

UNIT 4: TYPES OF RESEARCH

1. RESEARCH DESIGN CLASSIFICATION

A framework or blueprint for conducting the marketing research project. It specifies the details of the procedures necessary for obtaining the information needed to structure and/or solve marketing research problems. Research designs can be broadly classified as exploratory or conclusive.

Exploratory Research

Exploratory research is the type of research which has its primary objective as providing insights into and understanding the problem confronting the researcher. It is used in cases when you must define the problem more precisely, identify relevant courses of action, or gain additional insights before an approach can be developed. The information needed is only loosely defined at this stage, and the research process that is adopted is flexible and unstructured. The findings of exploratory research should be regarded as tentative or as input to further research. Typically, such research is followed by further exploratory or conclusive research.

Conclusive Research

Conclusive research is designed to assist the decision maker in determining, evaluating, and selecting the best course of action to take in a given situation. Conclusive research is typically more formal and structured than exploratory research. It is based on large, representative samples, and the data obtained are subjected to quantitative analysis. The findings from this research are considered conclusive in nature in that they are used as input into managerial decision making.

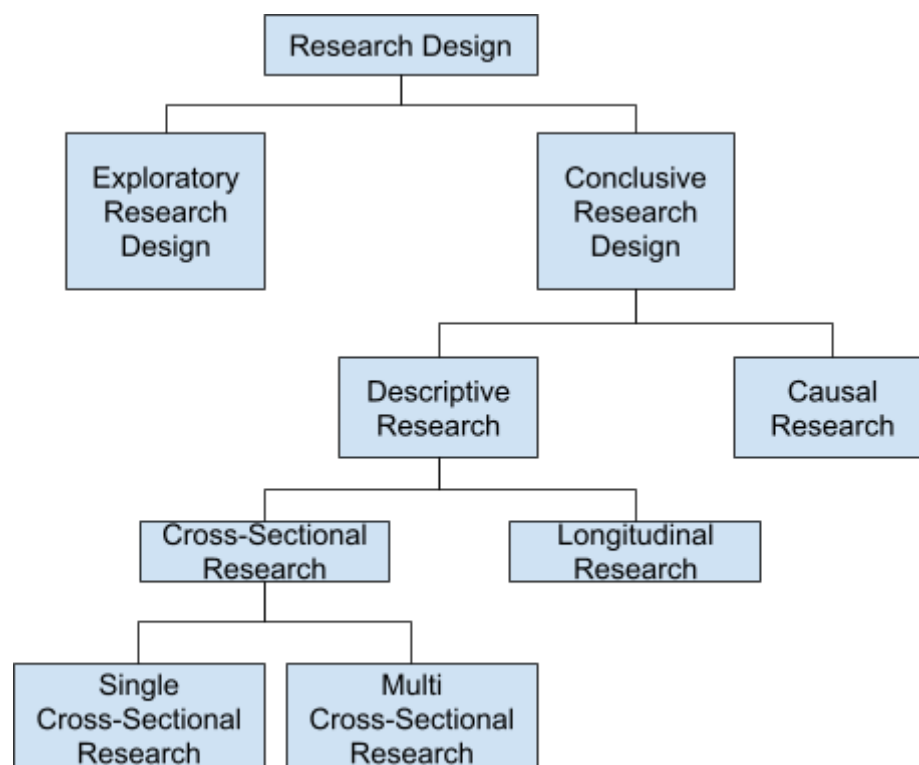


Fig 4.1 Classification of Marketing Research Designs

	Exploratory	Conclusive
Objective	To provide insights and understanding	To test specific hypotheses and examine relationships
Characteristics	<ul style="list-style-type: none"> ● Information needed is defined only loosely. ● Research process is flexible and unstructured. ● Sample is small and nonrepresentative. ● Analysis of primary data is qualitative. 	<ul style="list-style-type: none"> ● Information needed is clearly defined. ● Research process is formal and structured. ● Sample is large and representative. ● Data analysis is quantitative.
Findings/Results	Tentative	Conclusive
Outcome	Generally followed by further exploratory or conclusive research	Findings used as input into decision making

2. DESCRIPTIVE RESEARCH

Descriptive research is a type of conclusive research that has its major objective as the description of usually market characteristics or functions. Descriptive research is conducted for the following reasons:

1. To describe the characteristics of relevant groups, such as consumers, salespeople, organizations, or market areas. For example, we could develop a profile of the heavy users/frequent shoppers of Reliance Smart Bazaar.
2. To estimate the percentage of units in a specified population exhibiting a certain behavior. For example we might be interested in estimating the percentage of heavy users of Reliance Smart Bazaar who also visit Vishal Mega Mart.
3. To determine the perceptions of product characteristics. For example how do households perceive the various department stores in terms of choice criteria?
4. To determine the degree to which marketing variables are associated. For example, to what extent is shopping at department stores related to eating out?
5. To make specific predictions. For example, what will be the retail sales of Reliance Smart Bazaar for groceries in Dimapur?

