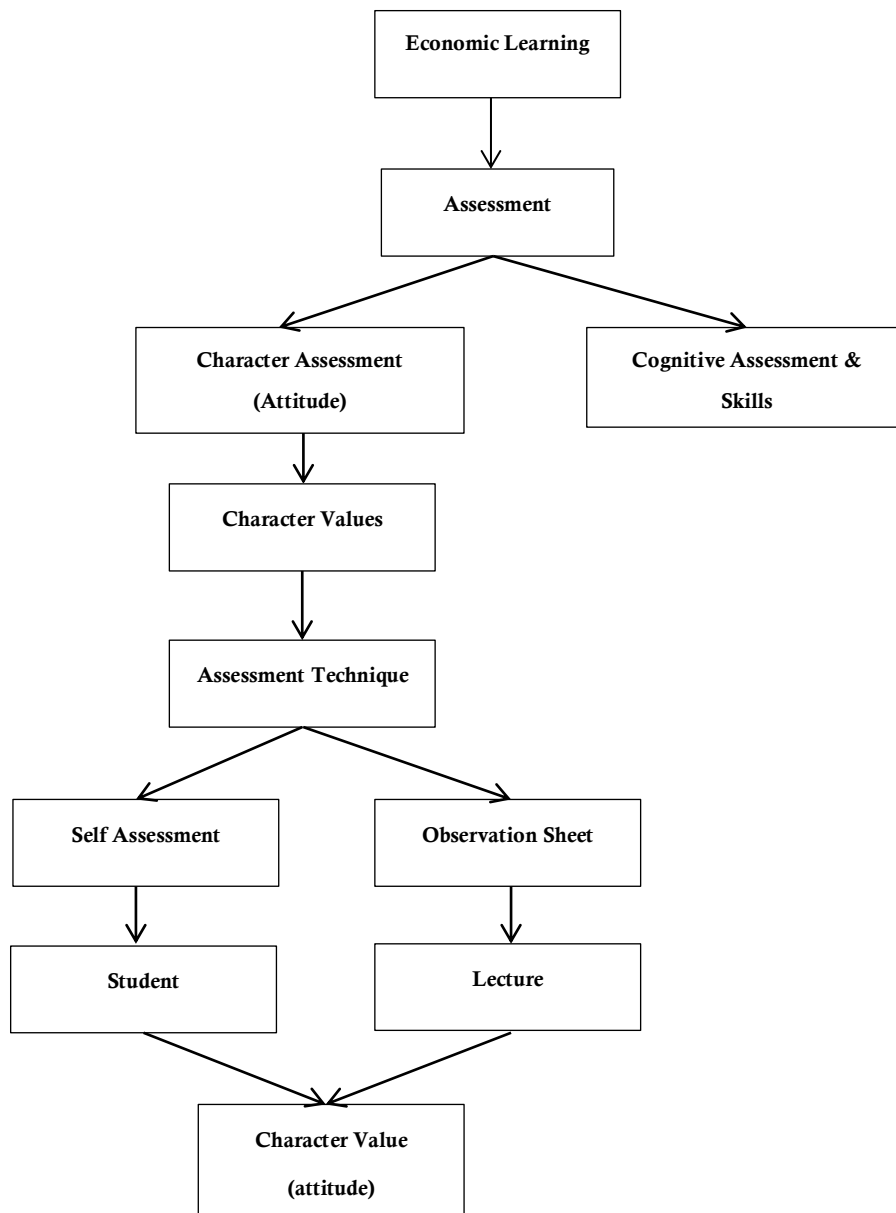


Figure 3 *Character Education Evaluation Model*

#### 4.2 *Character Education Instruments*

The character education evaluation model developed in this study uses self-assessment techniques and observation assessments. In the assessment of self-developed instruments that are closed with four possible answers (always, often, never and never). The more often perform an action, the better the characteristics that so that the self-assessment contains four possible answers always, often, never and never) in this analysis is divided into five categories (Very Good, Good, Good Enough, Low Good and Not Good). While the observation technique is developed by an instrument that is closed as well. But what distinguishes only the observer. In self-assessment that becomes an observer is yourself, while observation is an educator or lecturer.

The values developed in the evaluation are Honest, Disciplined, Responsible, Collaborative, Courteous, Confident, Self-Sufficient, Creative, Innovative, Never Give Up, Courage to Take Risks, and Efficient. Evaluation of these attitudes when made into tables like the following:

Table 3. Gradation of Attitudes of Each Character Value

Gradation Character Value	Very Good		Good		Good Enough		Low		Not Good	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Honest	0	0	68	60,2%	44	38,9%	1	0,9%	0	0
Discipline	0	0	44	38,9%	58	51,3%	11	9,7%	0	0
Responsible	0	0	33	29,2%	66	58,4%	14	12,4%	0	0
Collaborative	4	4,4%	28	24,8%	57	50,4%	18	15,9%	5	4,4%
Polite	0	0	67	59,3%	42	37,2%	4	3,5%	0	0
Confidence	0	0	17	15%	52	46%	35	31%	9	8%
Independence	0	0	12	10,6%	44	38,9%	49	43,4%	8	7,1%
Creative	0	0	12	10,6%	43	38,1%	43	38,1%	15	13,3%
Innovative	1	0,9%	15	13,3%	47	41,6%	43	38,1%	7	6,2%
Never give up	0	0	39	34,5%	55	48,7%	18	15,9%	1	0,9%
Courage to Take Risks	0	0	32	28,3%	54	47,8%	27	23,9%	0	0
Efficiency	0	0	19	16,8%	67	59,3%	23	20,4%	4	3,5%
<b>Amount</b>	<b>5</b>	<b>0,37%</b>	<b>386</b>	<b>28,49%</b>	<b>629</b>	<b>46,42%</b>	<b>286</b>	<b>21,11%</b>	<b>49</b>	<b>3,62%</b>

Source: Processed Data

From the table of attitude gradations, each of these character values can be seen that the majority of the characters or attitudes possessed by students have a pretty good grade. In this way it can be concluded that the average character possessed by students is having a fairly good attitude.

#### 4.3 Feasibility of Evaluation Models and Character Education Assessment Instruments

##### 4.3.1 Feasibility of Character Education Evaluation Models

The construct clarity of the research variables of Character Education Evaluation was validated in the form of Forum Group Discussion (FGD). This activity was held on April 20, 2018 at Yogyakarta State University. Expert judgment that contributes to this activity is an expert in the evaluation of learning and character education. The experts are Prof. Dr. Bambang Subali, M.S., Dr. Marzuki, M.Ag., Dr. Suranto, M.Pd., M.Sc., and Ali Muhson, M.Pd. The activity began with the delivery of income by each expert regarding the Character Education Evaluation research instrument. Every submission by each expert, the researcher gave a response. It aims to unite the views of experts and researchers.

The FGD activities agreed on several matters concerning the instrument of the character education evaluation model, namely: 1) The characters / aspects that can be observed in the character education evaluation model plus specific aspects in accordance with the clusters of economic learning such as creative, innovative, and efficient. 2) The instrument in the

evaluation of character education contains an observation sheet on each aspect and a self-assessment sheet. Because using the two assessment techniques has represented a valuation technique outside the assessment techniques used. 3) The character evaluation guide model has also changed. Existing changes are adjustments to the latest regulations. At first the writer used Permendikbud regulation No. 81A of 2013. However, after the FGD activities using the latest regulations Permendikbud No. 23 of 2016.

After the FGD activities were carried out, revisions were carried out in accordance with the advice of the experts relating to the constructs and contents of the instrument items to be used for the instrument testing. It is intended that the instrument used for instrument testing is nearing perfection or in other words it is close to what is intended from this research.

#### *4.3.2 Feasibility Instrument*

Limited-scale trials were conducted in several study programs in the Faculty of Economics, Yogyakarta State University which were conducting learning in the economic group. The respondents in fact were at the beginning of the lecture (semester 2 as many as 63 respondents) and at the end of the course (semester 6 as many as 50 respondents). It aims to be able to represent the condition of respondents in the learning of the economic group in general.

The trial was conducted to determine the extent to which the evaluation model and the instrument can be valid and reliable in the evaluation of quantitative character education. The instrument tested in this case is only the Self-Assessment Sheet instrument. In this instrument an indicator of each aspect that will be measured is contained. In this way, the researcher feels it is enough to just do a trial on one of the existing instruments. Data from the limited scale trial were then analyzed with SPSS software to find out whether the instrument is valid and reliable. Based on the Confirmatory Factor Analysis (CFA) and reliability analysis can state a number of things. Instrument validation was assessed based on the criteria of the factor loading item at least 0,4 (Hair et al, 1998: 648). Therefore if the factor loading value is  $> 0.4$  then the instrument item is declared valid. And a construct or variable is said to be reliable if it gives the value of Cronbach Alpha  $> 0.60$  (Ghozali, 2013).

The general values developed in the evaluation are Honest, Disciplined, Responsible, Collaborative, Courteous, Confident, and Self-Sufficient serta the economic values developed in the evaluation are Creative, Innovative, Never Give Up, Courage to Take Risks, and Efficient. Not all instrument items from each character are valid and reliable. In a disciplined, polite, confident, and independent attitude there is one instrument that is invalid so that the instrument is omitted. And there are two unreliable attitudes namely responsibility and efficiency so that both attitudes are reviewed to improve instrument items.

## **5. Conclusion**

Based on the description of the research results data and a description of the discussion that has been surfaced, conclusions can be drawn, namely: 1) Character education evaluation model suitable for evaluating character education in the economic learning groups so that it can provide information about the state of student character education is an evaluation model that accommodates or represents the assessment of both parties (students and educators), simple, and clear in their application. 2) The quality of the evaluation instrument for character education

from the instrument construct can be seen through FGD activities followed by experts in their fields. 3) The quality of the character education evaluation instrument is seen from the reliability and validity of the instrument through FGD results and statistical analysis for factor analysis.

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# Developing Contextual Learning Videos on Course of Administration Education Research Methodology

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## **Abstract**

This study aimed to produce and determine the feasibility of contextual learning video on course of Administration Education Research Methodology. The research method was research and development of ADDIE models. The stages of this research and development consisted of Analysis, Design, and Development. The data collection techniques in analysis stage were interview and observation, meanwhile questionnaire was used in development stage. Data collection instruments were inventory questionnaires with rating scales. Data analysis technique was descriptive analysis with quantitative and qualitative approaches. Validation of developed contextual learning media involved media expert and material expert. The conclusions of the particular study are: 1) has produced a contextual learning video on course of Administration Education Research Methodology with material of research proposal in topic of Introduction; 2) according to the assessment of media expert and material expert, the developed learning video have criteria of very feasible.

**Keywords:** video of learning, contextual learning, research methodology

## **1. Introduction**

Students of office administration education study program are required to have ability to conduct research to write thesis. Aim to equip the students' abilities, the curriculum of office administration education study program has provided course of Administration Education Research Methodology. The subject aims to provide knowledge and skills in writing proposals, conducting, and writing research reports. The students' ability to write proposals, conduct, and write research reports are a prerequisite for writing thesis.

The learning activities of Administration Education Research Methodology subject is not optimal. An example problem is low participation of students in learning. The students are more passive during the learning. The students are rarely to ask or give respond. Another problem is low of students' understanding on learning material. The low level of students' understanding can be seen from the inability of the most students in explaining the concepts when the lecturer asks them. Moreover, the students' ability to write research proposal is also low. The quality of research proposals that wrote by students is less of good in general. The problems relates to the learning media (lack or inadequate) to facilitate the students in understanding the learning material.

Based on the background, an effort is needed to solve the problem in order to improve the



quality of learning on course of Administration Education Research Methodology. An effort of problem solving is developing media to facilitate students in understanding the material of Administration Research Methodology. Media is all types or kinds form that able to transfer the information from senders (informant) to receivers (Prastati, 2005: 3; Heinich, 1996: 8). If the media contains messages or information with the purpose of learning, then the media is called as learning media (Heinich, 1996: 8). In the context of education, media is commonly referred to learning facilities – transfer material or messages to students (Wang & Cheung, 2003: 217). Thus, the media is component of learning resources or physical means contain instructional material in student environment to stimulate students in learning.

Learning media is constantly to develop along with the development of science and technology. The development of learning media also follows the demands and needs of learning, in accordance with the situations and conditions. Arsyad (2007: 29) classifies the learning media into four groups; the media produced by printing technology, media produced by audio visual technology, media produced by computer technology, and media produced by combination of printing and computer technology. Media is very important in learning because it can clarify the presentation of messages, solve the limitations of space, time, and sensory power, solve the problem of students' passive, and the students become more enthusiastic and more independent in learning, and provide stimuli, experiences, and perceptions to learning material (Sadiman, 2006: 17-18).

Contextual learning as a learning strategy is widely discussed among the education communities. There a lot of opinions associate with the definition of contextual learning. Johnson (2012: 58) argues that contextual learning is a suitable learning system to brain that produces meaning by connecting the academic content with the real context of students' life. Sanjaya (2009: 255) defines contextual learning as a learning strategy involving students to find the material and connect it into real life situations in order they can apply the learning material within their lives. Contextual learning has positive impact on learning outcomes (Putnam & Leach: 2007).

Then, the purpose of the particular study is to produce a contextual learning media of learning video on course of Education Administration Research Methodology and to determine the feasibility of contextual learning media based on expert.

## **2. Method**

The research method was research and development of ADDIE models. The stages of this research and development consisted of analysis, design, development, implementation and evaluation. Analysis stage consists of problem analysis and analysis of learning components. Design stage consists of making the structure of learning materials and storyboards. Development stage consists of making the scenarios for learning video, making the learning video and expert validation.

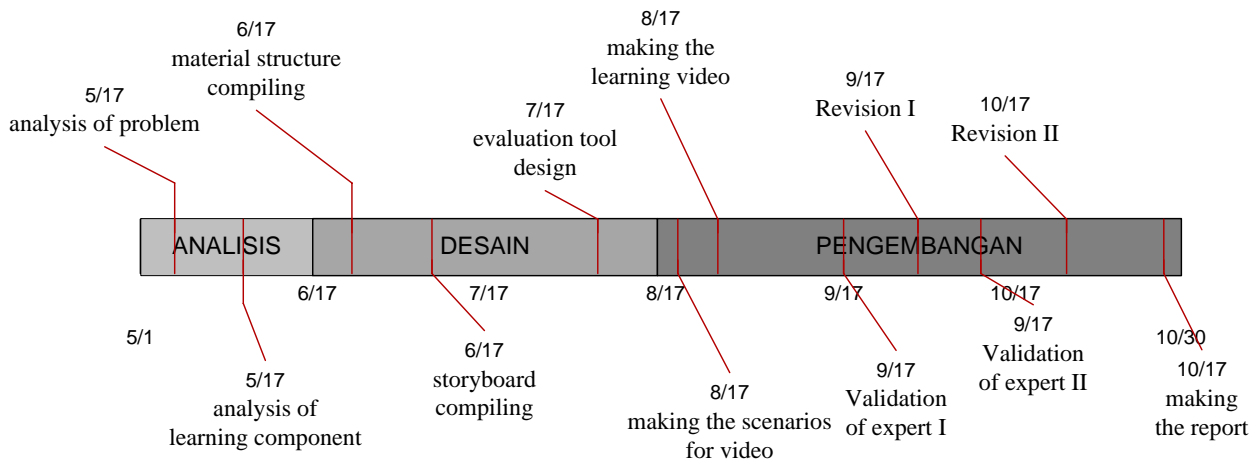


Figure 1. Scheme of learning media development procedures

The data collection techniques in analysis stage were interview and observation, meanwhile questionnaire was used in development stage. Questionnaire was used to obtain data on expert's assessment toward the developed product. The questionnaires were inventory questionnaires with rating scales. The aspects on expert's validation are feasibility of media and feasibility of material.

Data analysis in the particular study included analysis of problems, components of learning and analysis of expert validation results. Data analysis technique was descriptive analysis with quantitative and qualitative approaches. Descriptive techniques used to analyze the results of problems and learning components of Office Administration Education Research Methodology. Quantitative techniques used to analyze data from experts. The criteria to determine media feasibility is presented in table 1.

Formulas of Range	Score	Criteria
$\bar{X} > \bar{X}_i + 1,8 S_{bi}$	>4,2	Very feasible
$\bar{X}_i + 0,6 S_{bi} < \bar{X} \leq \bar{X}_i + 1,8 S_{bi}$	>3,4 - 4,2	Feasible
$\bar{X}_i - 0,6 S_{bi} < \bar{X} \leq \bar{X}_i + 0,6 S_{bi}$	>2,6 - 3,4	Sufficient
$\bar{X}_i - 1,8 S_{bi} < \bar{X} \leq \bar{X}_i - 0,6 S_{bi}$	>1,8 - 2,6	Poor
$\bar{X} \leq \bar{X}_i - 1,8 S_{bi}$	$\leq 1,8$	Very poor

Table 1. Criteria of media feasibility

### 3. Results

#### 3.1 Results in Analysis Stage

##### 3.1.1 Result of Problem Analysis

The data in analysis stage obtained through interviews with respondents, consisting of students of Office Administration Education Study Program of Economic Faculty, Yogyakarta State University who has taken the course of Office Administration Education Research Methodology. The numbers of interviewed respondents were 5 students consisting of students from 2012 and 2013. The respondents were randomly selected. Based on the results of interviews, it obtained data of problems in learning of Office Administration Education Research Methodology. The

problems according to the students' version are: 1) difficult to understand the material of research methodology; 2) poor of variety learning methods; 3) non-contextual of material in media.

Table 2. Problems of research methodology learning

Problems	Number of Respondents	Percentage (%)
Difficult to understand the material	5	100
Poor of variety learning methods	5	100
Non-contextual of material in media	3	60

Furthermore, based on observation to students who are writing thesis, it obtained data about the poor of students' understanding on the research methodology material. Observations were conducted to 4 (four) students who currently conduct thesis guidance and 4 (four) students who have passed thesis examination.

Table 3. Students' understanding toward research methodology material

Research Methodology Material	Students' Understanding	Number of Students	Percentage (%)
Chapter of Introduction	Poor	7	87,5
	Sufficient	1	12,5
	Good	0	0
Chapter of Literature Review	Poor	1	12,5
	Sufficient	7	87,5
	Good	0	0
Chapter of Research Method	Poor	2	25
	Sufficient	6	75
	Good	0	0
Chapter of Result and Discussion	Poor	1	12,5
	Sufficient	6	75
	Good	1	12,5
Chapter of Conclusion	Poor	1	12,5
	Sufficient	6	75
	Good	1	12,5

### 3.1.2 Results of learning components analysis

Based on analysis of learning components of Office Administration Education Research Methodology, it obtained data and presented in table 4.

Table 4. Results of learning components analysis

Learning Components	Description
Goal of learning / learning objectives	Fulfilled and Clear
Learning material	The scope is clear Theoretically / textually
Media	PowerPoint
Lecturer	Incredible competent
Students	Poor of active Poor of autonomous / independent

### 3.2 Result of Design Stage

The design stage produced material structure, storyboard, and instructions of media evaluation instrument.

#### 3.2.1 Material Structures

Based on the results in analysis stage, the main problem is poor of material understanding in topic of writing the chapter of introduction. Therefore, the developing of learning video focused on the material of chapter of introduction. The material structures of chapter of introduction included concept of problem, background, problem identification, problem limitation, problem formulation, research objectives, and research significances.

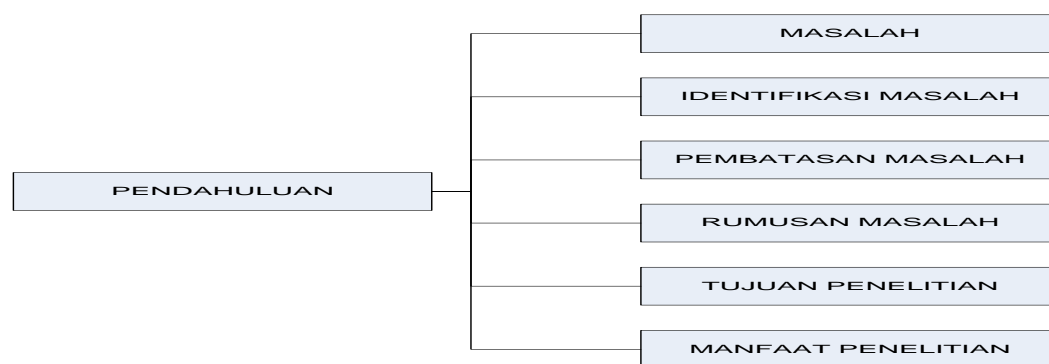


Figure 2.  
Learning  
Material

Structures

#### 3.2.2 Storyboard

Storyboard that made in design stage is a descriptive storyboard. Descriptive storyboard contains subject materials, video scene scenarios, and cast of learning video scenes. The scenario scene video are designed on four dialogue scenes and a narration. The learning video storyboard is attached in attachment section.

#### 3.2.3 Instructions of Evaluation Instruments

The instructions of evaluation instruments consisted of media evaluation instrument by material expert and media evaluation instrument by media expert. The instructions of media evaluation instruments by material expert consisted of indicators of concept authenticity, material factuality, material actuality, sequences of material presentation, video conformity to clarify the material, and language use. The instructions of media evaluation instruments by media expert consisted of video title indicators, letter use, text readability, display attractiveness, object layout, color composition, and presentation sequences.

### 3.3 Results of Development Stage

#### 3.3.1 Evaluation Instruments

The developed of media evaluation instruments consisted of evaluation instruments by media expert and material expert. The developed of media evaluation instruments are presented in appendix section.

#### 3.3.2 Media Products

The developed of learning media product was learning video. The developed of learning video consisted a scene of problem that occur in learning activities of office administration in Vocational High Schools and narration explaining the material based on the video scene.

The video was 20 minutes 59 seconds, 1920 X 1080 pixel frame size, and 1.8 GB file size.

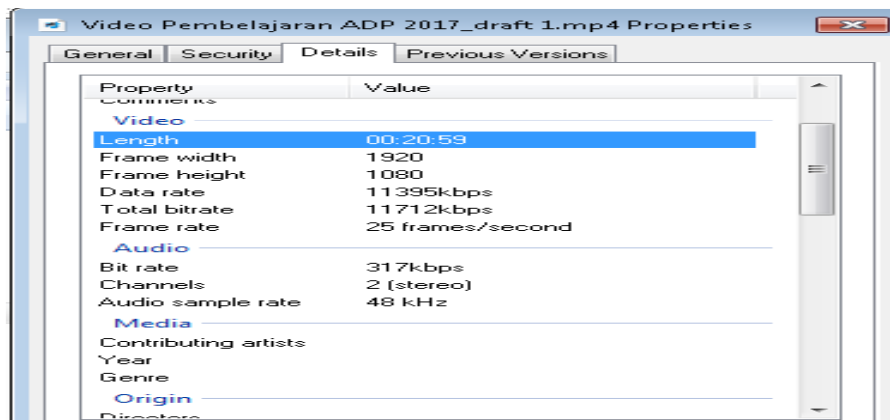


Figure 3. Metadata of learning video



Figure 4. Capture of learning video

### 3.4 Validation Results

The quality of learning video was validated by media expert and material expert. Media expert was Mrs. Muslikhah Dwiartanti, SIP., M.Pd. She is lecturers in Technology of Administration Learning. She graduated from Learning Technology of Postgraduate program at Yogyakarta

State University. Material experts was Mr. Ali Muhson, M.Pd. He is an expert in the field of research methodology and statistics. He graduated from master degree and doctoral candidate in the field of Educational Research and Evaluation of Postgraduate program at Yogyakarta State University.

### 3.4.1 Validation Results of Media Expert

Validation of media quality consisted of 8 aspects of assessment. The results of validation by media expert were presented in table 7. Based on the assessment by media expert, the average score was 4.25.

Besides providing assessments, media expert also provide suggestions and insight for improvement. The suggestions and insights by media expert are consistency in letters use and numbering. Also, media expert provides recommendation to revise the product before applied into the learning.

Table 7. Validation results of media expert

No	The Assessment Aspects	Very Poor	Poor	Sufficient	Good	Very Good
1	The clarity of title				4	
2	Font type selection				4	
3	Font size selection			3		
4	The legibility of text				4	
5	Video display					5
6	Layout				4	
7	The balance of background color and text					5
8	The consistency of display among sections					5
Total of score				3	16	15
Total of score				34		
Average				4,25		
Suggestions / Comments:						
1. Inconsistency of font size in some sentences						
2. There are bold words and not bold words						
3. The need of numbering consistency						
4. It should be revised						

### 3.4.2 Validation Results by Material Expert

Validation of material quality consisted of 7 aspects of assessment. The results of validation by material expert were presented in table 8. Based on the assessment by material expert, the average score was 4.28.

Table 8. Validation results by material expert

No	The Assessment Aspects	Very Poor	Poor	Sufficient	Good	Very Good
1	Concept authenticity				4	
2	Material factuality				4	
3	Material actuality				4	
4	Sequences of material presentation					5
5	Video conformity to clarify the material				4	
6	Accuracy of language use					5
7	Clarity of language use				4	
Total of score					20	10
Total of score				30		
Average				4,28		
Suggestions / Comments:						
1. No need to use the term famous and professional schools						
2. The reasons of research importance should be written in a text						
3. The explanation of problem identification should be interrelated among the problems						
4. The problem of students' lack of skill does not need to be explained again in narration						
5. Need more emphasize on the lack of teacher's skills						
6. Generally, problem formulation is question (s), not statement (s).						
7. Need to add material of research significances						
8. It should be revised						

Besides providing assessments, material expert also provides suggestions and insight for improvement. The suggestions and insights by material expert are the reasons of research importance should be written in a text, the explanation of problem identification should be interrelated among the problems, problem formulation is question (s), not statement (s), and need to add material of research significances. Also, material expert provides recommendation to revise the product before applied into the learning.

#### 4. Discussion

##### 4.1 Contextual Based Learning Media for Administration Research Methodology learning

Based on problem analysis stage, there are three problems in learning of Administration Education Research Methodology. They are: 1) students are difficult to understand the material of research methodology; 2) poor of variety learning methods; 3) non-contextual of material in media. All respondents stated that material of Administration Education Research Methodology is difficult to understand. This statement is supported by observation results to students who are writing thesis and have passed thesis examination. Students' understanding is on poor category, especially in writing the chapter of introduction.

The chapter of introduction is very important part and as foundation to other next chapters in research proposal. The errors or mistakes in formulating the components of introduction will result in errors and difficulties in making research proposals. Therefore, an understanding to components of introduction chapter which consists of background of the problem, problem identification, problem limitation, problem formulation, and research objective, must be well taught within students. One of the solutions is by presenting material through media with contextual material.

Furthermore, based on analysis of learning components, there are components that are less support to learning. Among five components (see table 4), two components need to improve;

material and students. Learning material is poor of contextual, as the impact, students are difficult to understand. Moreover, students are also more passive and poor of independent learning, so they have not good material understanding.

The developing media of learning video is conducted based on the results of needs analysis and learning problems (Widiati, Irawati, Basthomi, et. al: 2013). Based on analysis stage, the learning media are the learning video. The developed learning video focused on material of introduction chapter. Learning video used a contextual approach. It means, the content of learning video is real problem demonstration in order students are easily understand the material. Contextual learning is a learning concept that helps teachers associate the material with the students' real situations, and encourage the students to make connections between the knowledge and its application in their lives as family members and society (Hadiyanta: 2013). Based on research conducted by (Irwandi: 2013), contextual learning have a positive effect on cognitive learning outcomes. Contextual learning can facilitate the students' understanding to the material being studied (Shamsid-Deen & Smith: 2006). Thus, the developing of contextual learning media in learning video is in accordance with the needs and supported by the findings of previous research.

#### 4.2 Product Feasibility

To find out the quality of learning video, validation was conducted by material expert and media expert. The validation results by material expert obtained average score of 4.28 with very feasible category. Thus, in terms of material, the developed learning video is very feasible to use in learning.

The validation results by media expert obtained average score of 4.25 with very feasible category. Thus, in terms of media, the developed learning video is very feasible to use in learning. However, both media expert and material expert provide recommendation to revise the product before applied into the learning.

### 5. Conclusions

In accordance with the research objectives, it has produced a contextual learning video on course of Administration Education Research Methodology with material of research proposal in topic of Introduction. According to the assessment of media expert and material expert, the developed learning video has criteria of very feasible. However, both media expert and material expert provide recommendation to revise the product before applied into the learning

### 6. Suggestions

The lecturer on course of administration education research methodology should consider using contextual learning strategy in order the students are easily understand the material. The students should actively ask if they do not understand the material, and diligently to read the material independently without having an assigned by the lecturer.

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# The Readiness of Integrated Reporting Implementation in ASEAN Exchange: A Perspective of FTSE ASEAN Stars Index

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## Abstract

This research aims to identify the readiness of companies listed in FTSE ASEAN Stars Index in ASEAN Exchange to implement the Integrated Reporting (<IR>). This research is a descriptive quantitative approach. The population in this research are 180 FTSE ASEAN Stars Index listed company in ASEAN Exchange year 2017. A purposive sampling method is used as a sampling method and 151 companies are selected as a sample of research. The data analysis techniques is descriptive analysis. The result of this research show that the companies listed in FTSE ASEAN Stars Index in ASEAN Exchange in average were categorized unprepared to implement the <IR>. The average score of readiness of companies to implement <IR> are 18.93% in Indonesia, 16.67% in Malaysia, 18.11% in Singapore, 17.41% in Thailand, 12.07% in The Philippines, and 11.67% in Vietnam.

**Keywords:** FTSE ASEAN Stars Index, Integrated Reporting, <IR> Frameworks

## 1. Introduction

Integrated Reporting or <IR> is a reporting model, which currently are used by companies in several countries. <IR> is the abbreviation of Integrated Reporting on Integrated Reporting Framework, which was published by the International Integrated Reporting Council (IIRC). <IR> is a concept which that has been created to better articulate the broader range of measures that contribute to the long-term value and the role organizations play in society (EY, 2014b, p.1). <IR> is a mechanism for presenting information about strategy, governance, performance, and prospect which have relation each other in one report. This one report called integrated report. The purpose of integrated report creation is to give better information about stakeholder's strategic decision-making, the integrated risk of the company, and the company gives better-going concern and support for the stakeholders (Hoesada, 2013).

<IR> is not only created an integrated report, but the essence of <IR> is the companies can review and reevaluate their business activities to create sustainability value. <IR> contribute to increasing the quality of companies' information reporting (Adriana, 2015, p.1). <IR> aims to support integrated thinking, decision-making and actions that focus on the creation of value over the short, medium and long term (IIRC, 2013, p.2). Several companies start to implement <IR>. It was started from the idea of the International Integrated Reporting Council (IIRC). The IIRC is an international cross-section of leaders from the corporate, investment, accounting,

securities, regulatory, academic, civil society and standard-setting sectors (IIRC, 2011, p.3). The IIRC was established in 2010 in recognition of the need to move toward an International <IR> Framework that is fit-for-purpose for the 21st century (IIRC, 2011, p.5). The IIRC was formally launched by Accounting for Sustainability (A4S) and Global Reporting Initiative (GRI) (with support from the International Federation of Accountants (IFAC)) in August 2010 (Slack & Campbell, 2016, p.12).

Subsequently, the IIRC made clear the importance of <IR> and its positioning as being the global authority of <IR>. Its vision is clear: to enable integrated reporting to be embedded into mainstream business practice in the public and private sectors (IIRC, 2013, p.4). The discussion paper “Toward Integrated Reporting” was published by IIRC in September 2011 consists of explanation about the importance of <IR> (Slack & Campbell, 2016, p.13). It is a started action of the IIRC to develop the <IR> guideline (Adriana, 2015, p.2). Over the four years following its formation in 2010, the IIRC had a period of intense activity culminating in the publication of the International <IR> Framework in December 2013 (Slack & Campbell, 2016, p.12).

Currently, many large companies around the world issue separate financial and sustainability reports. The financial reports are shaped by accounting standards, while the sustainability reports are not but often comply with voluntary reporting standards, such as those created by the GRI. Moreover, while financial reporting is meant for investors, sustainability reporting is meant for stakeholders including employees, customers, suppliers, local communities, and NGOs (Eccles & Serafeim, 2014, p.4). This separate reporting have no links or relationships between financial reporting and sustainability reporting.

Sustainability report tend to be published with a lag of several months compared to financial reports, making the information included in them less valuable. Information contained in sustainability report is rarely presented in the context of the business model and the strategy of an organization, making it difficult for investors to understand how environmental, social, and governance (ESG) performance relates to financial performance and how sustainability issues affect value creation process in an organization (Eccles & Serafeim, 2014, p.6). There are no links between financial reporting and sustainability reporting to be a reason to integrate both of them. In short, annual report and sustainability report to be one report as integrated reporting of financial and nonfinancial information (Eccles & Krzus, 2010, p.22).

Research by ACCA and Net Balance Foundation (2011) considered to the extent to which ASX 50 companies are adopting an integrated approach to business and the extent to which they acknowledging the interdependencies between financial and non-financial matters. The result of this research found that the variation of ESG or nonfinancial information's integrated into the main business. In line with research by EY (2014a) found that the quality of the report is various. Besides, it has incensement of reporting for the previous year. Research by PwC (2013) and Deloitte (2014) aim to evaluate the <IR> implementation and identify the specific elements which need to develop based on <IR> Framework. Previous research about <IR> reflects the effort from academicians and institutions to contribute in develop <IR>. The reporting practice needs to increase. <IR> is an effort to increase it.

