# ADVERTSING AND MARKETING RESEARCH

# Revised SYLLABUS 2017-2018

# Semester-VI- TYBMM

## EDITION II

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**ADVERTISING AND MARKETING RESEARCH**
**Max. Marks: 100 (Theory:75, Internals: 25)**

**Objectives:**

- To inculcate the analytical abilities and research skills among the students.
- To understand research methodologies – Qualitative vs Quantitative
- To discuss the foundations of Research and audience analysis that is imperative to successful advertising.
- To understand the scope and techniques of Advertising and Marketing research, and their utility.

# MODULE: I
# FUNDAMENTALS OF RESEARCH

a. Meaning and objectives of Research
b. Concepts in Research: Variables, Qualitative and Quantitative
c. Literature review
d. Stages in Research process

## RESEARCH FUNDAMENTALS

- ## MEANING OF RESEARCH

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. The Advanced Learner's Dictionary of Current English lays down the meaning of research as a careful investigation or inquiry especially through search for new facts in any branch of knowledge. Redman and Mory define research as a "systematized effort to gain new knowledge." Some people consider research as a movement from the known to the unknown. It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness makes us probe and attain full and fuller understanding of the unknown. This inquisitiveness is the mother of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research.

## OBJECTIVE OF RESEARCH

The purpose of research is to **discover answers** through the application of **scientific procedures**. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Though each research study has its own specific purpose, we may think of research objectives as falling into number of broad grouping:

- To gain familiarity with a phenomenon or to **achieve new insights** into it (studies with this object in view are termed as exploratory or formulative research studies.
- To portray accurately the **characteristics of a particular individual, situation or a group** (studies with this object in view are known as descriptive research studies);
- To determine the **frequency** with which something occurs or with which it is associated with something else (studies with this object in view are known as diagnostic research studies).
- To test a hypothesis of a casual **relationship between variables** (such studies are known as hypothesis-testing research studies).

## Qualitative Research and Quantitative Research

# Qualitative Research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. Qualitative Research is also used to uncover trends in thought and opinions, and dive deeper into the problem. Qualitative data collection methods vary using unstructured or semi-structured techniques. Some common methods include focus groups (group discussions), individual interviews, and participation/observations. The sample size is typically small, and respondents are selected to fulfill a given quota.

Qualitative research is any which does not involve numbers or numerical data.
It often involves words or language, but may also use pictures or photographs and observations.
Almost any phenomenon can be examined in a qualitative way, and it is often the preferred method of investigation in the UK and the rest of Europe; US studies tend to use quantitative methods, although this distinction is by no means absolute.
Qualitative analysis results in rich data that gives an in-depth picture and it is particularly useful for exploring **how** and **why** things have happened.

**However, there are some pitfalls to qualitative research, such as:**

- **If respondents do not see a value for them in the research, they may provide inaccurate or false information.** They may also say what they think the researcher wishes to hear. Qualitative researchers therefore need to take the time to build relationships with their research subjects and always be aware of this potential.
- **Although ethics are an issue for any type of research, there may be particular difficulties with qualitative research because the researcher may be party to confidential information.** It is important always to bear in mind that you must do no harm to your research subjects.
- **It is generally harder for qualitative researchers to remain apart from their work.** By the nature of their study, they are involved with people. It is therefore helpful to develop habits of reflecting on your part in the work and how this may affect the research. See our page on **Reflective Practice** for more.

**Sources of Qualitative Data**
**Although qualitative data is much more general than quantitative, there are still a number of common techniques for gathering it. These include:**

- **Interviews**, which may be structured, semi-structured or unstructured;
- **Focus groups**, which involve multiple participants discussing an issue;
- **'Postcards'**, or small-scale written questionnaires that ask, for example, three or four focused questions of participants but allow them space to write in their own words;
- **Secondary data**, including diaries, written accounts of past events, and company reports; and
- **Observations**, which may be on site, or under 'laboratory conditions', for example, where participants are asked to role-play a situation to show what they might do.

**Analysing Qualitative Data**
**Because qualitative data are drawn from a wide variety of sources, they can be radically different in scope.**
There are, therefore, a wide variety of methods for analysing them, many of which involve structuring and coding the data into groups and themes. There are also a variety of computer packages to support qualitative data analysis. The best way to work out which ones are right for your research is to discuss it with academic colleagues and your supervisor.

# Quantitative Research is used to quantify the problem by way of generating numerical data or data that can be transformed into useable statistics. It is used to quantify or for the measurement of the attitudes, opinions, behaviors, and other defined variables – and generalize results from a larger sample population. Quantitative Research uses measurable data to formulate facts and uncover patterns in research. Quantitative data collection methods are much more structured than Qualitative data collection methods. Quantitative data collection methods include various forms of surveys – online surveys, paper surveys, mobile surveys and kiosk surveys, face-to-face interviews, telephone interviews, longitudinal studies, website interceptors, online polls, and systematic observations.

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**The data produced are always numerical, and they are analysed using mathematical and statistical methods. If there are no numbers involved, then it's not quantitative research.**
Some phenomena obviously lend themselves to quantitative analysis because they are already available as numbers. Examples include changes in achievement at various stages of education, or the increase in number of senior managers holding management degrees. However, even phenomena that are not obviously numerical in nature can be examined using quantitative methods.

**Sources of Quantitative Data**
The most common sources of quantitative data include:

- **Surveys**, whether conducted online, by phone or in person. These rely on the same questions being asked in the same way to a large number of people;
- **Observations**, which may either involve counting the number of times that a particular phenomenon occurs, such as how often a particular word is used in interviews, or coding observational data to translate it into numbers; and
- **Secondary data**, such as company accounts.

**Analysing Quantitative Data**
There are a wide range of statistical techniques available to analyse quantitative data, from simple graphs to show the data through tests of correlations between two or more items, to statistical significance. Other techniques include cluster analysis, useful for identifying relationships between groups of subjects where there is no obvious hypothesis, and hypothesis testing, to identify whether there are genuine differences between groups.

**The development of Likert scales and similar techniques mean that most phenomena can be studied using quantitative techniques.**
This is particularly useful if you are in an environment where numbers are highly valued and numerical data is considered the 'gold standard'.
However, it is important to note that quantitative methods are not necessarily the most suitable methods for investigation. They are unlikely to be very helpful when you want to understand the detailed reasons for particular behaviour in depth. It is also possible that assigning numbers to fairly abstract constructs such as personal opinions risks making them spuriously precise.

# Variable:

A variable is defined as anything that has a quantity or quality that varies. The **dependent variable** is the variable a researcher is interested in. An **independent variable** is a variable believed to affect the **dependent variable**. Confounding variables are defined as interference caused by another variable.

Variable is central idea in research. Simply defined, variable is a concept that varies. There are two types of concepts: those that refer to a fixed phenomenon and those that vary in quantity, intensity, or amount (e.g. amount of education). The second type of concept and measures of the concept are variables. A variable is defined as anything that varies or changes in value. Variables take on two or more values. Because variable represents a quality that can exhibit differences in value, usually magnitude or strength, it may be said that a variable generally is anything that may assume different numerical or categorical values. Once you begin to look for them, you will see variables everywhere.
For example gender is a variable; it can take two values: male or female. Marital status is a variable; it can take on values of never married, single, married, divorced, or widowed. Family income is a variable; it can take on values from zero to billions of Rupees. A person's attitude toward women empowerment is variable; it can range from highly favorable to highly unfavorable. In this way the variation can be in quantity, intensity, amount, or type; the examples can be production units, absenteeism, gender, religion, motivation, grade, and age. A variable may be situation specific; for example gender is a variable but if in a particular situation like a class of Research Methods if there are only female students, then in this situation gender will not be considered as a variable.

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**Relationship among Variables**: Once the variables relevant to the topic of research have been identified, then the researcher is interested in the relationship among them. A statement containing the variable is called a proposition. It may contain one or more than one variable. The proposition having one variable in it may be called as univariate proposition, those with two variables as bivariate proposition, and then of course multivariate containing three or more variables. Prior to the formulation of a proposition the researcher has to develop strong logical arguments which could help in establishing the relationship. For example, age at marriage and education are the two variables that could lead to a proposition: the higher the education, the higher the age at marriage. What could be the logic to reach this conclusion? All relationships have to be explained with strong logical arguments. If the relationship refers to an observable reality, then the proposition can be put to test, and any testable proposition is hypothesis

# Literature review

A literature review is a text of a **scholarly** paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and do not report new or original experimental work. A literature review can be a precursor in the introduction of a research paper, or it can be an entire paper in itself, often the first stage of large research projects, allowing the supervisor to ascertain that the student is on the correct path. A literature review is a critical and in depth evaluation of previous research. It is a summary and synopsis of a particular area of research, allowing anybody reading the paper to establish why you are pursuing this particular research program. A good literature review expands upon the reasons behind selecting a particular research question.

A literature review goes beyond the search for information and includes the identification and articulation of relationships between the literature and your field of research. While the form of the literature review may vary with different types of studies, the basic purposes remain constant:

- Provide a context for the research
- Justify the research
- Ensure the research hasn't been done before (or that it is not just a "replication study")
- Show where the research fits into the existing body of knowledge
- Enable the researcher to learn from previous theory on the subject
- Illustrate how the subject has been studied previously
- Highlight flaws in previous research
- Outline gaps in previous research
- Show that the work is adding to the understanding and knowledge of the field
- Help refine, refocus or even change the topic

**A literature review has four main objectives:**

- It **surveys** the literature in your chosen area of study
- It **synthesises** the information in that literature into a summary
- It **critically analyses** the information gathered by identifying gaps in current knowledge; by showing limitations of theories and points of view; and by formulating areas for further research and reviewing areas of controversy
- It **presents** the literature in an organised way

A literature review shows your readers that you have an in-depth grasp of your subject; and that you understand where your own research fits into and adds to an existing body of agreed knowledge.

**Here's another way of describing those four main tasks. A literature review:**

- demonstrates a familiarity with a body of knowledge and establishes the credibility of your work;
- summarises prior research and says how your project is linked to it;
- integrates and summarises what is known about a subject;
- demonstrates that you have learnt from others and that your research is a starting point for new ideas.

Steps for Conducting a Lit Review

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1. **Choose a topic. Define your research question:** Your literature review should be guided by a central research question. Remember, it is not a collection of loosely related studies in a field but instead represents background and research developments related to a specific research question, interpreted and analyzed by you in a synthesized way.
   - Make sure your research question is not too broad or too narrow.
   - Is it manageable? Begin writing down terms that are related to your question.
   - These will be useful for searches later.
   - If you have the opportunity, discuss your topic with your professor.
2. **Decide on the scope of your review:** How many studies do you need to look at? How comprehensive should it be? How many years should it cover?
   - This may depend on your assignment.
   - How many sources does the assignment require?
3. **Select the databases you will use to conduct your searches:** Make a list of the databases you will search. Remember to include comprehensive databases such as WorldCat and Dissertations & Theses, if you need to. Tips: Look at the Library's research guides in your discipline to select discipline-specific databases. Don't forget to look at books!Make an appointment with or contact your subject librarian to make sure you aren't missing major databases.
4. **Conduct your searches and find the literature**: Keep track of your searches:
   - Review the abstracts of research studies carefully. This will save you time.
   - Write down the searches you conduct in each database so that you may duplicate them if you need to later (or avoid dead-end searches that you'd forgotten you'd already tried).
   - Use the bibliographies and references of research studies you find to locate others.
   - Ask your professor or a scholar in the field if you are missing any key works in the field.
   - Use RefWorks to keep track of your research citations.
5. **Review the literature: Some questions to help you analyze the research:** What was the research question of the study you are reviewing? What were the authors trying to discover? Was the research funded by a source that could influence the findings? What were the research methodologies? Analyze its literature review, the samples and variables used, the results, and the conclusions. Does the research seem to be complete? Could it have been conducted more soundly? What further questions does it raise? If there are conflicting studies, why do you think that is? How are the authors viewed in the field? Has this study been cited?; if so, how has it been analyzed?
   - Again, review the abstracts carefully.
   - Keep careful notes so that you may track your thought processes during the research process.

# Stages in Research process.

## Stage 1: Formulating the Marketing Research Problem

Formulating a problem is the first step in the research process. In many ways, research starts with a problem that management is facing. This problem needs to be understood, the cause diagnosed, and solutions developed. However, most management problems are not always easy to research. A management problem must first be translated into a research problem. Once you approach the problem from a research angle, you can find a solution. For example, “sales are not growing” is a management problem.

Translated into a research problem, we may examine the expectations and experiences of several groups: potential customers, first-time buyers, and repeat purchasers. We will determine if the lack of sales is due to:

- *Poor expectations that lead to a general lack of desire to buy, or*
- *Poor performance experience and a lack of desire to repurchase.*

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What then is the difference between a management problem and a research problem? Management problems focus on an action. Do we advertise more? Do we change our advertising message? Do we change an under-performing product configuration? If so, how? Research problems, on the other hand, focus on providing the information you need in order to solve the management problem.

# Stage 2: Method of Inquiry

The scientific method is the standard pattern for investigation. It provides an opportunity for you to use existing knowledge as a starting point and proceed impartially.
The scientific method includes the following steps:

1. Formulate a problem
2. Develop a hypothesis
3. Make predictions based on the hypothesis
4. Devise a test of the hypothesis
5. Conduct the test
6. Analyze the results

The terminology is similar to the stages in the research process. However, there are subtle differences in the way the steps are performed. For example, the scientific method is objective while the research process can be subjective.
Objective-based research (quantitative research) relies on impartial analysis.
The facts are the priority in objective research. On the other hand, subjective-based research (qualitative research) emphasizes personal judgment as one collect and analyze data.

# Stage 3: Research Method

In addition to selecting a method of inquiry (objective or subjective), one must select a research method.
**There are two primary methodologies that can be used to answer any research question**:

- Experimental research and
- Non-experimental research.

Experimental research gives you the advantage of controlling extraneous variables and manipulating one or more variables that influences the process being implemented.
Non-experimental research allows observation but not intervention. One simply observe and report on findings.

# Stage 4: Research Design

The research design is a plan or framework for conducting the study and collecting data. It is defined as the specific methods and procedures one use to acquire the information needed.

# Stage 5: Data Collection Techniques:

Research design will develop as researcher selects techniques to use. There are many ways to collect data. **Two important methods to consider are interviews and observation.**
Interviews require researcher to ask questions and receive responses.
Common modes of research communication include interviews conducted face-to-face, by mail, by telephone, by email, or over the Internet. This broad category of research techniques is known as survey research. These techniques are used in both non-experimental research and experimental research.

Another way to collect data is by observation. Observing a person's or company's past or present behavior can predict future purchasing decisions. Data collection techniques for past behavior can include analyzing company records and reviewing studies published by external sources. In order to analyze information from interview or observation techniques, researcher must record the results. Because the recorded results are vital, measurement and development are closely linked to which data collection techniques researcher decide on. The way researcher record the data changes depends on which method researcher use.

# Stage 6: Sample Design

Marketing research project rarely examine an entire population. It's more practical to use a sample—a smaller but accurate representation of the greater population. In order to design sample, researcher must find answers to these questions:

1. From which base population is the sample to be selected?
2. What is the method (process) for sample selection?
3. What is the size of the sample?

Once researcher has established who the relevant population is (completed in the problem formulation stage), researcher have a base for sample. This will allow researcher to make inferences about a larger population. There are two methods of selecting a sample from a population:

- Probability or
- Non-probability sampling.

The probability method relies on a random sampling of everyone within the larger population.

Non- probability is based in part on the judgment of the investigator, and often employs convenience samples, or by other sampling methods that do not rely on probability. The final stage of the sample design involves determining the appropriate sample size. This important step involves cost and accuracy decisions. Larger samples generally reduce sampling error and increase accuracy, but also increase costs.

# Stage 7: Data Collection

Once researcher established the first six stages, he can move on to data collection.

Depending on the mode of data collection, this part of the process can require large amounts of personnel and a significant portion of research budget. Personal (face-to-face) and telephone interviews may require researcher to use a data collection agency (field service). Internet surveys require fewer personnel, are lower cost, and can be completed in days rather than weeks or months. Regardless of the mode of data collection, the data collection process introduces another essential element to research project: the importance of clear and constant communication.

# Stage 8: Analysis and Interpretation

In order for data to be useful, researcher must analyze it. Analysis techniques vary and their effectiveness depends on the types of information researcher is collecting, and the type of measurements been used. Because they are dependent on the data collection, analysis techniques should be decided before this step.

