

WHAT IS RESEARCH?

Business research can be defined as “a systematic and scientific procedure of data collection, compilation, analysis, interpretation, and implication pertaining to any business problem”.

Research is a systematic inquiry to describe, explain, predict and control the observed phenomenon. Research involves inductive and deductive methods (Babbie, 1998). Inductive methods analyze the observed phenomenon and identify the general principles, structures, or processes underlying the phenomenon observed; deductive methods verify the hypothesized principles through observations. The purposes are different: one is to develop explanations, and the other is to test the validity of the explanations.

Research purposes

Research involves systematic investigation of phenomena, the purpose of which could be for:

1. **Information gathering** and/or
 1. **Exploratory**: e.g., discovering, uncovering, exploring
 2. **Descriptive**: e.g., gathering info, describing, summarizing
2. **Theory testing**
 1. **Explanatory**: e.g., testing and understanding causal relations
 2. **Predictive**: e.g., predicting what might happen in various scenarios

What are the purposes of research?

Patton (1990) pointed out the importance of identifying the purpose in a research process. He classified four types of research based on different purposes:

1. **Basic Research**: This research is conducted largely for the enhancement of knowledge, and is research which does not have immediate commercial potential. The research which is done for human welfare, animal welfare and plant kingdom welfare. It is called basic, pure, fundamental research. The purpose of this research is to understand and explain. This type of research takes the form of a theory that explains the phenomenon under investigation to give its contribution to knowledge. This research is more descriptive in nature exploring what, why and how questions.

2. ***Applied Research:*** Applied research is designed to solve practical problems of the modern world, rather than to acquire knowledge for knowledge's sake. The goal of applied research is to improve the human condition. It focuses on analysis and solving social and real life problems. This research is generally conducted on a large scale basis and is expensive. As such, it is often conducted with the support of some financing agency like the national government, public corporation, World Bank, UNICEF, UGC, Etc. According to Hunt, “applied research is an investigation for ways of using scientific knowledge to solve practical problems” for example:- improve agriculture crop production.
3. ***Evaluation Research*** (summative and formative): Evaluation research studies the processes and outcomes aimed at attempted solution. The purpose of formative research is to improve human intervention within specific conditions, such as activities, time, and groups of people; the purpose of summative evaluation is to judge the effectiveness of a program, policy, or product.
4. ***Action Research:*** Action research aims at solving specific problems within a program, organization, or community. Patton (1990) described that design and data collection in action research tends to be more informal, and the people in the situation are directly involved in gathering information and studying themselves.

Other Types of Research

Quantitative Research

This research is based on numeric figures or numbers. Quantitative research aim to measure the quantity or amount and compares it with past records and tries to project for future period. In social sciences, “quantitative research refers to the systematic empirical investigation of quantitative properties and phenomena and their relationships”. The objective of quantitative research is to develop and employ mathematical models, theories or hypothesis pertaining to phenomena.

The process of measurement is central to quantitative research because it provides fundamental connection between empirical observation and mathematical expression of quantitative

relationships. Statistics is the most widely used branch of mathematics in quantitative research. Statistical methods are used extensively with in fields such as economics and commerce.

Qualitative Research

Qualitative research presents non-quantitative type of analysis. Qualitative research is collecting, analyzing and interpreting data by observing what people do and say. Qualitative research refers to the meanings, definitions, characteristics, symbols, metaphors, and description of things.

Qualitative research is much more subjective and uses very different methods of collecting information, mainly individual, in-depth interviews and focus groups. The nature of this type of research is exploratory and open ended. Small number of people is interviewed in depth and or a relatively small number of focus groups are conducted.

Types of Research Methods According to Nature of the Study

Types of the research methods according to the nature of research can be divided into two groups: descriptive and analytical.

Descriptive research usually involves surveys and studies that aim to identify the facts. In other words, descriptive research mainly deals with the “description of the state of affairs as it is at present” and there is no control over variables in descriptive research.

Analytical research, on the other hand, is fundamentally different in a way that “the researcher has to use facts or information already available and analyse these in order to make a critical evaluation of the material”.

Research Process

Scientific research involves a systematic process that focuses on being objective and gathering a multitude of information for analysis so that the researcher can come to a conclusion.. The scientific research process is a multiple-step process where the steps are interlinked with the other steps in the process. If changes are made in one step of the process, the researcher must review all the other steps to ensure that the changes are reflected throughout the process. Professionals need to understand the eight steps of the research process as they apply to conducting a study.

Step 1: Identify the Problem

The first step in the process is to identify a problem or develop a research question. The research problem may be something the agency identifies as a problem, some knowledge or information that is needed by the agency.

Step 2: Review the Literature

Now that the problem has been identified, the researcher must learn more about the topic under investigation. To do this, the researcher must review the literature related to the research problem. This step provides foundational knowledge about the problem area. The review of literature also educates the researcher about what studies have been conducted in the past, how these studies were conducted, and the conclusions in the problem area.

Step 3: Clarify the Problem

Many times the initial problem identified in the first step of the process is too large or broad in scope. In step 3 of the process, the researcher clarifies the problem and narrows the scope of the study. This can only be done after the literature has been reviewed. The knowledge gained through the review of literature guides the researcher in clarifying and narrowing the research project.

Step 4: Clearly Define Terms and Concepts

Terms and concepts are words or phrases used in the purpose statement of the study or the description of the study. These items need to be specifically defined as they apply to the study. Terms or concepts often have different definitions depending on who is reading the study. To minimize confusion about what the terms and phrases mean, the researcher must specifically define them for the study. This also makes the concepts more understandable to the reader.

Step 5: Define the Population

Research projects can focus on a specific group of people, facilities, park development, employee evaluations, programs, financial status, marketing efforts.. For example, if a researcher wants to examine a specific group of people in the community, the study could examine a specific age group, males or females, people living in a specific geographic area. The research problem and the purpose of the study assist the researcher in identifying the group to involve in the study. In research terms, the group to involve in the study is always called the population. Defining the population assists the researcher in several ways. First, it narrows the scope of the study from a very large population to one that is manageable. Second, the population identifies the group that the researcher's efforts will be focused on within the study. Finally, by

defining the population, the researcher identifies the group that the results will apply to at the conclusion of the study.

Step 6: Develop the Instrumentation Plan

The plan for the study is referred to as the instrumentation plan. The instrumentation plan serves as the road map for the entire study, specifying who will participate in the study; how, when, and where data will be collected; and the content of the program. The instrumentation plan specifies all the steps that must be completed for the study.

Step 7: Collect Data

Once the instrumentation plan is completed, the actual study begins with the collection of data. The collection of data is a critical step in providing the information needed to answer the research question. Every study includes the collection of some type of data—whether it is from the literature or from subjects—to answer the research question. Data can be collected in the form of words on a survey, with a questionnaire, through observations, or from the literature. Once the data are collected on the variables, the researcher is ready to move to the final step of the process, which is the data analysis.

Step 8: Analyze the Data

The researcher finally has data to analyze so that the research question can be answered. In the instrumentation plan, the researcher specified how the data will be analyzed. The researcher now analyzes the data according to the plan. The results of this analysis are then reviewed and summarized in a manner directly related to the research questions.

How to Write Research Proposal