<IR> is a new reporting model in ASEAN countries. Singapore is one of 25 countries of the IIRC Pilot Programme. DBS Group Holding, Ltd (DBS) is an entity from finance industry classification in the IIRC Pilot Programme from September 2011 to September 2014. DBS issued its first integrated report in place of the traditional annual report for the 2013 financial year. Internationally, DBS is one of the pioneering companies to adopt <IR>. It was the first company in South East Asia to participate in the IIRC <IR> Pilot Programme (ISCA, 2015, p.4).

Reporting in Malaysia is not yet integrated. The result of PwC benchmarking analysis show that while Malaysian businesses have the basis of reporting covered, their reporting is not yet integrated, and there is significant upside in improving stakeholder communications should companies choose to go down the path toward <IR> (PwC, 2014, p.4). The Federation of Accounting (FAP) in Thailand agreed with the fundamental concept of <IR> and consider that the substance and form of Thailand's financial report must increase using <IR>. The FAP in cooperation with Securities of Exchange Commission to increase the reporting structure of Thailand's companies to meet the stakeholders needed. This plan discussed at the 19th National Conference of Accountant on 1-2 September 2014 (Bangkok Post, 2014). Whereas in Indonesia is not yet rules to accommodate <IR>. Although, 18th National Accounting Symposium in 2014 discussed the role of the accountant to create sustainable development using <IR> (Martani, 2014). It means that the support of all sides, especially role of the accountant to understand and contribute to developing <IR> in ASEAN countries.

<IR> is the ideal model of report. It is scalable for future needs, flexible so that users can get customizable reports, and practical, so it provides a useful management tool within the company as well as a disclosure tool for outside stakeholders (Davis and Lukomnik, 2012, p.44). The participants of the <IR> Business Network interviewed by ACCA (2017, p.4) for report identify many benefits for adopting <IR>. These include more integrated thinking and management, greater clarity on business issues and performance, improved corporate reputation and stakeholder relationships, more efficient reporting, employee engagement, and improve gross margin.

Lee and Yeo (2016), investigate linked between <IR> and firm valuation. They find that disclosures of <IR> have positive associations with firm valuation. The results imply that <IR>'s benefits go above its cost. Therefore, they argued <IR> able to reduce cost related to information procession where the environment operation and information is complex. Zhou et al (2017) carried an explanatory research, <IR> to capital market benefits. They find a high level of alignment with <IR> and reduction in cost capital. Their findings indicate that <IR> enhances the information quality and companies' reporting environment. They also found that the level of alignment of integrated reports is helpful for analysts in formulating their prediction for earnings, probably because the integrated report contains information on corporate strategy, business model, and future oriented information.

This research aims to identify the readiness of listed companies in FTSE ASEAN Stars Index in ASEAN Exchange to implement the <IR>. FTSE ASEAN Stars Index is chosen that in line

with the statement of IIRC that the initial focus is on reporting by larger companies (IIRC, 2011, p.8). FTSE ASEAN Star Index is one of the categories of FTSE ASEAN Index Series. FTSE ASEAN Stars Index comprises 30 companies from each of the ASEAN exchange of Indonesia, Malaysia, Singapore, Thailand, and the The Philippines, and 15 companies from the two Vietnam member exchange (Ho Chi Min and Hanoi). This index is intended to serve as a mere barometer and not as the underlying benchmark for financial products (FTSE Russel, 2015, p.6). A large number of shares for investors to choose from it can be difficult to know where to start. To facilitate cross-border investment, ASEAN Exchanges provides an easily identifiable reference for investors in the form of the ASEAN Stars. The ASEAN Stars comprise blue-chip stocks representing the 30 most exciting companies of each ASEAN country, as ranked by invest ability in terms of market capitalization and liquidity (ASEAN Exchange, 2012, p.5).

Currently, many large companies around the world issue separate financial and sustainability reports. This separate reporting have no links or relationships between both of them. Annual report and sustainability report should be one report as <IR>. <IR> is a new reporting model in ASEAN countries, whereas <IR> is a reporting model which currently used by companies in several countries. Based on the identification problems, the researcher wants to find out the readiness of <IR> implementation in ASEAN country. This study will restrict the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement <IR>. The readiness of company is identified using eight elements of <IR> on the annual report financial year 2016. The companies listed on FTSE ASEAN Stars Index in ASEAN Exchanges in the period of September 2017. This research aims to identify the readiness of companies listed in FTSE ASEAN Stars Index in ASEAN Exchange to implement the Integrated Reporting.

## **2. Method**

### *2.1 Types of Research*

This research used descriptive quantitative approach. Descriptive research covered collection data to hypothesis test or to answer the research question about the last status of the research subject (Kuncoro, 2013, p.12). A descriptive study is undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation (Sekaran, 2003, p.121). This research used descriptive problem formulation. It's a problem formulation related to the question about the independent variable, one or more (Sugiyono, 2016, p.59). The variable in this research is the readiness of companies to implement the <IR>.

### *2.2 The Place and Time of Research*

This research held in the FTSE ASEAN Stars Index listed companies in the six ASEAN countries. There are Indonesia, Malaysia, Singapore, Thailand, The Philippines, and Vietnam. The data come from stock exchange official website from each country as follows: Bursa Malaysia (<https://www.bursamalaysia.com/>), Hanoi Stock Exchange ([www.hnx.vn](http://www.hnx.vn)), Ho Chi Min Stock Exchange (<https://www.hsx.vn/>), Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)), The Philippine Stock Exchange ([www.pse.com.ph](http://www.pse.com.ph)), The Stock Exchange of Thailand ([www.set.or.th](http://www.set.or.th)), and Singapore Exchange (<https://www.sgx.com/>). Data collecting held in September 2017 for collecting company's annual report financial year 2016. Then October 2017 until January 2018 for analyzing data and make a research report.

### *2.3 Population and Research*

The population is generalization area which consists of object/subject which has quality and characteristic, then researcher specified it to learn and make the conclusion (Sugiyono, 2013, p.191). Kuncoro (2013, p.118) explains that a population is a group of a complete element, and we intend to study it or be a research object. Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran, 2003, p.265). The population in this research are 180 FTSE ASEAN Stars Index listed companies in ASEAN Exchange year 2017 (see Appendix 1). It comprises 30 companies from each of the ASEAN exchanges of Bursa Malaysia, Indonesia Stock Exchange, The Philippine Stock Exchange, The Stock Exchange of Thailand, and Singapore Exchange, and 15 companies each from the two Vietnam member exchanges are Hanoi Stock Exchange and Ho Chi Min Stock Exchange.

The sample is a part of amount and characteristics of the population (Sugiyono, 2013, p.120). The sample is a subset of the population unit (Kuncoro, 2013, p.118). Sekaran (2003, p.266) explains that sample comprises some members selected from it. In other words, some, but not all, elements of the population would form the sample. The sampling method are used in this research is purposive sampling. This research using judgment sampling as follows:

1. FTSE ASEAN Stars Index listed company in ASEAN Exchanges per September 2017.
2. The company published an annual report for financial year 2016.
3. The company published an annual report in English.

### *2.4 Data Collection Technique*

Data collection technique in this research is secondary data. Secondary data is the data which gotten and saved by the other people and historical data (Wibisono, 2013, p.154). The data in this research is annual report financial year 2016 for the listed companies in FTSE ASEAN Stars Index in ASEAN Exchanges. This research use 80 item list reflect the <IR> content element in the <IR> Framework. This item list use to scoring the compatibility of the appropriateness between annual report and <IR> Framework.

### *2.5 Research Instrument and Data Analysis Technique*

#### *2.5.1 Research Instrument*

Research instrument comprises item list about indicators of the content element of <IR> in the <IR> Framework was published by the IIRC. Every indicator has a maximum score (see Appendix 2) and the minimum score is 0. <IR> Requirement Checklist was modified by the researcher based on the relevant research instrument. Research by Adriana (2015), and Dewanti (2017) used the International <IR> Framework published in 2013 as a base of assessment. It is in line with the survey by PwC (2013) and EY (2016) in South Africa and by PwC (2014) in Malaysia also used the Content Elements of <IR> in the International <IR> Framework as a base of assessment. In this research, the researcher developed <IR> Requirement Checklist based on the Content Elements of <IR> in the International <IR> Framework to measure the company's readiness to implement <IR>. The format of <IR> Requirement Checklist adopts from research by Warwick Stent and Tuyana Dowler (2015).

<IR> Requirement Checklist is being drawn up with information that indicates the readiness level of the company. It used justification of researcher based on the International <IR> Framework. The proportion is 30%:40%:30% for unprepared, less prepared, and prepared. The first part of item list in every content element consists of 30% score for a total score that asked about basic information about every indicators of content element that was disclosed by a company in the integrated report. The next part of item list in every content element consists of 40% score for a total score that asked about information about every indicators of content element to support company's disclosure about creating value overtime process in the integrated report. The last part of item list in every content element consists of 30% score for a total score that asked about information about every indicators content element that reflects the company's creating value over time in the integrated report.

### 2.5.2 Data Analysis Technique

Data analysis technique in this research used descriptive analysis. The descriptive analysis referred to transformation original data to the other types which easy to understand (Wibisono, 2013, p.171). Descriptive analysis is an activity to conclude the whole data and the result is concise data which easy to understand. Grouping or separating relevant component or part of the whole data is one of the analysis activities (Kuncoro, 2013, p.198). Measurement of the readiness of <IR> implementation categorized into prepared, less prepared, and unprepared. This categorization based on the <IR> Requirement Checklist is being drawn up with information that indicates the readiness level of the company. The proportion is 30%:40%:30% for unprepared, less prepared, and prepared. The result of the <IR> Requirement Checklist is total score in number. It will be transformed to the percentage that reflects of the extent of alignment between the content element of <IR> and the reporting entity. Then, the percentage will be categorized into prepare, less prepared, or unprepared.

Table 1. Measurement of the Readiness of <IR> Implementation

<IR> Score	Interpretation of <IR> Score
$\leq 30\%$	Unprepared (reevaluation of report)
$30\% < X \leq 70\%$	Less Prepared (need extra effort)
$>70\%$	Prepared (ready to implement)

Table 1 concise the interpretation of <IR> score which categorized into three groups. Score up to 70% was categorized as prepared. It means the company already disclosed information that reflects how the company's creating value over time. It indicated that the reporting has good suitability with content element of <IR> in the <IR> Framework. A score of more than 30% and less than or equal 70% was categorized as less prepared. It means that company already disclosed information that supports the process of creating value over time. It indicates that the company needs extra effort to adjust the reporting based on the content element of <IR> in the <IR> Framework. Score less than or equal to 30% was categorized as unprepared. It means that already disclosed of basic information related integrated reporting. It means that company not ready to implement <IR> and need to reevaluate of the report. Group of prepared and less prepared indicated that their reporting has a potential to develop into <IR>.

### 3. Results

This research used one variable. The variable is the readiness of companies to implement the <IR>. The readiness of companies to implement the <IR> means how the preparation of the companies to change the current reporting model to integrated reporting. The readiness of companies to implement the <IR> was categorized into prepared, less prepared, and unprepared. This categorization based on the proportion of the extent of alignment between the content element of <IR> and the current reporting entity in ASEAN Exchange.

A maximum score of the readiness of companies to implement <IR> in the totally content element is 77%, from DBS Group Holdings Ltd (Singapore). The range of the maximum score of the totally content element in ASEAN countries is 13% until 77%. All of the highest scores of every content element is DBS Group Holdings Ltd (Singapore). Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the <IR> as follow in Figure 1.

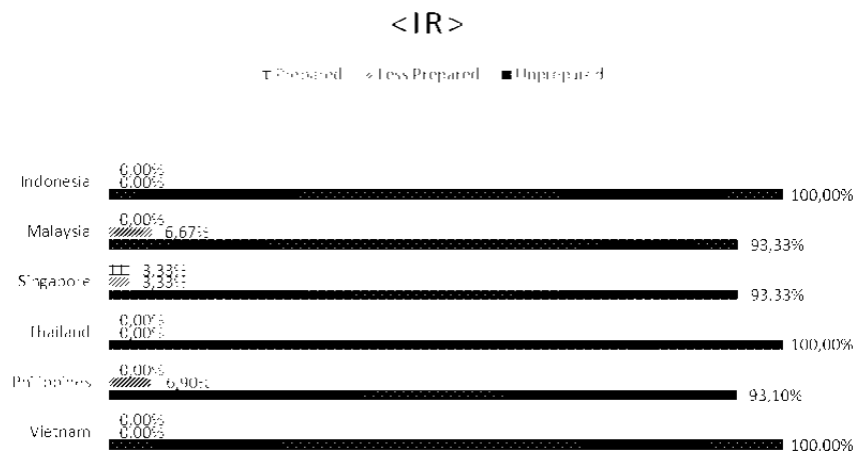


Figure 1. The Readiness of Companies to Implement the <IR>

#### 3.1 Organizational Overview and External Environment

Organizational Overview and External Environment identifies the organization's mission and vision, and provides essential context by identifying matters such as (a) the organization's: culture, ethics and values; ownership and operating structure; principal activities and markets; competitive landscape and market; positioning; position within the value chain, (b) key quantitative information, (c) Significant factors affecting the external environment and the organization's response. Significant factors affecting the external environment include aspects of the legal, commercial, social, environmental and political context that affect the organization's ability to create value in the short, medium or long term. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the Organizational Overview and External Environment as following in Figure 2.



## ORGANIZATIONAL OVERVIEW AND EXTERNAL ENVIRONMENT

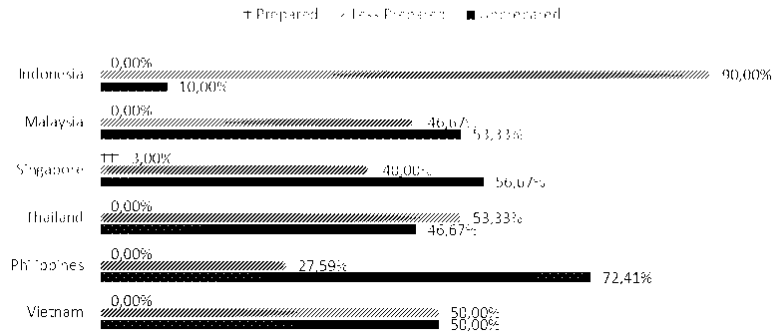


Figure 2. The Readiness of Companies to Implement the Organizational Overview and External Environment

### 3.2 Governance

Governance provides insight about how such matters as the following are linked to its ability to create value: (a) the organization’s leadership structure; (b) specific processes used to make strategic decisions and to establish and monitor the culture of the organization; (c) particular actions those charged with governance have taken to influence and monitor the strategic direction of the organization and its approach to risk management; (d) how the organization’s culture, ethics and values are reflected in its use of and effects on the capitals; (e) whether the organization is implementing governance practices that exceed legal requirements; (f) the responsibility those charged with governance take for promoting and enabling innovation; (g) how remuneration and incentives are linked to value creation in the short, medium and long term, including how they are linked to the organization’s use of and effects on the capitals. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the Governance as following in Figure 3.

## GOVERNANCE

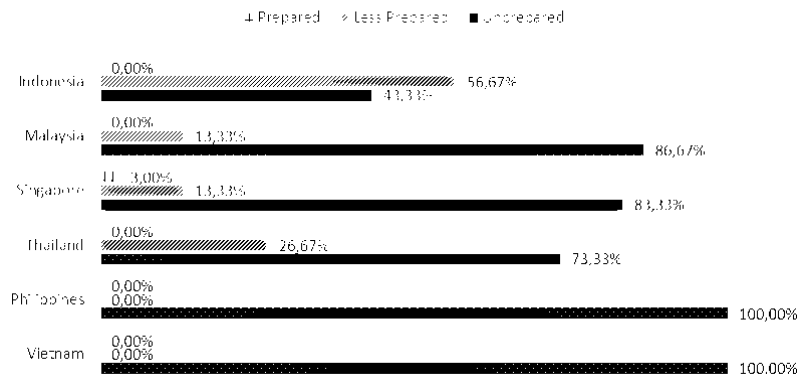


Figure 3. The Readiness of Companies to Implement the Governance

### 3.3 Business Model

An organization’s business model is its system of transforming inputs, through its business activities, into outputs and outcomes that aim to fulfill the organization's strategic purposes and

create value over the short, medium and long-term. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the Business Model as following in Figure 4.

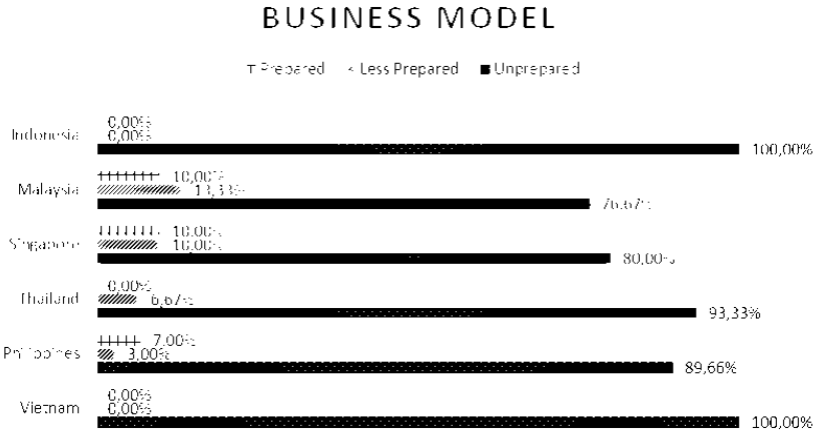


Figure 4. The Readiness of Companies to Implement the Business Model

3.4 Risk and Opportunities

An integrated report identifies the key risks and opportunities that are specific to the organization, including those that relate to the organization’s effects on, and the continued availability, quality, and affordability of, relevant capitals in the short, medium and long-term. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the Risk and Opportunities as following in Figure 5.



Figure 5. The Readiness of Companies to Implement the Risks and Opportunities

3.5 Strategy and Resource Allocation

Strategy and Resource Allocation ordinarily identifies: (a) the organization’s short, medium and long-term strategic objectives; (b) the strategies it has in place, or intends to implement, to achieve those strategic objectives; (c) the resource allocation plans it has to implement its strategy; (d) how it will measure achievements and target outcomes for the short, medium and long-term. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed

companies in ASEAN Exchange to implement the Strategy and Resource Allocation as following in Figure 6.

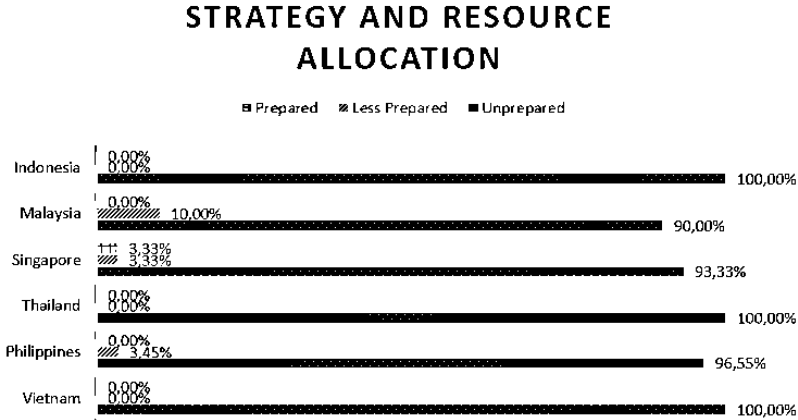


Figure 6. The Readiness of Companies to Implement the Strategy and Resource Allocation

### 3.6 Performance

Performance contains qualitative and quantitative information about performance that may include matters such as: (a) quantitative indicators with respect to targets and risks and opportunities, explaining their significance, their implications, and the methods and assumptions used in compiling them; (b) the organization’s effects (both positive and negative) on the capitals, including material effects on capitals up and down the value chain; (c) the state of key stakeholder relationships and how the organization has responded to key stakeholders’ legitimate needs and interests; (d) The linkages between past and current performance, and between current performance and the organization’s outlook. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the Performance as following in Figure 7.

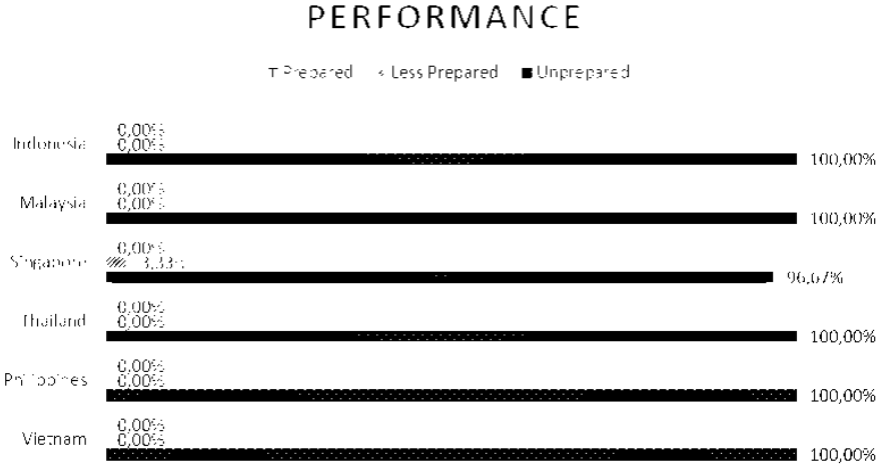


Figure 7. The Readiness of Companies to Implement the Performance

### 3.7 Outlook

Outlook ordinarily highlights anticipated changes over time and provides information, built on sound and transparent analysis, about: (a) the organization’s expectations about the external

environment the organization is likely to face in the short, medium and long-term; (b) how that will affect the organization; (c) how the organization is currently equipped to respond to the critical challenges and uncertainties that are likely to arise. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the Outlook as following in Figure 8.

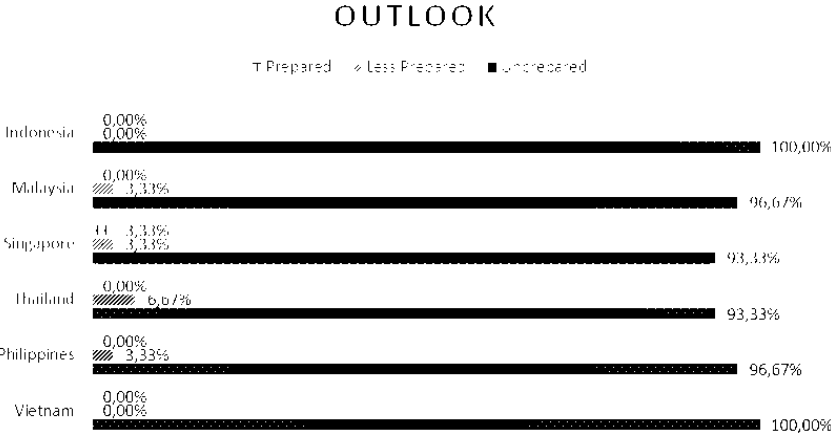


Figure 8. The Readiness of Companies to Implement the Outlook

**3.8 Basis of Preparation and Presentation**

An integrated report describes its basis of preparation and presentation, including (a) a summary of the organization’s materiality determination process; (b) a description of the reporting boundary and how it has been determined; (c) a summary of the significant frameworks and methods used to quantify or evaluate material matters. Based on the data analysis, the readiness of FTSE ASEAN Stars Index listed companies in ASEAN Exchange to implement the Basis of Preparation and Presentation as following in Figure 9.

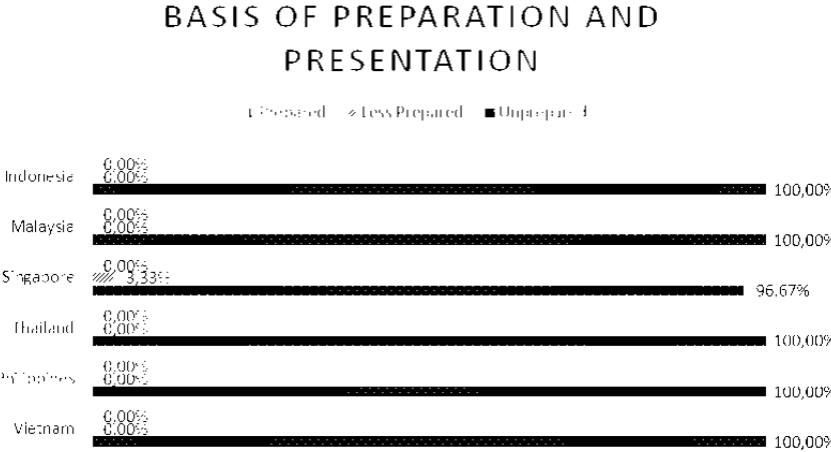


Figure 9. The Readiness of Companies to Implement the Basis of Preparation and Presentation

**4. Discussion**

FTSE ASEAN Stars Index listed companies in ASEAN Exchange was categorized as

unprepared to implement the <IR>. All of the companies in Indonesia, Thailand, and Vietnam were categorized as unprepared to implement <IR>. In Malaysia, 93.33% of companies were categorized as unprepared and 6.67% of companies were categorized as less prepared. In The Philippines, 93.10% of companies were categorized as unprepared and 6.90% of companies were categorized as less prepared. In Singapore, 93.33% of companies were categorized as unprepared, 0.33% of companies were categorized as less prepared, and 0.33% of companies were categorized as prepared.

In average, all of the countries was categorized as unprepared to implement the <IR>. The score range of the readiness to implement the <IR> in FTSE ASEAN Stars Index listed companies in ASEAN Exchange is 11.67% until 10.93%. Most of the companies disclosed more information about Organizational Overview and External Environment; and Governance. It is reflected that all of the companies have the score more than 20%. Different with the Basis of Preparation and Presentation, all of the companies have a low score for this element, less than 4%. It means that the appropriateness of annual reports of companies compared to <IR> framework still limited in Governance and Organizational Overview and External Environment. The average score of readiness to implement <IR> for each content element of each country as following in Table 2.

Table 2. Score of Readiness to Implement <IR>

No	Content Element	Indonesia	Malaysia	Singapore	Thailand	Philippines	Vietnam
1	Organizational Overview and	43,33%	31,33%	34,00%	31,67%	27,93%	32,50%
2	Governance	35,33%	25,67%	28,00%	31,67%	20,00%	20,00%
3	Business Model	0,67%	17,00%	15,67%	7,00%	8,62%	0,00%
4	Risk and	21,67%	15,67%	21,33%	25,33%	8,28%	15,00%
5	Strategy and Resource	10,67%	12,67%	12,33%	10,67%	6,55%	5,00%
6	Performance	3,33%	7,33%	4,33%	5,33%	2,76%	0,00%
7	Outlook	11,67%	7,00%	10,00%	13,00%	4,83%	0,00%
8	Basis of Preparation and	0,33%	2,00%	3,33%	0,33%	1,72%	0,00%
	Score	18,93%	16,67%	18,11%	17,41%	12,07%	11,67%
	Category	Unprepared	Unprepared	Unprepared	Unprepared	Unprepared	Unprepared

#### 4.1 Organizational Overview and External Environment

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as less prepared to implement the Organizational Overview and External Environment. More than 50% of companies in Malaysia, Singapore, The Philippines, and Vietnam were categorized unprepared to implement this content element. More than 50% of companies in Indonesia and Thailand were categorized less prepared to implement this content element.

#### 4.2 Governance

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as unprepared to implement the Governance. All of the companies in The Philippines and

Vietnam were categorized unprepared to implement this content element. More than 70% of companies in Malaysia, Singapore, and Thailand were categorized unprepared to implement this content element. More than 50% of companies in Indonesia was categorized less prepared to implement this content element.

#### *4.3 Business Model*

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as unprepared to implement the Business Model. All of the companies in Indonesia and Vietnam were categorized unprepared to implement this content element. More than 70% of companies in Malaysia, Singapore, Thailand, and the The Philippines were categorized unprepared to implement this content element.

#### *4.4 Risks and Opportunities*

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as unprepared to implement the Risk and Opportunities. All of the companies in Indonesia, Thailand, and Vietnam were categorized unprepared to implement this content element. More than 80% of companies in Malaysia, Singapore, and the The Philippines were categorized unprepared to implement this content element.

#### *4.5 Strategy and Resource Allocation*

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as unprepared to implement the Strategy and Resource Allocation. All of the companies in Indonesia, Thailand, and Vietnam were categorized unprepared to implement this content element. More than 90% of companies in Malaysia, Singapore, and the The Philippines were categorized unprepared to implement this content element.

#### *4.6 Performance*

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as unprepared to implement the Performance. All of the companies in Indonesia, Malaysia, Thailand, The Philippines, and Vietnam were categorized unprepared to implement this content element. More than 95% of companies in Singapore was categorized unprepared to implement this content element.

#### *4.7 Outlook*

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as unprepared to implement the Outlook. All of the companies in Indonesia and Vietnam were categorized unprepared to implement this content element. More than 90% of companies in Malaysia, Singapore, Thailand, and the The Philippines were categorized unprepared to implement this content element.

#### *4.8 Basis of Preparation and Presentation*

FTSE ASEAN Stars Index listed companies in ASEAN Exchange in average were categorized as unprepared to implement the Outlook. All of companies in Indonesia, Malaysia, Thailand, The Philippines and Vietnam were categorized unprepared to implement this content element. More than 95% of companies in Singapore was categorized unprepared to implement this

content element.

## 5. Conclusion

The conclusions of this research are the companies listed in FTSE ASEAN Stars Index in ASEAN Exchange in average were categorized unprepared to implement the Integrated Reporting. It means that companies in FTSE ASEAN Stars Index in ASEAN Exchange already disclosed only the basic information related integrated reporting. So, the companies not ready to implement this element of <IR> and need re-evaluate of the report. The average score of readiness of companies to implement <IR> are 18.93% in Indonesia, 16.67% in Malaysia, 18.11% in Singapore, 17.41% in Thailand, 12.07% in The Philippines, and 11.67% in Vietnam.

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# Bail-Out to Bail in : An Effort To Overcome The Financial Crisis In Indonesia

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## Abstract

Bail out is an alternative in handling the financial crisis. The fundamental purpose of bailout policy is for public interest. This research purposed to find out why bail-in mechanism replaced the bailout mechanism, an alternative in handling the financial system crisis in Indonesia. In this normative research, the secondary data were used. In order to analyze the data, qualitative data analysis technique was implemented. In conclusion, this research found out that bailout in Indonesia in case of Bank Indonesia Liquidity Assistance (BLBI) and Century Bank showed bad impacts of bailout implementation mechanism. Based on Law on Prevention and Mitigation of Financial System Crises (UU PPKSK) and its implementation regulation, systemic bank was now obliged to solve financial problems with its own effort in accordance with action plan they made. This mechanism is called bail-in mechanism, replacing the bailout policy mechanism in handling financial crisis in Indonesia.

**Keywords:** bailout, bail-in, Bank Indonesia, government, law, purpose

## 1. Introduction

### 1.1 Introduce the Problem

The economic crisis will have a bad impact and even become a source of failure of the development goals of a country. More specifically, the economic crisis is one of the reasons for the poor management of banking institutions that become the main economic pillar in a country. The economic crisis that will have a serious impact on the achievement of a country's objectives should be addressed and resolved proportionally, by minimizing the negative impacts of the crisis handling and resolution to society as much as possible. Bailout is one of the banks' alternatives in handling the financial problems financially imposing the banks' problems to the State Budget (*Anggaran Negara*). This bailout mechanism is not considered providing a sense of justice for society and causing moral hazard for other economic actors. The bailout policy in Indonesia was implemented in the distribution of Bank Indonesia Liquidity Assistance after the monetary crisis in 1997 and Century Bank case in 2008. Based on the description above, this problem of this research was why bail-in mechanisms replaced the bailout mechanism which became an alternative in handling the financial system crisis in Indonesia.

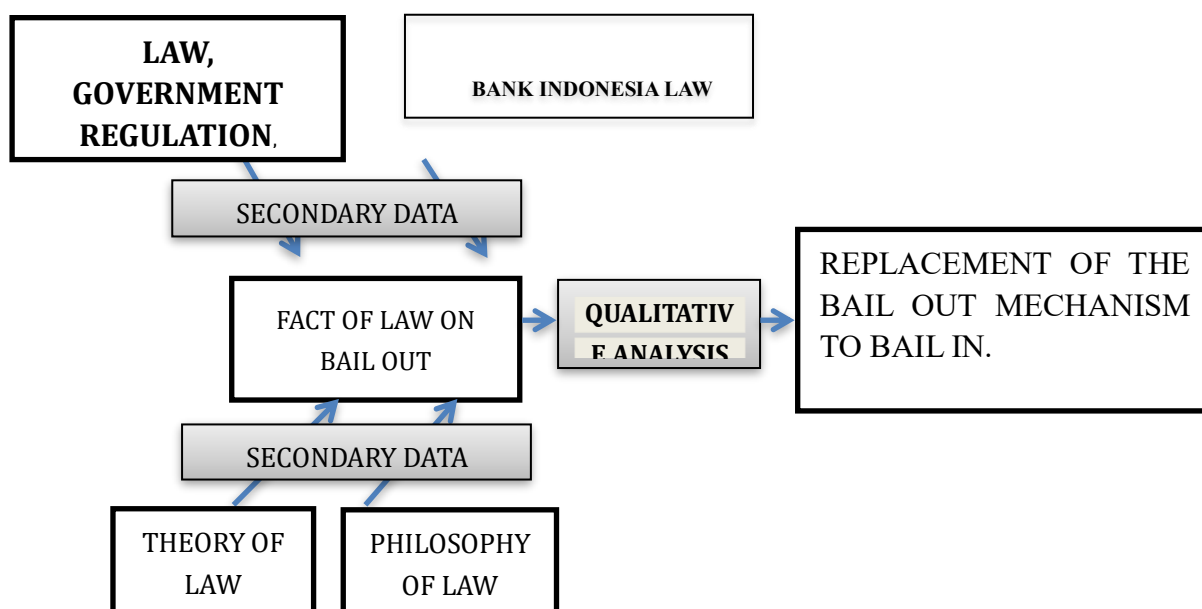
The importance of this issue to be researched is to know and analyze the reasons for the change of bail out mechanism to bail in mechanism in solving banking problems in Indonesia. Every change always creates legal and economics for further review.