# Stage 9: Research Report

The marketing research process culminates with the research report. This report will include all of information, including an accurate description of research process, the results, conclusions, and recommended courses of action. The report should provide all the information the decision maker needs to understand the project. It should also be written in language that is easy to understand. It's important to find a balance between completeness and conciseness. Researcher don't want to leave any information out; however, he can't let the information get so technical that it overwhelms the reading audience.

One approach to resolving this conflict is to prepare two reports: the technical report and the summary report. The technical report discusses the methods and the underlying assumptions. In this document, researcher discusses the detailed findings of the research project. The summary report, as its name implies, summarizes the research process and presents the findings and conclusions as simply as possible. Another way to keep research findings clear is to prepare several different representations of findings. PowerPoint presentations, graphs, and face-to-face reports are all common methods for presenting research information. Along with the written report for reference, these alternative presentations will allow the decision maker to understand all aspects of the project.

# MODULE: II
# HYPOTHESIS

**Meaning, Nature, Significance, Types of Hypothesis,**

'Hypothesis' is one of the fundamental tools for research in any kind of investigation. In fact, it is the second step to follow in any kind of research process. The hypothesis is a tentative solution of a problem. The research activities are

planned to verify the hypothesis. It is very essential for a researcher to understand the meaning and nature of hypothesis. The researcher always plan or formulate a hypothesis in the beginning of the problem.

**MEANING OF HYPOTHESIS:**

The word hypothesis is made up of two Greek roots which would roughly mean some sort of 'sub-statements' if they are sense translated in English. Thus, the word hypothesis consists of two words: Hypo + thesis = where, 'Hypo' means tentative or subject to the verification and 'Thesis' means statement about solution of a problem.

The word meaning of the term hypothesis is 'a tentative statement about the solution of the problem'. Hypothesis offers a solution of the problem that is to be verified empirically and based on some rationale. Another meaning of the word hypothesis which is composed of two words: 'Hypo' means composition of two or more variables which is to be verified. 'Thesis' means position of these variables in the specific frame of reference. This is the operational meaning of the term hypothesis.

Hypothesis is the composition of some variables which have some specific position or role of the variables i.e. to be verified empirically. It is a proposition about the factual and conceptual' elements.

Hypothesis is called a leap into the dark. It is a brilliant guess about the solution of a problem. A tentative generalization or theory formulated about the character of a phenomenon under observation are called hypothesis. It is a statement temporarily accepted as true in the light of what is known at the time about the phenomenon. It is the basis for planning and action- in the research for new truth.

**NATURE OF HYPOTHESIS**

*The following are the main features of a hypothesis:*

1. It is conceptual in nature. Some kind of conceptual elements in the framework are involved in a hypothesis.
2. It is a verbal statement in a declarative form. It is a verbal expression of ideas and concepts, it is not merely an idea but is also available in the verbal form, though the idea is in itself is enough for empirical verification.
3. It has some empirical referent. A hypothesis contains some empirical referent. It indicates the tentative relationship between two or more variables.
4. It has a forward or future reference. A hypothesis is future oriented. It relates to the future verification and not to the past facts and information.
5. It is the pivot of a scientific research. All the research activities are designed for its verification.

# Significance of hypothesis

The following are the significance of hypothesis in the research

1. It is a temporary solution of a problem concerning with some truth which enables an investigator to start his research works.
2. It offers a basis in establishing the specificity what to study and may provide possible solutions to the problem.
3. Each hypothesis may lead to formulate another hypothesis.
4. A preliminary hypothesis may take the shape of a final hypothesis.
5. Each hypothesis provides the investigator with definite statement which may be objectively tested and accepted or rejected.
6. It places clear and specific goals: A well thought out hypothesis is that which places clear and specific goals before the researcher and provides him/her with a basis for selecting sample and research procedure to meet these goals.
7. It links things together: "It serves the important function of linking together the related facts and information and organizing them into whole."
8. It prevents blind research: "The use of hypothesis prevents a blind search or research and saves the researchers from gathering of masses of data which may later prove irrelevant to the study."

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# TYPES OF HYPOTHESIS:

Hypotheses vary in form and some extent and in some cases the form is determined by the function of hypotheses in different contexts. Thus a working hypothesis is described as the best guess or statement derivable from known or available evidence. The amount of evidence and the certainty or quality that can be determined will bring different forms of hypotheses, such as specific or general.

In other cases, the type of statistical treatment generates a need for a particular form of hypothesis. In either case, there are some set forms of hypothesis and they can be explained as follows:

1. **Declarative Statement:** A hypothesis may be developed as a declarative statement which provides an anticipated relationship between variables. The anticipation of a difference between variables would imply that the hypothesis developer has examined existing evidences very carefully and they have led him/her to believe that differences may be anticipated as a process of additional evidences.
2. **Cause and effect relationship hypothesis**: - Hypothesis describing a relationship between two variables is said to be relational hypothesis. Here, relationship between variables is observed where change in one variable gives change in other variables. "Fast food eating habits is cause of obesity in children" is a good example.
3. **Directional Hypothesis:** States that the independent variable will effect the dependent variable and the direction of the effect in the experiment. ž E.g. Consuming 2 grams of caffeine will make you sleep less than 5 hours in one night.
4. **Non-Directional Hypothesis:** States that the dependent and independent variable will have an effect on one another but it does not specify what that effect will be. ž E.g. Consuming 2 grams of caffeine will alter how much sleep you will get in hours.
5. **Null Hypothesis:** It indicates that there is no relationship between the dependent and independent variables. Null Hypothesis States that if there is an effect between the dependent and independent variables, it is down to chance and not an effect from the experiment. E.g. Consuming 2 grams of caffeine will not influence how much you sleep in one night. It depends on the participant levels of stress at the time.

**A GOOD HYPOTHESIS IS ONE WHICH:**

1. Clearly defines the assumption will all operational definitions which are easy to understand and communicate.
2. Should be brief so that it meaningfully describes the concept involved in the assumption.
3. Requires limited assumption and conditions to testify it.
4. It should meet the criteria, or disprove or add new knowledge to the theory.
5. Based on phenomena which are easily observed or else it is difficult to test it empirically.
6. Explaining and expected relationship between the variables.
7. Initially researcher should make one hypothesis which is significant and can be easily tested. If he finds a need of designing or formulating number of hypothesis, he should do it.

# MODULE: III
# RESEARCH DESIGN

a. Meaning, Definition, Need and Importance, Scope of Research Design
b. Types- Descriptive, Exploratory and Causal.

**Research Design: Meaning and Importance**

A research design is a framework or blueprint for conducting the marketing research project. It details the procedures necessary for obtaining the information needed to structure or solve marketing research problems. In simple words it is the general plan of how you will go about your research.

**Definitions of Research Design:**

**1. According to David J Luck and Ronald S Rubin,** "A research design is the determination and statement of the general research approach or strategy adopted for the particular project. It is the heart of planning. If the design adheres to the research objective, it will ensure that the client's needs will be served.

**2. According to Kerlinger,** "Research in the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance.

**3. According to Green and Tull**, " A research design is the specification of methods and procedures for acquiring the information needed. It is the over-all operational pattern or framework of the project that stipulates what information is to be collected from which source by what procedures.

The function of a research design is to ensure that requisite data in accordance with the problem at hand is collected accurately and economically. Simply stated, it is the framework, a blueprint for the research study which guides the collection and analysis of data. The research design, depending upon the needs of the researcher may be a very detailed statement or only furnish the minimum information required for planning the research project.

**To be effective, a research design should furnish at least the following details.**

- A statement of objectives of the study or the research output.
- A statement of the data inputs required on the basis of which the research problem is to be solved.
- The methods of analysis which shall be used to treat and analyze the data inputs.
- More explicitly, the design decisions happen to be in respect of:
- What is the study about?
- Why is the study being made?
- Where will the study be carried out?
- What type of data is required?
- Where can the required data be found?
- What periods of time will the study include?
- What will be the sample design?
- What techniques of data collection will be used?
- How will the data be analyzed?
- In what style will the report be prepared?

**Advantages of research design**

- Consumes less time.
- Ensures project time schedule.
- Helps researcher to prepare himself to carry out research in a proper and a systematic way.
- Better documentation of the various activities while the project work is going on.
- Helps in proper planning of the resources and their procurement in right time.
- Provides satisfaction and confidence, accompanied with a sense of success from the beginning of the work of the research project.

**Need for Research Design:** Research design is needed because it facilitates the smooth sailing of the various research operations, thereby making research as efficient as possible yielding maximal information with minimal expenditure of effort, time and money. Research design has a significant impact on the reliability of the results obtained. It thus acts as a firm foundation for the entire research. For example, economical and attractive construction of house we need a blueprint (or what is commonly called the map of the house) well

thought out and prepared by an expert architect, similarly we need a research design or a plan in advance of data collection and analysis for our research project.

Research design stands for advance planning of the methods to be adopted for collecting the relevant data and the techniques to be used in their analysis.

**The need for research design is as follows:**

- It reduces inaccuracy;
- Helps to get maximum efficiency and reliability;
- Eliminates bias and marginal errors;
- Minimizes wastage of time;
- Helpful for collecting research materials;
- Helpful for testing of hypothesis;
- Gives an idea regarding the type of resources required in terms of money, manpower, time, and efforts;
- Provides an overview to other experts;
- Guides the research in the right direction.

# Importance and scope of Research Design

Research design carries an important influence on the reliability of the results attained. It therefore provides a solid base for the whole research. It is needed due to the fact that it allows for the smooth working of the many research operations. This makes the research as effective as possible by providing maximum information with minimum spending of effort, money and time. For building of a car, we must have a suitable blueprint made by an expert designer. In a similar fashion, we require a suitable design or plan just before data collection and analysis of the research project. Planning of design must be carried out cautiously as even a small mistake might mess up the purpose of the entire project. The design helps the investigator to organize his ideas, which helps to recognize and fix his faults, if any. In a good research design, all the components go together with each other in a coherent way. The theoretical and conceptual framework must  with the research goals and purposes. In the same way, the data gathering method must fit with the research purposes, conceptual and theoretical framework and method of data analysis.

**The importance and scope of research design in research methodology is due to the following**:

1. It may result in the preferred kind of study with helpful conclusion.
2. It cuts down on inaccuracy.
3. Allows you get optimum efficiency and reliability.
4. Reduce wastage of time.
5. Reduce uncertainty, confusion and practical haphazard related to any research problem.
6. Of great help for collection of research material and testing of hypothesis.
7. It is a guide for giving research the right path.
8. Gets rid of bias and marginal errors.
9. Provides an idea concerning the type of resources needed in terms of money, effort, time, and manpower.
10. Smooth & efficient sailing (sets boundaries & helps prevent blind search) Maximizes reliability of results.
11. Provides firm foundation to the endeavor.

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12. Averts misleading conclusions & thoughtless useless exercise. Provides opportunity to anticipate flaws & inadequacies (anticipates problems). I
13. ncorporates by learning from other people's critical comments & evaluations.

# Types of Research design:

On the basis of information to be collected, research designs can be classified into the following three categories:

**a) Exploratory research**
**b) Descriptive research**
**c) Causal research**

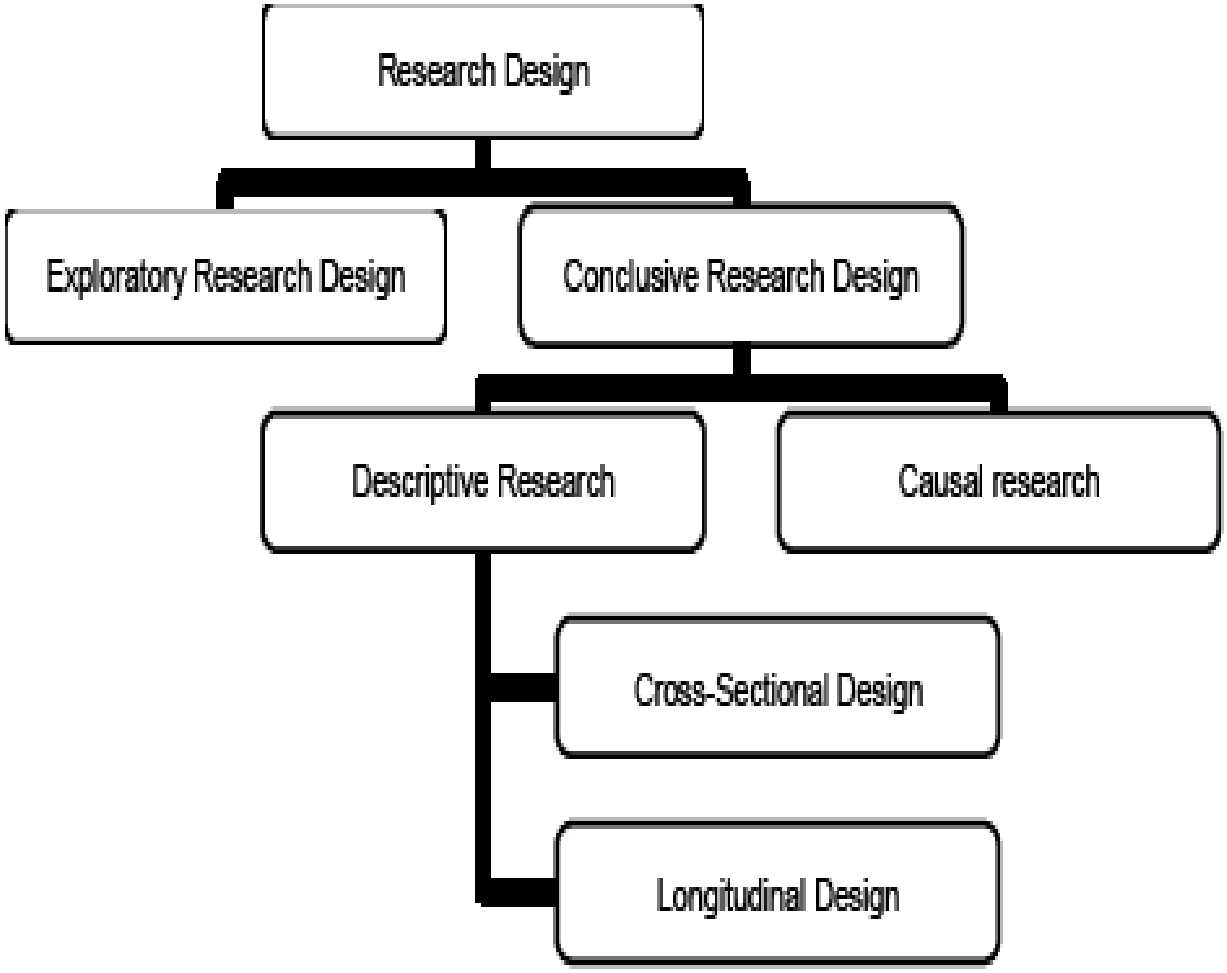



Figure 2: Classification of Research Designs

# Exploratory Research:

Exploratory research is conducted to clarify ambiguous situations or discover potential business opportunities. As the name implies, exploratory research is not intended to provide conclusive evidence from which to determine a particular course of action. In this sense, exploratory research is not an end unto itself. Usually exploratory research is a first step, conducted with the expectation that additional research will be needed to provide more conclusive evidence.

i. Exploratory research is often used to guide and refine these subsequent research efforts.
ii. Exploratory research aims to develop initial hunches or insights and provide direction for any further research needed.
iii. The primary purpose of exploratory research is to shed light on the nature of a situation and identify any specific objectives or data needs to be addressed through additional research.
iv. Exploratory research is most useful when a decision maker wishes to better understand a situation and/or identify decision alternatives.
v. Exploratory research is conducted when decision makers sense a need for marketing research but are unsure of the specific direction the research should take.

