INTRODUCTION
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What is Scientific Research?

- A scientific inquiry or investigation into a specific problem with the objective of finding answer or solutions to it
Why Study Research?

- Research provides you with the knowledge and skills needed for the fast-paced decision-making environment
RESEARCH PROCESS

OBSERVATION
Broad area of research interest identified

PROBLEM DEFINITION

THEORITICAL FRAMEWORK

ANALYSIS AND INTERPRETATION

RESEARCH DESIGN

GENERATION OF HYPOTHESES
CLASSIFICATION OF EDUCATIONAL RESEARCH

Based on Goal or Purpose of the Research
- Basic Research
- Applied Research

The Research Being Conducted (Methodology)
- Experimental Research
- Ex Post Facto Research
- Survey Research
- Historical Research
- Ethnographic Research
BASIC RESEARCH IS THE EXTENSION OF KNOWLEDGE

APPLIED RESEARCH IS THE SOLUTION OF AN IMMEDIATE, PRACTICAL PROBLEM
<table>
<thead>
<tr>
<th>TYPE</th>
<th>CHARACTERISTIC</th>
<th>QUESTION ASKED</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPERIMENTAL</td>
<td>AT LEAST ONE VARIABLE IS MANIPULATED TO DETERMINE THE EFFECT OF MANIPULATION</td>
<td>WHAT IS THE EFFECT OF THE EXPERIMENTAL VARIABLE?</td>
</tr>
<tr>
<td>EX POST FACTO</td>
<td>VARIABLES ARE STUDIED AS THEY OCCUR IN A NATURAL SETTING BECAUSE THEY HAVE ALREADY OCCURRED ARE NOT MANIPULATED</td>
<td>WHAT ARE THE RELATIONSHIP AND POSSIBLE EFFECT AMONG VARIABLES?</td>
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### Methodology (2)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>CHARACTERISTIC</th>
<th>QUESTION ASKED</th>
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</thead>
<tbody>
<tr>
<td>SURVEY</td>
<td>The incidence, relationship and distribution of variables are studied</td>
<td>What are the characteristic of the variables?</td>
</tr>
<tr>
<td>HISTORICAL</td>
<td>A description of past events or facts is developed</td>
<td>What was or what happened?</td>
</tr>
<tr>
<td>TYPE</td>
<td>CHARACTERISTIC</td>
<td>QUESTION ASKED</td>
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<tr>
<td>ETHNOGRAPHIC</td>
<td>A HOLISTIC DESCRIPTION OF PRESENT PHENOMENA</td>
<td>WHAT IS THE NATURE OF THE PHENOMENA?</td>
</tr>
</tbody>
</table>
Types of Studies Used to do Research

- Reporting research is done only to provide data and information required for certain decisions.
- Descriptive research aims to describe or define who is involved in an activity, what, where and how to do it.
Explanatory research that aims to explain phenomena
Predictive
to predict phenomenon/ identifies what to expect from a phenomenon
What is Good Research?

- Following the standards of the scientific method
  - Purpose clearly defined
  - Research process detailed
  - Research design thoroughly planned
  - Limitations frankly revealed
  - High ethical standards applied
What is Good Research? (cont.)

- Following the standards of the scientific method (cont.)
  - Adequate analysis for decision-maker’s needs
  - Findings presented unambiguously
  - Conclusions justified
  - Researcher’s experience reflected
When Research Should be Avoided

- When information cannot be applied to a critical managerial decision
- When managerial decision involves little risk
- When management has insufficient resources to conduct a study
- When the cost of the study outweighs the level of risk of the decision
The Value of Acquiring Research Skills

- To gather more information before selecting a course of action
- To do a high-level research study
- To understand research design
- To evaluate and resolve a current dilemma
- To establish a career as a research specialist