Previous research in relation to bail out mechanism from legal aspect has been done among others by Fuad (Fuad, 2012). He concludes that the Bank of Indonesia's Bank of Indonesia (GBI)

letter to the Minister of Finance as Chairman of the Committee of Finance Stability System (KSSK) No. 10/2 / GBI / DPNP / Secret on November, 20 th, 2008. Previous research was also conducted by Lili Eveline. She tried to find a middle ground on the issue. The standpoint of administrative law is used as an analysis in finding the right solution (Lili Eveline Sitorus, 2016). Furthermore Bail out also seen from the aspect of potential criminalization conducted by Dea Paramita Aggraeni (Dea Paramita Aggraeni, 2011) who examines aspects of Bailout Policy Century Bank and Potential Criminalization of Public Policy. This problem of this research was why bail-in mechanisms replaced the bailout mechanism which became an alternative in handling the financial system crisis in Indonesia. This study examines the reasons of the juridical aspect of why bailout mechanism is replaced by bail in mechanism to overcome banking crisis in Indonesia. This led to differences with previous research and complemented the understanding of bail out and bail in mechanisms in juridical concepts.

## 2. Method

This research used normative research and secondary data. To analyze the data, qualitative data analysis technique was conducted. Below is a flowchart showing the steps in conducting the research :



## 3. Results

### 3.1. Bailout Experience in Indonesia.

Bailout is a government intervention in providing financing facilities for banking institutions whose funding becomes the burden of government. In Indonesia, bailout policy has occurred with a policy of Bank Indonesia Liquidity Assistance. It is a liquidity assistance facility provided by Bank Indonesia to banks experiencing liquidity difficulties during the monetary crisis in 1997. There were 48 banks granted Bank Indonesia Liquidity Assistance fund. The purpose was to maintain public trust in banking institutions in Indonesia. Nevertheless, there found various irregularities. The audit of Audit Board on the use of Bank Indonesia Liquidity Assistance fund by 48 banks concluded that there had been indication of irregularities of Bank

Indonesia Liquidity Assistance which was supposed to be used to assist banks having difficulty, but the use was disregarded (Kinerjabank.com, 2017).

Bailout in Indonesia also occurred in the case of Century Bank in 2008. Century Bank was a bank established at the beginning with the name of Bank of Century Invest Corporation (CIC). The bank was based on the 1988 Deregulation Package issued by the government, one of which allowed a bank to operate with a minimum initial capital of 10 billion rupiah. In 1997 CIC Bank became a public bank. Then, in 2003 CIC Bank encountered a problem in selling securities in foreign currency. Bank Indonesia, normally having the task of arranging and supervising banking institutions, suggested a merger. CIC Bank later merged with Danpac Bank and Pikko Bank to be Century Bank in 2004. However, in 2008 Century Bank's balance as a merged bank still had foreign currency securities failed to be paid. In 2008 Century Bank's CAR was -3.53%. To address to this situation, Bank Indonesia provides assistance facilities to Century Bank normatively based on Law No.23 of 1999 amended by Law No.3 of 2004, adding Article 11i with paragraph (4) and (5).

Paragraph (4): In the event that a bank is experiencing financial difficulties that have systemic impacts and potentially lead to crises endangering the financial system, Bank Indonesia may provide emergency financing facilities whose funding becomes the burden to government.

Paragraph (5): Provisions and procedures for decision making concerning the financial difficulties of banks with systemic impacts, the provision of emergency financing facilities, and funding sources derived from the State Budget Revenue and Expenditure shall be stipulated in a separate Law established no later than the end of 2014.

Based on these provisions, Government Regulation No.4 of 2008 concerning Financial System Safety Net (*JPSK*) was issued in connection with the implementation of the duties of Bank Indonesia as Lender of the Last Resort.

When associated with the case of Century Bank, the chronology of rules relating to Government Regulation No.4 of 2008 coming into force on September 15, 2008 can be reviewed as below.

- a. The decision of House of Representatives plenary meeting on December 18, 2008 in essence not rejecting or approving Government Regulation No.4 of 2008 meant the House of Representative did not refuse. (DPR, 2008)
- b. The Head of House of Representatives wrote to President to propose a Bill (*RUU*) on Financial System Safety Net. Meanwhile, on September 30, 2009 the Commission XI of Government Regulation was turned down to be Law on September 30, 2009 based on Article 22 of the 1945 Constitution and Law No.10 Article 25. It means if Financial System Stability Committee (*KSSK*) established based on Government Regulation on Financial System Safety Net Article 18(1) in banking declares a bank failed and suspected to have systemic impacts by Bank Indonesia, Financial System Stability Committee shall decide whether the failed bank has systemic or non-systemic impacts. Article 18 paragraph 2 mentions the Settlement or Handling of Failed Bank as referred to paragraph 1 is conducted by Deposit Insurance Corporation (*LPS*). Financial System Stability Committee asks Deposit Insurance Corporation to include capital in Century Bank on November 21, 2008. Financial System Stability Committee action was established because of Government Regulation, while Deposit Insurance Corporation included capital based on Law of Deposit Insurance Corporation (Article 39, 41, 42).
- c. Based on Law No.10 of 2004 Article 25 Paragraph 4, if Government Regulation is turned down, the president is able to propose a Bill to revoke the Government Regulation.

The discussed issue is related to the determination of Century Bank as a systemic bank. From

the theoretical aspect, the systemic risk can be seen from two interpretations (Roby Muhamad, 2010): "The first interpretation relates to the risk of a domino effect of failed bank able to undermine the national economic system. The second interpretation is a classic bank rush scenario where bank customers are together pulling their money from the bank regardless the condition of bank." Systemic risk in the case of Century Bank is feared because bank customers will widely withdraw funds from banking institutions if Century Bank was not saved since it would lead to bank runs. This situation would affect society trust to banking institutions. On the other hand, the vulnerability of the economy would further worsen the banking condition, along with Mitchell's The Business Cycle Theory: "The basic idea is that when economy goes into a recession or depression the returns on bank assets will be low. Given their fixed liabilities in the form of deposits or bonds they may not remain solvent. This may preclude a run of banks (Franklin Allen and Douglas Gale, 2007)." This suggests that the bad condition of a country's economy will affect the banking development in that country. As the economy generally experiences uncertainty, which is a systemic risk in practice, it is in accordance with Keynes that uncertainty is a natural feature of economy. Fighting uncertainty is just like fighting nature (A. Prasentyako, 2010). It means, according to Keynes theory, the role of government in crisis is still needed. The government in this case should be the lender of last resort. According to Keynes, when a crisis happens, the government must help.

The above explanation can be examined that what Financial System Stability Committee does determines whether a bank has a systemic impact based on existing Government Regulation No.4 of 2008. If, after determined, the mechanism of a bank has a systemic impact, the handling is handed to Deposit Insurance Corporation and handled based on Law No.24 of 2004 on Deposit Insurance Corporation, no longer based on Government Regulation No.4 of 2004. The case of Century Bank evolved due to indecisive bailout mechanism. It was also due to the great political influence in the implementation of existing arrangements.

The experience of bailout in Indonesia as described above showed that the assistance facilities provided by the State Budget (society's money) actually intended to be able to avoid greater loss to society (public interest) in fact caused great and long problems later. There were more bad impacts from it, not only the financial impact but also the moral hazard impact on other economic actors. The aspect of the law expedience originally intended for the greater public interest in its implementation caused loss to society.

### 3.2. Alternative of Bail-in in Indonesia

Seeing the adverse impact of bailout, bail-in becomes an alternative to the financial crisis settlement as said by Stefano Luchini, et al (Steffano Lucchini, Jacques Mascranese, Irene de Angeles, Febrizio Di Benedetto, 2017): "States has traditionally face banking crisis through, the so called bail out tool. Public resources have been used for a long time in order to rescue banks putting the burden tax paying. Since the beginning of the crisis the European commission has adopted special state aid rules for the rescue of bank providing guidance on the use a bail out principles but without any precise exit strategy. In order to reduce public support to bank, the banking communication and the new bank recovery and resolution directive introduced the bail in (or burden sharing), tool putting the burden of bank rescue on share holder and subordinates creditor while minimizing the burden tax payers"

As Stefano Luchini says that bailout is a solution to the financial crisis imposing the impact of

the crisis on public fund or called tax payers. It can be understood that who and what causes liquidity difficulties causing the crisis is not necessarily the society. Nonetheless, the impact of the crisis is borne by the society. Therefore, the mechanism of handling the financial crisis should be diverted from the mechanism of bailout to bail-in mechanism, a mechanism to overcome the financial crisis by imposing the crisis handling to the shareholders or creditor of the company.

The role of regulation is essential in facing financial crises as Stephen K Aikhins (Stephen K Aikhins, 2009) says: "I argue that mutual co-existence of the market and the government is beneficial to society, and that periodic global financial crisis occur because of the failure to learn from history and ineffective regulatory governance. Governments need to put in place proactive regulatory framework to guard against regulatory capture, arbitrage and forbearance in order to control financial market excesses."

In Indonesia, the bail-in mechanism is set forth in Law No.9 of 2016 on Settlement and Handling of Financial Crisis. As a follow-up of the Law, the Financial Services Authority as an agency that plays a role in the mechanism of settlement and handling the financial crisis issued 3 Regulations of Financial Services Authority (*POJK*) as below.

1. Regulation of Financial Services Authority concerning the Supervision Status and Follow-Up of Commercial Bank Supervision.
2. Regulation of Financial Services Authority concerning Intermediary Bank.
3. Regulation of Financial Services Authority concerning Recovery Plan for Systemic Banks.

The regulation contains obligations for banks to create a Recovery Plan. Recovery Plan is required to be made though the banks are in normal condition, but actually there are significant problems in the banks. The Recovery Plan accomodates the obligations of the controlling shareholders and/or other parties to increase the bank's capital and convert certain types of debt into bank capital. The provisions in Law of Prevention and Mitigation of the Financial System Crisis which are then followed by Financial Services Authority with 3 Regulations of Financial Services Authority informs the systemic banks to solve their financial problems with their own efforts in accordance with the action plan they make themselves. This mechanism is said to be a bail-in mechanism in Indonesia.

## **4. Discussion**

### **4.1. Legal Function in Economic Development**

Law viewed from its function can be divided into 2 views. They are the law only able to follow the development of society and the law serving as a tool to engineer society.

The first view is proposed by two theories, the theory of School of History (*Mazhab Sejarah*) by Von Savigny and the theory of Decision (*Beslissingenleer*). In his theory, Von Savigny (Teguh HP & Abdul HP, 2007) mentions that law is not made, but it exists and grows up together with society (*das recht ist nicht gemacht aber ist und wird mit dem Volke*). This school is based on the fact that there are considerable nations in this world, each of whom has a *Volkgeist* (soul of society), and differs according to time and place (Otje Salman, 2009). The next theory by Ter Haar, Decision theory, suggests that law is only the customs recognized by the rulers (customary chiefs) in the decisions (CFG. Sunaryati Hartono, 1982). Consequences and legal functions will grow together with changes in society, so law in this case will change along with

the changes occurring in society. The law exists after the development and change of society. In this case, law makers are backward looking. This understanding, when viewed from law function perspective in economic development, means that law will always be left behind by the dynamics of the society rapid development.

According to Roscou Pound, when seen from its function, law is a tool of social engineering (Soetandyo Wignyosoebroto, 2008). This function brings the consequence that law must become a tool or means able to change and renew the society as aspired. Due to the consequence of law function as a tool for reforming society, law governing and directing the development of society must first exist before the change of society. Law makers oblige to always be forward looking. When facing various society changes requiring legal certainty in regulating such changes in today's economic development, it is more appropriate to state that law can be used as a tool to engineer and change society. Law makers must be forward-oriented in the sense of predicting future society development. By doing so, the law objective in providing certainty, justice and benefit can be realized. It is supported by David Harrison who emphasizes that the importance of legal functions in economic activities, especially banking activities, can be seen from the history of banking development in Indonesia in particular and the development of international banking in general (David Harrison, 2014).

#### 4.2. Bailout Objective and Its Bad Impact

The term *bailout*, as stated by Eric A. Posner and Anthony Casey Bailout, is pointed out as follow.

“Bailout is general term for extending financial support to a company or a country facing potential bankruptcy threat. It can take the form of the loan, cash, bonds, or stock purchase. Bailout may or may not require reimbursement and is often accompanied by greater government oversee and regulations.” (Eric A. Posner and Anthony Casey, 2015)

According to Eric A. Posner and Anthony Casey, in addition, the purpose of bailout is to maintain public trust. They state: We can make some progress by observing that in common parlance the word bail out refers to a subset a transfer where the transfer is intended rescue an agent who cannot meet its financial obligations. Even here, how ever the some of complaints is obscure. If the government is willing to subsidize a manufacture of solar power panels giving it money, making loans to it or guaranteeing its debt (as it often is), then what’s wrong with a policy of paying off an unpaid debt if otherwise it would default? The effect of all the policies is the same to lower the cost of capital for the beneficiary the policy justifications is also the same : to encourage people to invest in solar power.

Therefore, bailout is able to be an alternative in crisis resolution. It was going well in Mexico. This is described by Ian Vasques as below.

According to the conventional view, the International Monetary Fund’s bailout of Mexico in 1995 was a success because it restored confidence in the collapsing peso, led to a quick economic recovery, and possibly stemmed the outbreak of a global systemic financial crisis. The bailout, moreover, helped keep Mexico on a market- oriented track. Proponents of those

views rarely mention the high costs of the IMF's intervention to ordinary Mexicans, and they down- play the cost—namely in the form of moral hazard—to the world economy. More importantly, policymakers have never seriously considered market-oriented alternatives to official bailouts in Mexico or elsewhere, yet the evidence strongly suggests that market solutions offer greater benefits and lower costs.( Ian Vasquez, 2002).

Basically the bailout mechanism is intended for the benefit of society, that is maintaining public trust to invest, as widely known that the investment factor is the largest part affecting economic growth.

This opinion provides an understanding that the element of bailout can be seen from several things:

1. Bailout is the mechanism of funding facility.
2. Those involving in bailout are the government and financial institutions in general. However, Erick A. Posner says that dairy farmers, poor people, and research universities can be the parties receiving the government loans. Since banking institutions are one of the bailout recipients from government, the party giving the loan is government.
3. The funding facilities may be in the form of loans, cash, bonds, or stock purchases.
4. Bailout occurs when a company has liquidity problem able to cause systemic risk triggering a bigger financial system crisis. It is intended to maintain public trust to financial institutions.
5. The source of funding facility is government.
6. As a consequence of funding from the government (money from society), the supervision of the funding facility implementation becomes crucial.

The objective of bailout is to maintain public trust. This means the purpose of bailout policy is for public interest. The effectiveness of this policy can be seen in the experience of the State of Mexico.

Bailout in practice also causes adverse effects, especially the emergence of moral hazard, as mentioned by Jeffrey A. Miron as follows: "In my assessment of the financial crisis yield two main lessons. The first is that redistribution to low income house hold should be direct and on budget not indirect and off budget as in subsidized mortgage credit. The second lesson is that moral hazard from bailing out private risk taking are substantial even these do not appear immediately (Jeffrey A. Miron, 2009).” Moral hazard for other economic actors who rely on government intervention in the failure of their businesses will not be seen immediately, but will be very dangerous to the economic situation.

Normally bailout policy is one alternative to handle financial difficulties for banking institutions, in which it is also able to trigger a worse financial crisis. The aim of bailout policy is basically to maintain public trust, for the purpose of public interest. The experience in Indonesia based on the Case of Bank Indonesia Liquidity Assistance after the monetary crisis and the Century Bank case in 2008 shows that bailout policy has had a prolonged adverse impact until present time. The experience of bailout policy in Indonesia serves as an example of the underlying



objective of bailout policy, especially in Indonesia. This does not mean that the bailout policy is an incorrect policy to handle the financial crisis in a country. Legal mechanism and supervision of the implementation of the bailout is required, so that the fundamental objectives of the bailout can be achieved.

It is very unlikely that a troubled bank will occur and potentially lead to a financial crisis in the future. On the other hand, the potential financial crisis caused by banking problems is very likely to happen. Law should exist before the existing problems and the arrangement should already exist before the problem occurs. The Prevention and Mitigation of Financial System Crisis is an example of a legal function as a tool for public engineering or law is a tool of social engineering.

## 5. Conclusion

The purpose of the bailout is to prevent a financial crisis that will endanger the economy by giving funding facilities which is later burdensome to the society. The bailout experiences in Indonesia in the case of Prevention and Mitigation of Financial System Crisis and Century Bank show the adverse impact of bailout implementation mechanism. The bad impact of bailout in Indonesia is due to both the weak law as well as political factors. Therefore, the Law of Prevention and Mitigation of the Financial System Crisis and its implementing regulations regulate systemic banks to solve financial problems with their own efforts in accordance with their own action plan. This mechanism is known as bail-in mechanism.

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Law No.21 of 2011 on Financial Service Authority

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# The Effect of Academic Supervision, Participation in Teacher's Forum, and Training on The Competency of Social Science Teacher

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## Abstract

This study aimed to reveal the effect of academic supervision and, participation in teacher's forum and training on the competency of the social science teachers in District Sleman, either partially or simultaneously. This research was quantitative and associative causal research with the ex-post facto approach. The population was 183 social science teachers in Sleman Regency. A sample of 85 teachers was established using the purposive sampling technique. The data collection used a questionnaire and teacher competency test. Technique validity testing was performed through expert judgment and Confirmatory Factor Analysis with SPSS support, while the reliability testing used Cronbach's Alpha. The data analysis used the multiple regression analysis. The result of the research shows that there are positive and significant effect of academic supervision, participation in teacher's forum and training on SMP teacher competency in Sleman District either individually/ partially or simultaneously. The implementation of maximal academic supervision can improve teacher competency well. Participation in teacher's forum activities and active training also able to increase teacher competency maximally. So that academic supervision, participation in teacher's forum, and training can be applied well to improve teacher competency. There are very important for teachers for the present and future to increase knowledge, skills, attitudes and productivity of teachers in 21st Century

**Keywords:** academic supervision, participation in teacher's forum, training, teacher competency

## 1. Introduction

Low quality education is a long-standing educational problem in Indonesia. This 21st century wave of globalization is felt very strong and open. Technological advances provide awareness that Indonesia needs to align its position with other countries that can start by looking at the quality of education. In line with the low quality of education in Indonesia, many efforts have been made by the government, but still far from expectations. One of the factors causing the low quality of education is an incompetent teacher, as stated by former Minister of National Education Wardiman Djoyonegoro (Mulyasa, 2009: 3). In the view of UNESCO (2006), teachers are the most important factor in determining the quality of education that children

receive. Voluntary Service Organization also maintained that teachers' "motivation is fragile and declining and teachers' performance in contributing to learning is strongly influenced by teacher motivation. The issue of teacher motivation is important because of its correlation with the quality of education (Javaid, 2009: 5)

The teacher is a noble profession that is not just anyone capable of carrying out such professional work. Being a teacher requires a special skill (Usman, 2013: 6). Because the expertise is special, the teacher has a mission that is very important in determining the quality of education of a nation. The expertise that teachers must have in particular is what distinguishes it from other professions that lie in its duties and responsibilities. Teacher's duties and responsibilities are closely related to the basic competencies that support their duties. To know the extent of teacher competency development, the Government does it through Master Competency Test (UKG).

UKG implementation guidelines (Kemendikbud, 2015: 1) is a measure to measure teachers' ability to be adapted to the field of study (professional competence) and mastery of learning in the classroom (pedagogic) using test / exam questions. Based on the results of the Teacher Competency Test/ Uji Kompetensi Guru (UKG) in 2015, the description of pedagogical and professional competence of teachers in Indonesia is still not fully said. According to the Center for Data Statistics Education and Culture, nationally the results of UKG are still below expectations (*nasional.tempo.co.id*)

Yogyakarta Special Region (DIY) is one of the provinces that is able to prove the title that has been held so far as "Kota Pelajar" with the highest UKG score of 62.36 from the Minimum Criteria of Achievement/ Kriteria Capaian Minimal (KCM) in 2015 of 55.

However, based on the analysis of teacher images implemented by the Ministry of Education and Culture Center of Education and Education Statistics Data states that in the Province of Yogyakarta is identified many teachers who have not graduated / are under KCM especially on the ability to master professional competence. The results of the UKG will ultimately be linked to student achievement through National Test/ Ujian Nasional (UN).

Social Science (IPS) is an integration of various social sciences such as economics, history, geography, sociology, politics, etc (Soemantri, 2001: 12). IPS has a very wide range of material and its dynamic / evolving according to the changing times. But ironically, IPS is not included in the subjects to measure students' ability in the National Exam. Although IPS does not participate in National Examination, the fact that IPS teachers in DIY prove their ability in UKG with good value. The UKG results of IPS subjects at the junior high school in Yogyakarta 2015 are:

Table 1. Result UKG IPS DIY 2015

Rank	Kab/ Kota	$\Sigma$ Guru IPS peserta UKG	Hasil/ Rata-rata
1	Sleman	242	65,89
2	Yogyakarta	149	64,75
3	Gunung Kidul	212	64,14
4	Bantul	261	62,18

5	Kulon Progo	155	61,26
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Based on the results of UKG subjects IPS, Sleman regency was ranked top with an average score of 65.89. As a mapping of Teacher Performance and Competency Assessment/ Penilaian Kinerja dan Kompetensi (PKK), the government encourages teachers to continue to improve their competencies, given that the UKG's assessment/ KKM standards will be raised annually. In 2016 KKM UKG rose to 65, and in 2017 KKM UKG rose to 70 (*m.harnas.co*). The competence tested in UKG is pedagogic and professional competence.

Teacher competence is the basis that must be mastered by the teacher. The competence that can be tested in the UKG in writing and clear the results as explained by Hakim (2015: 3) in the Journal of Competence Teacher on The Performance of Learning which states is

*“Pedagogic competence is the ability of a person to exercise or perform a job or task that is based on skills, knowledge and attitudes supported by work in accordance with the demands of the job”.*

The revelation implies that pedagogic competence refers to a person's ability to perform tasks in his / her work / profession which are viewed from the skills, knowledge, and attitudes that support the work. In addition to competence in the mastery of teaching skills, teachers are also required to master the scientific field of professional competence. As Jamal (Judge 2015: 3) explains that

*“professional competence is the ability of dealing with the adjustment tasks and competence of lecturers is very important because it directly relates to the performance shown”.*

The statement means that professional competence is a must-have for handling tasks, and the ability of teachers is important because it directly relates to the performance shown in the classroom.

Given the ability or competence of teachers is very important to have the teacher, so as a follow-up of the results of UKG and for the achievement of the quality of teacher competence better, the government requires training for teachers who have not met the standards to improve skills, knowledge, understanding and skills (Kusumawati, 2016: 3). In addition to the obligation of teachers to follow the training as a step of professional development, the routine activities undertaken by teachers so far need to be evaluated and improved its implementation such as academic supervision and teacher participation in the Teachers Consultative Forum (MGMP). Academic Supervision is a coaching activity planned to help teachers and other school staff in performing work effectively and efficiently (Purwanto, 2003: 76)

Wiles (Rahabav, 2016: 48) also defines the supervision as follows:

*“Supervision is an activity that is provided to help teachers do their jobs better. The role of the supervisor is to assist, support and divide not tell. Wiles further, saying that good supervision should develop leadership within the group, establishing in-service training courses to improve the skills of teachers and help teachers improve its ability to assess the works results”*

Wiles's statement explains that academic supervision is an activity undertaken by teachers to help their work to be better which aims to provide technical assistance and guidance to teachers in order to improve the quality of its performance,

Arikunto (2004: 40) reveals the purpose of academic supervision namely:

- 1) Improving the quality of teacher performance so as to successfully assist and guide students achieving learning and personal achievement as expected.
- 2) Improve the effectiveness of the curriculum so that it is efficient and well implemented in the learning process.
- 3) Improve the effectiveness and efficiency of existing facilities and infrastructure to be managed and utilized properly so as to optimize the success of student learning.

Although academic supervision has a good purpose, there is still a skewed view of supervision that is only considered as an activity to calculate the quality of teachers' existence in meeting the interests of mere teacher accreditation (Khalif, 2014: 1). In addition to academic supervision, teacher participation in the MGMP forum is a significant influence on teachers' competence in terms of MGMP's own objectives:

- 1) Broaden the knowledge and knowledge of subject teachers in an effort to realize effective and efficient learning.
- 2) Developing a conducive class culture as a fun learning process, engrossing and memertidaskan students.
- 3) Building cooperation with the community as a teacher partner in implementing the learning process.

As a forum for teachers to improve their capabilities, the MGMP itself has a lot of activities that are very useful in improving the competence and fluency in the implementation of its work, including curriculum development, syllabus making, lesson plans, teaching materials, and evaluation of Glickman issues (2007: 39).

Looking at the academic supervision and the MGMP's containers, there needs to be more supportive activities with government interference, one of them training. Training is a combination of two words of education and training (Aqib, 2009: 16) ., Education and training are important because they are the means by which the organization maintains, maintains and nurtures employees and increases employee skills to improve productivity. Fathoni (2006: 147) also defines Training as a teaching and learning process in order to improve the ability of human resources in carrying out its duties.

Based on the background and elaboration of the literature above, it can be formulated the problem of how the influence of academic supervision, teacher participation in MGMP, and training on the competence of IPS teachers in Sleman District, so that the purpose of the research is to explain the influence of academic supervision, MGMP, and training on IPS teacher competency in Sleman Regency either partially or simultaneously. The results of the research are expected to be a weapon to deal with various changes in this global era, so that the quality of education will change to be more advanced.

## **2. Method**

This research is an ex-post facto research as well as a causal associative analysis with a quantitative approach. Ex-post facto research is a study aimed at uncovering facts without manipulating data on independent variables, but revealing facts based on measurements of symptoms that have occurred in previous respondents. This research is also causal associative, because this research is intended to know the influence of free variables (X1, X2, X3) with dependent variable (Y) (Sugiyono, 2011: 32).

The population in this study are IPS teachers in Sleman District who are incorporated in the IPS Subject Teachers MGMP (MGMP) consisting of the core board and members of MGMP. Adapun total population of teachers in this study there are 183 people. The sample in this study was chosen using purposive sampling technique.

The considerations in determining the sample in this study are: 1) Teachers who are members of MGMP IPS Sleman District and 2) teachers who have less SME scores than KCM 70 and are obliged to follow the training. The teachers who are obliged to follow the training are numbered 85 teachers. So the sample in this study is 85 teachers who are also the subject of research. In the search data, the subject teachers will provide opinions / information through questionnaires about the implementation of academic supervision, participation in the MGMP, Training programs as well as taking tests to measure competence.

This research was conducted at SMP N 1 Depok Sleman, SMP 1 Sleman, and SMP N 4 Pakem. The study was conducted in August-November 2017. The research was conducted in line with routine MGMP meetings, workshop activities, socialization in cooperation with several outsiders, and training implementation. The basic consideration of the time the study was conducted based on initial observations made by researchers, based on information from the chairman of the MGMP.

Data collection techniques used in this study is a questionnaire and teacher competency test tests.

1. Questionnaire (Kusioner)

Questionnaire used in the form of a closed questionnaire, which is provided answers, so that respondents just choose the answer. This technique is used to collect data from respondents in the form of teachers' perceptions of academic supervision, participation in MGMP, and training.

2. Test of Teacher's Competency

This form of test is carried out to obtain the results of teacher competency test consisting of professional and pedagogic competence.

**3. Result**

3.1 Description of Result Teacher Competency Test

IPS teacher competency data obtained through a written matter with the number of questions as many as 50 questions tested to 85 respondents. Problems given to the teacher is an evaluation or usefulness of activities that have been implemented by teachers during the service, both the result of supervision, participation in the MGMP, and education-training (training). The assessment standards shown are: a) control of pedagogic competencies such as; master the characteristics of learners, design of learning in the classroom, technology utilization, and development of evaluation tools / assessment, b) mastery of professional competence tangible ability to master SK-KD IPS and mastery of science / material in IPS lessons. The data obtained are:

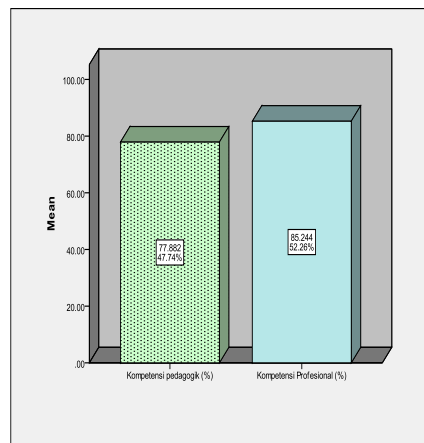
Table 2. Result Teacher's Competency

Category	Teacher's Competency (Pedagogic & Professional)
N = 85 Guru	

Max	92
Min	72
Mean	83.0353
Median	84
Modus	88
Simpangan Baku	4.58374

Based on the above data table can be explained again that of 85 teachers who answered questions on the question of teacher competence (pedagogical and professional), the highest score is 92 and the lowest score is 72. While for the mean (mean) is 83.0353. The table showing the overall results of overall teacher competence (pedagogical and professional competence), the following is a separate teacher competency comparison diagram.

Diagram 1. Comparison Pedagogy and Professional Competency



These results explain that the competence of teachers dominated in the mastery of professional competence of 52.26%, while pedagogic competence of 47.74%. Subsequent calculations of relative donations and effective contributions are made.

Table 3. Relative and Effective Contribution

Sumber	Contribution Summary	
	Relative Contributions	Effective contributions
Academic Supervisiom (X <sub>1</sub> )	50,99 %	25.50%
Partipation in MGMP(X <sub>2</sub> )	37,08 %	18,54%
Training (X <sub>3</sub> )	11,94%	5,97%
Total	100 %	50,01 %

Dependent Variable: Teacher's Competency  
 This calculation aims to determine how effective and relative contributions of each predictor to the criterion for predictive purposes One contributor to the level of teacher competence, testing through academic supervision. Perceptions of teachers in the implementation of supervision is



done by providing a questionnaire with indicators: 1) teacher readiness will be carried out each supervision, starting from the mental readiness of teachers, 2) administrative readiness / learning tools, and supervision implementation process and 3) follow-up of the supervision program.

### 3.2 The Effect of Academic Supervision (X1) on Teacher Competency (Y)

Supervision is a program or business service or guidance in a professional manner as an aid in developing learning situations in a better direction in order to improve the quality of teacher work in the field of teaching, so this study was conducted to determine the effect of the implementation of supervision program on SMP IPS teacher competence in Sleman Regency.

The data of academic supervision was obtained through questionnaire with the number of statements of 18 items distributed to 85 respondents. The questionnaire was given to the teacher. Based on the questionnaire that has been given to the teacher, obtained the results of the data presented with categorization according to Azwar (2003: 107) which is divided into three categories (low, medium, high). The categorization of academic supervision result that is:

Tabel 4. Categorization of Academic Supervision Result

Kriteria		Frek	Persentase (%)
Low	(0-24)	0	0
Medium	(> 24 - 48)	6	7.06
High	(> 48 - 72)	79	92.94
Total		85	100

In this study supervision focuses on teachers' perceptions of supervision performed by supervisors with class visits. Based on the results of simple calculations and categorization of Azwar (2003: 107) indicates that teachers who have readiness, implementation, and follow-up high academic supervision of 79 teachers or 94% of 85. In the medium category there are 6 teachers or 7.06% while for the low category does not exist. Based on these results explain that the teacher has a good readiness to face supervision, both on planning, supervision, and follow-up post-supervision.

Partial test result of academic supervision variable shows positive effect and significance to teacher competency. Thus it states that academic supervision can be a step to increase the competency of teachers viewed from; 1) the planning aspect implemented by the teacher starting from the pre-supervision of teachers pre-supervision and learning device planning that can be said good, 2) on the implementation aspect, the teacher is also able to provide mastery of the material and the good classroom atmosphere in learning, 3) , the teacher is able to make improvements to the assessment given by the principal to him in order to improve the next lesson. The results of the calculation of coefficient of determination also shows the contribution of academic supervision (X1) to teacher competency (Y) of 25.50

### 3.3 The Effect of Participation Teacher in Teacher's Forum (MGMP)

Participation is a series of systematic and structured activities involving a person to take the initiative of both mind and energy in the decision-making process, program implementation, evaluating and benefiting from a program. Participation in the MGMP means the participation of teachers in a teacher organization which can be seen from the extent to which a person has been involved in both the mastered and the educational issues at his or her level.