**Methods for Conducting Exploratory Research**

a. ***Key-Informant Technique:*** Conducting exploratory research by interviewing knowledgeable individuals is sometimes called the *key-informant technique*. It is also known as an *expert-opinion survey* or a *lead-user survey*. An effective way to do exploratory research is to seek out and talk to individuals with expertise in areas related to the situation being investigated. The technique is necessarily a very subjective and flexible procedure with no standard approach. In today's fast-changing technological world, very few individuals possess all of the relevant information about the market. Careful attention must be given to the selection of knowledgeable people. This observation is not limited to business-to-business market settings; it is relevant in almost every context requiring exploratory research. When properly used, the key-informant technique can be very productive in situations where a decision maker senses the need for research but lacks well-defined research objectives.
b. *Focus Group Interviews:* In a focus group interview, an objective discussion leader introduces a topic to a group of respondents and directs their discussion of that topic in a non-structured and natural fashion. This is sometimes simply called a *focus group*. Respondents (typically about 8 to 12) discuss a given topic in a fairly informal fashion. A well-trained researcher, called a moderator, leads the discussion. The moderator's primary tasks are to ensure that key aspects of the topic are discussed and to observe or record the participants' reactions. Focus groups are used in a variety of situations.
c. *Analysis of Secondary Data:* Examining appropriate secondary data is a fast and inexpensive way of conducting exploratory research that can generate valuable insights. Such insights, in turn, will provide a proper focus for conclusive research. Sometimes the insights revealed by secondary-data analysis may even eliminate the need for conclusive research.
d. *Case Study Method:* The *case study method* is an in-depth examination of a unit of interest. The unit can be a customer, store, salesperson, firm, market area, website, and so on. By virtue of its insight-generating potential, the case study method is a useful form of exploratory research. This method is suitable in a research setting in which the company has a general research objective but is unsure of exactly what it is looking for. It involves collecting in-depth data on a variety of important dimensions or factors for the unit of interest. Only the investigator's time and imagination limit the number and types of factors to be examined. The analysis of case data is nonquantitative and primarily involves numerous comparisons and contrasts of the data. It requires an alert investigator capable of recognizing even subtle differences across cases as well as possible relationships among factors within a case.

e. *Observational Method:* The *observational method* involves human or mechanical observation of what people actually do or what events take place during a buying or consumption situation. In this method of data collection, researchers or mechanical/electronic devices witness and record information as events occur or compile evidence from past events. It is useful to assess behavior such as use of products, frequency of store visits, teens shopping with and without supervision, use of media, and time spent on specific websites. It is particularly useful in researching young children, a group that is typically not amenable to many research techniques. Exploratory research is not limited to the five methods just described, although they are the most frequently used methods. Variations or combinations of these methods can also be employed in an exploratory research project. Insights gained through exploratory research pave the way for conclusive research. Many research projects involve an exploratory phase followed by a conclusive phase.

# Descriptive Research

As the name implies, the major purpose of descriptive research is to describe characteristics of objects, people, groups, organizations, or environments. In other words, descriptive research tries to "paint a picture" of a given situation by addressing who, what, when, where, and how questions.

This research describes the who, what, when, where, and how regarding the current economic and employment situation. Unlike exploratory research, descriptive studies are conducted after the researcher has gained a firm grasp of the situation being studied. This understanding, which may have been developed in part from exploratory research, directs the study toward specific issues. These statements help greatly in designing and implementing a descriptive study. Without these, the researcher would have little or no idea of what questions to ask.

Descriptive research often helps describe market segments. For example, researchers used descriptive surveys to describe consumers who are heavy consumers (buy a lot) of organic food products. The resulting report showed that these consumers tend to live in coastal cities with populations over 500,000, with the majority residing on the West Coast. The most frequent buyers of organic foods are affluent men and women ages 45–54 (36 percent) and 18–34 (35 percent).

Interestingly, consumers who buy organic foods are not very brand-oriented—81 percent of them cannot name a single organic brand. Research such as this helps high-quality supermarkets such as Whole Foods make location decisions. Over half of Whole Foods' food products are organic.

**Methods for Conducting Descriptive Research**

Descriptive research is by far the more frequently used form of conclusive research. Descriptive research studies are classified into two basic types: cross-sectional studies and longitudinal *studies.*

i. ***Cross-Sectional Studies:*** Cross-sectional studies are one-time studies involving data collection at a single period in time. They provide a "snapshot" of a situation being researched. Cross-sectional studies can also be used to obtain data pertaining to different periods in time. A cross-sectional study makes use of a cross-sectional sample or a group of units (e.g., consumers, stores, organizations) selected specifically and solely for the one-time data collection. The sample is disbanded after the data are collected. Several firms maintain omnibus panels as a source of samples for cross-sectional studies. Such samples are composed of panel members who are returned to the panel after participating in a cross-

sectional study. Within the domain of descriptive research the cross-sectional study is the most popular method. Cross-sectional studies account for the majority of formal research projects involving primary-data collection.

ii. *Longitudinal Studies:* Longitudinal studies are repeated-measurement studies that collect data over several periods in time. The primary purpose of longitudinal studies is to monitor changes over time. A longitudinal study produces a "motion picture" (or a series of snapshots) of a situation over time. In general, longitudinal studies are more informative than cross-sectional studies, just as motion pictures are more revealing than still pictures. Longitudinal studies are also more expensive than cross-sectional studies. A longitudinal study typically employs a panel, or a group of units recruited to provide measurements over a period of time. At the conclusion of each measurement phase, a panel is maintained intact for future use. Successive measurements in longitudinal studies can be obtained from a physically different but representative sample of units or from the same sample of units each time. Although both sample options will yield longitudinal data, the nature of the findings and the implications can differ.

*Types of Longitudinal studies:*

a. ***True Panel Studies:*** A longitudinal study using the same sample of respondents will provide richer information than one using a series of different samples. The dynamics of changes between measurements can be captured only by using the same panel of respondents. Such a panel has been labeled a *true panel* to distinguish it from omnibus panels used to generate different cross-sectional samples at various periods in time. A true-panel study, compared with a longitudinal study using different samples for the various measurements, is also capable of generating more data directly pertaining to the research purpose, for the following reasons: A true panel is a captive sample of willing respondents who are likely to tolerate extended interviews or fill out lengthy questionnaires. Background data such as demographic and lifestyle data need not be collected from panel respondents during each measurement. Therefore, for a given interview or questionnaire length, more data of primary research interest can be collected.

b. **Omnibus survey:** An **omnibus survey** is a method of quantitative marketing research where data on a wide variety of subjects is collected during the same interview. Usually, multiple research clients will provide proprietary content for the survey (paying to 'get on the omnibus'), while sharing the common demographic data collected from each respondent.The advantages to the research client include cost savings (because the sampling and screening costs are shared across multiple clients) and timeliness (because omnibus samples are large and interviewing is ongoing). An omnibus survey generally uses a stratified sample and can be conducted either by mail, telephone, or Internet.

c. **A cohort study** is a particular form of longitudinal study (panel study) that sample a cohort (a group of people who share a defining characteristic, typically who experienced a common event in a selected period, such as birth or graduation), performing a cross-section at intervals through time. A cohort study is a panel study, but a panel study is not always a cohort study as individuals in a panel study do not always share a common characteristic.

# Different types of panels

| | Same people | Different people |
|---|---|---|
| **Same questions** | **True panel** | **Cohort panel** |
| **Different questions** | **Omnibus panel** | **Cross-sectional survey** |

# Causal or Experimental Research

If a decision maker knows what causes important outcomes like sales, stock price, and employee satisfaction, then he or she can shape firm decisions in a positive way. Causal inferences are very powerful because they lead to greater control. Causal research seeks to identify cause and effect relationships. When something causes an effect, it means it brings it about or makes it happen. The effect is the outcome. Rain causes grass to get wet. Rain is the cause and wet grass is the effect.

The different types of research discussed here are often building blocks—exploratory research builds the foundation for descriptive research, which usually establishes the basis for causal research.

Thus, before causal studies are undertaken, researchers typically have a good understanding of the phenomena being studied. Because of this, the researcher can make an educated prediction about the cause-and-effect relationships that will be tested. Although greater knowledge of the situation is a good thing, it doesn't come without a price. Causal research designs can take a long time to implement. Also, they often involve intricate designs that can be very expensive. Even though managers may often want the assurance that causal inferences can bring, they are not always willing to spend the time and money it takes to get them.

**CAUSALITY**

Ideally, managers want to know how a change in one event will change another event of interest. As an example, how will implementing a new employee training program change job performance?

Causal research attempts to establish that when we do one thing, another thing will follow. A causal inference is just such a conclusion. While we use the term "cause" frequently in our everyday language, scientifically establishing something as a cause is not so easy. A causal inference can only be supported when very specific evidence exists. Three critical pieces of causal evidence are:

i. Temporal Sequence

ii. Concomitant Variance
iii. Nonspurious Association

*Temporal Sequence*

Temporal sequence deals with the time order of events. In other words, having an appropriate causal order of events, or temporal sequence, is one criterion for causality. Simply put, the cause must occur before the effect. It would be difficult for a restaurant manager to blame a decrease in sales on a new chef if the drop in sales occurred before the new chef arrived. If a change in the CEO causes a change in stock prices, the CEO change must occur before the change in stock values.

*Concomitant Variation*

Concomitant variation occurs when two events "covary" or "correlate," meaning they vary systematically. In causal terms, concomitant variation means that when a change in the cause occurs, a change in the outcome also is observed. A correlation coefficient, which we discuss in a later chapter, is often used to represent concomitant variation. Causality cannot possibly exist when there is no systematic variation between the variables. For example, if a retail store never changes its employees' vacation policy, then the vacation policy cannot possibly be responsible for a change in employee satisfaction. There is no correlation between the two events. On the other hand, if two events vary together, one event may be causing the other.

*Nonspurious Association*

Nonspurious association means any covariation between a cause and an effect is true, rather than due to some other variable. A spurious association is one that is not true. Often, a causal inference cannot be made even though the other two conditions exist because both the cause and effect have some common cause; that is, both may be influenced by a third variable. For instance, there is a strong, positive correlation between ice cream purchases and murder rates—as ice cream purchases increase, so do murder rates. When ice cream sales decline, murder rates also drop. Do people become murderers after eating ice cream? Should we outlaw the sale of ice cream? This would be silly because the concomitant variation observed between ice cream consumption and murder rates is spurious. A third variable is actually important here. People purchase more ice cream when the weather is hot. People are also more active and likely to commit a violent crime when it is hot. The weather, being associated with both may actually cause both.

**Differences Between descriptive and causal research design**

Data collected through experimental research can provide much stronger evidence of cause and effect than can data collected through descriptive research. This does not necessarily mean that analysis of descriptive research data cannot suggest possible causal linkages among variables, especially when the effects of uncontrolled variables are filtered through certain analysis techniques available for that purpose.

Viewing descriptive versus experimental research is not a clear-cut dichotomy. Conclusive projects vary from "purely descriptive with no control" at one extreme to "purely experimental with strict control and manipulation" at the other extreme.

**Conducting Causal or Experimental Research**

Causal or Experimental research is intended to generate the type of evidence necessary for confidently making causal inferences about relationships among variables.

To make causal inferences with confidence, then, we must manipulate the causal variable and effectively control the other variables. Another condition is that the causal variable and effect variable must occur in

# MODULE: IV
# SAMPLING

1. Meaning of Sample and Sampling,
2. Process of Sampling
3. Methods of Sampling:
i) Non Probability Sampling – Convenient, Judgment, Quota, Snow ball.
ii) Probability Sampling – Simple Random, systematic, Stratified, Cluster, Multi Stage.

## Meaning of Sample and Sampling

In statistics, a **sample** is a subset of a population that is used to represent the entire group as a whole. When doing research, it is often impractical to survey every member of a particular population because the sheer number of people is simply too large. Sampling is a process used in statistical analysis in which a predetermined number of observations are taken from a larger population. Thus Sampling is the process of selecting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen.

**Why Do Researchers Use Samples?**

When researching an aspect of the human mind or behavior, researchers simply cannot collect data from every single individual in most cases. Instead, they choose a smaller sample of individuals that represent the larger group. If the sample is truly representative of the population in question, researchers can then take their results and generalize them to the larger group.

**Basic Principles of Sampling**

Theory of sampling is based on the following laws-

• ***Law of Statistical Regularity*** – This law comes from the mathematical theory of probability. According to King," Law of Statistical Regularity says that a moderately large number of the items chosen at random from the large group are almost sure on the average to possess the features of the large group."

According to this law the units of the sample must be selected at random.

• ***Law of Inertia of Large Numbers*** – According to this law, the other things being equal – the larger the size of the sample; the more accurate the results are likely to be.

## Process of Sampling

**There are seven steps in sampling process:**

| Step | Description |
|---|---|
| 1. Define the population | The population is defined in terms of a) element, b) units, c) extent and d) time. |
| 2. Specify sampling frame | The means of representing the elements of the population – for example telephone book, map, or city directory – are described. |
| 3. Specify sampling unit | The unit for sampling – for example, city block, company, or household – is selected. The sampling unit |

| | |
|---|---|
| | may contain one or several population elements. |
| 4. Specify sampling method | The method by which sampling units are to be selected is described. |
| 5. Determine sample size | The number of elements of the population to be sampled is chosen. |
| 6. Specify sampling plan | The operational procedures for selection of the sampling units are selected. |
| 7. Select the sample | The office and fieldwork necessary for the selection of the sample are carried out. |

**Step 1: Define the population**

At the outset of the sampling process, the target population must be carefully defined so that the proper sources from which the data are to be collected can be identified. The usual technique for defining the target population is to answer questions about the crucial characteristics of the population.

The question to answer is, "Whom do we want to talk to?" The answer may be users, nonusers, recent adopters, or brand switchers. To implement the sample in the field, tangible characteristics should be used to define the population. A baby food manufacturer might define the population as all women still capable of bearing children. However, a more specific operational definition would be women between the ages of 12 and 50. While this definition by age may exclude a few women who are capable of childbearing and include some who are not, it is still more explicit and provides a manageable basis for the sample design.

**Step 2: Specify the Sampling frame**

In practice, the sample will be drawn from a list of population elements that often differs somewhat from the defined target population. A list of elements from which the sample may be drawn is called a sampling frame. The sampling frame is also called the working population because these units will eventually provide units involved in analysis. A simple example of a sampling frame would be a list of all members of the Indian Medical Association.

A sampling frame may be a telephone book, city directory, an employee roster, a listing of all students attending a university, or a list of possible phone numbers.

Maps also serve frequently as sampling frames. A sample of areas within a city may be taken and another sample of household then be taken within each area. City blocks are sometimes sampled and all households on each sample block are included. A sampling of street intersections may be taken and interviewers given instructions as to how to take "Random walks". From the intersection and select the households to be interviewed.

A perfect sampling frame is one in which *every element of the population is represented once but only once.* One does not need a sampling frame to take a non-probability sample.

**Step 3: Specify the sampling Unit**

*The sampling unit is the basic unit containing the elements of the population to be sampled.* It may be the element itself or a unit in which the element is contained.

During the actual sampling process, the elements of the population must be selected according to a certain procedure. The sampling unit is a single element or group of elements subject to selection in the sample. For example, if an airline wishes to sample passengers, it may take every 25th name on a complete list of passengers. In this case the sampling unit would be the same as the element. Alternatively, the airline could first select certain flights as the sampling unit and then select certain passengers on each flight. In this case the sampling unit would contain many elements.

BY: M H Lakdawala

For example, if one wanted a sample of males over 13 years of age, it might be possible to sample them directly. In this case, the sampling unit would be identical with the element. However, it might be easier to select households as the sampling unit and interview all males over 13 years of age in each household. Here the sampling unit and the population element are not the same.

**Step 4: Specify the Sampling Methods**

It indicates how the sample units are selected. One of the most important decisions in this regard is to determine which of the two –probability and non-probability sample –is to be chosen. Probability samples are also known as random samples and non-probability samples as non-random samples.
There are various types of sample designs, which can be covered under two broad groups – random or probability samples and non-random, or non-probability samples.

**Step 5: Determination of the Sample size**

The sample size is decided based on the precision required from the sample estimates, time and money available to collect the required data. While determining the sample size due consideration should be given to the variability of the population characteristic under investigation, the level of confidence desired in the estimates and the degree of the precision desired in estimating the population characteristic. The number of prospective units to be contacted to ensure that the estimated sample size is obtained and the additional cost involved should be considered. The researcher should calculate the reachable rates, overall incidence rate and expected completion rates associated with the sampling situation.

**Step 6: Specify the Sampling Plan**

The actual procedure to be used in contacting each of the prospective respondents selected to form the sample should be clearly laid out. The instruction should be clearly written so that interviewers know what exactly should be done and the procedure to be followed in case of problems encountered in contacting the prospective respondents.

**Step 7: Select the Sample**

The sample respondents are met and actual data collection activities are executed in this stage. Consistency and control should be maintained at this stage.

**Characteristics of a good Sample Design**

A good sample design requires the judicious balancing of four broad criteria –goal orientation, measurability, practicality and economy.

1. Goal orientation: This suggests that a sample design "should be oriented to the research objectives, tailored to the survey design, and fitted to the survey conditions". If this is done, it should influence the choice of the population, the measurement as also the procedure of choosing a sample.
2. Measurability: A sample design should enable the computation of valid estimates of its sampling variability. Normally, this variability is expressed in the form of standard errors in surveys. However, this is possible only in the case of probability sampling. In non-probability samples, such a quota sample, it is not possible to know the degree of precision of the survey results.
3. Practicality: This implies that the sample design can be followed properly in the survey, as envisaged earlier. It is necessary that complete, correct, practical, and clear instructions should be given to the interviewer so that no mistakes are made in the selection of sampling units and the final selection in the field is not different from the original sample design. Practicality also refers to simplicity of the design, i.e. it should be capable of being understood and followed in actual operation of the field work.

