

# Research Design

## Concept and Types of Research Design

The research design is a framework or blueprint for conducting the marketing research project. It specifies the precise details of the procedures necessary for obtaining the required information. It is important to have a good research design in order to ensure that the marketing research project is conducted effectively and efficiently.

We broadly classify the research design into two types:

1. Exploratory
2. Conclusive- Descriptive and Experimental

### Exploratory

Exploration refers to finding something existing but unknown to us. It is getting information and getting an idea about the issue. However, the information is not valid for making major decisions.

### Conclusive- Descriptive and Experimental

Conclusion refers to an understanding obtained from discussion. It is based on evaluation of the situation.. The information obtained for conclusion covers all aspects of inquiry. It is reasonable in depth and good in terms of validity and reliability.

Exploratory research is used in situations where the issue is not clear. It helps gain additional insights about the issue (clarifies the problem) and formulate hypotheses (tentative solutions to the problem on hand).

Conclusive research would be used to test specific hypotheses, examine specific relationships, or make predictions; this will include both descriptive and causal research designs.

Descriptive research is used to describe something, usually market characteristics or functions.

Causal research is used to obtain evidence regarding cause-and-effect relationships.

## **Exploratory Research Design**

The aim of exploratory research design is to get a better understanding or insights of the research problem. Exploratory research helps ensure that a rigorous and conclusive study will not begin with an inadequate understanding of the nature of the business problem.

**Drivers** Exploratory research is undertaken in the following situations.

**Limited knowledge-** There are limited amount of research works discussing the issue and hence prior knowledge about these studies are limited. The researchers need insights to develop further research works.

**Prior to a major research** - When a major research is planned to for making policy decisions, a pilot study in the form of exploratory research is undertaken.

### **Characteristics of the exploratory design -**

**Single vs serial research** -Exploratory research may be a single research investigation or it may be a series of informal studies; both methods provide background information.

**Informal approach** - Researchers must be creative in the choice of information sources. They should explore all appropriate inexpensive sources before embarking on expensive research of their own. However, they should still be systematic and careful at all times.

**Nature of data** - Most exploratory research designs provide qualitative data which provides greater understanding of a concept. In contrast, quantitative data provides precise measurement.

### **Purposes of the exploratory design-**

There are three different purposes for conducting exploratory research; all three are interrelated:

A. **Discovering new ideas** Uncovering consumer needs is a great potential source of ideas. Exploratory research is often used to generate new product ideas, ideas for advertising copy, etc.

B. **Concept testing** Concept testing refers to those research procedures that test some sort of stimulus as a proxy for a new, revised, or remarketed product or service. Generally, consumers are presented with an idea and asked if they like it would use it, etc. Concept testing is a means of evaluating ideas by providing a feel for the merits of the idea prior to the commitment of any research and development, marketing, etc. Concept testing portrays the functions, uses, and possible situations for the proposed product

**C. Diagnosing a situation-** Exploratory research helps diagnose the dimensions of problems so that successive research projects will be on target. Particularly, when the topic of research is very new, the researcher needs insights to develop research problem and magnitude of the issue and variables involved in the research.

**D. Screening alternatives** -When several opportunities arise and budgets restrict the use of all possible options, exploratory research may be utilized to determine the best alternatives. Certain evaluative information can be obtained through exploratory research.

### **Design Categories -**

**A. Experience Surveys** -Concepts may be discussed with people who have had personal experience in the field being researched. This constitutes an informal experience survey.

Who should conduct?

Such a study, aimed at experience sharing, if conducted by the business manager rather than the research department, shall be more useful for narrowing down the research domain.

Who may be the respondents?

Senior executives or managers inside the firm and consultants or experienced people who have been carefully selected from outside the organization form the population for the study.

How do you collect data?

An experience survey may be a small number of interviews.

### **B. Secondary Data Analysis**

A quick, easy and economical source of background information is trade literature. Research rarely begins without a literature review. In this method key considerations are:

**Relevance** –The research works or conceptual papers or data chosen for study should be relevant to the issue. The unnecessary one are to be carefully avoided.