In this study, participation in the MGMP explored three (3) aspects/indicators namely: activity in implementation, participation in decision making, and usefulness received by teachers during participation in the MGMP. Partial test results of teacher participation variables in MGMP showed positive and significant results on teacher competency. This means that teachers' active participation in MGMP activities is able to give a good effect on teachers' competency as seen from: 1) teacher activeness aspect which shows that teachers follow MGMP activities, such as workshop, material development, teaching materials, media, and evaluation of learning, 2) on decision-making aspects teachers also participate to take steps on every issue discussed in the MGMP, 3) and lastly on the aspect of usefulness, teachers give a good perception in their participation in the MGMP which is seen on the usefulness of the preparation of teaching materials and so on.

The teacher enrollment questionnaire results in the MGMP are categorized in this table below:

Table 5. Category of Participation Teacher in MGMP

Category	Frek	(%)
Low (0 - 42.67 )	5	5.88
Medium (> 42.67 - 85.33)	30	35.29
High (> 85.33 - 128)	50	58.82
Total	85	100.00

Based on the above table, it can be explained that the majority of teachers are at the high participation level of 50 teachers (58.82%), in the medium category as many as 30 teachers (35.29%) teachers, and 5 teachers (5.88%) teachers fall into categories with low participation rates.

Then, the result of questionnaire found that teacher participation in MGMP positive and significant influence. The positive influence of teacher competency quality through participation in MGMP will be better if the subject teachers are always active in carrying out activities in the MGMP. MGMP activities are very useful for various parties. For teachers, through qualified MGMP activities can be an opportunity to improve teacher competence. For students, they will have the opportunity to follow a fun, meaningful and quality learning in accordance with national education standards and content standards. For the school will have teachers of competent, professional and able to improve the quality of learning in schools in accordance with national standards of education (Zaim, 2011: 11).

The optimization of good quality MGMP activities has also been proven in National Council of Teachers of English (2010: 1-2) research. The results of the study shows that the community improvement of teacher competence is done well through the teacher learning community. The

teacher learning community here is a group that continues to develop itself by discovering, creating, teaching, and improving teaching practices. In Indonesia, one form of teacher learning community is known as the Subject Teachers' Meeting (MGMP).

### 3.4 The Effect of Training on Teacher Competency

Training is a planned program that can help teachers in solving problems and improving the quality and career of teachers. In this study, the training tries to explore the aspects / indicators, namely: a) the relevance of teacher education, b) the intensity of training participation, c) the level of teacher understanding in absorbing the training materials, d) the effectiveness of the training and e) the usefulness of the training. Based on the simple calculation shows the effect of the training (X3) on teacher competency (Y). The following categorization of teacher perceptions of the training:

Table 6. Categorization of Training Result

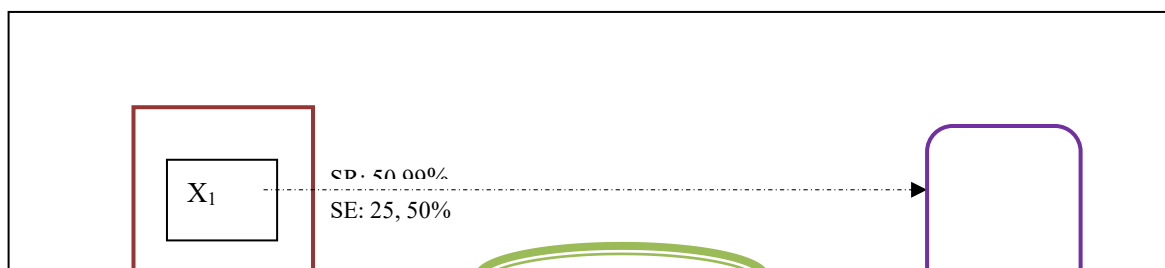
Kriteria		Frek	(%)
Low	(0-17.33)	0	0
Medium	> 17.33 - 34.67)	15	17.65
High	(> 34.67 - 52)	70	82.35
Total		85	100

Positive effect on the quality of teacher competence through the implementation of the training will be better if the teacher is able to always be active and take the time to understand the material in the training, so that the training can be effective and provide benefits for the teacher. If the teachers follow the training seriously and the implementation is effective, then the training will be able to be a real step in improving the competence of the teacher itself.

The results of partial test of the training variables showed a positive and significant effect on teacher competency. That is, the training is able to improve the competency of teachers by looking at aspects; 1) the relevance of education. The relevance of teacher education that is not all based on integrated IPS has no great effect on teacher competency, 2) intensity and level of training able to give effect to the ability of mastery of training materials, and 3) effectiveness and usefulness of the training gets a good perception for teachers to develop their competency. Thus it is stated that the correct training has a positive and significant effect on teacher competency.

### 3.5 The Effect of X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub> to Y Simultaneously (multiple regression results)

Based on the results of hypothesis test above, partially and simultaneously all the variables mutually positive and significant effect. Furthermore, also calculated relative contribution and relative contribution. There are to knowing the contribution every predictor to criterion for predictive purposes. To know relative donations and effective donations can be seen from the following analysis:



Thus, academic supervision (X1), participation in MGMP (X2), and Training (X3) simultaneously have a positive and significant impact on the competence of IPS junior high school teachers in Sleman District. Other things indicate that academic supervision, teacher participation in MGMP, and training are able to contribute to the improvement of teacher competence with a large contribution of 50.01%, and 49.99% determined by other factors not examined. Thus, if the three variables are done better and maximum, then the competence of teachers will increasingly have a positive impact.

The low level of teacher competence (Y) is not merely the benchmark of academic supervision level, participation in MGMP, and good / effective training program. These three things become part / factor that can improve teacher competence. This can be likened to if the teacher is effective in the participation in the training, and the level of diligent / active in the MGMP, he will get a lot of knowledge and experience that can be used as capital in the implementation of supervision. With the effectiveness of the implementation of the training and activeness in the MGMP activities, did not rule out teachers get a lot of input in developing competence, wealth of knowledge, and development of learning tools that will be used in supervision. So that the participation and experience in supervision can be a lesson to evaluate themselves related to teacher competence.

The results of the analysis in this study are in line with Moreno's research titled "Effective Teachers-Professional and Personal Skills" (Journal ENSAYOS, 2009: 35-46). The study concludes that effective and professional teachers not only have good knowledge competencies, but also the participation of organizational teachers, management skills, communication skills

and instruction, able to provide appropriate evaluation, and able to create conducive class conditions that can create an atmosphere of learning in interactive classes.

#### **4. Conclusion**

Based on hypothesis test result and contribution result indicate that academic supervision, participation of teacher in MGMP, and training give positive effect and have good contribution to teacher competency. With the existence of that effect, if quality supervision is improved, it will increase the contribution also to teacher competence. Score/ level of teacher's competency (Y) is not merely the benchmark of academic supervision level, participation in MGMP, and good / effective training program. These three things become a part/ factor that can improve the teacher competency. This can be likened to if the teacher is effective in the participation in the training, and the level of active in MGMP, they will get a lot of knowledge and experience that can be used as capital in the implementation of supervision. With the effectiveness of the implementation of the training and activeness in MGMP activities also, did not rule out the teacher gets a lot of input in developing competency, wealth of knowledge, and development of learning tools that will be used in supervision.

So that the participation and experience in supervision can be a lesson to evaluate themselves related to their competency. Hopefully, if supervision, participation in MGMP, and training can be implemented effectively, teacher will be motivated to improve the planning and implementation of learning in order to achieve the learning objectives. Based on the results of research, Education Authorities of Sleman can make the results of this study as a consideration in making decisions related to activities in improving teacher's competency. It is expected that the education authorities will be able to support teachers' activities in MGMP as needed, not only the activities are carried out but the essence / results are not obtained,

#### **5. Research Implication**

The implication of this research is that if the academic supervision can be done better by the teacher in preparing the supervision, implementation, evaluation, and also the principal as supervisor able to effect teacher teaching behavior, the result of supervision will be optimal and have good effect on teacher competency. In other words, the better the teacher preparing supervision and observing the results of supervision evaluation, the better the teacher's competency can be seen from the ability of mastering the scientific material (professional) and the implementation of the classroom learning (pedagogic).

Through the participation of teachers in the MGMP, teachers are also able to foster motivation to improve their competency. If the intensity and often active teachers participate / engage in various MGMP activities, then the teacher's insight will be broader and affect the competency. The MGMP becomes a space for teachers to share information, devote all sorts of problems, and discuss methods, media and materials including learning tools. Teachers who actively participate in MGMP activities prove that teachers are committed to their profession. So that the competency of teachers will be better and increased.

As a step in developing teacher profession, if the training is done effectively, then the teacher is able to hone various knowledge owned, add a lot of material, and get new information more innovative for progress in next learning.

## 6. Suggestion

Based on the results of the research indicates that academic supervision, teacher participation in MGMP, and training shows a positive and significant influence. Therefore, teachers should engage more actively in order to increase competence. In addition, training providers are able to foster participation / participation of teachers in the training both in the delivery of materials and in the use of time, so that the training can run better in supporting the improvement of teacher competence. Through academic supervision, the principal should be supervisor able to do good guidance with teachers agarguru able to make improvements on the evaluation results that have been given, so that academic supervision is not just a test for a moment, but can be a better footing for teachers to improve the planning and implementation of learning to improve its competence. In addition, MGMP administrators can also make the results of this study as a consideration in making decisions related to activities in the MGMP to further improve teacher competency.

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# Synergy Value from Bank Consolidations in Indonesia

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## Abstract

Developing nations witnessed tremendous numbers of domestic bank mergers and acquisitions (M&As) and foreign acquisitions in response to deregulation, technological advances, and the globalization of nonfinancial economic activity. These changes in the corporate governance of banks raise essential questions about how do these changes create value that can affect bank performance and are the changes permanent or do they tend to return to their previous conditions. This research aims to assess the synergy value created from change of ownership and its effect toward bank's performance shown in their relative performance as well as their standard financial ratios. Data in this research is taken from 37 observations of banks that operated in Indonesia at 2011 – 2016, and then the observations will be analyzed using panel data analysis. Consistent with the previous research, the result of this study shows that there is synergy value created from the consolidations that affects bank performance. Both domestic and foreign acquisitions affect positively in bank performance. While domestic acquisition show improvement in profitability, the foreign acquisition show improvement in asset quality and efficiency.

**Key Words:** Bank; Consolidation; Synergy Value; Financial Performance

## 1. Introduction

Since the early 1990s, nations of North America and Western Europe witnessed tremendous numbers of bank ownership change in the form of mergers and acquisitions (M&As) (Berger et al., 2005). Following the event, M&As happened even more dramatic in Eastern Europe, East Asia, and many in Latin America. These occurred as a response to deregulation, technological advances, and the globalization of nonfinancial economic activity (Berger et al., 2005). Between the year 2006 – 2016 Indonesia alone has witnessed 24 bank ownership changes that consist of domestic M&As and foreign acquisitions (EY, 2017).

The previous study on Indonesian banks was done over the period of 2006 – 2012. It showed that state-owned banks tend to be less profitable and more exposed to risk than private and foreign banks (Shaban & James, 2017). The domestic acquisition is generally associated with a decrease in the efficiency of the acquired banks. The non-regional foreign acquisition is related to a reduction in risk exposure. While acquisition by regional foreign investors is associated with performance gains (Chalid, Torrisi, Munari, Torluccio, & Mengoli, 2012).

Based on the above findings, it is still essential for conducting the research with an extended period of 2011 – 2016 given the following condition; in December 2012, the Indonesian Central Bank loosened the Single Presence Policy to support local banks being consolidated through M&As. Under the 2012 regulation, a controlling shareholder is allowed to have a controlling share in more than one bank subject to the nature of the business (Bank Indonesia, 2012). The central bank also set policies to raise the capital adequacy of banks, providing incentives for

banks to merge as part of their consolidation strategy (Bank Indonesia, 2013). Indonesia was expecting a surge in the number of bank M&As in the years following the regulation.

This research aims to prove the argument that the change of ownership by banks operating in Indonesia between 2011 – 2016 create synergy value that impact significantly and positively to their financial performance. And also to prove that the M&As has served the government objectives and give a positive attitude to the Indonesian banking industry.

## 2. Method

Observations used in this research are commercial banks, that operate in Indonesia between the period of 2011 - 2016. We exclude banks that were closed and acquired between that period. Regional Development Banks (BPDs) and Syariah Banks are also excluded in the observation due to differences in business activities to other commercial banks. Our original observation obtained from 75 Indonesian commercial banks but we filtered out banks for which the data necessary to estimate cost and profit functions were not available for all years over the period 2011-2016. This reduced the observation to 37 banks.

To obtain bank-specific relative performance measures we apply parametric frontier techniques to compute both cost and profit efficiency scores for our observation of commercial banks. According to Battese and Coelli (Battese & Coelli, 1995) cost and profit efficiency scores are obtained by calculating the ratio between the actual level of costs and profit with the minimum level of costs and maximum level of benefit given the cost & profit frontier.

This research also uses financial ratios that generally used to measure profitability, operational efficiency, capital adequacy, asset quality, and liquidity. They are: net interest margin (NIM); return on average assets (ROA); cost-income ratio (CIR); core equity capital to total risk-weighted assets (CAR); non-performing loans to total loans (NPL); and Loan to Deposit Ratio (LDR). All areas have been considered because they can well analyze the creditworthiness of an institution.

The observations comprised of panel data set for 37 commercial banks operating in Indonesia during 2011 – 2016. The dependent variables capture the bank performance indicators, while the independent variables related to static, selection, and dynamic indicators of bank governance. Thus, the estimating equations will take the following form:

$$\text{Bank Performance Measured} = \alpha + \beta_1 X + \beta_2 Z + \beta_3 D + \beta_4 C + e$$

Where:

$\alpha$  represents Constant;

$\beta_1, \beta_2, \beta_3, \beta_4$  represent regression coefficient for each independent variable;

$e$  represents standard error.

$X$  represent Static Governance Indicators

$Z$  represent Selection Governance Indicators

$D$  represent Dynamic Governance Indicators

$C$  represent Control variables

This research considers domestic and foreign acquisitions, as well as the percentage of the stake that is involved in the acquisitions. Stake percentage is a new consideration if compared from the previous study by Shaban, which is included to see whether there are any bank performance differences between the acquisitions that involve  $\leq 50\%$  of total bank stake, and the acquisition that require  $\geq 50\%$  of total acquired bank stake. Hence, below are the hypothesis that aimed to be answered by this research:

**H1:** Bank acquisition with  $\leq 50\%$  stake ownership changes significantly and positively affects bank performance.

**H2:** Bank acquisition with  $\geq 50\%$  stake ownership changes significantly and positively affects bank performance.

### 3. Result

Comparing the CE Score and PE Score for each type of bank, we can see that Foreign Banks (FB) are not the most cost efficient anymore, compared to previous study by Shaban. As for the State-Owned Banks (SOB) have the highest Profit Efficiency (PE). In the other hand, Private Domestic Banks (PB) have worst performance in profit efficiency but have the highest cost efficiency score. They also manage to gain profit, because of their nature of being part of a large conglomerate group, where their business is being supported by the leading group's business activity. This is aligned with the previous study that show how private banks are typically less affected by political interference and better able to maximize profits, for instance by aligning the objectives of the principal and the agent using incentives schemes and superior governance systems (Shleifer and Vishny, 1997).

Besides looking at their comparative efficiency indicators, this research also includes standard bank performance indicators that are included in their financial performance report that shows their profitability, efficiency, capital adequacy, asset quality, and liquidity. From the result, it can be seen that private domestic banks and State-owned banks have higher ROAs compared to foreign banks. However, private banks have a significant high NIM ratio, showing that the primary income for private Banks are still coming from interest-based transactions. In opposite with the foreign banks, that have the lowest NIM coefficient, since they are shifting to service businesses that gain fee-based income.

Table 1. Result for Selective Effects of Ownership Change on the Observation Banks

	Relative Performance		Profitability		Operational Efficiency	Capital Adequacy	Asset Quality	Liquidity
	CE SCORE	PE SCORE	ROA	NIM	CIR	CAR	NPL	LDR
<b>PB</b>	0.3606281	19.68107	0.0543602	5.045904	-26.59149	7.247738	-0.3301568	66.35273
	0.963	0.877	0.972	0.046**	0.378	0.646	0.853	0.819
<b>FB</b>	-1.601888	29.25182	-0.245948	3.877824	-26.59149	16.63174	0.470211	98.28668
	0.841	0.823	0.878	0.132	0.378	0.311	0.798	0.736
<b>SOB</b>	-0.7451669	69.68638	0.3045265	5.078144	-18.22212	11.64905	0.209252	83.37203

	0.930	0.620	0.859	0.068	0.571	0.506	0.915	0.777
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Foreign banks have significantly lower CIR compared to private domestic and state-owned banks. This consistent with the finding by Shaban in his research (Shaban & James, 2017) that said that foreign banks are more cost-efficient than private and state-owned banks. This study also show that private domestic banks have lower CIR ratio. We can conclude that foreign and private domestic banks have operational procedure that relying mostly on technology rather than human resources, unlike the SOBs, resulting in lower variable labor cost.

Foreign banks have stronger CAR, which can be a result of capital injection from their parent companies or broader access to capital compared to Indonesian private domestic banks and SOBs. However, private banks able to have higher asset quality, as a result of massive write-off due to the high NPL. Beside asset quality, private domestic bank also able to keep their liquidity higher than foreign and SOBs as indicated, although this can also be a sign that they have difficulties in growing their loan portfolio.

The selection effects describe the characteristics of banks that experience merger and acquisition at least once in the period of study. They show the nature of banks that are being acquired, which from there we can see the preferences of domestic and foreign banks in determining what kind of banks that they choose to purchase.

As seen from the table, both domestic and foreign investors who would like to acquire  $\leq 50\%$  of the target bank stake, they tend to choose banks that has lower profit efficiency, low profitability, and low capital. However, foreign banks still select banks that has good asset quality and significantly high NIM ratio.

In the case of targeting banks by acquiring  $> 50\%$  stake, both foreign and private domestic banks choose those that has low capital. Not only that, foreign investors tend to have profitability and asset quality, while the local investors do not put many attention on other ratios.

Table 2. Result for Dynamic Effects of Ownership Change on the Observation Banks

	Relative Performance		Profitability		Operational Efficiency	Capital Adequacy	Asset Quality	Liquidity
	CE SCORE	PE SCORE	ROA	NIM	CIR	CAR	NPL	LDR
<b>With <math>\leq 50\%</math> share acquisition</b>								
<b>DA-S</b>	-5.001677 0.903	-108.0306 0.534	-0.7346128 0.370	0.4818069 0.587	0.4912405 0.970	-3.872155 0.406	1.672217 0.125	5.94064 0.828
<b>FA-S</b>	-2.335843 0.928	-167.4845 0.129	-0.0946107 0.855	1.183935 0.036**	-1.846087 0.825	-5.009811 0.091*	-0.0351842 0.959	-23.45243 0.209
<b>DA-D</b>	13.56737 0.728	583.5774 0.365	-6.145617 0.436	7.56786 0.539	111.9387 0.446	-17.40087 0.827	10.493 0.248	0
<b>FA-D</b>	1.079922 0.915	118.5004 0.478	-0.7743581 0.705	3.606251 0.265	-3.257155 0.932	4.37382 0.832	-0.1610685 0.945	53.95811 0.854
<b>With <math>&gt; 50\%</math> share acquisition</b>								
<b>DA-S2</b>	-0.134929	-54.0621	0.0795912	1.36564	7.148665	-4.321494	0.5429392	-15.61893

	0.998	0.785	0.932	0.179	0.635	0.417	0.662	0.617
<b>FA-S2</b>	46.811111	131.7648	1.088326	-0.006104	-3.181515	-12.16815	1.431544	-8.504982
	0.177	0.368	0.121	0.994	0.778	0.002***	0.119	0.712
<b>DA-D2</b>	0.3138658	-2.311294	0.1731995	6.278898	-28.20417	7.099171	.6013756	62.70932
	0.980	0.991	0.945	0.121	0.550	0.781	0.835	0.831
<b>FA-D2</b>	-178.9403	-437.4162	-0.2357913	4.033435	-25.47759	-0.7685941	-0.5570337	81.02079
	0.000***	0.021	0.916	0.256	0.543	0.973	0.825	0.786
<b>SIZE</b>	-0.1440431	-102.7661	-0.567938	-1.397101	-9.015157	0.0367789	0.7408984	3.823803
	0.991	0.062	0.029**	0.000***	0.032**	0.980	0.034**	0.667
<b>CONS.</b>	-2.836775	1737.416	10.76109	28.42582	219.5991	21.63726	-10.48064	28.66147

It can be concluded that foreign investors choose the banks that they are going to be acquired based on their excellent financial performance and how they manage their asset quality. It can be seen that the decision to purchase more than half of the bank's value is based on the target banks that are already proven to have a good historical performance. Hence the likelihood for the business to be failed is small. As for the banks that are acquired by domestic entities by more than >50%, the results are in the opposite direction. The target banks that are acquired by domestic investors by > 50% have low CAR, high NPL, low PE and CE score, however, they have higher liquidity and better ROA.

The dynamic effects are showing how the banks perform after being acquired. These effects are used to answer the hypothesis of this research regarding how stake ownership change can affect the bank performance indicators. The result of each effect and significance level on each dependent variable is presented in Table 2. By looking at the table and comparing the result from the selection variables and the dynamic variables, we can see that domestic investor make more significant impacts on target banks when they acquire more stake percentage. They are proven to drive the acquired banks or the new merged banks into higher profitability, shown by the ROA and NIM ratio, higher CAR, and lower CIR. However, the liquidity condition is lower and NPL is slightly higher after the acquisition.

Different result come from the foreign investors, they already have impacts on the banks performance no matter the percentage of stake that they acquire. When they purchase the target banks by  $\leq 50\%$ , there is higher PE score, lower CIR, and lower NPL. And while when they acquire the target banks by more stake percentage, there is a significant decrease in CIR, CE Score, and lower NPL.

The outcome is that there are still some performance ratios that is positively affected by the acquisition of domestic entities is not consistent with the previous study by Shaban (Shaban & James, 2017) where the domestic acquisition is usually associated decline of bank performance. It is explained by Shaban that domestic investors in Indonesia are often private banks sharing many characteristics of the banks that they acquire (e.g. limited access to capital, inferior technology, poor managerial skills) (Shaban & James, 2017). However, with the supervision of the government and the tighter competition, push the bank to grow and have breakthrough ideas to grow their business.

However, there is a threat of having private conglomerate entities as investors; by conglomeration, the cost will be higher in the cost of agency and misallocation of investment

occurred between business segments, so that the financial performance was not optimal. The second explanation is that conglomerate is the inefficiency of internal capital market. They might invest in industry segments that are not profitable. They also found that the transfer of the cash flows of an industry segment to other sectors of the industry in one group is not always easy to do, hence it will harm the bank's cash flow (Hidayat, 2016).

Foreign ownership is not always associated with increase of performance. This study shows that following the acquisition by foreign investor, the profitability is not improving as well as the liquidity ratio. However, the cost efficiency demonstrated by the CIR ratio and asset quality are improved.

#### **4. Discussion**

The effect of synergy value created from M&As on the performance of Indonesian banks is being investigated in this research. This study considers not only the static but also selection and dynamic effects of the types of ownership in the same model jointly. This study interprets ownership change as a reflection of governance change. Different from the previous research by Shaban (Shaban & James, 2017) we do not differentiate the acquisition's selection and dynamic effects between ASEAN foreign investors and from those of non-ASEAN foreign investors. However, we distinguish the bank's stake acquisition by their percentage. The stake acquisition of  $\leq 50\%$  and  $> 50\%$ ) will be considered separately, as we want to see whether majority percentage of stake ownership will affect how the governance change of the acquired banks.

Our finding is that Indonesian private banks do not have the best cost and profit efficiency combined, this finding is not consistent with the previous result by Shaban (Shaban & James, 2017). The new discovery is that between the period of 2011 – 2016, Private banks are more prudent as they have the lower non-performing loan, which on the previous study was associated with the Foreign banks.

In this research, foreign banks, however, appear to be relatively less prudent, to the extent that foreign ownership, just a slightly better than the state-owned ownership, is significantly associated with a higher proportion of non-performing loans. Foreign ownership shows a commitment to the low cost to income ratio as also shown in the previous study, although it is not consistent with the Cost Efficiency Score. The strong capital adequacy is definitely won by the foreign banks as indicated in their equity to total asset and capital adequacy ratio.

As for the four state-owned banks in this research are becoming the winner of cost and profit efficiency, supported by the highest score of return on asset, return on equity, and net interest margin. Also have the best liquidity situation compared to other banks, as shown in their liquid asset to total asset and loan to deposit ratio. However, they have a higher gross non-performing loan, compared to private banks, and they seem to have weaker capital. Their capital adequacy is also lower than private and foreign banks, although not significant.

Both domestic and foreign investors which acquire  $\leq 50\%$  of the bank's stake tend not to select the best performing banks in term of profitability, efficiency, capital adequacy, and also liquidity. The bank's performance is not the primary consideration when buying the stake in a minor amount. However, the acquisition followed by improving capital, asset quality and surprisingly higher efficiency. In contrary, when domestic investors becoming the dominant

controller of the bank by acquiring more than 50% of the stake, they choose banks with excellent performance. However, there are almost no difference or improvement beside higher capital following the domestic acquisition by larger stake.

It is different when the foreign investors decided to fully on boarding the banks by acquiring more than 50% of the stake. They are not preferring banks with already excellent performance. However, they are able to improve efficiency and asset quality.

Bank consolidation is proven to have effect on the bank performance. In some ratios the impact is positive. However, the synergy value is not always found in every banks M&A. Financial integration pose an advantage to financial sector by providing better service quality, reducing intermediation costs, and lower risk. However, an integrated financial institution can cause a threat, namely conflict of interest. Complexity of its activities also made a financial institution becomes too complicated to monitor. In addition, the integration of financial institutions will also reduce competition because the increase in the concentration of the financial sector. Hence, to balance the benefits and risks of banking institution, supervision will still be required.

For further study, it is also recommended to analyze the difference between stake ownership changes brings to bank loan portfolio changes to show the strategies being applied following the acquisition. It is also essential to do the analysis on each domestic and foreign acquisition, as the study has shown a large gap of the result between the two types of acquisition. The future research on change of behavior subsequent to the consolidation will be very needed by the practitioners and investors to best have their investment decisions.

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# Individual Characteristics, Islamic Work Values, And Organizational Commitment among Islamic Hotel Employees in Lombok Island, Indonesia

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## Abstract

This paper aims to analyze the role of Islamic work values in mediating relationship between individual characteristics and organizational commitment on Islamic hotels' employees in Lombok Island, Indonesia, where Islamic tourism is a priority sector. There are 130 respondents taken as sample of the study. Data analysis is conducted using Structural Equation Modelling-Partial Least Squares (SEM-PLS) method. Result shows that Islamic work value, in particular value of responsibility significantly mediates relationship from individual characteristic that represented by marital status towards organizational commitment. Moreover, application of responsibility value changes negative relationship between marital status and organizational commitment into a positive one. Practical implication from this study is urgency for Islamic hotel management, particularly in Lombok Island to give attention on application of Islamic work values by the employees to preserve their organizational commitment, which in turn will contribute to betterment of the hotels' performance.

**Keywords:** Individual Characteristics, Islamic Hotels, Islamic Work Values, Lombok Island, Organizational Commitment

## 1. Introduction

### 1.1. Background of Study

Previous studies found that work values contribute to increment of various aspects within employees and managers' key performance indicators in an organization. Some of those aspects are organizational commitment, hotel's managerial performance (Elizur & Koslowsky, 2001), job satisfaction (Blood, 1969; Perrewé et al., 1999), productivity (Firestone et al., 2005) and others.

A company in its operation needs employees with high commitment. This is because high level of commitment will preserve employee's loyalty and spirit in working within the company. Parallel with this statement, Meiyanto and Santhoso (1999) stated that most effective way for a company to maintain its competitiveness is developing committed human resources. Kirkman dan Shapiro (2001) added that strong commitment from employees will contribute to its performance while working.

Strong organizational commitment as one of organizational key performance indicators is important, especially by Islamic organizations such as Islamic banks and hotels that emerged recently to achieve their objective. For Islamic hotels in particular, as business entity that



promote Islamic or sharia values in their operation, Islamic working environment is also demanded through application of Islamic work values. This is an important consideration in improving quality of their human resources in the era of halal lifestyle emergence in global level, particularly halal/Islamic tourism.

### *1.2. Objective of Study*

This study aims to analyze the role of Islamic work values that have been validated previously by Wahab, et al (2016), especially in mediating relationship between individual characteristics and organizational commitment on Islamic hotels' employees in Lombok Island.

### *1.3. Literature Review*

#### *Islamic Work Value*

Many social scientists have tried to define work values Brown (2002) defined work values as expected satisfaction result of an individual that achieved through his/her participation in working activities. Later on, Feather in Khanifar et al. (2011) defined work values as generator that functioned as standard or criteria to trigger thoughts and actions related to career development. Pennings in Elizur & Koslowsky (2001) promotes the concept of work value system which is a collection of attitudes and opinions where an individual evaluates his/her job and its working environment. Based on various definitions above, it can be concluded that work value is a set of understanding and attitude standard that becomes benchmark for individual in evaluating expected work result. Meanwhile, Islamic work value system is made up of motivation and guidelines on working sourced from Islamic religion, particularly the Quran and Hadith as primary manuscripts in Islam. This guideline is expected will optimize job performance and contribute to achievement of organizational targets.

Islamic scholars have tried to collect and summarize Islamic work values. Al-'Assal dan Karim (1999) mentioned compulsory work values of a Muslim employee as following: 1) Knowledge; 2) Sincerity; 3) Fulfill promises. Meanwhile, Yusuf Qardhawi mentioned Islamic work values as following: 1) Persisten; 2) Faith; 3) Piety; 4) Devotion; 5) Consistent; 6) Punctuality; 7) Discipline.

Recent study by Wahab, Quazi, & Blackman (2016) collected Islamic work values as following: 1) Cleanliness; 2) Piety; 3) Virtue; 4) Cooperation; 5) Consistency; 6) Consultation; 7) Equality; 8) Forgiveness; 9) Gratitude; 10) Justice; 11) Moderation; 12) Patient; 13) Transparency; 14) Trustworthy; 15) Strength; 16) Competency; 17) Humble; 18) Responsibility; 19) Hardworking; 20) Right intention; 21) Truth; 22) Perfectionism; 23) Promise keeping; 24) Honesty; 25) Punctuality; 26) Sincerity; 27) Integrity.

#### *Organizational Commitment*

According to Werkmeister in Elizur & Koslowsky (2001), commitment is a reflection of individual's personality and represents value standard that become existence basis of individual. Meanwhile, organizational commitment is psychological representation that characterize worker relationship with organization and has implication to decision related to continuation of organizational membership (Allen & Meyer, 1990). Employee or worker with higher commitment level is unlikely to leave organization and tends to have better performance in working with pro-social attitudes (Kirkman & Shapiro, 2001). Employees' commitment in an

organization is deterministic for organizational performance and success. (Sinambela, 2017:317).

Organizational commitment has three characteristics as mentioned by Porter et al. (1974): 1) strong motivation to retain membership in company; 2) intention to optimize efforts for company's interest; 3) trust and full acceptance towards organizational values and goals.

### *Inter-Variables Relationship*

Several previous studies have suggested relationship between individual characteristics and work values. Abboushi (1990) investigates the impact of occupation, education, age, and work experience on work values among Palestinian Arabs. The results show the type of work affects conventional work values such as pride in work, job involvement, social status, and attitudes related to income. Meanwhile, the level of formal education has a significant influence on pride in work, employment engagement, and attitudes related to income. The age has a significant influence on the connotation of social work-related prestige. Work experience influences work ethics attitudes related to struggle or hard work.

The relationship between individual characteristics with organizational commitment can be seen through research conducted by Meiyanto and Santhoso (1999). The results showed that the five demographic factors such as gender, age, education, marital status, and length of work have an influence on the organizational commitment of employees within a company. Among the five demographic factors, only sex factor has a weaker effect on organizational commitment compared to other factors.

The relationship between work values and organizational commitment was expressed by Kidron (1974). His research aims to determine the relationship between (Protestant)work values to organizational commitment of employees, which is divided into moral commitment and calculative commitment. The results show that (Protestant)work values tend to have an effect on moral commitment compared to calculative commitment. This is because Protestant followers are constantly stressed to carry their religious values even when they are working. They are required to work hard and should not separate moral principles and moral rules from their lives.

Based on the literature review above, the hypothesis proposed in this study is "individual characteristics have an effect on the commitment of syariah hotel employee organization in Lombok Island through mediation by Islamic work value"

## **2. Research Method**

### *2.1. Research Object*

Data for this study is taken from Islamic hotels' employees in Lombok Island. Samples for this research are taken through random sampling technique in Lombok Island, in particular Mataram City and West Lombok Regency. There are 130 respondents whom data are taken from.

### *2.2. Data Collection Instrument*

This research used questionnaire as data collection instrument. Questions in the questionnaire are divided into two types. First, favourable or support psychological object. Second, unfavourable or against psychological object. These types of items have opposite weighting; answer of "very agree" on favourable item will have highest score, while unfavourable item

with similar answer will have lowest score. On the other side, answer of “very disagree” on favourable will get lowest score, while similar answer on unfavourable item will get highest score.