4. Economy: Finally, economy implies that the objectives of the survey should be achieved with minimum cost and effort. Survey objectives are generally spelt out in terms of precision, i.e. the inverse of the variance of survey estimates. For a given degree of precision, the sample design should give the minimum cost. Alternatively, for a given per unit cost, the sample design should achieve maximum precision (minimum variance).

It may be pointed out that these four criteria come into conflict with each other in most of the cases, and the researcher should carefully balance the conflicting criteria so that he is able to select a really good sample design.

# Methods of Sampling

**Sampling Techniques**

Sampling techniques may be broadly classified as **non-probability and probability sampling techniques**.

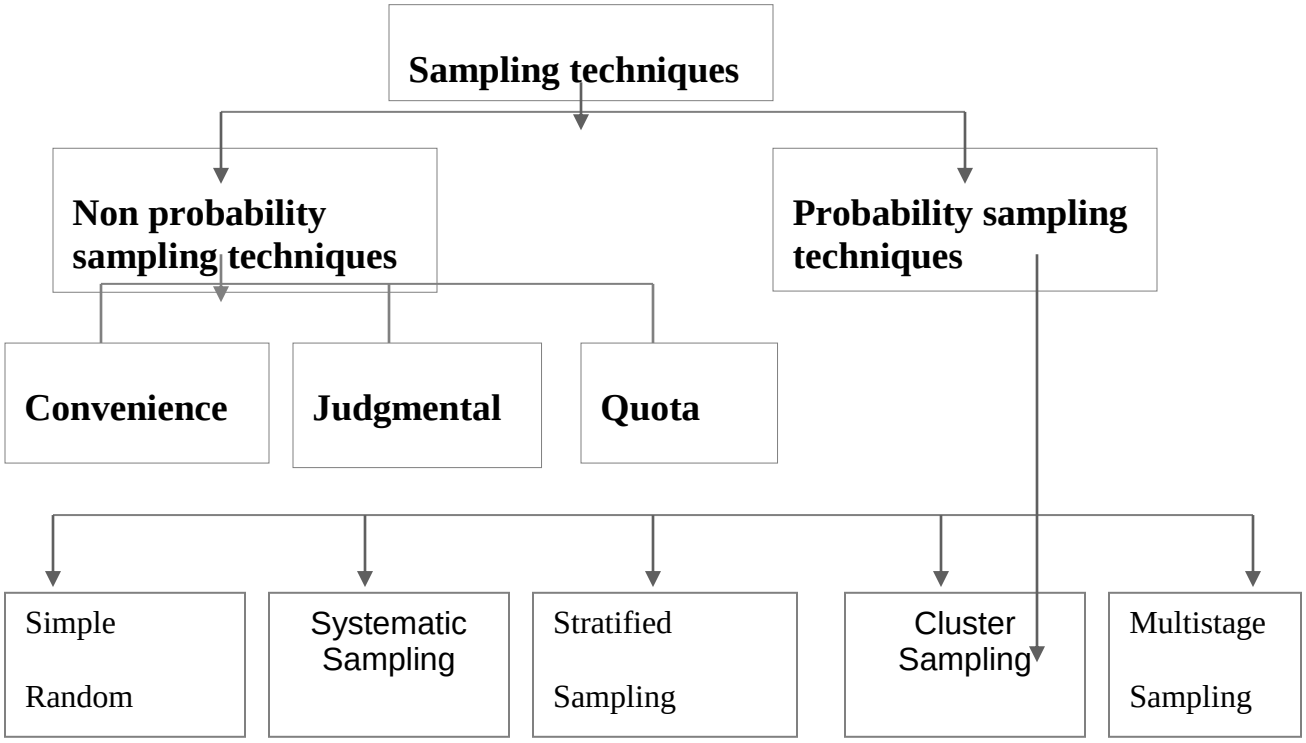
**Non-probability sampling techniques:**

1. It relies on the personal judgment and convenience of the researcher rather than the chance to select sample elements.
2. The researcher can arbitrarily or consciously decide which element to include in the sample.
3. Non-probability may yield good estimates of the population characteristic. However they do not allow for objective evaluation of the precision of the sample results.
4. Since there is no way of determining the probability of selecting any particular element for inclusion in the sample, the estimates obtained are not statistically projectable to the population.

**Probability sampling techniques:**

1. Researcher uses the element of chance for selecting sample.
2. It is possible to pre-specify every potential sample of a given size that could be drawn from the population, as well as the probability of selecting each sample.
3. Every potential sample need not have the same probability of selection, but it is possible to specify the probability of selecting any particular sample of a given size.
4. This requires not only a precise definition of the target population, but also a general specification of the sampling frame. Because sample elements are selected by chance.
5. It is possible to determine the precision of the sample estimated of the characteristics of interest. Confidence intervals, which contain the true population value with a given level of certainty, can be calculated. This permits the researcher to make inferences of projections about the target population from which the sample was drawn. Probability sampling techniques are classified based on :
   - Element versus cluster sampling
   - Equal unit probability versus unequal probabilities
   - Unstratified versus stratified selection
   - Random versus systematic selection
   - Single-stage versus multistage techniques

**Diagrammatic representation of the sampling techniques.**




# Non-probability method of sampling:

**1. Convenience Sampling:**

***Definition***

**Convenience sampling** involves using participants in a study because they are convenient and available. A non-probability sampling technique that attempts to obtain a sample of convenient elements. The selection of sampling units is left primarily to the interviewer.

Explanation

1. It is a form of Non-Probability sampling.
2. It is mainly used for Dipstick studies. This type of sampling is normally used to get basic information to take elementary decisions.
3. Convenience samples are often used in exploratory situations when there is a need to get only an approximation of the actual value quickly and inexpensively.
4. Commonly used Convenience samples are associates and "the man on the street". Such samples are often used in the pre-test phase of the study, such as pre-testing of a questionnaire.

Examples:

- Use of students, church groups, and members of social organizations,
- Mall-intercept interviews without qualifying the respondents,
- Department stores using charge account lists
- Tear out questionnaire included in a magazines, and
- People on the street interviews

*Advantages*

- Convenience sampling is the least expensive and least time consuming of all sampling techniques.
- The sampling units are accessible, easy to measure and co-operative.
- This technique is used in exploratory research for generating ideas, insight or hypothesis.

*Disadvantages*

- Convenience samples contain unknown amounts of both variables and systematic selection errors.
- These errors can be very large when compared to the variable error in a simple random sampling of the same size.

Convenience samples are not representatives of any definable population. So they are not recommended for descriptive or casual research.

**Judgmental sampling:**

A form of convenience sampling in which the population elements are purposively selected based on the judgment of the researcher. A judgment sample is one in which there is an attempt to draw a representative sample of the population using judgmental selection procedures. Judgment samples are common in industrial market research.

Example

A sample of addresses taken by the municipal agency to which questionnaires on bicycle riding habits were sent. A judgment sample was taken after researchers looked at traffic maps of the city, considered the tax assessment on houses and apartment buildings (per unit), and kept location of schools and parks in mind.

Advantages

- Judgmental sampling is low cost, convenient and quick.
- Judgmental sampling is subjective and its value depends entirely on the researchers judgment, expertise and creativity.
- It is useful if broad population inferences are not required.

Disadvantage

- It does not allow direct generalization to a specific population, usually because the population is not defined explicitly.

**Quota Sampling**

Definition: A non probability sampling techniques that is a two stage restricted judgmental sampling. The first stage consists of dividing the population into various groups or quotas based on predefined population elements. In the second stage, sample elements are selected from each group based on convenience or judgment .

Explanation

- It is a form of Non-Probability sampling.
- In Quota Sampling, the samples are selected in such a way that the interest parameters represented in the sample are in the same proportion as they are in the universe/ population.
- Quota Sampling is widely used in consumer panels.
- The following aspects must be kept in mind while choosing the control variables:
  - The variables must be available and should be recent.
  - They should be easy for the interviewer to classify.
  - They should be closely related to the variable being measured in the study.
  - The number of variable must be kept to a reasonable number so as to avoid confusion while analyzing the data

The cost of sample per unit is directly proportional to the number of control variables.
In order to have a check mechanism about the quality of samples taken so as to reduce the selection errors, Quota Samples are "***validated***" after they are taken.

The process of validation involves a comparison of the sample and the population with respect to characteristics not used as control variables. For e.g. in a quota sample taken from a consumer panel for which income, education, and age group are used as control variables. If the comparison of this panel and the population might be made with respect to such characteristics as average number of children, occupation of the chief wage earner and home ownership. Then if the panel differed significantly from the population with respect to any of these characteristics, it would be an indication of the potential bias in the selection procedures. It should be noted that the similarity does not necessarily mean the absence of bias.

**Example**

If one wants to select a Quota sample of persons for a test of flavored tea and wants to control (control variables are the parameters based on which he would like to classify the universe) it by ethnic background, income bracket, age group and geographical area. Then the sample taken would have the same proportion of people in each ethnic background, income bracket, age group and geographical area as the population.

Disadvantages

- Scope for high variances
- Scope for sizable selection errors.
- Selection errors arise from the way interviewers select the persons/ variables to fill the quota. Incorrect information of the proportions of the population in each of the control variables, biases in the relationship of the control variables to the variables being measured, and from other sources.

**Other types of non random samples:**

**4. Snowball Sampling**

A variety of procedures. Initial respondents are selected by probability methods. Additional respondents are obtained from information provided by the initial respondents.

**5. Purposive sample**

Subjects selected on the basis of specific characteristics or qualities. Users of a particular technology. Such as Young mothers with small children, doctors, members of a fan club, target market members.

# Probability Method of sampling:

Probability sampling techniques vary in terms of sampling efficiency. Sampling efficiency is a concept that reflects a trade-offs between sampling cost and precision. Precision refers to the level of uncertainty about the characteristic being measured. The greater the precision, the greater the cost and most studies require trade-off.

**1. Simple Random Sampling**

Definition

A probability sampling technique in which each element in the population has a known and equal probability of selection is known as simple random sampling (SRS). Every element is selected independently of every other element and the sample is drawn by a random procedure from a sampling frame.

Explanation

In random sampling, each element in the population has a known and equal probability or chance of selection. Furthermore, each possible sample of a given size (n) has a known and equal probability or chance of being

the sample actually selected. This implies that every other element is selected independently of every other element. The sample is drawn by a random procedure from a sampling frame. This method is equivalent to a lottery system in which names are placed in a container, the container is shaken, and the names of the winners are then drawn out in an unbiased manner.

To draw a simple random sample, the researcher first compiles a sampling frame in which each element is assigned a unique identification number. Then random numbers are generated to determine which element to include in the sample. The random numbers may be generated with a computer routine or a table.

Advantages

- It is easy to understand
- The sample result may be projected to the target population.

*Disadvantages*

- It is often difficult to construct a sampling frame that will permit a simple random sample to be drawn.
- SRS can result in samples that are very large or spread over large geographic areas, thus increasing the time and cost of data collection.
- SRS often results in lower precision with larger standard errors than other probability sampling techniques.
- SRS may or may not result in a representative sample. Although samples drawn will represent the population well on average, a given simple random sample may grossly misrepresent the target population. This more likely if the size of the sample is small.

**Systematic sampling**

Definition

A probability sampling technique in which the sample is chosen by selecting a random starting point and then picking every $i^{th}$ element in succession from the sampling frame.

Explanation

In systematic sampling, the sample is chosen by selecting a random starting point and then picking every $i^{th}$ element in succession from the sampling frame. The sampling interval, *i*, is determined by dividing the population size N by the sample size n and rounding to the nearest integer.

Example

It's a three step process:

- 1. Find out Sampling Interval

Sampling interval = Population divided by sample size

- 2. To select random starting point through simple random process
- 3. To select the sample

Suppose there are 100,000 elements in the population and a sample of 1000 desired. In this case the sampling interval, is calculated by dividing 100,000 by 1000. It comes to 100. A random number between 1 to 100 is selected. If say number 23 is selected, the sample will then consists of elements 23, 123, 223, 323, 423, 523, and so on.

Systematic sampling is similar to SRS in that each population element has a known and equal probability of selection. However, it is different from SRS in that only the permissible samples of size *n* that can be drawn

have a known and equal probability of selection. The remaining samples of size n have a zero probability of being selected.

For systematic sampling, the researcher assumes that the population elements are ordered in some respect. In some cases the ordering (alphabetic listing in a telephone book) is unrelated to the characteristic of interest. In other instances, the ordering is directly related to the characteristic under investigation. (Credit card customers may be listed in order of outstanding balances. If the population elements are arranged in a manner unrelated to the characteristic of interest, systematic sampling will yield result quite similar to SRS.
On the other hand, when the ordering of the element is related to the characteristic of interest, systematic sampling increases the representatives of the sample.

Advantages

- Systematic sampling is less costly and easier that SRS, because random selection is done only once.
- The random numbers do not have to be matched with individual element as in SRS. Since some lists contains millions of elements, considerable time can be saved. This in turn again reduces the cost.
- If the information related to the characteristic of interest is available for the population, systematic sampling can be used to obtain a more representative and reliable sample than SRS.
- Systematic sampling can even be used without knowledge of the composition (elements) of the sampling frame.

**Stratified Random Sampling**

Definition

A probability sampling technique that uses a two-step process to partition the population into subpopulations, or strata is known as stratified random sampling. Elements are selected from each stratum by a random procedure.

Explanation

- A probability sampling technique that uses a two-step process to partition the population:

It's a two step process:

*i. Divide the populations into subpopulations, or strata based on well defined criteria.*

i. *Elements are selected from each stratum or group based on the proportionate representation by a random procedure.*

Stratified Random Sampling emerges from the word *Stratum*. A Stratum in a population is a segment of that population having one or more characteristics. E.g. people in the age strata of 35-40, people in the income strata to Rs. 20000 p.m. etc
Stratified Sampling involves treating each stratum as a separate subpopulation for sampling purposes, and from each stratum sampling units would be drawn randomly.
The reasons for conducting Stratified Random Sampling are:

- To reduce sampling error by ensuring representation from the population.
- The required sample size for the same level of sampling error will usually be smaller.

As compared to other methods of sampling, in Stratified Random Sampling representativeness to a certain degree is forced. The greater degree to which there is similarity within stratum, smaller is the sample size required to provide information about that stratum.Thus the more homogeneous each stratum is with respect to the variable of interest the smaller is the sample required.

Example

If the head of the household age strata (18-34, 35-49, 50+) are of interest in a study on household spending habits on household furnishings, then each of these groups would be taken separately for sampling purposes. That is, the total population could be divided into age groups and a separate sample is drawn from each group.

## Cluster Sampling

*Definition*

The target population is divided into mutually exclusive and collectively exhaustive subpopulation called clusters. Then a random sample of clusters is selected based on probability sampling techniques such as simple random sampling. For each selected clusters, either all the elements are included in the sample or a sample of elements is drawn probabilistically.

Explanation

- If all the elements in each selected cluster are included in the sample, the procedure is called one stage cluster sampling.
- If a sample of elements is drawn probabilistically from each selected cluster, the procedure is called two-stage cluster sampling.
- The key distinction between cluster sampling and stratified sampling is that in cluster sampling only a sample of subpopulations (clusters) is chosen, whereas in stratified sampling all the subpopulations are selected.
- The objective of the cluster sampling is to increase the sampling efficiency by decreasing costs.

Example

If the study requires studying the households in the city then in cluster sampling the whole city is divided into Blocks and to take each household on each block selected. Thus to get a representative whole of the universe.

Advantages

- Low population heterogeneity / high population homogeneity
- Low expected cost of errors.
- The main advantage of cluster sampling is the low cost per sampling unit as compared to other sampling methods.

Disadvantage

- High potential of sampling error as compared to other methods.
- For eg: The lower cost per unit and higher sampling error potential of a cluster sample is illustrated by considering a sample of 100 households to be selected for personal interviews from a particular city. In this method the city would be divided in blocks and 10 households from 10 selected blocks would be selected and interviewed. Thus the cost of personal interview per unit will be low because of the close proximity of the units in the cluster. This sample may not be the exact representation of the entire city. Thus there is a possibility of sampling error.
- **Multistage sampling** can be a complex form of **cluster sampling** because it is a type of **sampling** which involves dividing the population into groups (or **clusters**). Then, one or more **clusters** are chosen at random and everyone within the chosen**cluster** is **sampled**.