Cross-Sectional Research

Cross-sectional research is a type of observational study that analyzes data from a population, or a representative subset, at a specific point in time. Think of it as taking a "snapshot" of the population to examine the prevalence of certain characteristics or conditions.

Single Cross-Sectional Research

A single cross-sectional research design is an observational study that examines a population or a representative subset at a single, specific point in time. The primary objective is to describe the prevalence of a condition or characteristic and to explore the associations between variables as they exist in the population at that moment. It's like taking a single photograph of a large crowd to see who is there, what they are doing, and how they relate to each other at that exact moment. This type of research is ideal for understanding the prevalence of a condition or characteristic within a population and can be used to compare different subgroups.

Multiple Cross-Sectional Research

A multiple cross-sectional research design, also known as a repeated cross-sectional study or trend study, is a series of independent observational studies conducted over time within the same target population. The defining feature is that at each data collection point, a new, independent sample of participants is drawn from the population. This design allows researchers to track population-level changes and trends in a variable or relationship over a period of time, as opposed to tracking changes within the same individuals. It can detect aggregate shifts in attitudes, behaviors, or conditions, but cannot be used to analyze individual-level change. Instead of following the same people, you are taking a new "snapshot" of the population at different intervals.

Feature	Single Cross-Sectional	Multiple Cross-Sectional
Data Collection	One-time snapshot	Repeated snapshots over time
Participants	Same group, surveyed once	Different groups, surveyed at each time point
Purpose	To measure prevalence and associations at a specific moment	To measure trends and changes within a population over time
Causality	Cannot establish causality	Cannot establish individual-level causality, but can show aggregate trends
Example	A survey on the percentage of people who own smartphones in a city in 2024.	A series of surveys conducted annually from 2020 to 2024 to track the percentage of people who own smartphones.

Longitudinal Research

Longitudinal research is a research design that involves repeated observations of the same variables and subjects over an extended period. Unlike a cross-sectional study that provides a

"snapshot" at one moment, longitudinal studies track changes, developments, and trends within individuals or groups over time. This approach allows researchers to establish a temporal relationship between variables, making it a powerful tool for exploring cause-and-effect relationships.

Types of Longitudinal Studies

- A. **Panel Study:** This is the most common type of longitudinal research. It involves collecting data from the same individuals at multiple time points. For example, a study might survey the same group of teenagers every year for 10 years to track their attitudes and behaviors as they transition into adulthood. This design is excellent for understanding individual-level change.
- B. **Cohort Study:** A cohort is a group of people who share a common characteristic or experience within a defined period, such as a birth year or graduation year. A cohort study follows this group over time, measuring how the shared characteristic relates to outcomes. For instance, a study could follow a cohort of people born in 1980 to see how their health outcomes differ based on early life exposures.
- C. **Retrospective Study:** This design looks backward in time. Researchers use existing data, such as medical records or historical surveys, to analyze past events and exposures to see how they relate to a current outcome. This is often used for studying rare diseases, where it's more practical to find people who already have the condition and then look back at their history.

3. CAUSAL RESEARCH

Causal research is a type of research that aims to establish a cause-and-effect relationship between two or more variables. The goal is to determine if a change in one variable (the independent variable) directly causes a change in another variable (the dependent variable).

Cause-and-Effect Relationship

A cause and effect relationship is a connection between two events or variables where one event (the cause) is directly responsible for bringing about the other event (the effect). This is a fundamental concept in science, research, and daily life, as it seeks to explain the "why" behind an observation. It is a common error to confuse causation with correlation.

- Correlation simply means that two variables are related or tend to change together. For example, ice cream sales and sunburns are often positively correlated as one increases, so does the other.
- Causation means that one variable directly causes the other. In the ice cream and sunburn example, neither causes the other; a third variable (hot weather) is the true cause of both.

In a cause and effect relationship, there are two main variables:

- The independent variable is the cause.
- The dependent variable is the effect.

Independent Variable

The independent variable is the one that is controlled or manipulated by the researcher. It's the variable that is thought to have an effect on another variable. You can think of it as the "input" in a study. For example, in a study on the effect of caffeine on alertness, the amount of caffeine given to participants is the independent variable. The researcher can change the dose (e.g., 0mg, 100mg, 200mg) to see what effect it has.

Dependent Variable

The dependent variable is the one that is measured or observed. It is the outcome that is thought to be influenced by the independent variable. You can think of it as the "output" in a study. It's called "dependent" because its value depends on the independent variable. For example, continuing the caffeine study, the participants' level of alertness (e.g., measured by a reaction time test) is the dependent variable. The researcher measures this to see if it changes based on the amount of caffeine they were given.