The questionnaire is made of some groups of questions that represent following variables:

1. Individual characteristics, comprising all information regarding individuals, including age (AGE), gender (GEN), education (EDU), work experience (EXP), and marital status (MAR)(Meiyanto and Santhoso, 1999).
2. Islamic work values, a collection of individual attitudes or opinions related to his/her work based on Islamic values. In this study, Islamic work values that have been validated by Wahab et al., (2016) are used: 1) gratitude; 2) discipline; 3) virtue; 4) perfectionism; 5) responsibility; 6) competence; 7) piety; 8) cooperation; 9) continuous self-evaluation; 10) patient.
3. Organizational commitment, a combination of: i) trust and acceptance towards organization values and goals; ii) readiness to give best effort for organization; and iii) intention to preserve membership within organization. Organizational commitment in this study based on work by Mowday et al (1979) in Ingarianti (2015).

### *2.3. Data Analysis*

Data analysis in this study is conducted using Structural Equation Modelling-Partial Least Square(SEM-PLS) or variance based SEM method which able to test measurement model and structural model simultaneously. Utilization of this method is due to this paper intention to focus on model prediction since theoretical foundation of Islamic work value as variable is still weak. Partial Least Square (PLS) is a strong analytical method because its independency from measurement scale requirement, little sampling size requirement as well as loose requirement for residual distribution. Indicators in PLS can also be in form of either reflective or formative. In this study, individual characteristics as a construct has formative indicators, while other variables (Islamic work values and organizational commitment) have reflective indicators.

In this study, prior to mediating effect testing for Islamic work values, direct relationship test between independent variable (individual characteristics) and dependent variable (organizational commitment) must be conducted. Once direct relationship path formed, direct relationship tests between independent variable and mediating variable as well as between mediating variable and dependent variable will be conducted. If these relationship paths are significant, mediating effect testing can be conducted(Hair, Hult, Ringle, & Sarstedt, 2014).

## **3. Results and Discussion**

### *3.1. Diagnostic Tests on Individual Characteristics' Indicators*

Prior to hypothesis testing, it is necessary to test indicators of Individual Characteristics construct to determine eligible indicators for further analysis. In this study, the construct "Individual Characteristics" is formed by formative indicators, namely Gender (GEN), Age (AGE), Education (EDU), Work Experience (EXP) and Marital Status (MAR). These indicators are expressed as formative indicators for the constructs of "Individual Characteristics" because

if one indicator is removed then another indicator cannot replace it. In turn, removal of one indicator will affect construct formed(Hair et al., 2014).

The test conducted to select formative indicators of "Individual Characteristics" construct is Outer Weights significance test on the indicators. If the results of the significance test indicate that an indicator has P-values greater than 0.05 ( $\alpha$ ), then the indicator still needs to be tested further to determine whether the indicator can be used in further analysis or not(Hair et al., 2014).

The result of significance test onabove is indicated by Table1below:

**Table 1**  
**Result onOuter Weights Significance Test**

<b>Indicator</b>	<b>T Statistics ( O/STDEV )</b>	<b>P Values</b>	<b>Description</b>
AGE ->Individual Characteristics	1,045	0,297	Must be tested further on itsOuter Loadings
GEN ->Individual Characteristics	0,235	0,814	Must be tested further on its Outer Loadings
EDU ->Individual Characteristics	0,659	0,510	Must be tested further on its Outer Loadings
EXP ->Individual Characteristics	0,611	0,541	Must be tested further on its Outer Loadings
MAR ->Individual Characteristics	1,727	0,085	Must be tested further on its Outer Loadings

Source: Primary Data, processed

Table1 above shows that on 95% confidence level, no indicators of Individual Characteristics construct have significant Outer Weights value. This indicates that uncertainty on what indicator to be included on further analysis. Therefore, above indicators should be tested again by calculating their Outer Loadings. An indicator should have at least 0,7 Outer Loadings to be eligible for further analysis(Hair et al., 2014). Outer Loadings value of all indicators is shown on Table 2 below:

**Table2**  
**Indicators' Outer Loadings**

<b>Indicator</b>	<b>Outer Loadings</b>	<b>Description</b>
AGE	0,247	Excluded in furhter analysis
GEN	-0,144	Excluded in furhter analysis
EDU	0,397	Excluded in furhter analysis
EXP	0,379	Excluded in furhter analysis

MAR	0,850	Included in further analysis
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Source: Primary Data, processed

Based on Table 2 above, it shows that only Marital Status (MAR) is eligible indicator to be included in further analysis since its Outer Loadings is more than 0,7. All other indicators must be excluded in further analysis since non of them have Outer Loadings value more than 0,7.

### 3.2. Hypothesis Testing

Hypothesis testing in this research is conducted through evaluation on Path Coefficient obtained from bootstrapping process on SmartPLS software. Path Coefficient is coefficient in a kind of regression model that can be used to test whether there is significant relationship between constructs/variables or not.

In this study, Individual Characteristics construct has significant path coefficients with Islamic work values and organizational commitment. Result of path coefficients measurement from individual characteristic to Islamic work values is shown on following table:

**Table 3**  
**Path Coefficients between Individual Characteristic and Islamic Work Values**

No.	Path	Original Sample (O)	P Values
1	Individual Characteristic ->Cooperation	0,251	0,002
2	Individual Characteristic ->Responsibility	0,236	0,003
3	Individual Characteristic ->Perfectionism	0,165	0,047

Source: Primary Data, processed

Table 3 above shows that Individual Characteristic construct has significant relationship with three Islamic work values, namely cooperation, responsibility and perfectionism. Meanwhile, result of path coefficients measurement from individual characteristic to organizational commitment is shown on following table:

**Table 4**  
**Path Coefficients between Individual Characteristic and Organizational Commitment**

No.	Path	Original Sample (O)	P Values
1	Individual Characteristic ->Giving best effort for organization	-0,166	0,008
2	Individual Characteristic ->Retain membership in organization	-0,154	0,032

Source: Primary Data, processed

Table 4 above shows that Individual Characteristic has significant relationship with two constructs of organizational commitment, namely “Giving best effort for organization” and “Retain membership in organization”. Last direct relationship test is between Islamic work values and organizational commitment as shown on following table:

**Tabel 5**  
**Path Coefficients between Islamic Work Values and Organizational Commitment**

No.	Path	Original Sample (O)	P Values
1	Patient ->Giving best effort for organization	0,375	0,000
2	Keterampilan ->Acceptance for organization	0,383	0,000
3	Tanggung Jawab ->Giving best effort for organization	0,310	0,000
4	Sabar ->Retain membership in organization	0,281	0,001
5	Takwa ->Giving best effort for organization	0,241	0,010
6	Sabar ->Acceptance for organization	0,160	0,027

Source: Primary Data, processed

Table 5 above shows that there are six significant path coefficients between Islamic work values and organizational commitment constructs on Lombok Island’s respondents.

To check for existence of indirect or mediating effect, a table named Specific Indirect Effect obtained from bootstrapping process by SmartPLS software can be used. Result on existence of mediating effect by Islamic work values on relationship between individual characteristic and organizational commitment can be seen on table below:

**Table6**  
**Relationship Paths with Mediating Effect**

No.	Path	Original Sample (O)	P Values
-----	------	---------------------	----------

1	Individual Characteristic ->Responsibility - >Giving best effort for organization	0,073	0,012
2	Individual Characteristic ->Responsibility - >Retain membership in organization	0,026	0,288
3	Individual Characteristic ->Cooperation - >Giving best effort for organization	0,025	0,340
4	Individual Characteristic ->Cooperation - >Retain membership in organization	0,015	0,631
5	Individual Characteristic ->Perfectionism - >Giving best effort for organization	-0,006	0,695
6	Individual Characteristic ->Perfectionism - >Retain membership in organization	0,002	0,915

Source: Primary Data, processed

Based on table above, significant relationship path with mediator variable with 95% confidence level ( $\alpha = 0,05$ ) is relationship path between individual characteristic, marital status in particular with “Giving best effort for organization” that mediated by work value of “responsibility”. Path relationship is a positive direction one.

Another test for mediating effect is full mediating effect test. The criteria for full mediating effect, if relationship paths through mediating variable are significant while direct relationship path between independent variable and dependent variable becomes insignificant. (Abdillah dan Jogiyanto, 2015:233). In SmartPLS software, full mediating effect test can be seen on table named Total Effect that obtained from bootstrapping process. Full mediating effect test result is shown on table below:

**Table 7**  
**Full Mediating Effect Test Result**

Path	Original Sample (O)	P Values	Description
<b>Independent Variable -&gt;Mediating Variable</b>			
Individual Characteristic - >Responsibility	0,236	0,003	Significant
<b>Mediating Variable -&gt;Dependent Variable</b>			
Responsibility ->Giving best effort for organization	0,310	0,000	Significant

Independent Variable ->Dependent Variable			
Individual Characteristic - >Giving best effort for organization	-0,032	0,722	Insignificant

Source: Primary Data, processed

Table 7 above shows that relationship paths that pass through mediating variable, either from independent variable or to dependent variable are significant at confidence level of 95% ( $\alpha = 0,05$ ). Meanwhile, direct relationship path between independent variable and dependent variable becomes insignificant. This condition means mediating effect from work value of “responsibility” is a full mediating effect. This result also support this study’s hypothesis which stated that individual characteristic significantly influence organizational commitment of Islamic hotels’ employees in Lombok Island through mediation by Lombok Island.

An interesting finding from this result is relationship between individual characteristic, particularly marital status towards organizational commitment that initially negative becomes a positive one after mediation by work value of responsibility. In other words, application of responsibility by a married employee will strengthen his/her organization commitment in Islamic hotel where he/she works. This finding is parallel with Robbins (2003) who stated that marriage enforce higher level of responsibility which makes a job becomes more important and valuable. Meiyanto dan Santhoso (1999) also found that marital status is a significant demographic variable influencing organizational commitment of Indonesian employees. This is due to influence of social status in Indonesian society, including marital status in the context of working environment

#### 4. Conclusion

This study extends body of knowledge by analyzing mediating effect created by Islamic work values within relationship between individual characteristic and organizational commitment on Islamic hotels’ employees in Lombok Island. This study shows that individual characteristics, particularly marital status have a significant and positive relationship to the organizational commitment of Islamic hotels’ employees Lombok Island through mediation by Islamic work value of responsibility. Responsibility as work value can even change direction of organizational commitment of employee that tend to decrease after marriage becomes higher and positive.

Results of this study have implications on the management of Human Resources at Islamic hotels in Lombok Island. The management of Islamic hotel in Lombok Island need to pay special attention to married employees. This is because married employees tend to have lower organizational commitment than employees who are not in marriage status. However, this can be overcome if the hotel management is able to provide an understanding on the value of responsibility to married employees since presence of responsibility can increase organizational commitment of married employees. Implementation of the above concept can be in form of training alongside supervision and evaluation so that implementation and its impact can be reviewed from time to time.



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# Transformational Leadership and Job Performance: Multiple Mediation Role of Job Satisfaction in SMEs Sector in Indonesia

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## Abstrak

The purpose of the study was to examine and explain the effect of transformational leadership, job satisfaction and organizational commitment on employees' job performance and the role of job satisfaction as a mediating variable. The population in this study were 69 export-oriented SMEs located in Bali Province, out of which a total sample frame consisting of 54 SMEs was built. Respondents were 177 employees and the data analysis was conducted with SmartPLS 3.0 software. The results of the analysis provided an explanation of the importance of the role of transformational leadership in building job satisfaction and organizational commitment which in turn have an effect on employees' job performance. Theoretically, the research results contribute to the body of knowledge and the role of job satisfaction as a multiple mediation in building organizational commitment and job performance. The research implications are discussed in the paper.

**Keywords:** Transformational leadership, job satisfaction, organizational commitment, and job performance

## 1. Introduction

The study conducted by Bushra et al. (2011) investigated the relationship between transformational leadership and job satisfaction of 133 bank employees in Pakistan and found that transformational leadership had a positive effect on employees' job satisfaction. Bass and Avolio (1990) argued that managers who use charisma are able to become a source of inspiration, individual consideration and intellectual motivation and to give positive reactions to employees in increasing desire and commitment to the organization. Riaz et al. (2011) found a strong positive correlation between transformational leadership and job commitment. Therefore, transformational leadership not only brings about significant effects on job

satisfaction, but it also can influence organizational commitment as shown by the study carried out by Emery & Barker, (2007). In contrast, Elkordy (2013) discovered that transformational leadership had no significant effect on job satisfaction and organizational commitment. Although some studies produced empirical evidence in support of the notion that transformational leadership has a significant effect on employees' job performance, the findings of Daud et al. study (2014) indicated otherwise.

The studies on job satisfaction yielding a significant, positive effect on organizational commitment include Qureshi et al. (2011), Malik et al. (2010), and Samad and Selangor (2005). But different findings were produced by the study conducted by Yiing and Zaman Ahmad (2009), that is job satisfaction negatively affected the organizational commitment of professionals in the education sector located in Malaysia.

The above review of past studies suggests that there is still a lacuna that is related to the conceptualization of the research model. Up to the present time, there has been no integrative research model employed by researchers. This is due to the fact that past studies examining employees' job performance deployed a partial model so that performance problems could not be solved partially.

## **2. Research Methodology**

### *2.1 Population and Samples*

The population of the present study comprised 69 export-oriented SMEs (small and medium enterprises), out of which a sample frame consisting of 59 SMEs was built. The samples were drawn using simple random sampling method, which is a non-replacement method which means that every member of the population had the same chance to be a one-time sample. So, from the 59 SMEs included in the sampling frame 3 respondents were asked to fill out the research questionnaire. The total number of respondents (employees) was 177 people being the unit of analysis in the present study.

### *2.2 Research Hypothesis*

The study on the relationship between transformational leadership and job satisfaction was conducted by Belias and Koustelios (2014), and it was found that transformational leadership had a significant effect on job satisfaction. Furthermore, Fernandes and Awamleh (2015) also found that transformational leadership had a significant effect on job satisfaction, a finding which was consistent with the finding of the study by Peachey et al. (2014), Shurbagi et al. (2014), Yucel (2012), Yang et al. (2011), Emery and Barker (2007). Based on these previous studies, the following hypothesis was formulated.

*H1: Transformational leadership will have a significant positive effect on job satisfaction*

Studies into the effect of transformational leadership on organizational commitment was conducted by Yang et al. (2011), Elkhordy (2013), Gumusglou (2013) and Peachey et al. (2014); Avolio et al. (2004), all of which produced identical results, that transformational leadership had a significant effect on organizational commitment. According to Emery and Barker (2007), the relationship between transformational leadership and organizational commitment is significant whereby character building and skills come from effective

transformational leadership. A more thorough study conducted by Porter (2015) discovered that the dimension of transformational leadership brought about a significant effect on organizational commitment of employees. On the basis of these previous studies, the second hypothesis formulated is as follows:

*H2: Transformational leadership will have a significant positive effect on organizational commitment of employees*

The relationship between transformational leadership and employee performance was evident in a study conducted by Masa'deh et al. (2015) who found that transformational leadership directly affected employee performance. A study conducted by Locke (1997) and (Bass and Avolio, 1990) found that transformational leadership was able to predict employee performance; if the leader was good then employee performance would be good too. Thus, the following hypothesis was formulated:

*H3: Transformational leadership will have a significant positive effect on employee performance*

The relationship between job satisfaction and organizational commitment was the focus of some researchers, such as Yang et al. (2011), Elkhordy (2013), Fu et al. (2014) and Moneke (2014). These researchers found that job satisfaction had a significant effect on organizational commitment. Other researchers, Ahmadi et al. (2014) found that job satisfaction enhanced commitment to the organization to prevent employees from future fear and uncertainty and helped them think about finding the solution to a problem. Aydogyu and Asikgil (2011) found that job satisfaction had a positive effect on organizational commitment through job enrichment and promotion, while Karim and Rehman (2012) found a strong correlation between job satisfaction and organizational commitment. The next hypothesis is as follows.

*H4: Job satisfaction will have a significant positive effect on organizational commitment*

Studies that linkd job satisfaction to employee performance were conducted by some researchers. Funmilola et al. (2013) argued that the dimensions of job satisfaction (pay, supervision, promotion, work it self and work conditions) contributed significantly positively to employee performance. Therefore, the following hypothesis was formulated:

*H5: Job satisfaction has a significant positive effect on employee performance*

An empirical study conducted by Rizal et al. (2014) found that organizational commitment had a significant effect on employee job performance. This finding has motivated the following hypothesis:

*H6: Organizational commitment will have a significant positive effect on employee performance*

Malik et al. (2010) found that job satisfaction served as a variable mediating the relation between work stress and affective commitment of employees. By using the sobel method, an indirect relationship between work stress and affective commitment of employees through job satisfaction was found. An important finding in this study was how managers reduced conflicts

within the organization so as to reduce stress on the part of the employees especially that related to decision making so that job satisfaction increased. The results of Yeh and Hoh (2012) study showed that job satisfaction played a significant role in mediating the relationship between transformational leadership and organizational commitment of employees in Taiwan. The number of employees who had a commitment to productivity and performance significantly increased. On the basis of these findings, the following hypothesis was formulated.

*H7: Job satisfaction will mediate the relationship between transformational leadership and organizational commitment*

According to social exchange theory, when an employee feels satisfied with his or her work life, the employee will demonstrate behavior that supports the organization goals. This is because satisfied employees will give their dedication and favorable behavior to the organization. According to a study conducted by Liang et al. (2011), job satisfaction mediated the relationship between leadership behavior and employee performance. It also found that leadership was a variable that held a critical position because it played a significant role in creating job satisfaction, while simultaneously providing direction in achieving employee performance. Based on the description above it can be hypothesized as follows.

*H8: Job satisfaction will mediate the relationship between transformational leadership and employee performance*

### 3. Results

#### 3.1 Outer Model Measurement

This study deployed three measures to obtain information on data quality, namely convergent and discriminant validity of indicators and composite reliability for block indicators. Convergent validity is used to measure the validity of an indicator as a measure of a construct that can be indicated by the value of the outer loading factor. In the early stages of a study, i.e. measurement scale development, also known as exploratory research, a loading factor of 0.50-0.60 is still considered adequate (Chin, 2010). This study used the value of outer loading above 0.60.

Discriminant validity test measures the validity of an indicator in a variable which can be done by comparing the square root average coefficient of variance extracted coefficient ( $\sqrt{AVE}$ ) of each latent variable with correlation coefficient among other latent variables in the model. The recommended AVE value is greater than 0.50

Tabel 1. AVE value, AVE square root and Latent Variable Coefficients

Variable	AVE	$\sqrt{AVE}$	Correlations Coefficients					
			KT	KK	KO	KS	K	
Transf Leadership	0,689	0,830	1,000					
Job satisfaction	0,783	0,885	0,708	1,000				
Org. Commitment	0,896	0,945	0,643	0,857	1,000			
Job Performance	0,878	0,937	0,760	0,764	0,644	0,844	1,000	

The AVE square root value for transformational leadership variable was 0.830, which was greater than the correlation coefficient between transformational leadership variable and other variables, 0.708; 0,643; and 0, 760. AVE square root value of job satisfaction variable was 0.885, which was greater than the correlation coefficient between job satisfaction variable and other variables, 0.857, 0.764 and 0.644. The AVE square root value of organizational commitment variable of employees was 0.945, which was greater than the correlation coefficient between organizational commitment variable and other variables, 0,644. This indicates that the indicators representing the variable dimensions in this study have good discriminant validity. Composite reliability is a measure of reliability between indicators of the variables that make the scale. The results of the indicator testing can be said to be reliable if the composite reliability and cronbach alpha has a value of  $> 0.70$ .

Tabel 2. Instrument Reliability Test Results

	Cronbach's Alpha	rho_A	Composite Reliability	(AVE)
Transf		1.000		
X.1	0.835	0.885	0.882	0.602
X.2	0.872	0.885	0.914	0.728
X.3	0.828	0.858	0.885	0.661
X.4	0.897	0.900	0.929	0.768
Job S		1.000		
Y1.1	0.971	0.971	0.981	0.945
Y1.2	0.855	0.888	0.910	0.772
Y1.3	0.754	0.933	0.817	0.599
Y1.4	0.941	0.942	0.962	0.895
Y1.5	0.791	0.840	0.877	0.705
Org C		1.000		
Y2.1	0.919	0.919	0.949	0.860
Y2.2	0.927	0.934	0.953	0.872
Y2.3	0.978	0.978	0.985	0.957
Job P		1.000		
Y3.1	0.710	0.740	0.872	0.773
Y3.2	0.927	0.927	0.965	0.932
Y3.3	0.827	0.838	0.920	0.852
Y3.4	0.886	0.887	0.946	0.898
Y3.5	0.881	0.883	0.944	0.894
Y3.6	0.880	0.883	0.943	0.893
Y3.7	0.952	0.959	0.969	0.912

The results of the calculation of composite reliability showed that the values ranged from 0.817 to 0.985 ( $> 0.70$ ). Therefore, based on the composite reliability indicators that represent the latent variable dimensions are reliable. Similarly, the value of cronbach alpha showed that the value ranged from 0.710 - 0.978 ( $> 0.70$ ) so that the indicators making up the dimensions of the

research variable are reliable and can be considered free from random error problems (MacKenzie et al, 2011; Singleton and Straits, 2010).

### 3.2 Inner Model Measurement

Research hypothesis testing was done using model fit test examining the ability of the model to explain variance of value dispersion on dependent latent variable which can be explained by the determining factors. The first phase involved the examination of the result of R<sup>2</sup> analysis. Second, the Stone Geiser predict relevance method (Stone, 1974 and Geisser, 1971) and Goodness of Fit (GoF) were conducted. The calculation of Q<sup>2</sup> and GoF was done using the R-square coefficient (R<sup>2</sup>). According to Chin (2010), the value of R<sup>2</sup> of 0.67 indicates that the model is quite strong, 0.33 moderate and 0.19 weak.

Table.3 Dispersion of the estimate R<sup>2</sup> dan Adjusted R<sup>2</sup>

Laten Variable	R <sup>2</sup>	R <sup>2</sup> Adjusted
Job Satisfaction (Y1)	0.712	0.710
Organizational Commitment (Y2)	0.776	0.774
Job Performance (Y3)	0.824	0.819
Average	0,771	0,767

The table above shows the R<sup>2</sup> estimate of job satisfaction was 0.712, organizational commitment of employees was 0.776, and employee performance was 0.824. According to Chin (2010), the R<sup>2</sup> estimate indicates that the model can be categorized as a strong model because the estimate is above 0.67. The average of the three R<sup>2</sup>s was 0.771, which means that the relationship among the constructs of transformational leadership, job satisfaction, organizational commitment and employee performance can be explained at 77.1 percent, while the remaining 22.9 percent is explained by other variances outside the model. It was also evident that the dispersion of the Adjusted R<sup>2</sup> value is less than the dispersion of R<sup>2</sup> value, which suggests that it is still possible to change and extend the research model through inclusion of other latent variables (Hair et al., 2010).

The next step was to evaluate the feasibility of the model to get its overall picture by referring to Stone (1974) and Geiser (1971) expressed in the form of the formula Q<sup>2</sup>. Q Square Predictive Relevance (Q<sup>2</sup>) measures how well the observations generated by the model. Q<sup>2</sup> has values ranging from 0 to 1. The closer the value to 1 means that the model has a better predictive ability (Stone, 1974, Geisser, 1971). Q<sup>2</sup> value is computed using the following formula:

$$Q^2 = 1 - [(1-R^2y1) (1-R^2y2) (1-R^2y3)]$$

$$Q^2 = 1 - [(1-0,712) (1-0,776) (1-0,824)]$$

$$Q^2 = 1 - [(0,288) (0,244) (0,176)]$$

$$Q^2 = 1 - 0,012$$

$$Q^2 = 0,9880 \text{ (very good predictive relevance)}$$

A Q<sup>2</sup> value of 0.9880 means the model shows a very good observation, that is 98,80% of the relation among the variables can be explained by the model while the another 1,20% is accounted for by another factor not included in the research model. Goodness of fit (GoF) was used to validate the model as a whole because it is a single measure of outer model and inner model. GoF values range between 0 which means that the model is less good and a value away



from 0 and closer to 1 means that the model is better. The formula used to determine the GoF value is as follows;

$$\begin{aligned} \text{GoF} &= \sqrt{\text{com} \times R^2} \\ &= \sqrt{0,683 \times 0,771} \\ &= \sqrt{0,527} \\ &= 0,726 \end{aligned}$$

It was found that the GoF value was 0.726 which is close to 1 (one), which means that the model has a very good predictive power, which in turn indicates that the accuracy of the measurement model is very good. Based on the criteria for GoF values, which are 0.10 (small), 0.25 (Moderate) and 0.36 (large), the Gof of research model is categorized as Large.

Effect size ( $f^2$ ) testing aims to provide more detailed information about variance in values that can be explained by a group of independent variables on the dependent variable in structural equation modelling (Cohen, 1998). The effect size criteria ( $f^2$ ) is 0.02-0.15 (small effect), 0.15 - 0.35 (moderate effect) and  $> 0.35$  (large effect).

If the obtained value of  $f^2$  is in the range of 0.02, it means that the variance of the value which can be accounted for by the model can be classified as small. The  $f^2$  value in the range of 0.15 – 0.34 is classified as medium and the  $f^2$  value in the range of 0.35 or above indicates that the equation system can be classified as having a strong effect (Chin, 2010).

Table 4. Results of Cohen's  $f^2$  effect size

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
X -> Y2	0.188	0.208	0.104	1.810	0.071
X -> Y3	0.103	0.133	0.087	1.181	0.238
Rerata	0,145				

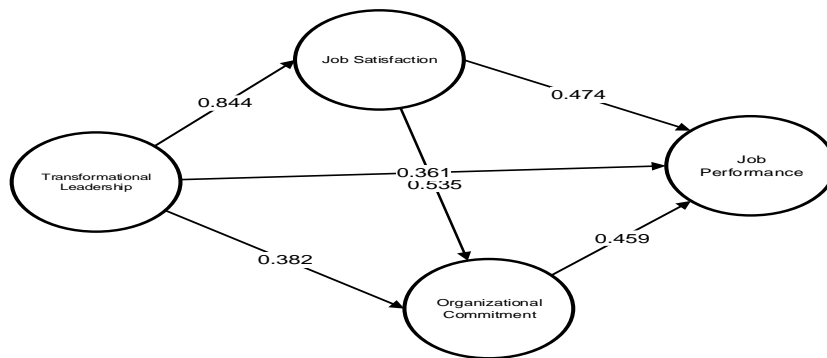
The results of the analysis as shown in the above table yielded an average of 0.145, which can be concluded that there is an indication that the formation of mediation relationship pattern is established in this study.

### 3.3 Research Hypothesis Testing

Hypothesis testing in this study was done through two stages that is testing the direct effect and testing the indirect effect of exogenous variables on endogenous variables.

Tabel 5. Direct Effects of Transformational Leadership, job Satisfaction, Organizational Commitment, and Job Performance

Construct	Original Sample	Sample Mean	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	Remark
TL -> JS	0.844	0.853	0.022	38.151	0.000	Support
TL-> OC	0.382	0.394	0.088	4.351	0.000	Support
TL-> JP	0.361	0.392	0.131	2.763	0.006	Support
JS -> OC	0.535	0.521	0.084	6.384	0.000	Support
JS -> JP	0.474	0.467	0.081	5.836	0.000	Support
OC -> JP	0.459	0.455	0.090	5.104	0.000	Support



The results of the analysis provide information that the relationship between transformational leadership and job satisfaction is significant positive where the value of path coefficient is 0.844 with t-statistic of 38.151 > 1.96, which means that hypothesis 1 was accepted. The relationship coefficient between transformational leadership and organizational commitment is 0.382 with a t-statistic of 4.351 > 1.96 which is significant positive, and thus hypothesis 2 is accepted. The relationship coefficient between transformational leadership and employee performance is 0.361 with a t-statistic of 2,763 > 1,96 which means positive significant so that hypothesis 3 is accepted. The relationship coefficient between job satisfaction and organizational commitment is 0,535 with a t-statistic of 6,384 > 1,96 meaning significant positive so that hypothesis 4 was accepted. The relationship between job satisfaction and employee performance is shown with coefficient of 0,474 with a t-statistic 5,836 > 1,96 which means positive significant so that hypothesis 5 was accepted. Organizational commitment has a significant positive effect on employee performance, where the value of path coefficient shown is 0.459 with a t-statistic 5,104 > 1,96 meaning significant positive and hypothesis 6 was accepted.

### 3.4 Indirect Effect Testing

The test of the mediation variable aims to detect the position of the mediating variable in the research model. This test was conducted to see the role of job satisfaction in its position as a mediating variable on employee performance.

Table 5. Indirect Relationship among Transformational Leadership Variables, Job Satisfaction, and Organizational Commitment to Employee Performance

No	Model *	Path Coefficient	t-statistics	t-Tabel	Remark
a	TL → JS	0.844	38.151	> 1,96	a significant, b significant and c significant with the following the direct coefficient c < b = <i>partial mediation</i>
b	JS → OC	0.535	6.384	> 1,96	
c	TL → OC	0.382	4.351	> 1,96	
a	TL → JS	0.844	38.151	> 1,96	a significant, b significant and c significant with the
b	JS → JP	0.474	5.836	> 1,96	
c	TL → JP	0.361	2.763	> 1,96	

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following direct  $c < b = \text{partial}$   
*mediation*

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The table above presents information about the direct effect of transformational leadership on job satisfaction with a coefficient of 0.844 and a t-statistic of  $38.151 > 1.96$ , the effect of job satisfaction on organizational commitment with a coefficient of 0.535 and a t-statistic of  $6.384 > 1.96$ , and the effect of transformational leadership on organizational commitment with a coefficient of 0.382 and a t-statistic of  $6.384 > 1.96$ . So, hypothesis 7 is accepted.

The table also reveals the direct effect of transformational leadership on job satisfaction with a coefficient of 0.844 and a t-statistic of  $38.151 > 1.96$ , the effect of job satisfaction on employee performance with a coefficient of 0.474 and a t-statistic of  $5.836 > 1.96$  and the effect of transformational leadership on employee performance with a coefficient of 0.361 and a t-statistic is  $2.763 > 1.96$ . Hair et al. (2010) suggested that if all have a direct and significant effect, but the coefficient value of c (0.361) is smaller than the coefficient value of b (0.474) then it indicates partial mediation and hypothesis 8 is accepted.

### *3.5 Discussion*

#### *3.5.1 The Effects of Transformational Leadership on job Satisfaction*

The results of the analysis show that the effect of transformational leadership on employee job satisfaction is significant positive. This indicates that transformational leadership perceived by employees influences their job satisfaction, which means that the implementation of transformational leadership dimensions increases job satisfaction. The results of the study are consistent with the results of Belias and Koustelios's (2014) research that transformational leadership has a significant effect on job satisfaction. A positive, linear and strong relationship between transformational leadership and job satisfaction was found by Fernandes and Awamleh (2015), Peachey et al. (2014), Yucel (2012), Yang et al. (2011), Emery and Barker (2007). The results of the analysis also provide a rebuttal to the criticism of Yukl (1999) and Odumeru & Ifeanyi (2013) which stated that this type of leadership is not entirely good. Proven in the context of export-oriented SME employees, all four dimensions have been implemented very well, especially how leaders/ managers help employees in coping with difficulties in problem solving and how managers boost employee motivation through the implementation of the dimensions of inspirational motivation.

#### *3.5.2 The Effect of Transformational Leadership on Employees' Organizational Commitment*

The effect of transformational leadership on employee organizational commitment is significant positive. This indicates that the transformational leadership felt by employees influences their commitment to the organization, which means that the increase in transformational leadership role leads to the increase in employee commitment. The results of the present study are in line with the studies conducted by Avolio et al. (2004) Yang et al. (2011), Elkhordy (2013), Gumusglou (2013) and Peachey et al. (2014).

Emery and Barker (2007) also found a positive relationship between transformational leadership and organizational commitment through leadership development to build behavior and skills. Another study was conducted by Porter (2015) which examined each of the

transformational leadership dimensions against organizational commitment and revealed that those dimensions had a significant effect. Riaz et al. (2011) found a strong positive interaction between transformational leadership and organizational commitment, where managers had to adopt transformational leadership styles in order to increase employee commitment.

### *3.5.3 The Effect of Transformational Leadership on Employee Performance*

The effect of transformational leadership on employee performance is significant positive. This indicates that the transformational leadership felt by employees influences individual employee performance, which suggests that the increase in transformational leadership role leads to improvement in employee performance. This study supports the results of the study conducted by Masa'deh et al. (2015) on the effect of transformational leadership on employee performance. Maharani et al. (2013) also found a direct link between transformational leadership and employee performance. These findings confirm previous studies conducted by (Locke, 1997) and (Bass and Avolio, 1993) producing empirical evidence that transformational leadership is a variable that can be used to predict employee performance; if the leader is good then the employee performance will be good too.

### *3.5.4 The Effect of job Satisfaction on Employee Organizational Commitment*

The effect of job satisfaction on organizational commitment of employees is significant positive. This indicates that job satisfaction perceived by the employees has an effect on their commitment to the organization, suggesting that the increase in job satisfaction will be followed by an increase in their commitment.

The results of this study are supported by results from several other researchers such as Yang et al. (2011) Atmojo (2012) Thamrin (2012) Elkhordy (2013) Fu et al. (2014) and Moneke (2014), all of whom found that job satisfaction had a significant effect on organizational commitment. Ahmadi et al. (2014) found that job satisfaction enhanced organizational commitment of employees to the organization where job satisfaction prevented employees from future fear or uncertainty or something that helped employees think positive when they encountered a problem within the organization.