# MODULE: V
# DATA COLLECTION

*1. Types of data and sources- Primary and Secondary data sources*
*2. Methods of collection of primary data:*
*a. Observation*
*b. Experimental*
*c. Interview Method:*
*i) Personal Interview*
*ii) focused group,*
*iii) in-depth interviews -*
*d. Survey*
*e. Survey instrument – i) Questionnaire designing.*
*f. Scaling techniques- i) Likert scale, ii) Semantic Differential scale, iii) Staple scale, iv) Constant sum scale*

## Types of data and sources- Primary and Secondary data sources

Market research can be either primary or secondary. In marketing research, there are two types of data. Primary data is data that has to be collected and analyzed from scratch, while secondary data refers to data that already exists and was gathered for purposes other than current research project. Primary research is new research, carried out to answer specific issues or questions. It can involve questionnaires, surveys or interviews with individuals or small groups. Secondary research makes use of information previously researched for other purposes and publicly available. This is also known as 'desk research'. Secondary research includes published research reports in a library, surveys or the Internet. It can also include scientific reports produced by medical councils, universities or government, for example, the Royal College of Physicians, the Indian Heart Foundation and the Department of Health.

**Primary research** is defined as factual, firsthand accounts of the study written by a person who was part of the study. **Primary research** involves the collection of original primary data by researchers. It is often undertaken after researchers have gained some insight into an issue by reviewing secondary research or by analyzing previously collected primary data. The methods vary on how researchers run an experiment or study, but it typically follows the scientific method. One way you can think of primary research is that it is typically original research. Secondary data comes in all sorts of shapes and sizes. There are plenty of raw data sources like the Census data, Data.gov, the stock market, and countless others.

**Secondary research** is defined as an analysis and interpretation of primary research. **Secondary research** (also known as desk research) involves the summary, collation and/or synthesis of existing research rather than primary research, in which data are collected from, for example, research subjects or experiments. The method of writing secondary research is to collect primary research that is relevant to a writing topic and interpret what the primary research found. For instance, secondary research often takes the form of the results from two or more primary research articles and explains what the two separate findings are telling us. Or, the author may have a specific topic to write about and will find many pieces of primary research and use them as information in their next article or textbook chapter. Internal company data like customer details, sales figures, employee timecards, etc. can also be considered secondary data. Published articles, including peer-reviewed journals, newspapers, magazines, and even blog postings like this count as secondary data sources. Sometimes, secondary research is required in the preliminary stages of research to determine what is known already and what new data is required or else to inform research design. At other times, it may be the only research technique used. A key performance area in secondary research is the full citation of original sources, usually in the form of a complete listing or annotated listing. Secondary sources could include previous research reports, newspapers, magazines and journals as well as government and NGO statistics.

You can break the sources of **secondary** data into **internal** sources and **external** sources. **Internal** sources include data that exists and is stored inside your organization. **External** data is data that is collected by other people or organizations from your organization's **external.**

**Internal sources** include data that exists and is stored inside your organization. **External data** is data that is collected by other people or organizations from your organization's external environment.

Let's dig a little deeper into each of these general categories. Examples of **internal sources of data** include, but are certainly not limited to, the following:

- Profit and loss statements
- Balance sheets
- Sales figures
- Inventory records
- Previous marketing research studies

If the secondary data you have collected from internal sources will not be sufficient, you can turn to **external sources of data**. Some external sources include:

- Government sources, such as the U.S. Census Bureau
- Corporate filings, such as annual reports to the U.S. Securities and Exchange Commission (SEC)
- Trade, business and professional associations
- Media, including broadcast, print and Internet
- Universities
- Foundations
- Think tanks, such as the Rand Corporation or Brookings Institute
- Commercial data services

**The main sources of external secondary sources are (1) government (federal, state and local) (2) trade associations (3) commercial services (4) national and international institutions.**

| | |
|---|---|
| Government statistics | *These may include all or some of the following:*<br>· Population censuses<br>· Social surveys, family expenditure surveys<br>· Import/export statistics<br>· Production statistics<br>· Agricultural statistics. |
| Trade associations | Trade associations differ widely in the extent of their data collection and information dissemination activities. However, it is worth checking with them to determine what they do publish. At the very least one would normally expect that they would produce a trade directory and, perhaps, a yearbook. |
| Commercial services | Published market research reports and other publications are available from a wide range of organisations which charge for their information. Typically, marketing people are interested in media statistics and consumer information which has been obtained from large scale consumer or farmer panels. The commercial organization funds the collection of the data, which is wide ranging in its content, and hopes to make its money from selling this data to interested parties. |
| National and international institutions | Bank economic reviews, university research reports, journals and articles are all useful sources to contact. International agencies such as World Bank, IMF, IFAD, UNDP, ITC, FAO and ILO produce a plethora of secondary data which can prove extremely useful to the marketing researcher. |

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# Methods of collection of primary data

1. **Observation**
2. **Experimentation**
3. **Focus group**
4. **Depth interview**
5. **Survey**

# 1. OBSERVATION

**A. Observation Research -** Observing consumers without communicating with them. It is the systematic process of recording the behavioural patterns (or events) of people, objects, and occurrences without questioning or communicating with them. Observational methods are tools to gather information on current behaviour. A wide ranging set of research techniques aimed at observing consumers interacting naturally with their surroundings including products and services in use. A wide ranging set of research techniques aimed at observing consumers interacting naturally with their surroundings including products and services in use. A key advantage of observation research is that often the respondent or consumer is unaware that they are being observed, allowing their behavior to be observed naturally.

Conditions for Using "Observations" in Research: (all three must be present)

1. The desired information must be inferable from observation of subjects' behavior;
2. The behavior of interest must be frequent, repetitive, or predictable; and
3. The behavior of interest must be of relatively short duration.

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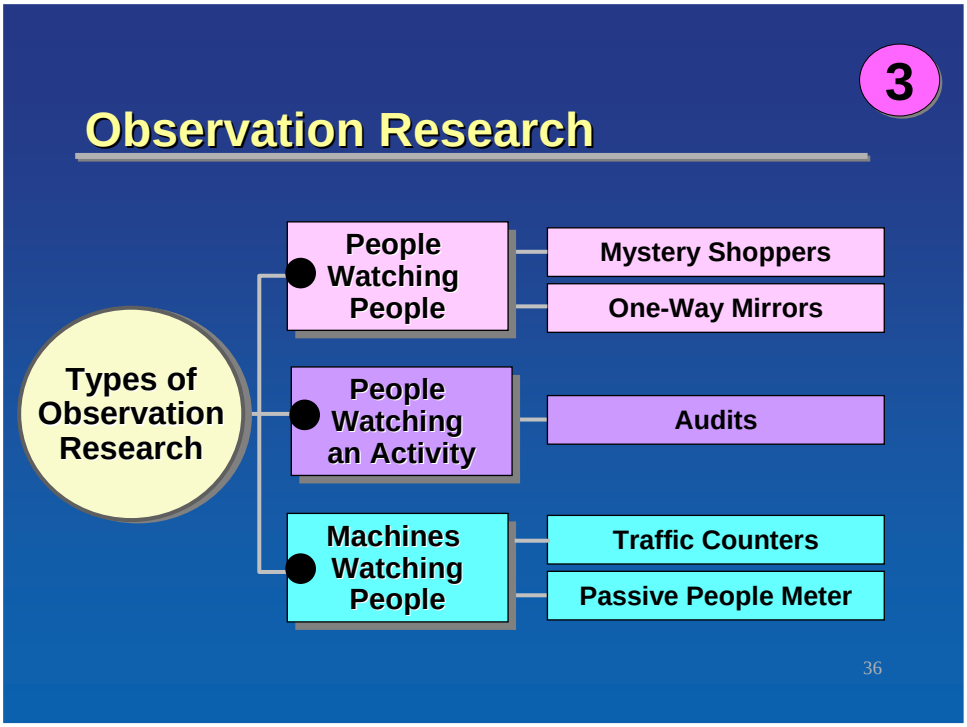


***Advantages of Observation Method***

1. If the researcher observes and record events, it is not necessary to rely on the willingness and ability of respondents to report accurately.
2. The biasing effect of interviewers is either eliminated or reduced. Data collected by observation are, thus, more objective and generally more accurate.

***Disadvantages of Observation Method***

1. The most limiting factor in the use of observation method is the inability to observe such things such as attitudes, motivations, customers/consumers state of mind, their buying motives and their images.
2. It also takes time for the investigator to wait for a particular action to take place.
3. Personal and intimate activities, such as watching television late at night, are more easily discussed with questionnaires than they are observed.
4. Cost is the final disadvantage of observation method. Under most circumstances, observational data are more expensive to obtain than other survey data. The observer has to wait doing nothing, between events to be observed. The unproductive time is an increased cost.

# Types of observation research

**I. Human Observations:** - refers to people (rather than machines) watching other people. Types include:
**A. Mystery Shoppers** - people that are employed by a firm to pose as consumers and shop at competitors' stores to compare prices, displays, service performances, cleanliness, and the like.
**B. One-Way Mirror Observations** - The practice of watching unseen from behind a one-way mirror. Often used for product testing and with focus groups.
**C. Shopper Patterns** - refers to drawings that record the footsteps of a shopper through a store. They show the flow of a representative sample of shoppers through a store.
[Also used to study the effect of music on shopper behavior. For instance, we know that slow music makes them stay longer and buy more.]

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**D. Content Analysis** - A technique used to study written material, usually advertising copy, by breaking it into meaningful units, using carefully applied rules.
**Content Analysis** attempts to determine what is being communicated to a target audience by objectively and systematically describing the communication's content.
**E. Humanistic Inquiry** - A method of inquiry in which the researcher is immersed in [becomes a part of] the system or group under study, rather than using the scientific method of standing apart from the system being studied.
**F. Audits** - are examinations and verifications of the sales of subject products.
There are two general categories: Retail audits measure sales to final consumers, and wholesale audits determine the amount of product movement from warehouses to retailers. Retail distribution audits are similar to store audits however these audits do not measure inventory sales: instead they are observational studies at the retail level. Field agents enter stores unannounced and without permission. They observe and record the brands present, price, shelf facings and other relevant data for selected product categories. Audits provide relatively precise information on the movement of many different types of goods. Since most products are not sold directly to the end user, but to retailers, wholesalers and distributors, the manufacturer does not have information on sales at the retail level. Even though information on factory shipments are available, warehouse stocks might be accumulating because of limited retail sales. Moreover, audits give information on how competing products are faring in the marketplace.

II. **People Watching an Activity**
Audits: - are examinations and verifications of the sales of subject products. Audits involve the physical inspection of inventories, sales receipts, shelf facings, prices, and other aspects of the marketing mix to determine sales, market share, relative price, distribution, or other relevant information.

**III. Machine Observation Types:**
**A. Traffic Counters** - Machines used to measure vehicular flow over a particular stretch of roadway.
**B. Physiological Measurement** - refers to measuring the level of involuntary change in a person's activation based upon the stimuli of interest. Activation - refers a person's feeling of arousal, inner tension, or alertness.
Activation is stimulated via a subcortical unit, called the reticular activation system (RAS), which is located in the human brainstem.

# 2. EXPERIMENTATION

Experiment -- experiments are widely used in causal research designs. Experimental research allows a researcher to control the research situation so that *causal* relationships among variables may be evaluated. The experimenter manipulates one or more independent variables and holds constant all other possible independent variables while observing effects on dependent variable(s). Events may be controlled in an experiment to a degree that is simply not possible in a survey.

Independent variables are expected to determine the outcomes of interest. In an experiment, they are controlled by the researcher through manipulations. Dependent variables are the outcomes of interest to the researcher and the decision makers. A simple example would be thinking about how changes in price would influence sales. Price would be an independent variable and sales would be a dependent variable. An experiment measures the change in the dependent variable created by a specific, controlled change in another variable(s) which is called the independent variable(s).

- Thus the researcher's goal in conducting an experiment is to determine whether changing an experimental independent variable causes changes in the specified dependent variable.

Examples

i. The effect of price changes on sales volume of a particular product can be examined by actually varying the price of the product
ii. Advertising Experiment: Will replacing commercial A with commercial B lead to a marked increase in consumer preference for a company's brand?
iii. Pricing Experiment: Can a company improve the profitability of its fashion clothing line by increasing its price by 10 percent?
iv. Sales Productivity Experiment: Will an increase in the average number of sales calls per customer from six to eight per year significantly improve sales?

**Three types of Experimental research:**

a. **Laboratory Experiments** - Tests done in a sterile environment in which the researcher can control almost all possible causal factors. However, while the laboratory allows the researcher to control the variables involved, the lab may not accurately represent the real marketplace. Thus, the research results my not hold up when transferred to (generalized to) the actual marketplace. Thus, lab results are said to have good internal validity, but often lack external validity. This suggests that lab results are more likely to be statistically correct than results from field experiments, but less likely to be generalizable to the population of interest which is always located outside of the laboratory.

b. **Field Experiments** - Tests conducted outside the laboratory in an actual market environment. A test market is a good example. This solves the problem of realism of the test environment, but factors other than the independent variable(s) of interest may influence the observed changes in the dependent variable of interest because the researcher cannot control all other independent variables that may affect the dependent variable. For instance, the researcher cannot control nor even precisely measure the effects of competitive actions, the weather, the economy, societal trends, the political climate, nor other elements of the uncontrollable environment. Thus, field experiments often lack internal validity, while having better external validity. This suggests that the results have a better chance of being statistically wrong, but they are more likely generalizable to other similar market situations, if they are statistically correct. A major difference between the two approaches is the degree of control available during the manipulation and measurement process. A laboratory experiment clearly offers better control than a field experiment with respect to extraneous factors capable of influencing consumer preferences.

   A *laboratory experiment* is a research study conducted in a contrived setting in which the effect of all, or nearly all, influential but irrelevant independent variables is kept to a minimum. A *field experiment* is a research study conducted in a natural setting in which the experimenter manipulates one or more independent variables under conditions controlled as carefully as the situation will permit.
   The validity of experimental results is usually evaluated on two dimensions: external validity and internal validity.
   - *Internal validity* is the extent to which observed results are solely due to the experimental manipulation.
   - *External validity* is the extent to which observed results are likely to hold beyond the experimental setting. An ideal experiment is one whose results will have high internal as well as external validity, although there is usually a trade-off between these two forms of validity.
   - Laboratory experiments generally have an advantage over field experiments in terms of internal validity but not external validity. Field experiments generally have an advantage over laboratory experiments in terms of external validity but not internal validity.

c. **Continuous research:** A survey conducted on a regular and frequent basis among parallel samples within the same population or a survey in which the interviews are spread over a long period of time. In this way, a picture of market *trends* can be built up. This type of longitudinal research is often funded on a syndicated basis. Syndicated research usually involves an independent research company collecting data and supplying it simultaneously to a number of clients.

# 3. Focus group discussions (F.G.Ds):

The standard focus group interview involves 8 and 12 individuals and lasts about 2 hours. Normally each group is designed to reflect the characteristics of a particular market segment. The respondents are selected according to the relevant sampling plan and meet at a central location that generally has facility for taping and/ or filming the interviews. In Europe, focus tend to consist of 6 to 8 respondents, vary in length from 1.5 to 4 hours and are often conducted in the home of the recruiter. Otherwise the interviewers are similar.

The discussion itself is “led” by a moderator. The moderator attempts to progress through three stages during the interviewer: (1) establish rapport with the group, structure the rules of group interaction, and set objectives; (2) provoke intense discussion in the relevant areas; and (3) summarize the group’s responses to determine the extent of agreement.

The general either the moderator or a second person prepares a summary of each session after analyzing the session's transcript.

**Focus Group Interviews can be applied to:**

1. Basic- need studies for product idea creation,
2. New product idea or concept exploration,
3. Product positioning studies,
4. Advertising and communications research,
5. Background studies on consumer's frames or reference,
6. Establishment of consumer vocabulary as a preliminary step in questionnaire development and,
7. Determination of attitudes and behavior.

**Advantages**

1. Each individual is able to expand and refine their opinions in the interaction with the other members. This process provides more detailed and accurate information than could be derived from each separately.
2. A group interview situation is generally more exciting and offers more stimulation to the participants than the standard depth interviews.
3. The security of being in a crowd encourages some members to speak out when they otherwise would not.
4. As the questions raised by the moderator are addressed to the entire group rather than an individual the answer contains a degree of spontaneity that is not produced by other techniques.
5. Focus groups can be used successfully with children over five. They are also very useful with adults in developing countries where literacy rates are low and survey research is difficult. 88
6. A final major advantage of focus groups is that executives often observe the interview (from behind mirrors) or watch films of the interview.

