

Research Methodology

1.1.1.1

Problem Statement



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Define Problem

- **A situation that needs a solution**
- A condition to be improved upon,
- A difficulty to be eliminated, or
- A troubling **question** within existing practice that points to a need for meaningful understanding.

Define Problem

- Take this statement, “everybody wants to go to heaven but nobody wants to die”. Dying looks like a problem that needs a solution. Yet there is no possible solution to it. People must die it’s a natural phenomena.
- A research on how people can live forever makes little or no sense.

Define Problem and Objectives

1. There is typically a key business problem (or opportunity) that needs to be acted upon, but there is a lack of information to make that decision comfortably; the job of a market researcher is to inform that decision with solid data.
- Make sure the problem is restricted in scope and context of the problem is clear
 - Start with a general statement of the problem

Research Problem

Examples of “business problems” might be

“Design the Promotion Strategy for Hunter Jacket”

WHAT IS A PROBLEM STATEMENT?

- A problem statement is the description of an issue currently existing which needs to be addressed.
- It provides the context for the research study and generates the questions (discuss later) which the research aims to answer.
- The statement of the problem is the focal point of any research.
- A good problem statement is just one sentence (with several paragraphs of elaboration).

What are key components of the statement problem?

- Problem statements often have three elements:
 1. The problem itself, stated clearly and with enough contextual detail to establish why it is important
 2. The method of solving the problem, often stated as a claim or a working thesis
 3. The purpose, statement of objective and scope of the project being proposed.
- These elements should be brief and the statement of the problem should clearly indicate what is to be investigated.
- One page is enough for a statement of problem.

PROBLEM STATEMENT

For example it could be:

"The frequency of job layoffs is creating fear, anxiety, and a loss of productivity in middle management employees."

- **While this problem statement is just one sentence, it need be accompanied by a few paragraphs that elaborate on the problem.**
- **The paragraphs could cover arguments that make the problem important enough to study.**
- **They could include the opinions of others**
- **Explanations of how the problem relates to business, social or political trends via presentation of data that demonstrates the scope and depth of the problem.**

Research Questions

- In some situations, rather than stating research objectives, researchers will prefer to use research questions. One of the definition of Problem Statement that “it provides the context for the research study and generates the questions which the research aim to answer”.
- Thus, the objectives stated in the previous example are reframed as research questions:
- Which factors influence the marketing environment?
- What Strategy should be adopted for a good marketing environment?
- “What strategy should be adopted for the promotion of Hunter Jacket Product?”

Types of Research Question

- The three question types can be viewed as cumulative. That is, a relational study assumes that you can first describe (by measuring or observing) each of the variables you are trying to relate. And, a causal study assumes that you can describe both the cause and effect variables and that you can show that they are related to each other. Causal studies are probably the most demanding of the three.

Types of Research Question (Descriptive)

- When a study is designed primarily to describe what is going on or what exists.
- To describe the proportion of people who hold various opinions are primarily descriptive in nature.
- To know skills of administrator, the status of an institute or class room,
- To inquire where no-one knows what is actually happening.
- To know what percent of the population would vote to any of the parties in election

Types of Research Question (Relational)

When a study is designed to look at the relationships between two or more variables.

Two basic purposes

- 1. Help explain important human behaviors
(Explanatory Studies)
- 2. Predict likely outcomes
(Prediction Studies)

Types of Research Question (Relational)

- A public opinion poll that compares what proportion of males and females say they would vote for a Democratic or a Republican candidate in the next presidential election is essentially studying the relationship between gender and voting preference.
- Three major types of problems;
 - a. is variable X related to variable Y?
 - b. how well does variable X predict variable Y?
 - c. What are the relationship among a large number of variables and what predictions can be made?

Types of Research Question (Casual)

- When a study is designed to determine whether one or more variables (e.g., a program or treatment variable) causes or affects one or more outcome variables.
- A **causal study** assumes that you can describe both the cause and effect variables and that you can show that they are related to each other.

Types of Research Question (Casual)

- If we did a public opinion poll to try to determine whether a recent political advertising campaign changed voter preferences,
- we would essentially be studying whether the campaign (cause) changed the proportion of voters who would vote party “A” or Party “B” (effect).

Research Questions

- In some situations, rather than stating research objectives, researchers will prefer to use research questions.
- The objectives stated in the previous example are reframed as research questions:
- Q.1: Is alcohol consumption associated with increased partner violence?
- Q.2: Is work force status (employment, unemployment) associated with variations in the incidence of partner violence?

A good research question:-

- Well defined and focused on specifics
- Involves the search for relationships between two or more variables.
- Should be able to tell the reader what actually you are looking in particular.
- Make sure the research questions provide a framework for reporting the results.