Aydogyu and Asikgil (2011) found that job satisfaction had a positive effect on organizational commitment. In this research, work satisfaction variables consist of 6 dimensions namely 1) pay, 2) work itself, 3) supervision 4) promotion possibility 5) peers and 6) working conditions while the organizational commitment variable consists of 3 dimensions: affective commitment, ongoing commitment and normative commitment. Research conducted by Karim and Rehman (2012) also found a strong correlation between work satisfaction and organizational commitment of employees. One of the important findings in this study is that to increase employee empowerment means to increase organizational commitment of employees because with empowerment, employees feel more confident to show contribution to the organization.

### *3.5.5 The effect of job satisfaction on employee performance*

The effect of job satisfaction on employee performance is significant positive. This indicates that job satisfaction felt by employees influences the performance of individual employees, which further suggests that with higher perceived work satisfaction comes higher employee

performance. The results of this study are consistent with the study conducted by Funmilola et al. (2013) which found that the dimension of work satisfaction consisting of pay, supervision, promotion, work it self and work condition contributes positively and significantly to the performance of employees.

### *3.5.6 The effect of organizational commitment on employee performance*

The effect of employee organizational commitment on their performance is significant positive. This indicates that the organizational commitment perceived by employees has an effect on their performance, indicating that with the increase in the employee perceived commitment comes improvement in employee performance. Committed employees tend to generate positive outcomes such as better performance, higher job satisfaction, increased corporate profits, lower turnover and small absence rates. If this can be done then the company will benefit from increased employee loyalty, and the ability to deal with the dynamics of a flexible organizational environment. A study by Ahmad et al. (2010) also found a strong positive relationship between organizational commitment and employee performance.

### *3.5.7 The role of job satisfaction in mediating the relationship between transformational leadership and employee performance*

The direct effect of transformational leadership variable on job satisfaction has a coefficient of 0.844 and a t-statistic of  $38.151 > 1.96$  which is significant (a). The effect of job satisfaction on organizational commitment has a coefficient of 0.535 and a t-statistic of  $6.384 > 1.96$  which is significant (b). The effect of transformational leadership on organizational commitment has a coefficient of 0.382 and a t-statistic of  $6.384 > 1.96$  which is significant (c). Hair et al. (2010) suggested that if all have a direct and significant effect, but the coefficient of c (0.382) is smaller than the coefficient of b (0.535), it indicates partial mediation which means that the effect of transformational leadership on organizational commitment can explained by the presence of job satisfaction variable and other variables. The results of the statistical analyses can be used as the basis in this study to accept hypothesis 12 which states that work satisfaction will mediate the relationship between transformational leadership and employee organizational commitment.

### *3.5.8 The role of job satisfaction in mediating the relationship between transformational leadership and employee performance*

The results of the analysis proved that the strengthening of job satisfaction can be a mediator for transformational leadership constructs in order to improve employee performance, which is significant based on interaction effect test with 5% confidence level. The role of partial mediation is that transformational leadership has a significant direct effect on job satisfaction, so mediation effect is not the only variable that affects employee performance. Based on the prediction results, it was found that the interaction effect was 0.474, which is positive but still smaller than the predicted results of direct relationship between transformational leadership and job satisfaction (0.844).

Because the effect on work satisfaction of a mediating variable of the transformational leadership construct is positive, this study provides empirical finding that transformational

leadership strengthens the position of job satisfaction as a mediator for the strengthening of employee performance. This means that transformational leadership can choose two channels to strengthen employee performance, because the path of mediation is positive so that both paths through transformational leadership construct have a strategic value in order to strengthen employee performance.

## **4. Discussions**

### *4.1 Theoretical Implications*

First, the present study offers a more comprehensive knowledge and conceptualization of a new research model, providing a clear and systematic understanding of variable interrelationships. Second, the research succeeds in revealing the empirical fact that job satisfaction serves as a multiple mediator, first being a mediator for transformational leadership construct in order to strengthen organizational commitment through the role of partial mediation, where transformational leadership has a significant direct effect on organizational commitment, which is the only factor that affects employee organizational commitment. Based on the prediction result, the estimation on the interaction effect yields a value of 0.382, which is positive but smaller than the predicted result of direct relationship between job satisfaction and organizational commitment (0.535). Because the effect of job satisfaction as the mediator of transformational leadership construct is positive, this research proves that transformational leadership construct strengthens the position of job satisfaction as a mediator for the organizational organizational commitment. Thus, transformational leadership can choose two channels to strengthen organizational commitment of employees, and because the path through mediation is positive the two paths through which the transformational leadership construct has a strategic value in order to strengthen organizational commitment of employees.

The second role of the job satisfaction construct is as a mediator for transformational leadership construct to improve employee performance. The role of mediation that occurs is partial mediation, where transformational leadership has a direct significant effect on employee performance, so mediation effect is not the only factor that affects employee performance. Based on the prediction results obtained, the estimate of the interaction effect is 0.361, which is positive but smaller than the predicted results of direct relationship between job satisfaction and employee performance (0.474). Because the effect on job satisfaction as a mediator of the transformational leadership is positive, this study can prove that transformational leadership construct strengthens the position of job satisfaction as a mediator to strengthen employee performance. Transformational leadership can choose two channels in improving employee performance, and because the path through mediation is positive the two paths through which the transformational leadership construct has a strategic value in order to improve employee performance.

### *4.2 Practical implications*

The practical implications of the present study concern the position or role of company managers/ leaders which is very important as a trigger in building job satisfaction and employee organizational commitment in order to improve their job performance. To improve performance, a leader is first expected to create employee job satisfaction, then to build and

maintain their organizational commitment. For organizations/ SMEs, creating a conducive working environment can be done through the creation of a standard operating procedure (SOP), fair implementation of reward and punishment, and a transparent and challenging promotional system.

#### *4.3 Research Limitations*

This study does not claim that the results of the study can be applied equally well on other samples, so caution should be exercised when making generalization. This research was a study of behavior evident within one period of research so that in the future it is necessary to conduct a longitudinal study so that the development of the aspects of behavior of the object of research can be followed dynamically, so as to determine whether or not the behavior evident during the study period (2016-2018 ) remain the same in the future. Further research should be conducted on all sectors of SMEs using a longitudinal method so that the results can be generalized. Future research is expected to use 360-degree appraisal method especially in assessing employee performance, either personal appraisal, colleague/ peer, subordinate and leader so that the result of assessment can avoid the effect of bias.

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# Perceived Change Leadership: Employees vs. Directors

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## Abstract

Nowadays with the very tight competition, every organization has to survive and adapt with the change happens in the environment. However, not every organizational change program was successful; researches showed that there is even more than 50% organizational change not succeeded. The role of leaders in the success of organizational change is very significant. However, the research's result about the part of the leader in a commitment to change is still not consistent, some of the studies stated that there is a direct impact and others are not. To further identify the role of leader, and found the specific characteristics of change leader that is expected by the employees, as well as by the perceptions of the directors, grounded research conducted to identify the concept of perceived change leadership. In this regard what did employees think about the characteristics of change leadership that need to be there to develop the positive reaction toward change? This study is conducted using a qualitative approach, with 32 participants from two groups (employees and Directors), using focus group discussion and in-depth interview for data collections. Research showed that there are 4 (four) types of roles of change leader namely: a) change pioneer; b) change enabler; c) caretaker and d) coach. However, the characteristics behavior from each group is slightly different.

**Keywords:** Change Leadership, Organizational Change, Qualitative,

## 1. Introduction

Organizations face several challenges to be more responsive to the needs, both external and internal needs of the organization. Therefore, organizations should increase their organizational innovativeness to remain competitive (Roberts, 1998), as well as to achieve the success in organizational change. Consequently, a leader as a change agent is essential to lead, direct and manage the change process. The impact of corporate leaders has attracted attention from organizational researchers (Fritz and Ibrahim, 2010), and previous researches always mention that leader is vital on the success and failure of organizational change (Quinn, 2004) and lack of proper leadership often results in weak or no motivation of employees to perform their tasks in an innovative and effective manner. Leader as a change agent is very critical in leading the organizational change. On the other hand, Mangundjaya's findings (2013,2014) showed that change leadership could not directly influence on people's commitment to change. Regardless the pro and contra about the direct impact of change leader on people's commitment to change, to date, characteristics of successful change leadership not explicitly stated and defined. In this regard, although the terminology of change leader was frequently used, however, research about change leadership is still insufficient. The objective of this research is to develop a model for

change leadership. Specifically, the study seeks to answer the following questions: What is the profile of change leadership (perceived change leadership, both from the perception of employees and directors)?

*1.1 Organizational Change*, nowadays people and organizations have to face changes, in this regard; organizations are created and developed on an assumption of continuity, to continue surviving, and to last (Burke, 2008). George & Jones (2008) mentioned that Organizational change is the movement of an organization away from its present state and toward some desired future state to increase its effectiveness. In this regard, Leaders face an incredibly dynamic environment where change still a constant issue. To deal with change, followers must share willing to commit themselves to accomplish the leader's direction (Baum and Locke, 2004; Northouse, 2007). Leadership behavior is characterized as task-oriented, relationship-oriented or change-oriented (Yukl, Gordon & Taber, 2002, in Olsson, 2012). First, task-oriented leaders are concerned with getting the job done through the effective management of work routines, i.e., clarifying, monitoring and short-term planning. Task-oriented behaviors may seem contradictory to creativity in research where members need autonomy and, to a great extent, self-manage according to group goals. Second, relationship-oriented leadership is concerned with supporting, developing, consulting, recognizing and empowering followers. Such a leadership style may seem suitable for stimulating creativity in research groups. Third, leaders who promote change in their organizations are capable of encouraging creativity and innovation (Puccio, Murdock, and Mance, 2007). The change-oriented leader behaviors, which include visioning, intellectual stimulation, risk-taking and external monitoring as described by Yukl, Gordon, and Taber (2002), frequently appear in creative research environments.

Organizational Change, Kotter (1995) frequently cited as the source of many seminal works on change and is known for having built upon Lewin's leadership theory. The logic behind Kotter's (1995) method of managing change is that it should direct through deliberate leader action. The step-by-step guidance method of managing change is directive in nature, which sets it apart from other forms of change management leadership; such as caretaking, coaching, navigating, and interpreting. The rationale for Kotter's categorization is that Kotter (1995) attempted to account for emotions that can undermine change: anger, resentment, complacency, false pride, cynicism, passion, faith, and so on, which are not things that are easily measured by quantitative research. The belief indicates knowledge is relative to the knower and can only be understood from the viewpoint of the individuals directly involved, and that truth is socially constructed via multiple interpretations, shifts, and changes, through time (Hatch, 2006).

*1.2 Change Leadership*, Herold et al. (2008) examined the effects of transformational and change leadership on employees' commitment to change. They contended that future research should look at the linkage between other leadership theories and change success when employees make decisions about how hard they will work to implement a change, they seem to rely on their views of the leader making the request (Herold et al., 2008). From a different perspective, Battilana et al. (2010) attempted to bridge the leadership and organizational change literature by exploring the relationship between manager's leadership competencies and the likelihood they will emphasize the different activities involved with effective change implementation. For future research, they suggested an examination of the relationship between other leadership competencies and change agents' likelihood to underscore different activities

involved with planned organizational change. Further, Mangundjaya (2016), mentioned in her research that perceived change leadership should be studied based on the eyes of the people's involvement, such as employees and the change leader itself.

*1.3 Leadership in Indonesia*, Characteristics of Indonesian as high collectivism, paternalism, power distance, and masculinity (Mangundjaya, 2011; Hofstede, 1991). House, et al., 1994) revealed that the prototypical "good leader" will not offend or embarrass others but will maintain respect and interact with others in a culturally sensitive manner (*simpatico*). Compliments, feedback, and criticism are usually directed at the group; personal criticism is not conveyed openly but may be directed at the individual after the workday is over. Charisma is necessary for top-level managers in Indonesia, who represent a symbol of respected authority. The primary functions of senior management in Indonesia include establishing an overall theme, developing strategy, and engaging in high-level external relations (Morgan & Morgan, 1991).

*1.4 Leadership behavior during organizational change*, Palmer, Dunford, and Akin, (2009) as well as Dorfman, et al., (1997) have proposed the following six patterns of leadership behavior as follows: a) *Director*; which is the characteristics of directive style in clarifying performance expectations and assigning tasks) b) *Navigator*; leaders are more navigators than controllers c) *Caretaker*; as changes are severely constrained by external stressors consequently leaders become more caretakers shepherding the organization along as best they can. d) *Coach*; charisma-inspiring and developing confidence among followers, setting challenging goals, and encouraging high expectations. e) *Interpreter*, asking for suggestions and obtaining information from subordinates for important decisions. and f) *Nurturer*, the nurturing image to managing change assumes that even small changes may have a significant impact on an organization, and managers are not able to control the outcome of these changes nurturing the organizations, facilitating organizational qualities that enable positive self-organizing to occur. The question arises, is the perceptions of employees (staffs up to general managers) as well as directors are the same and follows the same categorization of Palmer et al (2009) have mentioned?

## **2. Method**

### *2.1 Participant (Subject) Characteristics*

The research participants consist of two groups, the first Group is the Director group, which consists of HR Directors and CEO, as they usually are the one who act and understand the role of change leader. The criteria are as follows: a) at present hold a position of HR Director or CEO; b) permanent employees; c) minimum two years working as an HR Director/CEO; d) minimum educational level is bachelor degree and e) the organization that they work have been conducted organizational change, Meanwhile, respondents from the employees have almost the same criteria as follows: a) permanent employee; b) minimum two years as employee in the organization; c) minimum education is bachelor degree; and d) the organization that they work have been conducted organizational change.

### *2.2 Sampling Procedures and Sample Size*

Respondents are chosen using purposive random sampling both for the two groups (the directors and the employees). The participants are collected from all over Indonesia (Jakarta and other big cities in Indonesia for the employees) and Jabodetabek (Jakarta, Bogor, Depok

Tangerang, Bekasi) area for the Director group. The planning numbers of respondents from each group is 30 respondents. However, due to many reasons only 32 respondents that show up for this research (25 from employees and seven from the Directors (Full profile of the respondents can be seen at Table 1 and Table 2). As a result, the researchers analyzed data from 32 respondents of FGD.

### *2.3 Measures*

This research used analysis of qualitative data by Focus Group Discussion (FGD) and in-depth Interview. FGD is a small group of six to twelve people led through an open discussion by a skilled moderator (Eliot & Associates, 2005; Wahyuni, 2012). It ought to reveal a wealth of detailed information and profound insight. It is also a technique of gathering information from some individual interactions that are done at the same time by using a series of questions and make observations directly. FGD in this study aims to deepen the understanding of the culture in each country and its relation to personal leadership during organizational change. In this research the FGD was conducted three (3) times consisting each 8, 8 and 9 participants for each group. The FGD of nine (9) participants were conducted at Yogyakarta, consisted Manager and General Managers from all over Indonesia. The other two groups were conducted in Jabodetabek area. Meanwhile, for the Director group the data were collected using in-depth interview.

### *2.4 Research Design*

This study utilized a qualitative grounded theory design to examine the perception of change leadership from both respondents from two groups. The study examined participants' perspectives on change leadership, what is the characteristics of change leadership, and how these characteristics are similar/different between the two groups. The research strategies consist of 1) In-depth literature review, a literature review discusses information in a particular subject area, 2) In-depth interviews, and 3) focus group discussions/meetings were held in the participating groups.

### *2.5 Data Analysis*

Data analyzed using qualitative analysis. Creswell (2007) stated that when writing on qualitative study, there are three core elements of qualitative data analysis namely: a) Reducing the data into meaningful segments and assigning names for the sections, b) combining the codes into broader categories or themes, and c) displaying and making comparisons in the data graphs, tables, and charts" (Creswell, 2007, p. 148). Meanwhile, Miles and Huberman (1994, p.58) described three types of codes: descriptive, interpretive, and pattern, implying that coding can occur with different levels of analysis "ranging from descriptive to the inferential." Whereas first level coding summarizes segments of data, pattern coding helps "reduce large amounts of data into smaller analytic units" (Miles and Huberman, 1996, p. 69). For the grounded theory study, a start list of codes was not generated and instead assigned once the data was collected and examined in context.

## **3. Results**

### *3.1 Profiles of respondents*

There are two types of respondents a) directors, consists of CEO and HR Directors as Change Leader in the organization, and b) employees, consists of staffs up to General Manager from various type of industries. The profile of these participants was as follows:

Table 1: Profile of Directors

No	Position	Organization
1.	HR Director	Multi National Beverage Industries (FMCG)
2.	HR Director	National Bank
3.	HR Director	International NGO
4.	HR Director	Multi National Bank
5.	HR Director	State Owned Insurance
6.	HR Director	Multi National Beverage Industries (FMCG)
7.	Director/CEO	HR & Organization Consulting

The seven directors above are the respondents that participate in in-depth interview about change leader, the role, functions and characteristics.

Table 2: Profile of Employees (FGD members)

No.	Position	Organization
1	People development	IT
2	Recruitment specialist	Private company
3	Communication staff	State owned enterprise
4	Program Director	Private company
5	Procurement SCM contract	Oil & gas
6	Division head	Government institution
7	HSE Coordinator	Private company
8	Assistant manager	Private company
9	Officer	Educational Institution
10	Recruiter	Private company
11	HR Specialist	Private company
12	Recruitment consultant	Private company
13	Senior consultant	Private company
14	Education staff	Government institution
15	HSE Coordinator	Private company
16	Recruitment specialist	Private company
17	Information system specialist	Private company
18	Sales training team leader	Private company
19	GM Learning development	Private company
20	Human capital manager	Drilling services of oil and gas
21	HR Specialist	State-owned institution
22	Manager	Law Office Consultant
23	Senior staff	Private company

24	Recruitment	HR Consultant
25.	GM HR Management	Fashion Industries

### *3.2 The perceptions of change leader by the directors*

There are four perceptions of change leader characteristics in Indonesia, namely: as 1) change pioneer; 2) change enabler; 3) caretaker; and 4) coach. The followings are the description of each style as follows:

#### 1) As a change pioneer

As a change pioneers, change leader should have the willingness to change, have a good vision, and clear objectives and targets that are going to achieve. Change leader should clarify the goals and objectives of the change process. Change leader should also be an agile person easy to adapt the changes, and ready to change according to the demands of the environments.

#### 2) As a Change enabler

Related to change enabler, respondents said that “change leader must have strategic, well designed and initiative plan.” Moreover, respondent adds that “change leader must design an action plan for the change process which includes mentoring approach”. As a change enabler, change leader leads and direct the change process. Respondents said that “change leader should drive the compelling reason for the change and organize the guiding team and sustain change initiative.” Change leader must have commitment and conduct as an agent of change; change leader must conduct change arrangement, decision, and communication. Change leader also make difficult decisions and communicate the vision. Respondent agreed that “a change leader should have the ability to communicate the need for change and be able to influence the people.” Besides that, the respondent agreed that “change leader needs to address all issues or concerns by giving priority to the vital role. Change leader should facilitate change in the organization.” Last, respondents said, “change leader resolves concerns related to change through effective and efficient processes, honest, open communication and well-designed plans.”

#### 3) As a Caretaker

A change leader as a caretaker should have the behavior that cater feeling of the employees during the process of change. As during the change process, many factors can be harmful to some people that will make them feel threatened, stress and depression. These behaviors such as: open to feedback, good with people’s and social skills, as well as willing to listen are necessary for change leader.

#### 4) As an Evaluator

To make sure that organizational change runs smoothly, change leader must conduct a comprehensive study, monitoring, and evaluation, and conduct restructuring, consolidation if necessary.

#### 5) As a Coach

As a coach, at first change leader must act as a role model for all employees related to change. By being a role model, they also should have a good personality such as: enable to balance life, having good IQ and EQ, have emotional maturity, adaptability, resilient, persistent and commitment. Change leader also should be able to create a trusting environment and empowering their subordinates.

### *3.3 The perceptions of change leader by the employees*



There are also five perceptions of change leader characteristics according the employees, namely: as 1) change pioneer; 2) change enabler; 3) caretaker;4) evaluator and 5) coach. The followings are the description of each style:

#### 1) As a change pioneer

To enhance good communication, the respondent said that “change leader must have company vision and mission.” Besides that, change leader must also inform new company vision to all stakeholder. Another respondent agrees that “change leader must frequently communicate change directly to the employee.” Moreover, change leader must also give feedback to the change process. Besides that, respondents also said that “change leader must also explain in the background of change. One respondent agrees that “good change leader give transparent information about company conduction and being cautious in every acting especially on the important decision which involves company sustainability.” Change leader must create a sense of urgency which can be accepted by all organization staff and also give an explanation to all employees.

#### 2) As a Change Enabler

As a change enabler, 25 respondents agree that change leader must conduct change arrangement, decision, and communication. Includes in this arrangement is deciding every matter. Change leader must conduct as a good decision making and carefully action related to that. Change leader does not hesitate in any decision-making that should be made. The decision making, should be followed by communication. One respondent said that “change leader must communicate change vision using standard language which will be understandable.” Also, another respondent said that “change leader must be able to communicate with the employee, and communicate change plan to prepare organization with stakeholder involvement.” In addition to communication, change leader have to develop and create a system, change leader must prepare the order. Another respondent said “change leader must change the operational system. Organization procedure must be suitable for new organization culture.” Also, other respondent said that “standard system must be prepared to make sure that the change process is already planned systematically.” Furthermore, as a change enabler, eleven respondents agreed that change leader must give commitment and conduct as an agent of change, change leader and also a role model. A change leader must commit to change plan and also commit with all change stage. If the commitment is not maximal, it can influence the change process. Respondent said that “change leader must conduct as an agent of change who can trigger all employees in doing change.” Moreover, change leader must have strong leadership to make sure that the change process runs smoothly and is able to influence all employees to follow the change planned. Other respondent also mentioned that besides organizational transformation, change leader should also conduct organization and financial restructuring. Respondents also said that “change leader must consolidate all the things for the better future. Integrate change to company culture, and conducts cultural transformation. Change leader should also be involving the employees to conduct change

#### 3) As a caretaker

Change leader must provide emotional support to create a successful change. Eight respondents stated that as a change leader, he/she should provide feedback, explanation, creating transparency, providing motivation, and understanding people’s feeling. Also, change leader

gives continuous motivation to all staffs who involved in the change process, when they feel like they don't want to do as the change planned.

#### 4) As an evaluator

Eleven respondents answered that change leader must conduct a comprehensive study, monitoring, and evaluation, transformation, restructuring, consolidation and culture integration. As an evaluator, respondent argues that change leader must conduct a comprehensive study to know the cause of company deterioration. Moreover, the respondent answer that "change leader should monitor every change stage until optimal implementation. He must distribute effective change message. Change leader also monitors on how employee response to change by involving in the change process. Besides monitoring, the respondent also added a statement that change leader conducts a formal evaluation of change progress that has been done and conducts corrective action."

#### 5. As a coach

There are several characteristics of a change leader as a coach. Seven respondents said that change leader must create a guiding team, champion team, system, and rule. Creating a guiding team who can lead the change process. Creating a champion team. One respondent said "creating champion team must be conducted in each department." Another respondent said that "to achieve change, a leader must be replaced by the champion team." Eight respondents stated that change leader must give the opportunity to develop. Finally, change leader must also conduct as a role model for all employees related to change. A change leader should do as a role model who performs change and explains the change process positive impact

As a conclusion, Figure 1 and 2 show the perception and expectation of change leader characteristics by the perceptions of the Directors and the employees:

**Perception of Change Leader by the Directors**

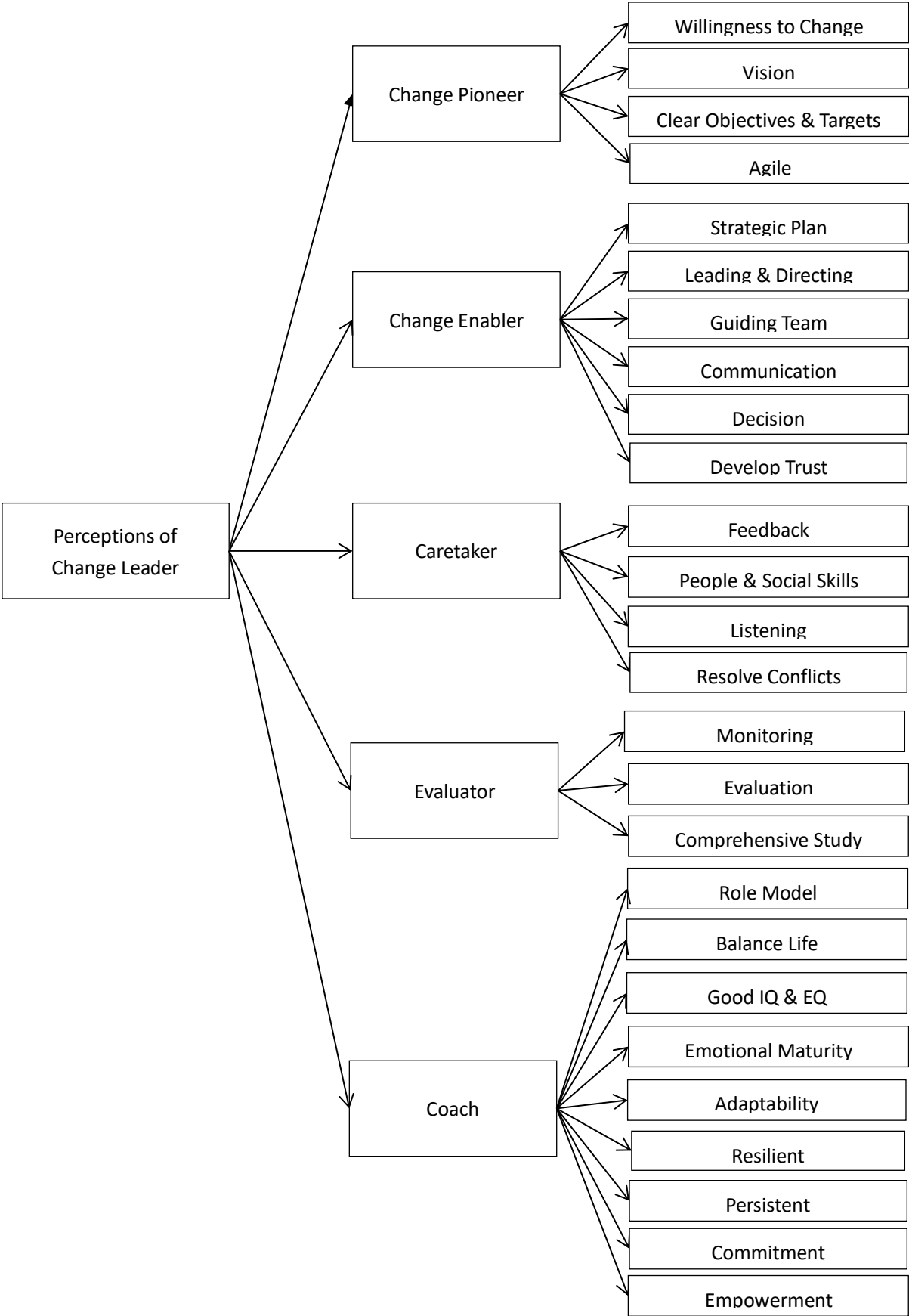


Figure 1: Change Leader Perception

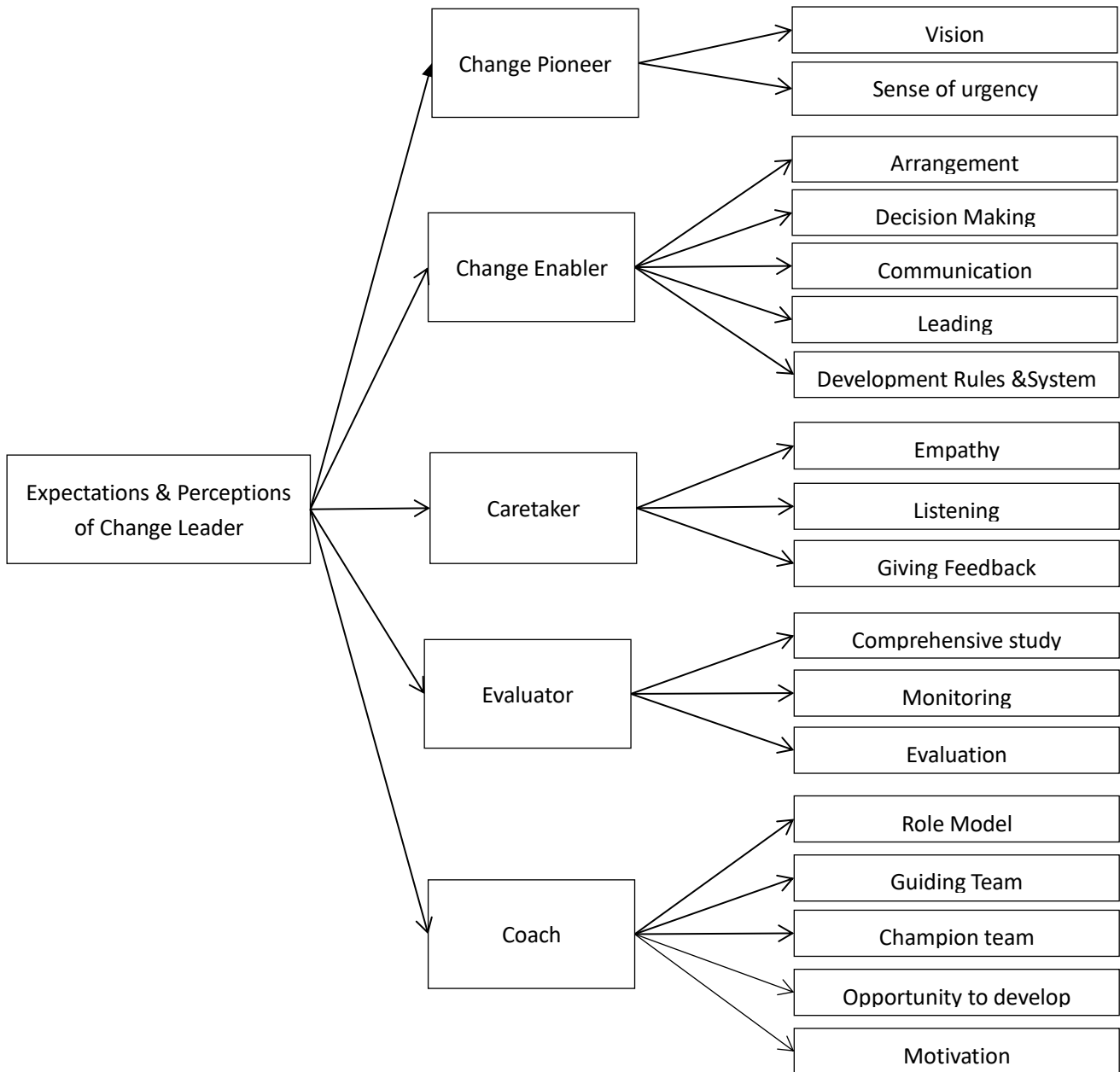


Figure 2: The expectations of Change Leader

#### 4. Discussion

Research showed that there are five types of change leader that is expected to perform as well as perceived by both the employees and directors namely: a) change pioneer; b) change enabler; c) caretaker; d) evaluator; and e) coach. These 5 (five) types are found in two groups. However, there are slightly different behaviors comprises between the two groups, especially in coach behaviors. At the director's profile, the coach is primarily connected with the personal characteristics of a change leader. In comparison of the types and roles of change leader by

Palmer et al. (2009) there is a slight difference in the types of leader. Palmer et al. (2009) mentioned that there are six types of change leaders, and there is no discussion about the personal characteristic of change leader but only discussing about the role of change leader in the organizational change. Meanwhile, based on Anderson and Anderson (2010), change leader has three roles, namely socialization, implementation and monitoring & evaluation. In this study those three roles have also found, and in addition to that there are two additional roles which have not mentioned in Anderson and Anderson (2010), namely role as a coach and as a caretaker.

On the other hand, given the high failure rates for successful change implementation (Kotter, 2000; Maurer, 2010; Reiss, 2009), the potential for increasing success rates justified the research efforts. Examining how leaders of large organizations affect change implementation, which are intertwined in a culture that promotes selfless service and mission first attitudes, provided valuable data on effective change implementation. Aligning people towards common goals and empowering them to take the actions needed to reach them (Crosby & Bryson, 2005) and characterize leadership as inspiring and mobilizing others to achieve purposeful change. According to York (2002) there is a high positive correlation between task-oriented leadership behaviors and overall change success. It implies that a balance of both task-oriented and people-oriented leadership behaviors are required for successful change initiatives.

There are some limitations of this research namely: research has only a limited number of respondents especially the director position; the majority of the respondents were supervisor up, and only a limited number of respondents were staffs; and the number of distributing for each role were not the same. Based on these limitations, there are some suggestions for future research as follows: 1) Comparison of further analysis of organizational change implementation that includes data from all tiers within the organization, and differing biographical data for participants, each of which will be explored in more detail. 2) In this study, the majority the participants are men, because the ratio of men to women leader, however it may also be helpful to examine the role of gender in their role as a change leader, and 3) This research has already found the model, next stage is developing concept more thoroughly followed by the details of behavior, and the tolls to measure it.

## **5. Conclusion**

Research showed that there are five types of change leader that is expected to perform as well as perceived by both the employees and directors namely: a) change pioneer; b) change enabler; c) caretaker; d) evaluator; and e) coach. These 5 (five) types are found in two groups. However, there are slightly different behaviors comprises between the two groups, especially in coach behaviors. At the directors' profile, a coach is mostly connected with the personal characteristics of a change leader.