**Disadvantages**

1. Since focus group interviews last 1.5 to 3 hours and take place at a central location, securing cooperation from a random sample is difficult.
2. Those who attend group interviews and actively participate in them are likely to be different in many respects from those who do not.
3. There are chances that participants may go along with the popular opinion instead of expressing their own which may be contrary to the popular opinions.
4. The presence of a one-way mirror and /or an observer(s) has been found to distort participant's responses.
5. The moderator can introduce serious biases in the interview by shifting topics too rapidly verbally or nonverbally encouraging certain answers, failing to cover specific areas, and so forth.
6. Focus groups are expensive on a per respondent basis.

# 4. Depth interviews

***Depth interviews*** are frequently used by marketing researchers when direct questioning is impractical, more costly, or less accurate. These techniques generally referred to as ***Qualitative research*****.**

**Depth Interviews** - (unstructured one-on-one interviews intended to discover deep seated motivations) -- One-on-one interviews that probe and elicit detailed answers to questions, often using clinical nondirective techniques to uncover hidden motivations. Thus, psychologists and people with Doctorates in Marketing (which is a combination of applied psychology and applied economics) are often called upon to conduct Depth Interviews, as well as Nominal Grouping Sessions.

Individual depth interviews typically require 30-45minutes. The interviewer does not have a specific set of pre-specified questions that must be asked according to the order imposed by a questionnaire. Instead, there is freedom to create questions, to probe those responses that appear relevant, and generally to try to develop the best set of data in any way practical. However the interviewer must follow one rule; one must not consciously try to affect the content of the answers given by the respondents. The respondent. The respondent must feel free to reply to the various questions, probes, and other, subtler, ways of encouraging responses in the manner deemed most appropriate.

- Subject of interest is discussed in detail.

- There is no fixed pattern for eliciting information from the respondents.
- Generally conducted by highly trained interviewers. They must be thorough in probing the respondents.
- The interviewee is asked about the subject of his choice, coffee, for example, and an attempt is made to explore the respondents' attitudes in depth by probing extensively into any other areas which may come up.
- Interviewers have a general series of topics that they will introduce – perhaps such topics as coffee, or sleep, and will introduce them from time to time if the respondent does not bring them up.
- Tone of the interview is permissive and the respondent is allowed to talk as much as he likes.
- The interviewer must not influence the answers of the respondent.
- The interpretation of the answers is very subjective and knowledge of human behavior is required to analyze the information received.

Individual depth interviews uses three questioning techniques namely:

1. ***Laddering:*** "The *laddering* method of interviewing is technique to understanding people's core values and beliefs. The technique is powerful, because it provides a simple and systematic way of establishing an individual's core set of constructs on how they view the world. Laderring Technique is use to describe the linkages between customers' values and their overall purchasing behavior: the *Means End Chain theory*. This theory provides both a framework for capturing qualitative laddering research data in the consumer space and a model for assessing consumer values and behaviors. According to the Means End Chain theory, there is a hierarchy of consumer perceptions and product knowledge that ranges from attributes (A) to consumption consequences (C) to personal values (V), as follows:
   - Attributes—At the top level of this hierarchy, attributes are most recognizable by individuals. Individuals recognize the attributes of a product or system easily. For example, "I like this car, because it is a convertible."
   - Consequences—In turn, the attributes have *consequences* for the individual. For example, the convertible makes its driver feel young and free. Each attribute may have one or more consequences for any given individual.
   - Core values—finally, each consequence are linked to a *core value* of the person's life. For example, the sense of youth makes that driver feel attractive.

   Purpose is to uncover the "network of meanings" associated with the product, brand, or concept.
2. ***Hidden-issue questioning*** focuses on individual respondents feelings about sensitive issues. Analysis on focus on common underlying themes across respondents. These themes can then be used to guide advertising development.
3. ***Symbolic questioning*** requires respondents to describe the opposites of the product/ activity of interest or a specific attribute of the product/ activity.

Individual depth interviews have been found to generate more and higher quality ideas on a per respondent basis than either focus or minigroups. They are particularly appropriate when:

1. Detailed probing of an individual's behavior, attitude or needs is required;
2. The subject matter under discussion is likely to be of a highly confidential nature (e. g. personal investment)
3. The subject matter is of an emotionally charged or embarrassing nature;
4. Certain strong, socially acceptable norms exist (e.g. baby feeding) and the need to conform in a group discussion may influence responses;
5. Where highly detailed understanding of complicated behavior or decision- making pattern (e.g. planning the family holiday) are required; or

The interviews are with professional people or with people on the subject of their jobs 9 e.g. finance directors)

# 5. Survey Method:

The Survey method is the technique of gathering data by asking questions to people who are thought to have desired information. A formal list of questionnaire is prepared. Generally a non disguised approach is used. The respondents are asked questions on their demographic interest opinion.

***Advantages of Survey Method***

1. As compared to other methods (direct observation, experimentation) survey yield a broader range of information. Surveys are effective to produce information on socio-economic characteristics, attitudes, opinions, motives etc and to gather information for planning product features, advertising media, sales promotion, channels of distribution and other marketing variables.
2. Questioning is usually faster and cheaper that Observation.
3. Questions are simple to administer.
4. Data is reliable
5. The variability of results is reduced.
6. It is relatively simple to analyze, quote and interrelate the data obtained by survey method

***Disadvantages of Survey Method***

1. Unwillingness of respondents to provide information- This requires salesmanship on the part of the interviewer. The interviewer may assure that the information will be kept secret or apply the technique of offering some presents.
2. Inability of the respondents to provide information- This may be due to
    a. Lack of knowledge
    b. Lapse of memory
    c. Inability to identify their motives and provide "reasons why?" for their actions
3. Human Biases of the respondents are there, for eg: "Ego"
4. Symantec difficulties are there – it is difficult, if not impossible, to state a given question in such a way that it will mean exactly same thing to each respondent. Similarly two different wordings of the same question will frequently produce quite different results.

## Types of Surveys:

There are mainly 4 methods by which we can collect data through the Survey Method

a. Telephonic Interview
b. Personal Interview
c. Mail Interview
d. Computer or Internet or Electronic Interview

**1. Telephonic Interview**

Telephone Interviewing stands out as the best method for gathering quickly needed information. Responses are collected from the respondents by the researcher on telephone.

***Advantages of Telephonic Interview***

a. It is very fast method of data collection.
b. It has the advantage over "Mail Questionnaire" of permitting the interviewer to talk to one or more persons and to clarifying his questions if they are not understood.
c. Response rate of telephone interviewing seems to be a little better than mail questionnaires
d. The quality of information is better
e. It is less costly method and there are less administration problems

***Disadvantages of Telephonic Interview***

f. They cant handle interview which need props
g. It cant handle unstructured interview
h. It cant be used for those questions which requires long descriptive answers
i. Respondents cannot be observed
j. People are reluctant to disclose personal information on telephone
k. People who don't have telephone facility cannot be approached

2. **Personal Interviewing**

It is the most versatile of the all methods. They are used when props are required along with the verbal response non-verbal responses can also be observed.

***Advantages of Personal Interview***

a. The person interviewed can ask more questions and can supplement the interview with personal observation.
b. They are more flexible. Order of questions can be changed
c. Knowledge of past and future is possible.
d. In-depth research is possible.
e. Verification of data from other sources is possible.
f. The information obtained is very reliable and dependable and helps in establishing cause and effect relationship very early.

***Disadvantages of Personal Interview***

g. It requires much more technical and administrative planning and supervision
h. It is more expensive
i. It is time consuming
j. The accuracy of data is influenced by the interviewer
k. A number of call banks may be required
l. Some people are not approachable

3. **Mail Survey**

Questionnaires are send to the respondents, they fill it up and send it back.

***Advantages of Mail Survey***

a. It can reach all types of people.
b. Response rate can be improved by offering certain incentives.

***Disadvantages of Mail Survey***

c. It can not be used for unstructured study.
d. It is costly.
e. It requires established mailing list.
f. It is time consuming.
g. There is problem in case of complex questions.

4. **Computer or Internet or Electronic Interview**

Electronic interviewing is a process of recognizing and noting people, objects, occurances rather than asking for information. For example-When you go to store, you notice which product people like to use. The Universal Product Code (UPC) is also a method of observing what people are buying.

***Advantages of Electronic Interview***

a. There is no relying on willingness or ability of respondent.
b. The data is more accurate and objective.

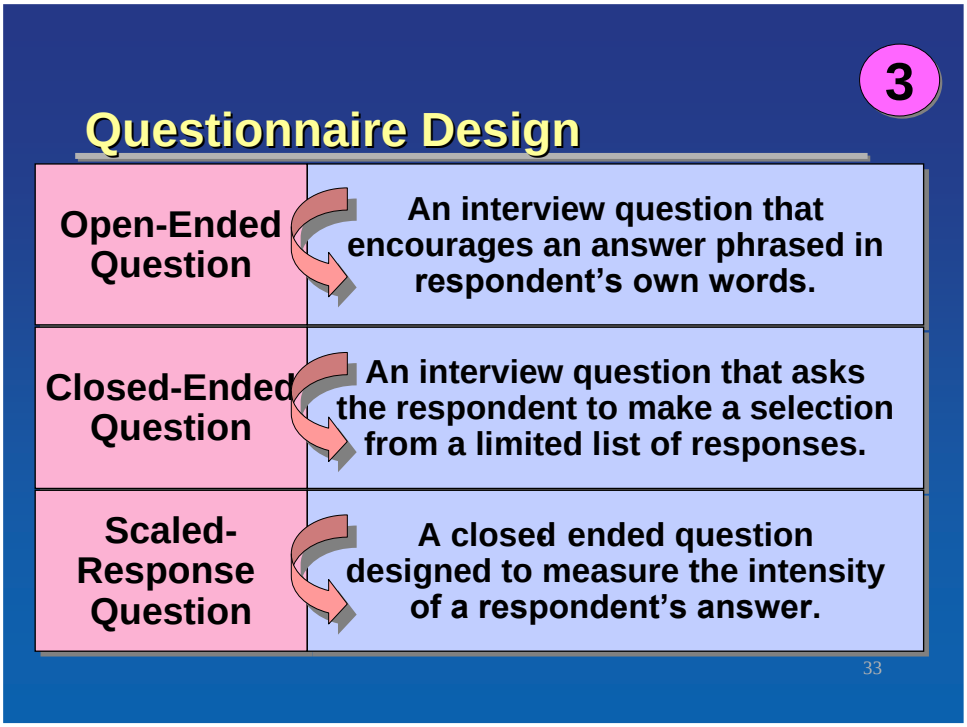
***Disadvantages of Electronic Interview***

c. Attitudes cannot be observed.
d. Those events which are of long duration cannot be observed.
e. There is observer bias. It is not purely objective.
f. If the respondents know that they are being observed, their response can be biased.
g. It is a costly method.

# Survey instrument – i) Questionnaire designing.

## Questionnaire construction

Questionnaires are frequently used in quantitative marketing research. They are a valuable method of collecting a wide range of information from a large number of respondents. Good questionnaire construction is critical to the success of a survey. Inappropriate questions, incorrect ordering of questions, incorrect scaling, or bad questionnaire format can make the survey valueless. A useful method for checking a questionnaire for problems is to pretest it. This usually involves giving it to a small sample of respondents, then interviewing the respondents to get their impressions and to confirm that the questions accurately captured their opinions.




**STRUCTURED Vs UNSTRUCTURED DATA COLLECTION**

The data collection through questionnaires can be done through four ways as follows;

1. Structured disguised
2. Structured - nondisguised
3. Non-structured - disguised
4. Non structured - nondisguised

**Note :** non disguised data collection is also called as direct method & disguised is also called as indirect method .

**Structured data collection**

A structured data collection is a formal list of questions framed so as to get the facts. The interviewer asks the questions strictly in accordance with pre- arranged order. For e.g. this method can be used when the information is based on the expenditures of the consumer on different types of clothing like. Cotton woolen or synthetic, etc. This structured questionnaire can be of two types, disguised and non- disguised, based on whether the object or the purpose of the

survey is revealed to the respondent. The main advantage of this method is that, the information can be collected in a systematic and orderly manner. However when it comes to personal questions, this method seems to be less effective.
Structured disguised: - in this case the researcher does not disclose the object of the interview, because he feels that by revealing that the very purpose of the interview will get defeated.

**Structured - nondisguised: -** in this case the everything is pre- arranged and the researcher reveals the objective of the survey to the respondent. This is the most widely followed approach in market research. This is because it is generally felt that the respondent should be taken into confidence, so that he can realize the relevance and give desired information.

**Non-structured data collection**
It is a kind of data collection method where the data to be collected is not pre- arranged or not listed in a proper structured format. Therefore the entire responsibility is left on the researcher to ask the respondent, in the way he feels fit. The researcher only has certain main points on which he develops the questions to be asked. Such a method is devoid of rigidity and the researcher has sufficient amount of freedom to collect the data in the order he wants. Normally this kind of method is used in exploratory research
This kind of data collection is most suitable when it comes to personal or motivational factors.

**Again here there are two main types of non-structured methods of data collection.**
**(1) Non structured disguised:** - again here the objective of interview is not described to the respondent

**(2) Non structured - non-disguised: -** like in case of structured non- disguised, the respondent is taken into confidence by revealing the purpose of the survey.

**CONCLUSION:** The researcher should use the already viable data only when he finds them reliable, suitable and adequate. But he should not blindly discard the use of such data if they are readily available from authentic sources and are also suitable and adequate for in that case it will not be economical to spend time and energy in field surveys for collecting information. At times there may be wealth of usable information in the already available data which must be used by an intelligent researcher but with due precaution.

**Guidelines for Devising a Good Questionnaire**

1. The wording must be kept simple : no technical or specialized words. Use short sentences. Writing style should be conversational, yet concise and accurate.
2. The meaning should be clear. Avoid ambiguous words and equivocal sentence structures. Avoid double negatives. Even single negatives should be reworded as positives.
3. Avoid biasing the responses. A biased question or questionnaire encourages respondents to answer one way rather than another. Avoid “loaded” questions.
4. Ask one question at a time. Avoid complex questions. If more than one question is hidden in a survey question, the researcher will not know which one the respondent is answering.
5. Avoid personal or intimate questions. Most people will not answer them.
6. Consider the respondent’s frame of reference. What is their background, and how will this effect their interpretation of the questions? Do respondents have enough information or expertise to answer the question?
7. Ask yourself if each question is really necessary. Unneeded questions are an expense to the researcher and an unwelcome imposition on the respondents. To answer this question, you must consider the objective(s) of the research.
8. Ask yourself what type of data analysis techniques are available for various kinds of questions. Will the question provide you with the statistical analysis that you want?
9. What type of content will responses to the question yield? Will the question responses provide facts, beliefs, feelings, descriptions of past behavior, or standards of action?
10. What type of scale, index, or typology should be used?

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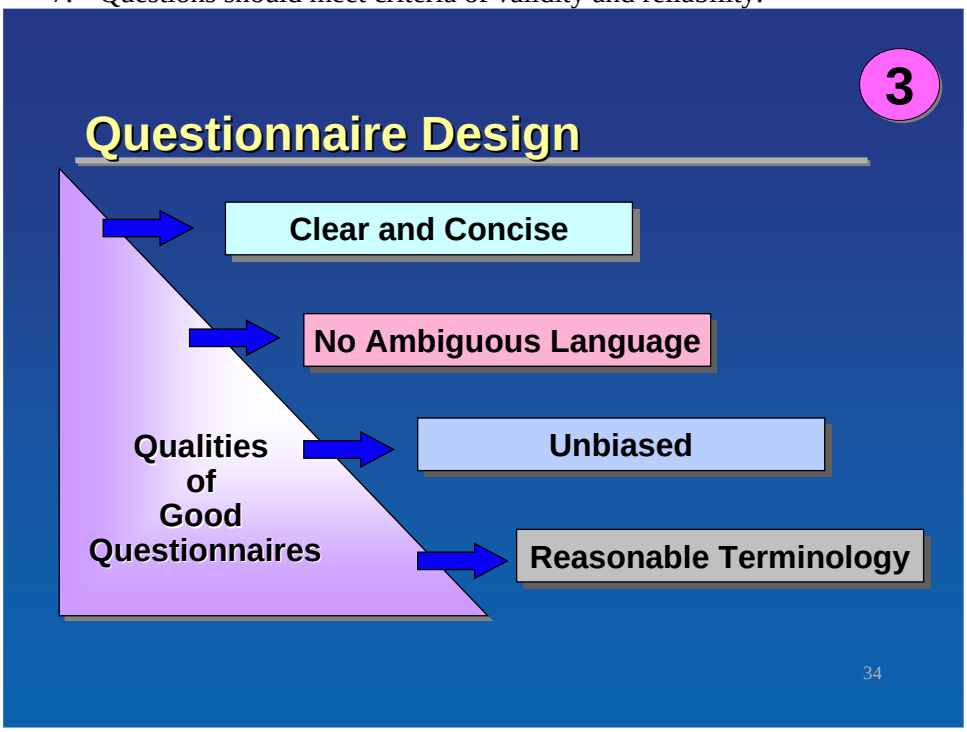
11. How should the questions be presented on the page (or computer screen)? How much white space? How many colours? Do you use pictures, charts, or other graphics? It should be colourful enough to gain and maintain respondent interest, but not so graphic as to distract from the of the questions.
12. Should questions be open-ended or should respondents' answers be limited to a fixed set of responses?
13. What order should the questions be in? Is there a "natural" grouping to the questions? Will previous questions bias later questions?
14. Should the questions be numbered? Generally this is a good idea.
15. Are possible responses mutually exclusive? The respondent should not find themselves in more than one category, for example in both the "married" category and the "not living with spouse" category. Categories should not overlap.
16. Is the list of possible question responses inclusive? The respondent should not find themselves with no category that fits their situation.
17. Is the questionnaire going to be administered by research staff, or will it be self-administered by the respondents. Self administered questionnaires must give clear, detailed instructions.

