

## EXPLORATORY RESEARCH DESIGN

When a researcher has a limited amount of experience with or without knowledge about a research issue, exploratory research is a useful preliminary step that helps ensure that a more rigorous, more conclusive future study will not begin with an inadequate understanding of the nature of the management problem. The findings discovered through exploratory research would lead the researcher to emphasize learning more about the particulars of the findings in subsequent conclusive studies. Conclusive research answers questions of fact necessary to determine course of action. This is never the purpose of exploratory research.

Much but certainly not all, exploratory research provides qualitative data. Usually, exploratory research provides qualitative data. Usually, exploratory research provides greater understanding of a concept or crystallizes a problem rather than providing precise measurement. A researcher may search for numbers to indicate economic trends, but a rigorous mathematical analysis is not performed. Any source of information may be informally investigated to clarify which qualities or characteristics, are associated with art object, situation, or Issue.

Alternately, the purpose of quantitative research is to determine the quantity or extent of some phenomenon in the form of numbers. Most exploratory research is not quantitative research. Exploratory research may be a single research investigation or a series of informal studies to provide background information. Researchers must be creative in the choice of information sources to be investigated. They must be flexible enough to investigate all inexpensive sources that may possibly provide information to help understand a problem.

Examples of exploratory research are:

- Survey of experts to validate an instrument
- Pilot studies conducted to perform reliability check on a questionnaire
- Use of secondary data in order to analyze it in a qualitative way
- Qualitative research

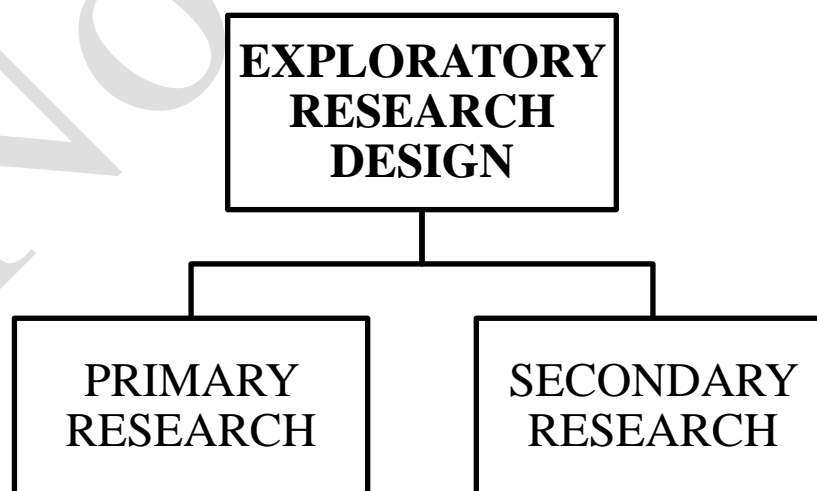
Exploratory research design is characterized by flexibility to gain insights and develop hypotheses. It does not follow a planned questionnaire or sampling. It is based on literature survey, experimental survey, and analysis of selected cases. Unstructured interviews are used to offer respondents a great deal of freedom. No research project is purely and solely based on this design. It is used as complementary to descriptive design and causal design.

This need to be flexible does not mean that researchers do not have to be careful and systematic when designing exploratory research studies.

## **Characteristics of Exploratory Research**

1. Exploratory research is inexpensive, interactive, unrestricted, and open-ended in nature.
2. It is an unstructured type of research.
3. No pre-research is conducted to support exploratory research and even there is no prior information available on the problem from the past researcher.
4. It enables a researcher to answer all questions like why, how, and what. Therefore, it helps a researcher to know about the purpose of the research.
5. All the available material should be studied in detail.
6. It consumes a lot of time to conduct exploratory research and it might sometimes lead to disappointments.
7. There is no standard format to carry out exploratory research. It is flexible, scattered, and broad in nature.
8. There must a few theories which can verify your outcome.
9. Make sure the problem you are going to conduct research about should have importance and value.
10. Most of the time you will get qualitative data as an outcome of this research.

## **TYPES OF EXPLORATORY RESEARCH DESIGN**



## Primary Research Methods

In this research, information is directly gathered from the subject. The information can be collected from a group or an individual. A researcher can either use a third party to conduct research for him or he can himself conduct the research. The purpose of conducting this research is to collect information about the problem which requires in-depth analysis.

- **Surveys/polls:** Surveys/polls are used to gather information from a predefined group of respondents. It is one of the most important quantitative methods. Various types of surveys or polls can be used to explore opinions, trends, etc. With the advancement in technology, surveys can now be sent online and can be very easy to access. For instance, use of a survey app through tablets, laptops or even mobile phones. This information is also available to the researcher in real time as well. Nowadays, most organizations offer short length surveys and rewards to respondents, in order to achieve higher response rates.

**For example:** A survey is sent to a given set of audience to understand their opinions about the size of mobile phones when they purchase one. Based on such information organization can dig deeper into the topic and make business related decision.