This grounded theory study sought to understand the process and experience of leaders in the successful implementation of organizational change management. It is anticipated that the research will contribute to the body of knowledge on leadership for effective change management. By understanding what leads to successful change implementation, leaders can take measures to ensure higher success rates for achieving organizational change initiatives.

Through conducting this research, insights were gained as to how leaders can more effectively manage the change processes in their organizations. The research contributes the body of knowledge on leadership for effective change management, by providing practical guidelines that will help leaders implement strategies to achieve higher rates of success in accomplishing organizational change objectives. The completed research is expected to contribute to the body of knowledge on leadership for effective change management. By understanding what leads to successful change implementation, superiors and leaders are able to measure to ensure higher success rates for achieving organizational change. By conducting the research, recommendations have emerged as to how leaders can more effectively manage the change processes within their organizations. The study contributes theories on leadership for effective change management, by providing practical guidelines that will help leaders implement strategies to achieve a higher rate of success in achieving organizational change objectives.

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# Psychological empowerment as mediator on perceptions of organizational environment with commitment to change

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## Abstract

An organization is an open system; consequently, any changes in the external environment will have an impact on the organization. This condition makes the organization has to change. However, based on the previous experiences, not every change program had succeeded, and even can be categorized as a failure. In this regard, there are many variables can become the sources of failure namely: factors that lie in the environment, organization, and people, such as individual characteristics. Mostly the researchers pay attention to variables in the organization and personal characteristics, however, only a few their studies regarding to the perceptions of the organizational environment. The research aims to test the effect of employee's perceptions of the external organizational environment about commitment to organizational change, using psychological empowerment as a mediator. Data gathered from 539 employees working in two financial state-owned organizations in Indonesia. Results showed that there are significant effects of all the two variables, namely: organizational task environment and Psychological Empowerment on commitment to change. Results also revealed that the psychological Empowerment as a mediator had an indirect effect on a commitment to change. The implications of this study are for management of change, regarding paying attention to how people perception of their environment as well as developing psychological empowerment to achieve high commitment to change from their employees.

**Keywords:** Commitment to Change, Organizational Task Environment, Psychological Empowerment.

## 1. Introduction

Organizations operate as an open system. Consequently, any changes in the external environment will have an impact on the organization and vice versa. Any kinds of changes, in terms of economic, political, technical, customer demand, competitor's policy will have an impact on the organization. It can be said that as a response to the environment's demand, an organization has to change. However, not all the change program has succeeded, and many variables play an essential role in the success, and amongst them are people. Without the support from people, organizational change will not have succeeded. As a result, commitment from people about the change program is a must. On the other hand, people itself, cannot be separated from the external environment, its organization, and his/her characteristics. As a result, people perception's about the external organizational environment is assumed to have an impact on their attitude toward organizational change. This paper aims to identify which variable between perceptions of the external organizational environment and psychological empowerment is more critical in developing commitment to change, and how is

the dynamics between these two variables on the influencing process on commitment to change. This study was conducted at two financial state-owned organizations, as at present state-owned organizations are required to be beneficial with high efficiency.

### *1.1 Commitment to change.*

It used the concept from Herscovitch & Meyer (2002) who define commitment to change as a force (mindset) that binds an individual to an action that deemed necessary for the successful implementation of a change initiative. This kind of mentality has a various degree, which expressed in three dimensions. First, a desire to provide support for the change based on a belief inherent in the benefits to change or so-called as affective commitment. Second, a recognition that there are costs related to lack of support for the change or so-called as continuance commitment to change. Third, a sense of obligation in providing support for the change, or so-called as a normative commitment to change. In other words, individuals can feel bound to support a change initiative because they want to, have to, and/or ought to (Parish et al., 2008). Moreover, Herscovitch and Meyer (2002) mention that the effective commitment to change is only represents by affective commitment to change and normative commitment to change, as they both expressing championing behaviors.

### *1.2 Organizational task environment.*

It based upon the concept of Dess & Beard (1984) who mentioned that there are dimensions of environments that important and taken into consideration in management, especially in organizational change management. These dimensions measuring the task environment of organizations, including using the data and schema developed to record resource transactions in the national social accounts. These dimensions called Organizational Task Environments (OTE), consists of 1) *Capacity*, is the extent to which the environment can support the sustained growth of the organization (Beard & Dess, 1984); 2) *Environmental Dynamism*, turn over, absence of pattern and unpredictability are the best measures of environmental stability-instability (Dess & Beard, 1984). Dynamism should be restricted to change that is hard to predict, and that heightens uncertainty for vital organizational members (Dess & Beard, 1984); and 3) *Environmental Complexity*, is the heterogeneity of organization activities and the range of an organization's activities (Child, in Dess & Beard, 1984).

### *1.3 Psychological Empowerment.*

Psychological empowerment is a set of mental states that are necessary for individuals to feel a sense of control about their work (Spreitzer, 1995). This perspective refers to the empowerment of personal beliefs that employees have about their role in the organization. Four dimensions of psychological empowerment namely: First, *meaning*, is involving a match between the needs of one's work role and one's beliefs, values, and behaviors; second, *competence*, is similar to self-efficacy, which is a belief in his/her capability to perform their work activities; third, *self-determination* is a sense of choice in initiating and regulating of one's actions which reflects a sense of autonomy; and fourth, *impact* is the degree to which one can influence strategic, administrative, or operating outcomes at work (Spreitzer, 2007).

Every organizational change makes people feel ambiguity, anxiety, and insecurity, this feeling followed by a sense of low trust and self-perseverance (Cartwright & Cooper, 1993). In this regard, perceptions of threatening external environments will be affecting their attitude toward

change, and their commitment to change. As a result of the more positive their opinions about the external situations, this will be followed by the higher commitment to change. Building on these justifications, the first hypothesis as follows:

Hypothesis one (H1): Perceptions of organizational environment significantly predict commitment to change.

As discussed previously, every organizational change makes people feel ambiguity, anxiety, and insecurity (Cartwright & Cooper, 1993, Pritchett, 1997). Moreover, organizational change can also create ambiguity and uncertainty about the future of the company. This lack of information often compounded with rumor and gossip will create a high level of anxiety in people's lives. On the other hand, previous studies showed that people, in this regard characteristics of the individual, including whether employees have strong psychological empowerment was assumed to have positive correlation with commitment to change. Based on the above discussion, the following as follows:

Hypothesis two (H2): Perceptions on organizational environment influences psychological empowerment significantly.

A previous study by Hashmi (2012) showed that psychological empowerment has correlated with organizational commitment. Further, research conducted by Mangundjaya (2013) showed that organizational commitment connected with a commitment to change, based on that it assumed that psychological empowerment has significantly positively associated with commitment to change. On the other hand, having self confidence, and belief that you have a meaning and impact to the job's environment as well as make choices by yourself (dimensions from psychological empowerment) will also influence people's commitment to change. Accordingly, the third hypothesized as follows:

Hypothesis three (H3): Psychological empowerment positively predicts a commitment to change.

Based on the previous discussion, it was mentioned that perceptions about the organizational environment as well as psychological empowerment had a significant impact on commitment to change, and perceptions of organizational environment will have a significant impact on psychological empowerment. Based on those discussions, the following hypothesis is proposed:

Hypothesis four (H4): Psychological empowerment mediate the association between organizational environment and commitment to change.

## **2. Methods**

### *2.1 Participant Characteristics*

The characteristic of the participants are as follows: permanent employees, minimum working in the company is two years, minimum education is senior high school, and the age is between 21–56 years old. The profile of the respondents are as follows: male (61.97%), the range of age between 25–44 years old (78.29%), bachelor's degree (74.77%), staff (43.42%), length of works more than ten years (51.95%).

### *2.2 Sampling Procedures*

The sample collected from two financial state-owned companies that had undergone some organizational changes, such as restructuring the organizational, different strategic marketing,

and changes to the general system and procedures. Samples were chosen by convenience sampling. Numbers of participants were 539 respondents.

### 2.3 Measures & Data Collection

Data were collected through 4 types of questionnaires, namely: 1) *Commitment to Change Inventory*, which was developed and modified to Indonesian language from Herscovitch and Meyer (2002), consists of 18 items from three dimensions: a) Affective Commitment to Change; b) Continuance Commitment to Change; and c) Normative Commitment to Change, and each dimension consists of 6 dimensions. However, in this study, the researcher only use two dimensions of commitment to change namely affective and normative commitment to change, as these two commitment to change are the ones that can represent the commitment to change, as they represent championing (Herscovitch & Mayer, 2002), 2) *Psychological Empowerment*, adapted from Spreitzer (2007) which consists of 4 dimensions: a) meaning ( $\alpha=.78$ ); b) competence ( $\alpha=.73$ ); c) self-determinant ( $\alpha=.67$ ); and d) impact ( $\alpha=.79$ ). 3) *Organizational Task Environment*, consists of a) *Capacity*, b) *Environmental Dynamism*, and c) *Environmental Complexity*, (Dess & Beard, 1984). All the scales tested for its validity and reliability, in which the results were reliable and valid.

### 2.4 Research Design

The design of the research is a survey with cross sectional research, thus one-shot data collection, without any repetition.

### 2.5 Data Analysis

Data were analyzed using SEM, and descriptive statistics. Procedures for data analysis was following the two-step modeling approach developed by Anderson and Gerbing (1988), the first stage, researchers identify how well each underlying indicator and error is included in the model. This stage tests the reliability, factor loading and goodness-of-fit for each scale of the study. The rationale for this approach is that an accurate representation of the reliability of the indicators is best accomplished in two stages to avoid the interactions between measurement and the structural model.

## 3. Results

### 3.1 Mean, Standard Deviation, Correlation Analysis

Table 1: Mean, Standard Deviation and Intercorrelation Analysis

	Mean	SD	O TE	C2C	PE
Organizational Environment (OTE)	4.31	.41	1.00	.45**	.24**
Commitment to Change (C2C)	4.47	.51	.45**	-	.33**
Psychological Empowerment (PE)	4.60	.54	.24**	.33**	-

\*\*Significant at  $p < 0.01$

Table 1 shows that based on references cut-off points for correlation, the magnitude of Pearson's correlation coefficient revealed that there is correlations between constructs. This might give preliminary evidence to support the hypotheses of the study.

### 3.2 Descriptive Analysis

Table 2: Descriptive Analysis of Organizational Task Environment & Commitment to Change

Demographics Variable	Organizational Environment		Task	Commitment to Change			Psychological Empowerment		
	Mean	SD	Sign.	Mean	SD	Sign.	Mean	SD	Sign.
Sex/Gender			0.23			0.02*			0.13
Male	4.29	0.42		4.51	0.52		4.64	0.56	
Female	4.34	0.38		4.40	0.48		4.53	0.49	
Age			0.14	-	-	0.00**			0.00**
<25 y.o.	4.12	0.25		4.11	0.35		4.46	0.35	
25-44 y.o.	4.32	0.42		4.64	0.51		4.57	0.53	
>44-56 y.o.	4.29	0.39		4.55	0.52		4.73	0.59	
Education			0.24			0.00**			0.00**
Sr. High Sch.	4.11	0.28		4.53	0.28		4.57	0.48	
Diploma	4.40	0.39		4.59	0.42		4.62	0.52	
Bachelor Degree	4.31	0.41		4.43	0.51		4.53	0.53	
Master Degree	4.30	0.42		4.58	0.55		4.90	0.50	
Position									
Staff	4.25	0.39		4.37	0.53		4.48	0.52	
Section Head	4.29	0.40		4.46	0.50		4.60	0.53	
Department Head	4.35	0.38		4.49	0.52		4.71	0.57	
Division Head	4.37	0.42		4.87	0.49		5.02	0.40	
Length of Works			0.35			0.00**			0.00**
2-10 years	4.29	0.40		4.38	0.50		4.53	0.53	
>10 years	4.33	0.41		4.55	0.50		4.67	0.54	

\*\*Significant at  $p < 0.01$ ; and \* significant at  $p < 0.05$

Table 2 shows that regarding organizational task environment, the results showed that the higher the position, the more positive their perceptions about the organization's environment. However, there are no significant differences in other demographic profiles, such as gender, age, education and lengths of works. In relation with a commitment to change, the results show that all demographic variables have significant effect on commitment to change. The results show that gender has significant differences men have higher score commitment to change than the women. The results also show that the older person have the higher score in commitment to change. Further, it also revealed that the higher the position, the higher even the score of commitment to change. Duration of works also play significant roles; the longer employees work and stay in the company, the more committed they are to the organizational change. Educational background also has a significant impact on the commitment to change. It shows that bachelor degree is the lowest dedicated to change and employees with diploma degree have the highest one.

In terms of psychological empowerment, the results show that men and women have no significant differences. Further, it shows that the older of the person, the higher the position, and the longer they work in the company, will result in the higher score of psychological empowerments. Educational background also has significant differences in psychological empowerment. However, it can't be said that the higher the education, the higher their

psychological empowerment. The results also show that bachelor degree respondents have the lowest psychological empowerment's score, and employees with a master's degree have the highest one.

#### 4. Hypotheses Testing

##### 4.1 Results of Hypotheses testing

Table 3: Hypotheses testing

Hyp	Path	Coefficient	t-value	Results
H1.	OTE→C2C	0.30	4.35	Hypothesis supported
H2.	OTE→PE	0.37	6.15	Hypothesis supported
H3.	PE→C2C	0.44	6.22	Hypothesis supported

p-value 0.0762 ( $p \geq 0.05$ ), RMSEA 0.031 ( $p \leq 0.08$ ), GFI  $\geq 0.90$

From the results of the SEM analysis, it shows that all the hypotheses are accepted, the model testing and the results show in Figure 1 and Table 3.

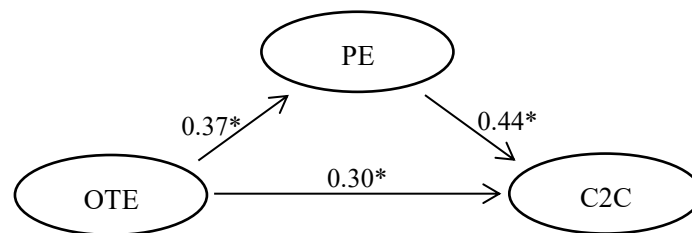


Figure 1: Results of Standardized Solution

The total effects of Organizational Task Environments (OTE) to Commitment to Change (C2C) with Psychological Empowerment (PE) as mediator is  $(0.37 \times 0.44) + 0.30 = 0.46$ .

The results show that Psychological Empowerment (PE) had indirect effects on Commitment to Change (C2C).

Based on Table 3 and Figure 1, it can be concluded that:

- H1: Perceptions of organizational environment significantly predict commitment to change, was supported.
- H2: Perceptions of organizational environment influences psychological empowerment significantly, is supported
- H3: Psychological empowerment positively predicts the commitment to change, is supported.
- H4: Psychological empowerment mediate the association between organizational environment and commitment to change, is supported

Furthermore, according to the results in Figure 1, it can be concluded that Psychological Empowerment had an indirect effect on Commitment to Change, as there was significant impact from organizational task environment on Commitment to Change.

#### 5. Discussion

Organizational Change can be evolutionary (Burke, 2004, 2008), incremental (Daft, 2007), or transformational (Cummings & Worley, 2014), this kind of Organizational Change is the response of Organizational Environment, for which a successful Organizational Change should pay attention to the process, content, context, and people (Walker et al., 2007).

The study shows that perceptions of Organizational Environment and Psychological Empowerment have a significant contribution on Commitment to Change (C2C). The results show that both external organizational conditions and individual characteristics (in this case Psychological Empowerment) are essential to developing a commitment to change. It concludes that individuals who have positive perceptions about the organizational environment; self-confidence, high a sense of meaning in their work, and have the feeling of impact on the work environment will support the change in the organization, and believe that the change is essential for the organization. Meanwhile, the research also shows that the positive perceptions about the external organization would develop more normative commitment to change rather than affective commitment to change. Moreover, the results show if the individual has positive feelings about the external environment, especially about the possibility of the external environment, this will develop a high normative commitment to change. As a result, individuals will have the feeling of obligations in supporting their organization, and show commitment to change, as they understand that there are lots of possibility for development and expansion for the organization (Dess & Beard, 1984).

This study supports the previous research conducted by Galpin (1996) and Walker et al. (2007), which mentioned that individual characteristic had an essential role in the success of organizational change. The study also shows that personal aspect, especially feeling of meaningful is significant during an organizational change to develop a commitment to change. This feeling of useful will overcome the fear and anxiety during the process of organizational change (Cartwright & Cooper, 1993), as the feeling of meaningful at work similar to the feelings of self-esteem and recognition from the management (Maslow in Robbins, 2010).

The results also showed that the older of the position, the higher the job's position, as well as the longer they work in the company, will be resulted on the more committed employees to the organizational change. This result supports the previous research conducted by Mangundjaya (2014), which showed that the older and the longer people worked in the organization, will result in the higher commitment to change. However, these findings cannot be generalized, as these studies were conducted at state-owned organizations, with no large-scale/radical organizational change. The investigation also revealed that the older of the person, the longer they stay and the higher position of the employee, will be resulted in the stronger their psychological empowerment. This finding can be explained as by life and work experience that people have; these experiences will develop their sense of self-confidence and competence.

## **6. Conclusion**

Employee's commitment to change will lead to the implementation of change success (Parish et al., 2008) and increasing performance (Parish et al., 2008). Consequently, paying attention to the psychological empowerment of the employee is essential, as psychological empowerment will boost organizational commitment (Hashmi, 2012) and commitment to Change (Rindang & Mangundjaya, 2013).



The result of the study has a practical benefit. First, it is useful for implementing change management in an organization. Moreover, there are some implications of this study as follows: First, management should identify, what kind of variables that can develop psychological empowerment, and organizational trust as these variables play an important role in developing a commitment to change. Second, as in a change and transformation situations create many anxieties (Cartwright & Cooper, 1993; Galpin 1996), establishing the feeling of meaning will enable people to develop their self-confidence to face the organizational change, fears, and anxieties. Third, it recommends that change management should assign senior people, that have a high position, who are older and longer work in the organization) to become a change agent, as according to the results they are more committed to organizational change.

This study held at the state-owned organizational that conducted organizational changes regarding organizational structures, strategy, and operating procedures. However, it is not a large scale and transformational types of organizational change. Consequently, generalization cannot be made. Based on findings, further studies are recommended in many kinds of organizations in other forms of an organization who undertake different types of transformation, and in different kinds of organizations such as private, government and non-government organizations are still needed. Further, it also shows that age and tenure correlated with a commitment to change. However, these findings might have different results if the research conducted at large-scale organizational change, such as merger and acquisition.

Organizational change has to be successful, and to do that organization should pay attention to the employee, and heir commitment to the organizational change. The study showed that Psychological empowerment or feeling of self-confidence and self-efficacy and meaning in their work environment is significant in developing a commitment to change. In this regard, organization should create many activities such as training, coaching, mentoring, and counseling in order to establish high sense of psychological empowerment.

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# Social Capital and School Principal Roles in Improving School Quality of SMA Muhammadiyah 3 Yogyakarta

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## Abstract

This study aims to: (1) finding the elements of social capital contained in SMA Muhammadiyah 3 Yogyakarta, (2) describing school principal roles in improving school quality of SMA Muhammadiyah 3 Yogyakarta.

This research is qualitative research and located in SMA Muhammadiyah 3 Yogyakarta. Research subjects are school Principal, teachers and students. Data collection uses observation techniques, interviews and documentation. Furthermore, data validity uses triangulation technique, data analysis uses interactive model scheme with some steps, and they are: data collection, data reduction, data presentation, then ended by conclusion.

The research findings show that (1) Elements of non-existing social capital consists of: a) trust: b) relationships: c) Values and norms, (3) School principal roles in improving school quality are found in school culture aspects, and they are: a) physical culture: maintaining, repairing and supplementing school buildings: b) religious culture: guiding spiritual attitude through mandatory prayer in congregation: c) achievement culture including teachers and students who have participated in the Olympics and conducting supervisory activities.

**Keywords:** Social capital, principal

## 1. Introduction

Social capital contribution of education aspect, especially in Indonesia in this present is rare, particularly in school institutions, In this far, utilization of social capital has focused only on economic and politics, also has a tendency to education. Nowadays, education problems seem to focus on curriculum issues or introducing education management improvement programs, such as introducing MBS (manajemen berbasis sekolah), human resource empowerment programs to educators (teachers), and other programs like physical development sector issues. Whereas the problems such as student brawl, lack of discipline, truancy, become the second issue that is set aside.

In fact at the present moment, there are many parties who question the success of the programs that have been done. Those questions are not to be debated, but to find ways and solutions for improving education quality in this country. Therefore, understanding of social capital approach in the education sector that is devoted to school institutions should be improved.

The importance of applying social capital as a resource to improving school quality is ensured by Kuntoro (2010: 2) that education in schools should pay attention to the social and cultural forces to be used for the betterment of school life. It is important to understand the process of

human interaction among all residents of the school which is as parable in a society. The better school building efforts build a better society. It is because school is deliberately prepared to be a good place for educating or learning place of children and youth generation of a society.

Utilization of social forces such as social capital in schools is indispensable. The reason is that schools are an integrated, interconnected and interconnected one, having all values, norms, rules, complementary culture, and social capital can be a bridge to create the quality schools.

The success of school is not only seen as a form of learning achievement and mastery of technology and graduate quality, but as high appreciation for intellectual development and individual character. Then, the implications that arise from the forces of social capital affect to behavior, honesty, school cleanliness and discipline. Therefore, social capital development is important as a basis in improving the quality of schools in terms of achievement, independence, up to the moral values prevailing in the wider community.

Msila (2009: 126) emphasized that existence of social capital in school becomes an important factor for school success. Some school can achieve success despite no money. This situation is described by Msila at a school located in South Africa, Hambanathi. This school is characterized by weak financial capital where most of student parents are disadvantaged communities with high unemployment rates. Msila found that school strategy by creating a culture of parent involvement was a major factor in improving school quality.

Concerning the educational context in Indonesia related to the social capital utilization in schools has been studied by Hanum, Ayriza, and Rahmadona in 2016. Contrary to Msila who examines the weak financial success of schools by utilizing social capital as a way of quality improvement, Hanum and his colleagues research on teacher participation in quality schools in developing social capital of schools. In their findings, Hanum explained that teacher roles in developing social capital of schools starts from giving mutual trust to fellow teachers, they exchange ideas, a sense of togetherness is formed by activities carried out together, mutual trust also formed from teachers and students, teachers involving learners in various activities of the race, so that the communication is intertwined become intense and generate strong trust (Hanum, Ayriza, Rahmadona, 2016: 237: 239).

Another factor that determines the issue of school quality improvement is inseparable to leadership issues. Giplin (2000: 399) explained that leadership is a process of a person to influence a group of people to achieve common goals. Peter (1997: 3) also added that leadership is an interaction between members in the group. While Robbins (1996: 347) defined leadership as ability to influence group and direct it toward a particular goal. In sum, leadership is the process of directing and influencing activities related to the duties of members of groups or organizations. This function requires leaders to cultivate the spirit of their subordinates to work diligently and guide them in carrying out the plan in achieving the goal.

The leader in the school context is the principal. The school principal became the first person to be regarded as the top manager in fixing every issue of school quality. The school principal is an important link between local school relations and the wider community. If the teaching and learning process is improved, then intellectual, technical and material support will be utilized appropriately. Similarly, the relationship with the community supports in the development of school improvement programs. In order to realize important changes in schools, the school principal needs the support of many resources of school community environment.

Those supports may be personnel such as experts, consultants, teachers, parents, supervisors and so on, or in the form of funds necessary to support the availability of facilities, equipment and other teaching materials. Another supports are information, institutions and attitudes of politicians. In order to achieve that support, Wahjosumidjo (2011: 344-345) explains that the school principal should be able to utilize his leadership to influence community to gain psychological support of caring, generating a responsibility attitude from the community that schools belong together. The school principal must be able to build responsive communication that directs the flow of information down, parallel, and upward in the school environment and the wider community environment. Wahjosumidjo also added his explanation that improving the quality of schools from the community can be achieved if there has been two-way communication and maintenance of communication. Cooperation needs to be built in order to realize changes in education quality improvement of schools.

Establishing relationships and networks by school principal is also considered important, as Hasbullah (2006: 9) explains that groups and networks owned by a person in social capital will help disseminate information for an organization in achieving common goals. In a collectivity groups there are voluntary principles, equality, freedom and civility. These three aspects will reinforce the creation of a complete social capital, in such mannerevery desired goal likely to succeed. The groups and networks are able to facilitate communication and interaction among individuals. The social networks owned by school principal will strengthen the cooperation feelings of its members and the benefits for participation in each group of individuals (Suharto, 2008: 4).

Based on the role and empowerment of social capital in schools, researchers started observation by looking for data in private schools that are incorporated by Muhammadiyah organization in Yogyakarta city. One such school is SMA Muhammadiyah 3 Yogyakarta which is known as MOEGA. On the first occasion, researchers sought the superiority of the school compared to other schools. SMA Muhammadiyah 3 Yogyakarta has a fairly simple building and will look clear inequality when compared with state schools. However, the researchers found different findings at the start of initial observation. In early July 2017 researchers made their first visit to the school, the researchers were warmly greeted by the school security guards were known by army at first time they entered the school gate. The warmth and friendliness of the school began to be felt when researchers tried to convey the intent and purpose to find research data. Preliminary observation is done by observing the various activities of all school residents, school ornaments, school support facilities and interactions among school members.

Initial findings that researcher get are the success of high school principal Muhammadiyah 3 Yogyakarta as the best school principal of the provincial level, even three times in a row. Viewed from the teaching activities seen students engrossed listening to their teacher explanation. Furthermore, from the religious school culture reflected during the break time, many students impulsively forced to perform religious activities such as sunnah prayer and hospitality to the teachers of the school. Then, researcher tries to assume that the togetherness factor becomes the key of improving the school quality. To further explore the preliminary data, the researcher conducted a study in SMA Muhammadiyah 3 Yogyakarta by looking at the social capital owned by the school and how the school community contributed to empower the social capital for the improvement of school quality.

## **2. Methodology**

This research uses qualitative approach with naturalistic paradigm, naturalistic research using actual characteristic, descriptive, prioritizing process, inductive character and "meaning" in research become the main concern (Bodgan& Biklen 1998: 4-7). The location of this research is SMA Muhammadiyah 3 Yogyakarta with time ranging from 15 August 2017 to 15 November 2017. Subject of research is school principal, teacher and student. For additional, data collection is done through observation techniques, interviews, and documentation studies. This study uses two supporting data sources to obtain a lot of data, namely secondary data sources and primary data sources. While to test the validity of the data must go through the stages of credibility, dependability and confirmability made through confirmation of the results of observations, interviews with informants and confirmation of documents with interviews. Data analysis using interactive data analysis scheme Miles & Huberman (1992: 18; 20). Stages of data analysis consist of data collection, reduction, data presentation and conclusion.

## **3. Result**

### *3.1 Elements of Social Capital in SMA Muhammadiyah 3 Yogyakarta*

#### 3.1.2 Trust

Trust is the first element of social capital that can be identified in SMA Muhammadiyah 3 Yogyakarta. The emergence of social capital in the form of trust is based on individual or group level. At the level of the individual social capital is created from the common values shared. Trust is also derived from the professional relationships of teacher work. While the environment of SMA Muhammadiyah 3 Yogyakarta place the subject teacher and homeroom teacher in the same room, so that interaction is intense and maintained. The ongoing interaction makes teachers have a great sense of togetherness.

At an individual level, trust is created because of a harmonious relationship between teachers and students. Creating mutual trust between students, school principal and teachers often involves students in various activities, such as extracurricular activities and racing activities in Olympics. Trust is also created by the pleasure of teachers led by the school principal. This is related to leadership conducted by the school principal. The school principal always keeps teachers in making a decision to make a policy. Social capital in the form of trust is also created by the school principal for the community around the school. In this case, the trust made by the community for SMA Muhammadiyah 3 Yogyakarta is evidenced by the number of new learners who register every year. Communication made by the school principal along with the teachers and the parents of the students and also the surrounding community is the key to SMA Muhammadiyah 3 Yogyakarta. Maintaining communication means building trust in the surrounding community. Trust is basically at the level of one's individual, this is done by the various qualities of interaction they have. In SMA Muhammadiyah 3 Yogyakarta, the growing belief between school principals and teachers arises from the habit that has been done for a long time, like sharing and exchanging ideas. Trust is also created because of the relationship between the citizens of schools that are bound by religious values. Besides, it appears in the organization form, such as membership Muhammadiyah organization of each teacher.

#### 3.1.3 Social Capital in Relations and Network Form

Social capital in relationships and networks form of SMA Muhammadiyah 3 Yogyakarta is based on the school principal and teachers. While the social structure that exist in SMA Muhammadiyah 3 Yogyakarta quality relation and network have different level. The school principal has wider relationships and networks than teachers in SMA Muhammadiyah 3 Yogyakarta, like the school principal's relation incorporated into the school principal group. Relationships with important people are used to get information dissemination for school needs. The school principal will be incorporated in the school principal's working group so often meetings to discuss the various problems that occur in each school. In terms of group membership and relationships of the school principal occurs due to the process of absorption and dissemination of information utilized by the school principal.

SMA Muhammadiyah 3 Yogyakarta also conducts communication with government and private institutions. Thus the school principal of SMA Muhammadiyah 3 Yogyakarta can take advantage of the cooperation agreed with various institutions, one of which is in cooperation with several campuses like UIN, UAD, UMY. School principals use the cooperation agreed by the school with various institutions in terms of empowering the quality of human resources especially teachers, trainings such as the provision of curriculum 2013, learning innovation training that is often followed by teachers SMA Muhammadiyah 3 Yogyakarta. Social capital in the form of relationships and networks is also obtained from teachers. Each subject teacher has a membership of (KKG) or MGMP. The routine meetings held in various schools produce new information that is used to improve the learning process or the exchange process of ideas in mastering the lesson material to be taught.

#### 3.1.4 Social Capital in Values and Norms Form

SMA Muhammadiyah 3 Yogyakarta has a school criteria based on religious values and a culture of Islamic nuance. Values and norms are an important element in process control of every individual who is incorporated in a group or organization. SMA Muhammadiyah 3 Yogyakarta's social capital in values and norms form is formed based on the ability of school principals and teachers in making policies that related to religious values. In addition, SMA Muhammadiyah 3 Yogyakarta has a religious value that is fairly good, has a variety of religious activities conducted by the school both in the internal environment of the school and surrounding communities. Some religious activities such as praying congregation, holding a regular recitation and inviting parents to conduct recitation are one form of activity that refers to social capital in the form of values and norms. Social capital in terms of values and norms is also applied to school discipline. School principals and teachers make some rules that students must adhere to in order to control the student's attitude so as not to exceed the reasonable limits of behavior. The rules are applied with reward and punishment system so that students become disciplined and easy to manage.

To better understand the forms of social capital contained in SMA Muhammadiyah 3 Yogyakarta, researchers will describe the form into the table below.

Tabel 1: Social Capital Forms in SMA Muhammadiyah 3 Yogyakarta

No	Social Capital Type	Description
1	Trust	Trusts that exist in SMA Muhammadiyah 3 Yogyakarta include at the level of individual, professional relationship, placement of work space, togetherness and two-way communication.
2	Obligations	Social capital in obligations form is based on the role, awareness, exemplary, discipline and agreement on rules.
3	Value and Norm	Values and Norms are based on values of diversity, religion, mutual respect, school culture, orderliness, social structure, social status, honor and folkways
4	Relation	Relationships arise from individual engagement to membership of formal and non-formal organizations, colleagues' networks, communication with institutions, parents and the community.

### 3.2. School Principal Roles in Improving School Quality of SMA Muhammadiyah 3 Yogyakarta

#### 3.2.2 The School Principal Roles in Utilization of Social Capital in Religious Culture

As a school principal, Mr. H can be said to succeed in providing the strengthening of diversity values into SMA Muhammadiyah 3 Yogyakarta environment. Vision and mission carried by SMA Muhammadiyah 3 Yogyakarta is an interpretation form of the Islamic character of Muhammadiyah. Planting implementation of religious values incorporated into the school curriculum. School principal and teachers make rules for students, such as obligatory prayers, socialize habits of smile greetings. Providing religious facilities is a step of the school principal and teachers in providing Islamic values.

Basically, the above components can be paralleled with the opinion of an expert named Peterson & Deal who explained that the school principal can play a role in shaping the school culture by providing and conducting ongoing coaching, such as in modeling, giving teaching, provide a good reinforcing character to all the citizens of the school (Darmiatun, 2013: 31).

School principals always involve teachers in providing religious guidance to students. It is seen that many religious ornaments displayed on the wall of the school and the obligation of tadarus read Al-Quran before starting the lesson is also applied to the students. Coordination between the school principal and subject teachers makes the process of planting religious values to be achieved. The similarity of religious values strengthens the relationship between school principals and teachers in maintaining religious values in SMA Muhammadiyah 3 Yogyakarta. Religious activities are applied to students not only during school hours but also on other Islamic holidays, such as giving qurban animal donations during the Hajj, conducting routine recitation of homes to homes accompanied by homeroom teachers. The programs are successful because there is cooperation among fellow citizens and the volunteer of everyone to always be



involved in various activities, thus affecting the school community in maintaining religious culture in SMA Muhammadiyah 3 Yogyakarta.