# *Principles of Developing Questions*

1. Be clear and precise.
2. Response choices should not overlap.
3. Use natural and familiar language.
4. Do not use words or phrases that show bias.
5. Avoid double-barreled questions.
6. State explicit alternatives.
7. Questions should meet criteria of validity and reliability.




## Types of Questions

1. **Contingency questions -** A question that is answered only if the respondent gives a particular response to a previous question. This avoids asking questions of people that do not apply to them (for example, asking **men if they have ever been pregnant).**
2. **Matrix questions -** Identical response categories are assigned to multiple questions. The questions are placed one under the other, forming a matrix with response categories along the

top and a list of questions down the side. This is an efficient use of page space and respondents' time.

3. **Scaled questions -** Responses are graded on a continuum (example : rate the appearance of the product on a scale from 1 to 10, with 10 being the most preferred appearance). Examples of types of scales include the Likert scale, semantic differential scale, and rank-order scale
4. **Closed ended questions -** Respondents' answers are limited to a fixed set of responses. Most scales are closed ended. Other types of closed ended questions include:
   * Dichotomous questions - The respondent answers with a "yes" or a "no".
   * Multiple choice - The respondent has several option from which to choose.
5. **Open ended questions -** No options or predefined categories are suggested. The respondent supplies their own answer without being constrained by a fixed set of possible responses. Examples of types of open ended questions include:
6. **Completely unstructured -** For example, "What is your opinion of questionnaires?"

### *Question Sequence*

1. Questions should flow logically from one to the next.
2. The researcher must ensure that the answer to a question is not influenced by previous questions.
3. Questions should flow from the more general to the more specific.
4. Questions should flow from the least sensitive to the most sensitive.
5. Questions should flow from factual and behavioural questions to attitudinal and opinion questions.
6. Questions should flow from unaided to aided questions
7. According to the three stage theory (also called the sandwich theory), initial questions should be screening and rapport questions. Then in the second stage you ask all the product specific questions. In the last stage you ask demographic questions.

# Attitude measuring scales

Attitude is a resultant of number of external and internal factors. Depending upon the attitude to be measured, appropriate scales are designed. Scaling is a technique used for measuring qualitative responses of respondents such as those related to their feelings, perception, likes, dislikes, interests and preferences. An attitude is a person's feeling toward and evaluation of some object or event. Attitudes have two important aspects: Direction (positive/negative, for or against) and Intensity (strength of feeling). For example, you might like horses - thus, your attitude towards horses has a positive direction. Every attitude has three components that are represented in what is called the ABC model of attitudes: A for affective, B for behavioral, and C for cognitive. The affective component refers to the emotional reaction one has toward an attitudeobject. For example, 'I feel scared when I think about or see a snake.'

***Meaning of Scaling***

Scaling describes the procedures of assigning numbers to various degrees of opinion, attitude and other concepts. This can be done in two ways viz., (i) making a judgement about some characteristic of an individual and then placing him directly on a scale that has been defined in terms of that characteristic and (ii) constructing questionnaires in such a way that the score of individual's responses assigns him a place on a scale. It may be stated here that a scale is a continuum, consisting of the highest point (in terms of some characteristic e.g., preference, favourableness, etc.) and the lowest point along with several intermediate points between these two extreme points. These scale-point positions are so related to each other that when the first point happens to be the highest point, the second point indicates a higher degree in terms of a given characteristic as compared to the third point and the third point indicates a higher degree as compared to the fourth and so on. Numbers for measuring the distinctions of degree in the attitudes/opinions are, thus, assigned to individuals corresponding to their scale-positions. All this is better understood when we talk about scaling

technique(s). Hence the term 'scaling' is applied to the procedures for attempting to determine quantitative measures of subjective abstract concepts. Scaling has been defined as a "procedure for the assignment of numbers (or other symbols) to a property of objects in order to impart some of the characteristics of numbers to the properties in question."

**Measurement Scales**

Scaling is the measurement of a variable in such a way that it can be expressed on a continuum. Rating your preference for a product from 1 to 10 is an example of a scale.

**Concept:**

- A researcher has to know what to measure before knowing how to measure something. The problem definition process should suggest the concepts that must be measured. A **concept can** be thought of as a generalized idea that represents something of meaning. Concepts such as *age, sex, education, and number of children are relatively concrete properties. They present few problems* in either definition or measurement. Other concepts are more abstract. Concepts such as *loyalty, personality, channel power, trust, corporate culture, customer satisfaction, value, and so on are more difficult* to both define and measure. For example, *loyalty has been measured as a combination of customer share (the relative proportion of a person's purchases going to one competing brand/store)* and *commitment (the degree to which a customer will sacrifice to do business with a brand/store).*Thus, we can see that loyalty consists of two components, the first is behavioral and the second is attitudinal.

# Scaling techniques

**Various types of attitude measuring scales**

**There are four types of attitude measuring scales:**

1. **Nominal Scale**
2. **Ordinal Scale**
3. **Interval Scale**
4. **Ratio Scale**

## 1. Nominal Scale:

This is a very simple scale. It consists of assignment of facts/choices to various alternative categories which are usually exhaustive as well mutually exclusive. These scales are just numerical and are the least restrictive of all the scales. Instances of Nominal Scale are - credit card numbers, bank account numbers, employee id numbers etc. It is simple and widely used when relationship between two variables is to be studied. In a Nominal Scale numbers are no more than labels and are used specifically to identify different categories of responses. Following example illustrates -

**What is your gender?**

**[ ]** Male
**[ ]** Female

Another example is - a survey of retail stores done on two dimensions - way of maintaining stocks and daily turnover.

**How do you stock items at present?**

**[ ]** By product category
**[ ]** At a centralized store
**[ ]** Department wise
[ ] Single warehouse

Daily turnover of consumer is?

**[ ]** Between 100 – 200

**[ ]** Between 200 – 300
**[ ]** Above 300

# 2. Ordinal Scale

Ordinal scales are the simplest attitude measuring scale used in Marketing Research. It is more powerful than a nominal scale in that the numbers possess the property of rank order. The ranking of certain product attributes/benefits as deemed important by the respondents is obtained through the scale.

**Example 1:** Rank the following attributes (1 - 5), on their importance in a microwave oven.

1. Company Name
2. Functions
3. Price
4. Comfort
5. Design

The most important attribute is ranked 1 by the respondents and the least important is ranked 5. Instead of numbers, letters or symbols too can be used to rate in a ordinal scale. Such scale makes no attempt to measure the degree of favourability of different rankings.

**Example 2** - If there are 4 different types of fertilizers and if they are ordered on the basis of quality as Grade A, Grade B, Grade C, Grade D is again an Ordinal Scale.

**Example 3** - If there are 5 different brands of Talcom Powder and if a respondent ranks them based on say, "Freshness" into Rank 1 having maximum Freshness Rank 2 the second maximum Freshness, and so on, an Ordinal Scale results. *Median* and *mode* are meaningful for ordinal scale.

# 3. Interval Scale

Herein the distance between the various categories unlike in Nominal, or numbers unlike in Ordinal, are equal in case of Interval Scales. The Interval Scales are also termed as Rating Scales. An Interval Scale has an arbitrary Zero point with further numbers placed at equal intervals. A very good example of Interval Scale is a Thermometer.

**Illustration 1** - How do you rate your present refrigerator for the following qualities.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Company Name** | Less Known | 1 | 2 | 3 | 4 | 5 | Well Known |
| **Functions** | Few | 1 | 2 | 3 | 4 | 5 | Many |
| **Price** | Low | 1 | 2 | 3 | 4 | 5 | High |
| **Design** | Poor | 1 | 2 | 3 | 4 | 5 | Good |
| **Overall Satisfaction** | Very Dis-Satisfied | 1 | 2 | 3 | 4 | 5 | Very Satisfied |

Such a scale permits the researcher to say that position 5 on the scale is above position 4 and also the distance from 5 to 4 is same as distance from 4 to 3. Such a scale however does not permit conclusion that position 4 is twice as strong as position 2 because no zero position has been established. The data obtained from the Interval Scale can be used to calculate the Mean scores of each attributes over all respondents. The Standard Deviation (a measure of dispersion) can also be calculated.

# 4. Ratio Scale

Ratio Scales are not widely used in Marketing Research unless a base item is made available for comparison. In the above example of Interval scale, a score of 4 in one quality does not necessarily mean that the respondent is twice more satisfied than the respondent who marks 2 on the scale. A Ratio scale has a natural zero point and further numbers are placed at equally appearing intervals. For example scales for measuring physical quantities like - length, weight, etc. The ratio scales are very common in physical scenarios. Quantified responses forming a ratio scale analytically are the most versatile. Rati scale possess all he characteristics of an internal scale, and the ratios of the numbers on these scales

have meaningful interpretations. Data on certain demographic or descriptive attributes, if they are obtained through open-ended questions, will have ratio-scale properties. Consider the following questions :

Q 1) What is your annual income before taxes? _____ $
Q 2) How far is the Theater from your home ? _____ miles

Answers to these questions have a natural, unambiguous starting point, namely zero. Since starting point is not chosen arbitrarily, computing and interpreting ratio makes sense. For example we can say that a respondent with an annual income of $ 40,000 earns twice as much as one with an annual income of $ 20,000.

# *Various methods of attitude measuring scales*

Attitude is a group of opinions, values and dispositions to act associated with a particular object or concept. Measuring attitude in your survey can be difficult because it requires a series of questions to evaluate it effectively. An **attitude scale** is designed to provide a valid, or accurate, **measure** of an individual's social **attitude**
Here are some examples of subjects that an attitude survey might attempt to measure.

- Attitude on Choice of smart phone
- Attitude on customer service
- Attitude on use of software

# Various methods of attitude measurements are:

## 1. Likert Scale

It was developed Rensis Likert. Here the respondents are asked to indicate a degree of agreement and disagreement with each of a series of statement. Each scale item has 5 response categories ranging from strongly agree and strongly disagree.

| 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|
| Strongly agree | Agree | Indifferent | Disagree | Strongly disagree |

Each degree of agreement is given a numerical score and the respondents total score is computed by summing these scores. This total score of respondent reveals the particular opinion of a person. Likert Scale are of ordinal type, they enable one to rank attitudes, but not to measure the difference between attitudes. They take about the same amount of efforts to create as Thurston scale and are considered more discriminating and reliable because of the larger range of responses typically given in Likert scale.

A typical Likert scale has 20 - 30 statements. While designing a good Likert Scale, first a large pool of statements relevant to the measurement of attitude has to be generated and then from the pool statements, the statements which are vague and non-discriminating have to be eliminated. Thus, likert scale is a five point scale ranging from ’strongly agreement’to ’strongly disagreement’. No judging gap is involved in this method.

## 2. Semantic Differential Scale

This is a seven point scale and the end points of the scale are associated with bipolar labels.

| *1* | | | | | | *7* |
|---|---|---|---|---|---|---|
| *Unpleasant* | *2* | *3* | *4* | *5* | *6* | *Pleasant* |
| *Submissive* | | | | | | *Dominant* |

Suppose we want to know personality of a particular person. We have options-

i. Unpleasant/Submissive
ii. Pleasant/Dominant

Bi-polar means two opposite streams. Individual can score between 1 to 7 or -3 to 3. On the basis of these responses profiles are made. We can analyse for two or three products and by joining these profiles we get profile analysis. It could take any shape depending on the number of variables.

Profile Analysis

----------/----------
----------/----------
--------/----------

*Mean* and *median* are used for comparison. This scale helps to determine overall similarities and differences among objects.

When Semantic Differential Scale is used to develop an image profile, it provides a good basis for comparing images of two or more items. The big advantage of this scale is its simplicity, while producing results compared with those of the more complex scaling methods. The method is easy and fast to administer, but it is also sensitive to small differences in attitude, highly versatile, reliable and generally valid.

# 3. Stapel's Scale

It was developed by Jan Stapel. This scale has some distinctive features:-

Each item has only one word/phrase indicating the dimension it represents.

i. Each item has ten response categories.
ii. Each item has an even number of categories.
iii. The response categories have numerical labels but no verbal labels.

For example, in the following items, suppose for quality of ice cream, we ask respondents to rank from +5 to -5. Select a plus number for words which best describe the ice cream accurately. Select a minus number for words you think do not describe the ice cream quality accurately. Thus, we can select any number from +5,for words we think are very accurate, to -5,for words we think are very inaccurate. This scale is usually presented vertically.

+5
+4
+3
+2
+1
**High Quality**
-1
-2
-3
-4
-5

This is a unipolar rating scale.

# 4. The Constant Sum Scale:

The constant sum scale requires the respondent to divide a constant sum, generally 10 or 100, among two or more objects or attributes on order to reflect the respondent's relative preference for each object, the importance of the attribute, or the degree to which an object contains each attribute.

Divide 100 points among the characteristics listed so that the division will reflect how important each characteristic is to your selection of a new automobile.

Price ____
Economy ____

Dependability ____
Safety ____
Comfort ____
Style ____
Total 100

All three of the following groups' average responses to the constant sum scale would be consistent with the rank order results just described:

| | Group A | Group B | Group C |
|---|---|---|---|
| Price | 35 | 20 | 65 |
| Economy | 30 | 18 | 9 |
| Dependability | 20 | 17 | 8 |
| Safety | 10 | 16 | 7 |
| Comfort | 3 | 15 | 6 |
| Style | 2 | 14 | 5 |
| | 100 | 100 | 100 |

With rank order scale the researcher has no way of knowing if price is of importance (GROUP C); part of a general, strong concern for overall cost (GROUP A); or not much important than the other attributes (GROUP B).

Constant Sum Scale provides such evidence.

***Figure 9.8 Constant Sum Scaling***

**Instructions**

Below are eight attributes of bathing soaps. Please allocate 100 points among the attributes so that your allocation reflects the relative importance you attach to each attribute. The more points an attribute receives, the more important the attribute is. If an attribute is not at all important, assign it zero points. If an attribute is twice as important as some other attribute, it should receive twice as many points.

**Form**

AVERAGE RESPONSES OF THREE SEGMENTS

| Attribute | Segment I | Segment II | Segment III |
|---|---|---|---|
| 1. Mildness | 8 | 2 | 4 |
| 2. Lather | 2 | 4 | 17 |
| 3. Shrinkage | 3 | 9 | 7 |
| 4. Price | 53 | 17 | 9 |
| 5. Fragrance | 9 | 0 | 19 |
| 6. Packaging | 7 | 5 | 9 |
| 7. Moisturizing | 5 | 3 | 20 |
| 8. Cleaning Power | 13 | 60 | 15 |
| Sum | 100 | 100 | 100 |

**5. Guttman Scales/Scalogram Analysis**

A Guttman scale presents a number of items to which the person is requested to agree or not agree. This is typically done in a 'Yes/No' dichotomous format. It is also possible to use a Likert scale, although this is less commonly used. Questions in a Guttman scale gradually increase in specificity. The intent of the scale is that the person will agree with all statements up to a point and then will stop agreeing.

The scale may be used to determine how extreme a view is, with successive statements showing increasingly extremist positions.

If needed, the escalation can be concealed by using intermediate questions.

***Example***

| | |
|---|---|
| *Place a check-mark against all statements` with which you agree* | |

| | |
|---|---|
| I like eating out | [ ] |
| I like going to restaurants | [ ] |
| I like going to themed restaurants | [ ] |
| I like going to Chinese restaurants | [ ] |
| I like going to Beijing-style Chinese restaurants | [ ] |

# Projective Techniques

*Projective Techniques* are based on the theory that the description of vague objects requires interpretation and this interpretation can only be based on the individual's own background, attitudes, and values. The more vague or ambiguous the object to be described the move one must reveal of oneself in order to complete the description.