- **Interviews:** While you may get a lot of information from public sources, but sometimes an in person interview can give in-depth information on the subject being studied. Such a research is a qualitative research method. An interview with a subject matter expert can give you meaningful insights that a generalized public source won't be able to provide. Interviews are carried out in person or on telephone which have open-ended questions to get meaningful information about the topic.

**For example:** An interview with an employee can give you more insights to find out the degree of job satisfaction, or an interview with a subject matter expert of quantum theory can give you in-depth information on that topic.

- **Focus groups:** Focus group is yet another widely used method in exploratory research. In such a method a group of people is chosen and are allowed to express their insights on the topic that is being studied. Although, it is important to make sure that while choosing the individuals in a focus group they should have a common background and have comparable experiences.

**For example:** A focus group helps a research identify the opinions of consumers if they were to buy a phone. Such a research can help the researcher understand what the consumer value while buying a phone. It may be screen size, brand value or even the dimensions. Based on which the organization can understand what are consumer buying attitudes, consumer opinions, etc.

- **Observations:** Observation research can be qualitative or quantitative observation. Such a research is done to observe a person and draw the finding from their reaction to certain parameters. In such a research, there is no direct interaction with the subject.

**For example:** An FMCG company wants to know how its' consumer react to the new shape of their product. The researcher observes the customers first reaction and collects the data, which is then used to draw inferences from the collective information.

### Secondary Research Methods

Secondary research is gathering information from previously published primary research. In such a research you gather information from sources likes case studies, magazines, newspapers, books, etc.

- **Online research:** In today's world, this is one of the fastest ways to gather information on any topic. A lot of data is readily available on the internet and the researcher can download it whenever he needs it. An important aspect to be noted for such a research is the genuineness and authenticity of the source websites that the researcher is gathering the information from.

**For example:** A researcher needs to find out what is the percentage of people that prefer a specific brand phone. The researcher just enters the information he needs in a search engine and gets multiple links with related information and statistics.

- **Literature research:** Literature research is one of the most inexpensive method used for discovering a hypothesis. There is tremendous amount of information available in libraries, online sources, or even commercial databases. Sources can include newspapers, magazines, books from library, documents from government agencies, specific topic related articles, literature, Annual reports, published statistics from research organizations and so on.

However, a few things have to be kept in mind while researching from these sources. Government agencies have authentic information but sometimes may come with a nominal cost. Also, research from educational institutions is generally overlooked, but in fact educational institutions carry out more number of research than any other entities.

Furthermore, commercial sources provide information on major topics like political agendas, demographics, financial information, market trends and information, etc.

For example: A company has low sales. It can be easily explored from available statistics and market literature if the problem is market related or organization related or if the topic being studied is regarding financial situation of the country, then research data can be accessed through government documents or commercial sources.

- **Case study research:** Case study research can help a researcher with finding more information through carefully analyzing existing cases which have gone through a similar problem. Such analysis is very important and critical especially in today's business world. The researcher just needs to make sure he analyses the case carefully in regards to all the variables present in the previous case against his own case. It is very commonly used by business organizations or social sciences sector or even in the health sector.

**For example:** A particular orthopedic surgeon has the highest success rate for performing knee surgeries. A lot of other hospitals or doctors have taken up this case to understand and benchmark the method in which this surgeon does the procedure to increase their success rate.

## USES OF EXPLORATORY RESEARCH DESIGN

It is appropriate when the research objective is to provide insights into:

- i. Identifying the problems or opportunities
- ii. Defining the problem more precisely
- iii. Gaining deeper insights into the variables operating in a situation
- iv. Identifying relevant courses of action
- v. Establishing priorities regarding the potential significance of problems or opportunities
- vi. Gaining additional insights before an approach can be developed and
- vii. Gathering information on the problems associated with doing conclusive research.

Much research has been of an exploratory nature; emphasizing on finding practices or policies that needed changing and on developing possible alternatives.

On examination of the objectives of exploratory research, it is well understood that it could be used at the initial stages of the decision making process. It allows the marketer to gain a greater understanding of something that the researcher doesn't know enough about. This helps the decision maker and the researcher in situations when they have inadequate knowledge of the problem situation and/or alternative courses of action. In short, exploratory research is used in the absence of tried models and definite concepts.

Exploratory research could also be used in conjunction with other research. As mentioned below, since it is used as a first step in the research process, defining the problem, other designs will be used later as steps to solve the problem. For instance, it could be used in situations when a firm

finds the going gets tough in terms of sales volume, the researcher may develop use exploratory research to develop probable explanations. Analysis of data generated using exploratory research is essentially abstraction and generalization. Abstraction refers to translation of the empirical observations, measurements etc. into concepts; generalization means arranging the material so that it focuses on those structures that are common to all or most of the cases.

This design is followed to discover ideas and insights to generate possible explanations. It helps in exploring the problem or situation. It is, particularly, emphasized to break a broad unclear problem statement into smaller pieces or sub-problem statements that help forming specific hypothesis.

The exploratory research design is used to increase familiarity of the analyst with problem under investigation. This is particularly true when researcher is new in area, or when problem is of different type.