The network withdrawal is also used by the school principal against the student guardian. The school principal routinely establishes a joint study program with the parents, provides meeting facilities with guardians through religious activities, establishes parent connecting day programs for guardians and teachers, thus forming a routine silaturahmi among guardians, homeroom and school principals directly. School principal of SMA Muhammadiyah 3 Yogyakarta acts as the initiator of mutually agreed policies. Regulations that arise in the school environment apply to all school residents. While Islamic values are executed by mutual agreement and obligation. Therefore, the social capital that emerged in the researcher observation of volunteer elements in each individual to run the rules that have been made. The similarity of values and vision set by school principals and teachers binds the success of schools in maintaining religious culture into the school environment.

### 3.2.3 The School Principal Roles in utilizing Social Capital in Achieving Culture

The success of the school principal in raising the name of SMA Muhammadiyah 3 Yogyakarta as one of the private schools considered to have the quality of education can be seen from some achievements obtained by SMA Muhammadiyah 3 Yogyakarta. The school principal's guidance to schools is seen in the provision of learning facilities, continuous teaching of students, training and supervision to teachers. The School Principal Roles in empowering social capital is reflected in the reinforcing of the environment and to all school residents. The School Principal Roles will always monitor the environmental conditions, provide self-reinforcement in the form of motivation also establish good communication with teachers and students.

The reinforcement activity for all school residents conducted by school principal of SMA Muhammadiyah 3 Yogyakarta is seen in the context of social capital can be explained by Coleman (Usman, 2018: 75) as a form of intimate relationship between people who are gathered in the same organization or called network closure, so that in one group can encourage cooperative behavior of all people who are collected in the group.

Facilities and empowerment conducted by the school principal to teachers in the form of training, supervision and regular meetings between subjects teachers. It is intended that every teacher has a relationship of each membership and can share ideas in improving self quality and able to develop a way of teaching methods. The role of school principals is seen in the empowerment and acceptance of cooperation for teachers.

At the student level, the school principal invites students to be actively involved in various competitions. School principals use contacts outside the school to provide training and motivation for students, providing mutual trust in the form of communication and guidance of students. The school principal also creates a conducive environment for all the citizens of the school so as to create social relationships that encourage intimacy, to socialize and to create collective consciousness for others.

## 4. Conclusion

Based on the research results, the elements of social capital and school principal roles in utilizing social capital for improving the quality of schools are as follows:

Social capital elements in SMA Muhammadiyah 3 Yogyakarta are divided into several forms, namely: trust, values, relationships and code of conduct. Trust relationships at the individual level include the beliefs of the teachers and the School Principal. It is seen by the teachers' pleasure for the school principal performance. Teacher-level beliefs include professional work relationships that mutual trust creation based on awareness of each individual to respect each teacher's quality. Trust also emerged from the society towards SMA Muhammadiyah 3 Yogyakarta, as evidenced by the increasing interest of prospective students who want to join SMA Muhammadiyah 3 Yogyakarta from year to year. This is based on the promotion and relationships that the school principals and teachers have.

Social capital in the value form also affects the mutual trust of all residents of the school. The values can be the similarity of vision and mission, goals, but the most dominant is the religious values that form a sense of solidarity and a high level of trust. Islamic values embraced by SMA Muhammadiyah 3 Yogyakarta can be categorized into the binding of all the citizens of the school in carrying out the teaching and learning process in the school environment.

On the other hand, obligations also form the basis of social capital for school principals and teachers, as well as students. The obligations in this study are the obligation to comply with the rules and agreements that have been made together. Duties and discipline contained in SMA Muhammadiyah 3 Yogyakarta is the binding of every citizen of the school to not act beyond the will of the citizens of the school.

Social Capital in Relations and Network Form is formed on the basis of individual participation in developing networks in formal organizations. The school principal develops a network on the organization of school principal, teachers form a network by participating in the MGMP of every subject group. At the individual level, the withdrawal of relations is not only limited to formal organization, but also formed from the acquaintance of each school. This relation on the acquaintance is used by the school principal to fill the event in SMA Muhammadiyah 3 by inviting acquaintances who are considered competent.

The school principal roles in improving and maintaining school quality can be seen in school culture aspects by utilizing social capital. The school culture contained in SMA Muhammadiyah 3 Yogyakarta is divided into several forms of culture, namely: [1] Physical culture which includes school appearance, school cleanliness, classroom arrangement, school ornaments including school wall readings, paintings, and school support facilities such as buildings, libraries, teachers' rooms, study rooms, administrative rooms and canteens, parking lots, mosques and campus mosques. [2] Religious culture contained in SMA Muhammadiyah 3 Yogyakarta includes Islamic values, congregational prayer habits, reciting the holy verses of Al-quran before learning, respecting teachers, disciplinary values, omission of greetings, Muslim uniforms, preachers hijrah program, assistance qurban cattle, school recitation events. [3] Achievement culture that includes the election of school principals in a row as the best school principal of city and province, student achievement in academic and non academic, teacher achievement and increasing of students national examinations result.

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# **E-LEARNING ON THE SUBJECT OF SOCIOLOGY IN SMA N 1**

## **YOGYAKARTA**

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### **Abstract**

YENI ARINI: E-learning on the subject of Sociology at SMA Negeri 1 Yogyakarta. Thesis. Yogyakarta: Graduate Program, Yogyakarta State University, 2018. This study aims to 1) To know the e-learning policy in learning sociology subject in SMA Negeri 1 Yogyakarta. 2) To describe e-learning viewed in terms of Human Resources (HR), teaching materials and infrastructure in SMA Negeri 1 Yogyakarta. 3) To know the obstacles faced in e-learning in SMA Negeri 1 Yogyakarta. 4) To know the effort to overcome the obstacles faced in e-learning in SMA Negeri 1 Yogyakarta. This research used descriptive qualitative approach with principal research subjects, teachers and students. The data collection techniques used are observation, interviews, and documentation. The validity of the data was examined by using source triangulation, i.e. checking data obtained through multiple sources. The result of the research shows that: (1) Providing guidance and motivation for teachers or students to get e-learning based learning (2) In terms of Human Resources (SDM) is by giving additional sociology teacher, in terms of materials / teaching materials given method or games in e-learning in the classroom, in terms of infrastructure can be given additional computer let if there is a broken computer can still learn. (3) Obstacles (4) The driving factors of e-learning: the great motivation in internet usage, either from the principal, teachers, or students, owned facilities are sufficient for e-learning implementation. Inhibiting factors: the limited ability of teachers in e-learning in school, human resources are not optimal in e-learning.

**Keywords:** learning, e-learning, policy

### **1. Introduction**

Education in general is any effort planned to influence other people, individuals, groups or communities so that they do what the educator expect for (Soekidjo Notoatmodjo 2003: 16). Education is the process of changing the attitude and behavior of a person or group of people in an effort to mature human beings through the efforts of teaching and training, processes, ways, educational acts. (Pusat Bahasa Departemen Pendidikan Nasional (Depdiknas, 2006: 263). Education is a conscious and well-planned effort to create an atmosphere of learning and learning process so that learners actively develop their potential to have spiritual power, self-control, personality, intelligence, noble character, as well as skills needed by him, society, nation and state. ((Pusat Bahasa Departemen Pendidikan Nasional (Depdiknas, 2006:268).

Education became one of the important concerns of the government as it is with education, human beings can develop and can develop its civilization. The rapid development of technology and ICTs has influenced many fields, including education. The development of technology in education is now influential on learning media, which originally only use the board, or can be called black board / whiteboard, now already using LCD, Internet, even distance learning. (Molenda, M. & Januszewski, 2008).

The rapid development of technology has affected all aspects of life, especially how the use of internet media in improving the quality of education. This is because technology has affected everyday life. Technology always has various connections, ranging from hardware just to how to solve problems. (Smaldino, S.E.et.al. 2008: 20). The progress of information and communication technology in recent years has grown very fast. (Utomo Junaidi, 2015: 4). The Internet has become an inevitable part of daily life, especially in the world of education is closely related to the need for concepts and mechanisms of technology-based teaching and learning. Internet itself is meant as a network consisting of several computer components that are connected to each other either in an area or between regions, while according to Lantip Diat Prasajo and Riyanto (2011: 178). The Internet is short for interconnected-networking that is connected to each other. The development of the internet is so that in the information can be very much, any field that is in want sure can be searched source. Internet also as a medium of communication and learning media that is useful for teachers, students, and society in general and have an influence on the world of education, especially in studying sociology, many students who struggle because they consider sociology is science uncertain and even difficult to learn because they have to memorize many things. Sociology is one of the social science. The existence of curriculum changes in SMA especially sociology subjects is expected that human resources that are inputs in social science can play a role in solving educational problems in the learning process.

In the National Education Strategic Plan (RENSTRA) 2010-2014, the national education system should be able to ensure equal distribution of educational opportunities as well as to improve the quality, relevance, and efficiency of education management to address the challenges of changing local, national, and global lives. The Government has established educational development to be one of the national priorities in the National Medium Term Development Plan (RPJMN) for 2010-2014. RPJMN Year 2010-2014 mentioned that education is an important instrument in economic and social development. Education is expected to support efforts to alleviate poverty, promote equity and gender equality, and strengthen cultural values.

Problems in the field of equalization of educational opportunities and quality improvements that affect the relevance and change of local, national and global cultures, as well as the expansion of access to education are still the government's PRthis. E-learning is one of the programs in the stretcher by the government forsolve the problem. This can give the government agenda. Perhaps e-learning can provide solutions to assist governments in various aspects (Moore Joi L, et.al.2011: 131). In the Law on National Education System (UU-SISDIKNAS) number 20 year 2003/ CHAPTER VI (line, step, and type of education) or the tenth part of distance education Article 31 states that distance education serves to provide educational services for community groups that cannot joinlearning by face to face/regular. E-

learning enables learners to learn to understand computers in their own places without having to physically meet face to face in class with their teacher (Aleksandra Kla, et al, 2010: 20).

Effective learning can be said that learning that utilizes information and communication technology optimally in learning process as a tool, one of utilization of information and communication technology in learning is by utilizing e-learning. (Numiek S.H. 2013: 93). Through this e-learning media, it is expected that teachers can manage learning materials, such as arranging syllabus, uploading material, giving task to students, taking job of making test/quiz, giving value, monitoring activity, managing value, interacting with students and fellow teaching team, through discussion forums or chat, and so on. Instead learners can take advantage by accessing tasks, learning materials, discussions with learners and teachers, viewing conversations and learning outcomes (Anggoro Muhammad Toha 2001: 62). Besides or advantages is learning using e-learning has potential to increase equity and access to education in a country.

Utilization and development of ICT is now more rapidly. This is marked by the increasing need for a computerized information system in the field of education. Paradigm of conventional education system or face-to-face learning, nowadays by utilizing information technology especially internet make distance education system which is not limited by space, time, distance so that relation between teacher and student can be done anywhere. One of utilization of computer technology by using internet. Internet technology be a solution in overcoming the learning process slowness. Therefore the principal issued an e-learning policy in the subject of sociology because the application of the internet in the field of education is clearly implementation now. The concept of e-learning is an internet-based education system that is well received and much for now, one of the utilization of the website.

The use of the website is intended for teachers and learners to get a reference material of learning, and standard questions that become the reference in every school. Teachers can add and enrich insight in the making of problems and examinations. Implementation of the use of the website must also be actual and appropriate to support access and distribution of knowledge for the needs of education and intellectual life of the nation as contained in the Constitution 1945.

SMA Negeri 1 Yogyakarta is one of the schools located in urban areas that have cultural characteristics and have applied e-learning based learning. School is a place to seek knowledge, especially in SMA Negeri 1 Yogyakarta which become examples of schools that are aware of the importance of education renewal. The existence of the motivation given by the Principal related to the implementation policy and the application of e-learning based learning is always given, to make the learner spirit to follow the learning process, besides the existence of computer training make all teachers ready in doing the learning. The training has been there several years ago also become a positive factor in the implementation of e-learning in SMA Negeri 1 Yogyakarta. Utilization of e-learning in the learning must be really monitored its implementation, not only that learning sociology with the utilization of this technology has not been done maximally by the school and learners. This is because of computer facilities obstacle in schools to support e-learning implementation. Obstacles of e-learning in SMA Negeri 1 Yogyakarta can be seen, among others:

The first is the lack of interaction can slow formation of deep values in process of teaching and learning which resulted in the teaching and learning process tends toward training rather than education. Changing the role of teachers from the original master of conventional learning techniques, now also required to know the learning techniques that use ICT (Information, Communication and Technology). The role of teachers in applying e-learning-based learning in SMA Negeri 1 Yogyakarta is still merely utilizing as an additional learning, not an application in daily learning.

Infrastructure support as a supporter of e-learning activities is also found several obstacles, such as one of the teachers who said when using the internet to find the source of learning materials found that school-owned Internet access is still slow, often failed, and not all places affordable Wi-Fi internet access. The use of e-learning based website also needs to be owned by the school, but SMA Negeri 1 Yogyakarta does not yet have the website facilities. The second is the competence of teachers in implementing internet-based learning is still a little, in terms of human resources are still reluctant in applying the learning.

With reference to the above background then the author is interested in taking the title "E-learning on the sociology subjects in SMA Negeri 1 Yogyakarta".

## **2. Research methods**

This research used qualitative research type with descriptive approach. This type of research was chosen because this research was not aimed at testing the hypothesis but aimed to gain a deep understanding and interpretation of the data. The data might also come from field notes, photographs, personal documents, archives and other official documents. Therefore, in the research, the researcher attempted to reveal a problem or social phenomenon of special attention in this research that researchers will reveal e-learning to sociology subjects in SMA Negeri 1 Yogyakarta.

Setting this research is one element that supports the success of a study. This research was conducted in SMA Negeri 1 Yogyakarta. The reason for choosing the location in this place with the consideration that SMA Negeri 1 Yogyakarta was the best high school in Yogyakarta that has facilities and a good learning system. Facilities for learning is good and support for computer. Learning using computers, especially e-learning is going well. The observations took place from January to March 2017.

Analysis units the subjects of this research were teachers, principals, administrators, and students who are in SMA Negeri 1 Yogyakarta. The determination of research subjects used purposive sampling, the selection of this sampling technique was to obtain satisfactory data. Based on the results of research that researchers have shown that e-learning of sociology in SMA Negeri 1 Yogyakarta was not maximal and more used by students of class X and XI, while students in class XI were not allowed to follow e-learning.

Qualitative research has the main source of data originating from words and actions, the rest of the main data sourced from documents and others. There are two types of data needed in this study, namely:

### **a. Primary data**

Primary data is obtained by digging the original source directly through the respondent. The data are obtained directly through observation and interviews used to answer the problems

of research and direct observation in the field. The primary sources of this study were the principal, teachers, students, Chief of PR and Administrative

b. Secondary data

Secondary data is obtained from indirect sources but were able to provide additional data and reinforcement of research data. Secondary data source can be obtained through literature studies, documents, manuals, and relevant reports to complement this research activity. In order for this research to be responsible, the data source element becomes the key in the research in a variety of appropriate additions, so that the objective to obtain the research results can be achieved in detail.

This research used the data source orally and in writing, so in this research the data collection techniques are:

1. Observation

Nasution (1998) states that observation is the foundation of all science. In addition, observation can also be interpreted a process of viewing, observing, scrutinizing and recording behavior systematically for a particular purpose. In this observation was choose place used as research object namely SMA Negeri 1 Yogyakarta. Observation activities aim to collect data used to provide conclusions. Observation technique that is done by direct observation that is observation that done directly to object that researched.

While the method used in the observation activity is by anecdotal record method that is observer record carefully and record the behavior that is considered important and meaningful immediately possible after the behavior appear (Zainal A. 2010: 231).

This observer technique was done to know the general description of SMA Negeri 1 Yogyakarta which includes the state of teachers and the state of learners. In addition, the observations were conducted to find out the implementation of e-learning in sociology subjects in SMA Negeri 1 Yogyakarta.

2. Interview

Esterberg (2002) defines the interview as a meeting of two people to exchange information and ideas through question and answer so that it can be constructed meaning in a certain topic (Sugiyono, 2009: 213). Interview technique is done by making the guidance of interviews in accordance with the problems that will be used to ask the respondent with the respondent. Interviews used to supplement data previously obtained through the observation process

Interview conducted in this study was semi-structured interviews. Semi-structured interviews means that written content on the interview guide is only a topic of discussion that refers to a central theme or central theme that has been defined and adapted to the purpose of the interview. By semi structured interview, researcher can get information according to what is expected from the informant. Therefore, in semi structured interview, it is necessary to have an interview guidance that contains a number of related questions, but later the question can also be developed while in the field which will eventually result research findings. In addition researchers are also free to improvise in asking questions in



accordance with the natural flow that occurred but still based on the specified topic. Thus will be obtained complete data to analyze problems to be studied.

This technique was used to know the implementation of e-learning in SMA Negeri 1 Yogyakarta, the goals and obstacles faced by users (teachers and students) in e-learning in SMA Negeri 1 Yogyakarta.

### 3. Documentation

Documentation is a record of past events. Documentation may be writings, drawings, or monumental works of someone (Sugiyono, 2009: 240). In qualitative research, documentation is a complement of the use of observational data collection techniques and interviews more credible and reliable research results. Checking the validity of the data used several techniques as follows:

#### 1) Extension of observation.

Through the extension of observation means the researcher returned to the field, make observations, interview again with the source data to be researched where ever met or not. With the extension of this observation means the relationship of researchers with resource persons will increasingly formed rapport, the more familiar (no longer distance), the more open, trust each other so that no information is hidden again. Extension of this observation was done so that researcher could obtain more complete data again.

#### 2) Increase persistence.

Increasing perseverance in this study means making more careful and continuous observations. In this way the data certainty and sequence of events will be recorded in a definite and systematic way.

#### 3) Triangulation.

Triangulation in testing of credibility is interpreted as checking different data sources to improve the accuracy of a study. Researcher tests each source of information and evidence of findings to support a theme. This ensures that the study will be accurate because the information comes from various sources of information, individuals, or processes.

#### 4) Member Checking.

The purpose of member check in this study is to find out how accurate the data obtained in accordance with what provided by the data provider

Member check implementation can be done after one period of data collection is complete, or after got a conclusion. The trick can be done in various ways but by this research is done individually, by the way the researchers come to the data giver, or through group discussion forums.

The process of data analysis is done by using several criteria such as.

#### a. Data collection.

Data obtained from observations, interviews, and documentation are then written in field notes of what was seen, heard, witnessed, experienced, and also findings about what was encountered during the study and were the materials of data collection for the next stage.

b. Data reduction.

Data reduction is the process by which researchers conduct selection, focusing attention on simplification, abstraction, and transformation of "rough" data from written records in the field. This data reduction process is intended to further refine, classify, direct, remove unnecessary data and organize data so that it is easy to need a conclusion which then continued with the verification process.

c. Conclusion

Withdrawal of conclusions concerning interpretation of researcher, namely the depiction of the meaning of the data displayed. Researchers seek to find meaning from data that has been produced in research, as well as analyze data and then make conclusions. Before drawing conclusions, researchers should look for patterns, relationships equations and so on between details to be studied then concluded. In the process of data deduction is a process that requires a consideration that is actually accounted for.

### 3. Research Results and Discussion

Based on the results of research obtained during the research, resources owned by SMA Negeri 1 Yogyakarta both in terms of educators and educational staff are as follows: Educators and education are important component in helping the process of fluency and the ongoing process of teaching and learning. Educators and non-educational personnel are also differentiated according to the level of formal and non-formal education. The state of educators and teachers based on the level of formal education in SMA Negeri 1 Yogyakarta as follows:

Table 1. Educator Data Based on Formal Education Level

No	Education level	Number and Status of Teachers				Total
		GT / PNS		GTT / helper teacher		
		Male	Female	Male	Female	
1	S3	-	-	-	-	
2	S2	10	6	-	-	
3	S1	33	26	-	-	
4	D4	-	-	-	-	None
5	D3	-	1	-	-	None
6	D2	-	-	-	-	None
Total		43	33	-	-	76

Source: Administrative Documents

Based on the data above can be seen that SMA Negeri 1 Yogyakarta has 76 teachers with adequate educational background in accordance with the needs of teaching and learning process. All the educators in SMA Negeri 1 Yogyakarta have been in college, there are not S3

graduates, teachers with S2 are 16 people consisting of 10 men and women 6 people and mostly have taken S1 as many 59 people consist of men 33 people and women amounted to 26 people while for D3 level as much as 1 person, there are no teachers with D4 and D2. Educator data based on Non-formal education level are as follows:

Table 2. Educator Data Based on Level of Non-formal Education

No	Type Development Competence	Number of Teachers Who Have Been Following Activity Competency Development / Professionalism			
		Male	Total	Female	Total
1	Upgrading KBK / KTSP	10	10	5	5
2	Upgrading Method Learning (including CTL)	15	15	8	8
3	Upgrading PTK	15	15	8	8
4	Upgrading Work Writing Scientific	10	10		
5	Certification Profession / Competence	10	10	12	12
6	Upgrading PTBK	10	10	15	15
7	Other Upgrading	7	7	4	4

Source: Document SMA Negeri 1 Yogyakarta, 2016.

Based on the data above the number of teachers who have good qualifications in non-formal education programs is very diverse, many teachers who already have or have good experience in the field of curriculum upgrading, learning methods that include the skills using computer, internet and learning using the internet.

Distribution of the number of students between classes equally, students in class X as many as 10 groups of general study group and 1 group of social science learning group (IIS). The students of class XI have 8 general study groups (IPA), 1 group of social science study, and 1 class of acceleration group. Students of class XII have 8 general study group (IPA), 1 group study of social science and 1 acceleration group learning. The details of the state of SMA Negeri 1 Yogyakarta students as follows:

Table 3. Student Data 2016

Class	Program	Female	Male	Total
X	IPA	161	115	276
	IPS	11	1	12
XI	IPA	170	79	249
	IPS	7	2	9
XII	IPA	184	88	272
Acceleration		22	4	26
Students number total		555	289	844

Data obtained based on the results of in-depth interviews with principals, teachers, students and also officers who take care of the technical part and internet network in the school. Coupled

with documents and various data related to e-learning system in SMA Negeri 1 Yogyakarta. The presentation of this data aims to answer the research questions that developed during the field. The complete systematic description of this research data refers to the problem formulation. The substance of the research questions are (1) 1. the use of e-learning as media, (2) e-learning in SMA Negeri 1 Yogyakarta, (3) obstacles faced in the implementation of e-learning, (4) overcome the obstacles that arise in the implementation of e-learning in SMA Negeri 1 Yogyakarta.

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Based on the results of observation data and documentation of teachers who become informants, the allocation of time used by the teacher in the utilization of the internet one-learning in SMA Negeri 1 Yogyakarta, it turns out that in using the internet on learning activities found that teachers have limited time to use it in e-learning that should be utilized more by all teachers, it is still very limited time.

Utilization of the internet in learning is fondled every day, facilitate the teacher in finding the source material, explain in the classroom or outside the class that does not allow for face to face, easier in processing and presentation, and able to know the latest news so that information will be faster in can and known wide community.

Limitations of time in using e-learning are caused by the busyness of teachers who have to prepare many materials and teach in different classes so that using the internet in e-learning is still minimal, so also when teachers are out of school, especially at home to give the task to the students have constraints because of the busyness of each teacher at home. The use of internet in learning seen from the proportion of time used is the teacher has been using the internet in learning both at home and in school average of 2 to 3 hours per day. Good to access tasks, news, or other forms and kinds of learning.

Based on the results of interviews and observations show that for the allocation of time internet use only 2 to 3 hours per day, either at school or at four others, especially at home. The allocation is still less related to teachers only take advantage of spare time alone, not every time of learning, other than that when the teacher has come home, time to access the internet or e-learning did not get time because the focus on family and work at home. Constraints in the mastery of information communication technology still affect the school, the obstacles encountered include:

Table 8. Obstacles of Teachers and Students in e-learning

No	Teacher	Students
1	Teachers who have not understood e-learning and application in learning.	Interaction between teachers is still difficult because there is no e-learning website

2	There are teachers who do not feel able to use e-learning.	Student's ignorance in understanding e-learning.
3	Absence of direct communication	Students are more likely to be difficult to capture the material so that e-learning does not contribute much.
4	Teacher activity in giving less task or lesson	The assigned task only takes from the internet directly without understanding the content of the material.

Based on the data of teachers and students it can be concluded that in the implementation of e-learning in SMA Negeri 1 Yogyakarta has not run optimally, because the interaction of teachers and students is still constrained unavailability e-learning website that becomes the bridge of communication learning is also the ability of teachers in running IT-based interaction to students who use more direct relationships without electronic intermediaries, preferring to use email, social networks or instant message that are considered more effective and efficient. Therefore it is necessary to review what factors affect the success of e-learning implementation. These factors include:

- 1) Student Ability in Using E-Learning.
- 2) Allocation and Proportion of Student Time in Using E-Learning

#### Interaction between Students and Teachers through E-Learning

Learning e-learning in terms of materials / learning materials include:

- 1) The diversity of material resources (references) obtained one of which must exist in the electronic learning of the material or teaching materials.
- 2) 2) The types of files used in various learning (word, powerpoint, excel, flash, audio, video and others)

Based on the implementation of e-learning in terms of Material and Teaching Materials can be described in detail as follows:

Table 5. Material and Teachers' Materials by 2016

	Study / Sub-Chapter	Description
1	The diversity of material resources (references) obtained	a) Sources of material used e-books, books, journals, and internet. b) The use of power points and video learning as a media presentation c) Limited learning resources.
2	Type of file used	a) Format of material used word, power-point, excel, audio, video and others. b) Teachers are still limited in the use of media that is just that-that's all.

		c) File storage is usually on the internet using google drive.
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Based on the above data it can be seen that the use of power point and learning video is often used. Teachers can already use a variety of material formats that means teachers understand and have no difficulty in carrying out learning through the internet.

c. E-learning in terms of Infrastructure

1) Readiness hardware (hardware) support e-learning activities in SMA Negeri 1 Yogyakarta.

Based on the observations of researchers, SMA Negeri 1 Yogyakarta has several rooms that have computer facilities, including teacher room, ICT room, multi media room that get computer facilities. While each class also has LCD and Projector to display learning using electronics. However, the utilization is not maximal, concerning the teacher is still difficult to use computer and still glued with manual learning.

No.	Study / sub chapter	Description
1	Readiness of hardware (hardware) in e-learning activities	a) Already available hardware such as computer, computer room, multimedia room, LCD, projector and Wi-Fi. b) Utilization of hardware facilities that have not been maximized. c) There is still a lot of hardware that has not been fixed.
2	Software Readiness (Software) in e-learning activities	a) The Wi-Fi security is good. b) Software used is still limited to general software, such as word, pdf, and excel. c) Internet access is very good. d) Network Wi-Fi or internet is good. e) Rarely trouble or network smoothly

3. Constraints Faced in E-learning in SMA Negeri 1 Yogyakarta.

In this e-learning is still a lot of obstacles faced by teachers and students both in terms of human resources, materials and from existing infrastructure. Some obstacles faced are not entirely great effect on the implementation of e-learning then some of the obstacles below that need to be addressed and greatly affect the ongoing electronic learning in SMA Negeri 1 Yogyakarta. The obstacles encountered in learning e-learning SMA Negeri 1 Yogyakarta is as follows

a. Constraints in terms of HR

The ability and willingness of teachers in using e-learning is still lacking, there are still many teachers who have not understood the meaning of e-learning.,

Teacher's commitment in using e-learning is still low, there are still many teachers who use ordinary manual learning, and there are still teachers who have not been able to use

the computer that became the basis of electronic learning. Students are more dependent on active teachers in the class. Whereas in the curriculum now students are required to be more active in exploring ability not depending on the science of the teacher.

b. Constraints from Material or Learning Materials

Constraints that occur in the implementation of e-learning in SMA Negeri 1 Yogyakarta are seen from the source of materials and teaching materials used such as teachers have not fully use the Internet as a source / learning materials that can be utilized for the learning process makes it affect the intensity of use of computers and the internet in learning.

c. Constraints from the Infrastructure

Infrastructure is a component that needs to be owned by schools in support learning. In this case, internet-based learning must have a lot of infrastructure, besides the utilization of good infrastructure and appropriate will give a good impact also in learning. Another problem is the lack of access and internet quota owned by the school, so not all can use, and the network is not stable or can be said is still often slow. Not only that, Wi-Fi facilities in schools are still limited, not all rooms can be reached by the Wi-Fi signal.

4. Solutions to Overcome the Emerging Constraints in E-learning at SMA Negeri 1 Yogyakarta

a. Solutions from Human Resource Constraints (HR)

Problems that occur in e-learning in SMA Negeri 1 Yogyakarta need a solution. The solution to the problem is still the lack of willingness of teachers to use e-learning. In utilizing internet-based learning must be good at sorting out where needs and where the desire, in utilization for education must be adapted to the materials and teaching materials.

To match what is expected, and the use of the Internet for education needs to be improved and tailored to the needs. Solutions for problems related to students who have not been able to apply the learning well

b. Solutions to Overcome Constraints from Materials or Teaching Materials

The absence of e-learning website about sociology subjects that make learning resources for students and teachers are still limited, and communication between the two are also disrupted the need for e-learning website as a means of communication and information both about learning, duties, references and others that will be useful for both parties. It needs creativity from teachers to deliver and deliver e-learning related learning materials to appeal students in using e-learning can be more leverage. So the teacher's competence increases and the learning outcomes are better.

c. Solutions from Infrastructure

The solution to answer the problems regarding the related school infrastructure is still not yet maximal computer facilities in SMA Negeri 1 Yogyakarta, it is necessary for

a policy to utilize the study space for all inner school residents in utilizing existing to maximize and can be used well.

No.	Study / Sub Chapter	Solutions to resolve the issue
1	Human Resources (HR)	<p>a) There needs to have awareness and commitment from every teacher to be able to learn and practice using computer and internet for learning process better and more varied.</p> <p>b) Teachers who have applied the learning can provide direction / assistance to fellow teachers if experiencing difficulties in the implementation of e-learning.</p> <p>c) Need for awareness and willingness of students and teachers to implement learning so that students can learn independently, looking for sources of learning from everything encountered, from the internet, books, and others.</p> <p>d) Build awareness to learn about the importance of updating of learning, especially in the field of IT so that the increase in human resources can be maximized.</p>
2	Material Facility or Learning Materials	<p>a) It needs creativity from teachers to provide and deliver e-learning related learning materials to appeal students in using e-learning can be more leverage.</p> <p>b) There is a need for training and introduction of students and teachers on more e-learning lessons of learning and more varied files to increase students' interest and enthusiasm to explore the abilities, ideas, and creativity of the students or teachers.</p>
3	In terms of infrastructure	<p>a) There is a need for a policy to utilize the learning space for all school residents in utilizing the existing to maximize and can be used properly.</p> <p>b) The addition of internet access at any point Wi-Fi / hotspot so that in every room can be reached with internet access, so that learning e-learning or internet based can ease in learning.</p> <p>c) Existing internet quota needs to be added so all can use comfortably</p>

## Conclusion

Based on the results of research and discussion that has been described above can be concluded that:

1. The e-learning policy in SMA Negeri 1 Yogyakarta is based on three considerations, First the government response in RENSTRA Year 2005-2009 is related to the problem in the field of equity expansion of education access. Second, the response to the 2010 RENSTRA to date is related to the equalization of educational opportunities and the improvement of the quality of education. Third, the response to Long-Term Development



Plan (RPJP) 2005-2025 DEPDIKNAS which contains the education efforts in Indonesia to Indonesia gold, as well as application of Curriculum 2013 at this time.

2. Learning e-learning in SMA Negeri 1 Yogyakarta in terms of human resources.

Human resources, the majority of teachers use computers and the internet only to search for materials or teaching materials. The utilization of e-learning is not optimal because of the low commitment of teachers. Interaction and communication between teachers and students has not been maximal so students still have difficulty in learning with e-learning.

3. Obstacles e-learning in SMA Negeri 1 Yogyakarta in terms of Human Resources (HR) is the technical ability of teachers which is still lacking, many teachers who have not understood and have not implemented e-learning. Students choose to use ordinary manual learning instead of e-learning.

4. Solutions that can be implemented by the school in terms of Human Resources (HR), including the need for awareness of all teachers using the internet in particulare-learning, giving rewards to active and creative teachers, motivating othersteachers use e-learning and awareness and willingness of students to use e-learning, and need independent learning. Solutions in terms of materials or teaching materials, teaching materials and materials are more varied, among others, the policy of utilizing the school learning space can be maximized and used properly.

Based on the conclusion of the results of the study, the implication of this research result is the addition of internet access including Wi-Fi greatly give influence to the increasing of student activeness. This is reinforced by the increased activity and student learning outcomes by downloading sample material in the form of images to facilitate students and understand the material in the learning process. So the implications of this study in the use of example images have reinforced the theory of learning in this study.

Based on the conclusions of the research results, suggestions that can be given are as follow: 1. E-learning can be used as an alternative for teachers in an effort to improve student activeness in learning.2. There is a need for refresher in the form of training, seminars, workshops, workshops and other academics to develop e-learning lessons related to various approaches, methods, models and instructional media to be implemented and implemented in an internet classroom. 3. Teaching by using e-learning can improve students' activity and learning outcomes. However, in this study only carried on the subject of the theme concept and the variety of e-learning design style. So that researchers consider the need to develop the implementation of e-learning more for other subjects.

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