**Sufficient** – Another important point is whether the studies or data are adequate to provide an answer to the problem on hand. In many a case, data gaps may exist. Sometimes only outdated data or scholarly works will be available. When relevant and sufficient research or data is not available, researchers has to supplement this method with primary data based inquiry.

### **C. Case Study Method**

The purpose of a case study is to obtain information from one, or a few, situations similar to the researcher's situation. A case study has no set procedures. However, this freedom to research makes the success of the case study highly dependent on the ability of the researcher.

To be useful, the inquiry should cover all the relevant areas of the person or organization under study. One should get clarity in the inquiry by asking questions like What? Which? Why? Where? How? Who? When?

For instance, you are inquiring a case of purchase of a refrigerator; the relevant questions helpful to researcher may be as given under.

What is the reason for the purchase? Which brand did you buy?

Why did you buy that brand? Where did you buy it?

How did you know about it and how did you buy (down payment or a scheme of installments)?

Who influenced who decided and who purchased? When did you buy-during off season or normal times?

In inquiry of this kind, the cooperation of the party whose history is being studied is very important.

#### ***D. Pilot Studies***

The term "pilot studies" is used as a collective to group together a number of diverse research techniques all of which are conducted on a small scale. They generate primary data from consumers, or other subjects of ultimate concern. There are three major categories of pilot studies:

***Focus group interviews:*** These are interviews with a small group of people. They have a flexible format. It means they can discuss anything from brand to a product itself. They are free-flowing – participants can talk freely to express their view points.

***Projective techniques:*** Individuals may not give true answers in many cases. This is more so in case of sensitive issues like cigarette smoking, alcohol drinking etc. They may give a true answer if the question is disguised. If respondents are presented with unstructured and ambiguous

stimuli and are allowed considerable freedom to respond, they are more likely to express their true feelings.

**Depth interviews:** Depth interviews are similar to the interviews of a clinical psychiatrist. They are more penetrative and dig the history of the patient. In this case, they seek to know more about the respondent in detail.

### **Descriptive Research Design**

Descriptive research is conducted to discover and determine the characteristics of a population. It seeks to determine the answers to the questions “who,” “what,” “when,” “where,” and “how.” However, it does not tell us “why” or the causes for an effect.

It is characterized by a clear statement of the problem, specific hypotheses, and detailed information needs. In this type of research design, the researcher begins with the structure ( a model) already defined and proceeds to actual data collection in order to describe a process or determine some market variable..

### **Causal Research Design**

Causal research design deals with answering questions like “why”. It attempts to identify cause-and-effect relationships between variables. It usually follows exploratory and descriptive research and, therefore, the researchers are quite knowledgeable about the subject.

For instance, sales of a firm has gone up. The causal factors may be – product effectiveness, ad effectiveness, consumer preferences, competitor weak points, etc. Exploratory research provides a rough estimate of the major reason. Let us say, it is identified as ad effectiveness.

Descriptive research describes the relationship between ad elements and consumer attitudes or preferences to the product. It explains the correlation among the ad variables and consumer preferences. Causal research, precisely estimates the extent to which each variable of ad has contributed to the rise in sales.

Thus, causal research attempts to establish that when we do one thing (e.g., increase advertising), another will follow (e.g., increased sales). In other words every action causes some effect. It seeks to obtain evidence regarding cause-and-effect relationships. It proceeds from a pre-established structure and attempts to infer causal relationships between variables.

### **Experimental Design**

The causal research requires examination of the effect with reference to a cause. It seeks to answer the question- If there is n degrees of change in X, how many degrees of change has taken place in Y? Causal research can be conducted either in a laboratory or in a field setting. However, the situation should be such that there are only two variables –dependent and independent – for observation and measurement. We can define experiment as follows.

“An experiment involves the creation of a contrived situation in order that the researcher can manipulate one or more variables whilst controlling all of the others and measuring the resultant effects”.

DR. KAPIL