The following general categories of projective techniques are described: *association, completion, construction and expression.*

# 1. Association Techniques

Association techniques require the subject to respond to the presentation of a stimulus with the first things that come to mind.

a. **Word association:** An individual is given a clue or hint and asked to respond to the first thing that comes to mind. The association can take the shape of a picture or a word. There can be many interpretations of the same thing. A list of words is given and you don't know in which word they are most interested. The interviewer records the responses which reveal the inner feeling of the respondents. The frequency with which any word is given a response and the amount of time that elapses before the response is given are important for the researcher. For eg: Out of 50 respondents 20 people associate the word " Fair" with "Complexion".

- One of the oldest and simplest projection techniques.
- Respondents are presented with a number of different words, one at a time. After each word, they are asked to give the first word that comes to mind.
- The assumption here is that through free words, the respondents will indicate their inner feelings about the subject.
- Responses are timed so that those responses that respondents "reason out" are identified and taken into account in the analysis. The time limit is usually 5 seconds.
- The usual way of constructing such a test is to choose many stimulating and "neutral" words. The words are read out to the respondent one at a time, and the interviewer essentially records the "first word" association by the respondent.
- Respondents should not be asked to write their responses because then the interviewer will not know if the responses were spontaneous or whether the respondent took time to think out the responses.
- An example of such a test is: who would eat a lot of oatmeal? The first response is "athletes". This means that the respondent feels that the product is more suited for sportspersons. More words on the same topic will reveal more about the respondent's attitude about the product.
- While analyzing the results of word-association tests, responses are arranged along such lines as "favorable - unfavorable" and "pleasant – unpleasant".

b. **Successive word association:** In successive word association, the respondent is asked to give a series of words or thoughts that occur after hearing a given word. The respondent is generally read a number of relatively neutral terms to establish the technique. Then the words of interest to the researcher are presented, each separated by several neutral terms. The order of presentation of the key words is randomized to prevent any position or order bias from affecting the results. The most common approach to analyzing the resulting data is to analyze the frequency with a particular word or category or word is given in response to the word of interest

to the researcher. Word association techniques are used in testing potential brand names and occasionally for measuring attitudes about particular products, product attributes, brands, packages or advertisements.

# 2. Completion Techniques

In this the respondents are asked to complete an incomplete sentence or story. The completion will reflect their attitude and state of mind. Two types of completion are of interest to marketing researchers- *sentence completion* and *story completion.*

***a. Sentence completion***, as the name implies, involves requiring the respondent to complete a sentence. In most sentence completion tests the respondents are asked to complete the sentence with a phrase. Generally they are told to use the first thought that comes to their mind or "anything that makes sense". Because the individual is not required directly to associate himself or herself with the answer conscious or subconscious defences are more likely to be relaxed and allow a more revealing answer.

- The respondent is given a number of incomplete sentences and asked to complete them.
- The rule here too, is that respondent must fill in the first thought that comes to mind.
- Responses are timed.
- Here the interviewer gets more information than the word association technique.
- However, it is difficult to disguise the motive of the study from the respondent, who is usually able to diagnose the investigator's purpose of study.
- For example, "a man who reads Sportstar is ----------."
- The sentences can be worded in either first or third person. No evidence suggests that one of these approaches could be better than the other.

***b. Story completion*** is an expanded version of sentence completion. As the name suggests part of a story is told and the respondent is asked to complete it.

- Respondents are given a half-completed story. This is enough to draw their attention to a particular issue, but the ending is left vague, so that responses can be varied.
- This technique is very versatile and has numerous applications to marketing problems.
- The findings about products/ services give companies inputs to determine advertising and promotional themes and product characteristics.

# 3. Construction Techniques

This technique requires the respondent to produce or construct something generally a story, dialogue, or description. They are similar to completion techniques except that less initial structure is provided. This is more or less like completion test. They can give you a picture and you are asked to write a story about it. The initial structure is limited and not detailed like the completion test. For eg: 2 cartoons are given and a dialogue is to written.

***a. Picture response,*** another useful construction technique, involves using pictures to elicit stories. These pictures are usually relatively vague, so that the respondent must use his or her imagination to describe what is occurring. These are similar to story completion method, except that here pictures are used as the stimuli. The two main methods used here are

i. Thematic Apperception Tests (TAT)
ii. Cartoon method

**i.** A **thematic apperception test (TAT)**, sometimes called the *picture interpretation technique*, presents subjects with an ambiguous picture(s) and asks the subject to tell what is happening in the picture(s) now and what might happen next. Hence, themes (*thematic*) are elicited on the basis of the perceptual-interpretive (*apperception*) use of the pictures. The researcher then analyzes the contents of the stories

that the subjects relate. A TAT represents a projective research technique. Frequently, the TAT consists of a series of pictures with some continuity so that stories may be constructed in a variety of settings. Each subject in the pictures is a medium through which the respondent projects his feelings, ideas, emotions and attitudes. The respondent attributes these feelings to the characters because he sees in the picture something related to himself. Responses differ widely and analysis depends upon the ambiguity of the picture, the extent to which the respondent is able to guess the conclusions and the vagueness of the support questions asked by the interviewer.

ii. **Cartoon Tests:** They are a version or modification of the TAT, but they are simpler to administer and analyze. Cartoon Characters are shown in a specific situation pertinent to a problem. One or more "*balloons*" indicating the conversation of the characters is left open. The respondent has to then fill these balloons and then analyzed. Instead of having the bubble show replies or comments, it can be drawn to indicate the unspoken thoughts of one or more of the characters. This device allows the respondent to avoid any restraints that might be felt against having even a carton character *speak* as opposed to *think* certain thoughts.

***b. Fantasy scenario*** requires the respondent to make up a fantasy about the product or brand.

***c. Personification*** asks the respondent to create a personally for the products or brands. With the pictures and words technique, the subjects are given a number of words and pictures and are asked to choose those they associate with a brand or product and to explain their choice.
This allows the researcher to discover the more emotional responses to brands and imagery.
The product or brand becomes a person (or vice versa)

- Helps bring brands to life
- Feeling, thought, character etc (like brand values)
- Or respondents can project themselves into the roles of user and non-users
- Making up eulogies or obituaries can help

# 4. Expressive Techniques

In this the people are asked to express the feeling or attitude of other people.
**a. Role-playing** is the only expressive technique utilized to any extent by marketing researchers. In *role playing* the consumer is asked to assume the role or behavior of an object or another person, such as a sales representative for a particular department store. The role-playing customer can then be asked to try to sell a given product to a number of different "consumers" who raise varying objections. The means by which the role player attempts to overcome these objections can reveal a great deal about his or her attitudes. Another version of the technique involves studying the role-player's attitudes on what type of people "should" shop at the store in question.

**b. Third-person technique**:
The respondent is presented with a verbal or visual situation and the respondent is asked to relate the beliefs and attitudes of a third person rather than directly expressing personal beliefs and attitudes. This third person may be a friend, neighbor, colleague, or a "typical" person

**Advantages of Projective Techniques**

1. They may elicit responses that subjects would be unwilling or unable to give if they knew the purpose of the study.

2. Helpful when the issues to be addressed are personal, sensitive, or subject to strong social norms.

3. Helpful when underlying motivations, beliefs, and attitudes are operating at a subconscious level.
4. Disadvantages of Projective Techniques
5. Suffer from many of the disadvantages of unstructured direct techniques, but to a greater extent.

6. Require highly trained interviewers.
7. Skilled interpreters are also required to analyze the responses.
8. There is a serious risk of interpretation bias.
9. They tend to be expensive.
10. May require respondents to engage in unusual behavior.
11. Guidelines for Using Projective Techniques
12. Projective techniques should be used because the required information cannot be accurately obtained by direct methods.
13. Projective techniques should be used for exploratory research to gain initial insights and understanding.
14. Given their complexity, projective techniques should not be used naively.

**Disadvantages of Projective Techniques**

1. Suffer from many of the disadvantages of unstructured direct techniques, but to a greater extent.
2. Require highly trained interviewers.
3. Skilled interpreters are also required to analyze the responses.
4. There is a serious risk of interpretation bias.
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**Guidelines for Using Projective Techniques**

1. Projective techniques should be used because the required information cannot be accurately obtained by direct methods.
2. Projective techniques should be used for exploratory research to gain initial insights and understanding.
3. Given their complexity, projective techniques should not be used naively.

# MODULE: VI
# REPORT WRITING

1. Essential of a good report,
2. Content of report ,
3. Steps in writing a report,
4. Footnotes and Bibliography

# Essential of a good report

1. Information collected in the report must be **relevant and focused** to derive desired results. Pictorial and graphical presentation of data and related information help to understand the details easily. There is a possibility that the collected data in the report needs to be represented at many places in different formats to fulfill the report goals. The ultimate goal is to determine all the issue and make suitable strategies to cope up with these issue or problems.
2. Report should follow the exact **predefined goals and objectives**. If there is any sort of divergence of related information which does not match the goals then the results are of no use. In fact there is a probability of landing up in making negative or out of focus strategies, which will be very dangerous.
3. The report should always contain the executive **summary of the work**. This is generally kept before the actual report starts as it shows the summary of the desired business plan.

4. Apart from the actual analysis the report should also depict the reasons of making this report and what advantages and profit it can provide after successful implementation of business plans described inside the report.
5. It should also contain the **methodology of the research** which shows the overall process adopted to create the report.
6. It is important that the report contains the possibility of errors in any of the module or process so that immediate measures could be taken to cope up with these errors.
7. The report should contain the **description of the questionnaires** used in analysis and the way it has been prepared.
8. The methodology used in the interviews should also be elaborated and what was achieved in this should also be described.
9. If the information show that some aspects needs to predict the future trends then the reports should depict that prediction. This prediction should have scale of success so that the accuracy could be judged efficaciously. The report should also define each and every variable and element used in creating these predictive analyses.
10. The report should be **flexible** enough to be changed accordingly. The analytical information described inside the report should be maintained in such a way that there is no extra effort labored if any strategy or process it to be changed in future. It should necessarily mould the changes without changing the structure of the report.

# Content of report

**FORMAT OF RESEARCH REPORTS**

Dr. Miriam Helen Hill

[adapted from: John W. Best, Research in Education, 2nd ed., (Englewood Cliffs, NJ: Prentice-Hall, 1970)].

## A. **Preliminary Section**

1. Title Page
2. Acknowledgments (if any)
3. Table of Contents
4. List of Tables (if any)
5. List of Figures (if any)
6. Abstract

## B. Main Body

**1. Introduction**

a. Statement of the Problem
b. Significance of the Problem (and historical background)
c. Purpose
d. Statement of Hypothesis
e. Assumptions
f. Limitations
g. Definition of Terms
h. Ethical Considerations
i. Budget (proposal only)
j. Proposed Timeline (proposal only)

**2**. **Review of Related Literature** (and analysis of previous research)

**3**. **Design of the Study**

a. Description of Research Design and Procedures Used
b. Sources of Data
c. Sampling Procedures

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d. Methods and Instruments of Data Gathering
e. Statistical Treatment

4. **Analysis of Data *contains:***
   a. text **with appropriate**
   b. tables **and**
   c. figures

5. **Summary and Conclusions**
   a. Restatement of the Problem
   b. Description of Procedures
   c. Major Findings (reject or fail to reject $H_o$)
   d. Conclusions
   e. Recommendations for Further Investigation

# C. **Reference Section**

1. End Notes (if in that format of citation)
2. Bibliography or Literature Cited
3. Appendix

# MODULE VII
# ADVERTISING RESEARCH

## 1. Introduction to advertising research:

Advertising research is a specialized form of marketing research conducted to improve the efficiency of advertising. 3. Meaning. • Advertising research is the systematic gathering and analysis of information to help develop or evaluate advertising strategies, ads and commercials, and media campaigns.

Advertising research, often referred to as ad testing, aims to determine an ad's effectiveness based on consumer responses, feedback, and behaviour. This can be done on a piece-by-piece basis, or it can be done with periodic or continuous in-market research that monitors the performance of a campaign over time.

**Objectives of Advertising Research**

- **To Enhance Awareness** − Through research, it is easy to plan the marketing strategy of any product/service.
- **To Know Attitudinal Pattern** − A thorough research predicts the people's attitude. It analyses the changing attitudinal pattern of a geographic area. Knowing the consumers' attitude is very important before launching a new product and its advertisement.
- **To Know People's Action/Re-action** − Research also records and analyzes people's action or re-action regarding a particular product/service.
- **Analysis** − Based on deep research and analysis, it is simple to design and develop a creative ad, effective enough to influence consumers.

*Essentials of Advertising Research*

Following are the essentials of advertising research that support researcher to complete the research task successfully −

- **Research Equipment** − It is the basic requirement of advertising research. It includes a skilled person, computer system with internet, and relevant newspapers and magazine. However, field research is also important. For example, interviewing people in the market or their residential places.
- **Media Research** − To determine, which media is the most effective advertisement vehicle, media research is necessary. It helps to reach the potential customers in a short period of time and at lower cost.
- **Marketing Trends** − Knowledge of marketing trends help advertisers to know what products people are buying and what are the specific features of the products, which compels people to buy. With this information, manufacturers can modify their product according to the trend on competitive price.
- **Target Audience** − For any advertising research, it is very important to identify target audience and geographic location.

*Benefits of Advertising Research*

Conducting research before launching a new product and subsequently developing an ad has the following advantages

- **Develops creative design and strategy** − Once, all information is available, it is very simple to develop an eye-catching design. It also helps in making a well-defined strategy to develop your business.
- **Identifies Opportunity in the Market** − Research suggests — what is the right time to launch the product. It also tells, which geographical location is the best for the product.
- **Measures Your Reputation** − It is always beneficial to know your competitor's reputation and credit in the market. It helps to develop faultless strategy.
- **Identifies Major Problems** − Research helps to identify the potential problems.
- **Analyzes Progress** − It helps to analyze the performance of your product. Likewise, you can monitor your progress.
- **Minimize the Risk** − If you have done a thorough market research, there is least chance of failure.

**Ad testing allows you to:**

- Effectively target key market segments with content that resonates
- Get iterative feedback to ensure core messaging sticks, and to share those insights with ad creators and/or stakeholders
- Achieve data-driven confidence when promoting a campaign
- Make an informed go or no-go decision when deploying an ad
- Evaluate the performance of an ad agency
- Get the highest ROI out of your ad spend
- Predict advertising effect on purchase intent

***Why conduct ad research?***

Weak advertising is not only a waste of spend, it can also cause lost sales. Advertising research prevents this from happening with pre- and post-sales feedback that works to optimise messaging. Companies often test their advertising with a subset of a target market before rolling out a campaign to a broader target market.

Even if you're not working with a multimillion-dollar advertising budget, it is wise to test your ads. Ad testing is one of the best ways to see how effective a new ad might be without blindly spending your budget or potentially offending your customers. You can use the test feedback to refine the advertisement or go in a different direction. The test provides insights to help you make informed decisions about how to best use your advertising budget.

## There are four stages where Advertising Research can take place:

1. Beginning of creation process
2. End of creation process
3. End of the production stage
4. After the campaign has been launched

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# Copy Research
# Concept testing, name testing and slogan testing

**Copy research** starts with the beginning of creation process. Account team wants assurance that the ad does what it is supposed to do. The client wants to see how well a particular ad scores against the average commercial of its type. Copy research is a good idea most of the time--it can yield important data that management can use to determine the suitability of an ad concept and basic idea.

**Purposes of Copy Research**

1. **Idea Generation.** An agency is often called on to invent new, meaningful, ways of presenting a brand to a target audience.
2. **Concept Testing** seeks feedback designed to screen the quality of new ideas or concepts.
3. **Audience Definition.** Once a target segment have been identified, advertising planning can proceed with a developing a message that will be meaningful to the consumers.
4. **Audience Profiling.** Creative need to know as much as they can about the people to whom their ads will speak.

**Evaluative Criteria in Copy Research**

- **"Getting It."**
  - Do consumers understand the ad?
- **Knowledge**
  - Tests of recall and recognition
- **Attitude change**
  - Determine where a brand stands
- **Feelings and emotions**
- **Physiological changes**
  - Changes in eye movements or respiration
- **Behavioral intent**
  - Do people say they will buy the product
- **Actual Behavior**
  - Did people buy the product?

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# Copy Research Methods

## Copy Research Methods

- 1. **Concept Testing**
  - a. Card concept
  - b. Poster test
  - c. Layout test
- **2. Name testing**
- **3. Slogan testing**
-

**1. Concept Testing**
Concept tests are characterized by an exploratory focus. In concept tests, the objective is to understand what kind of concepts (usually written descriptions or storyboards) would be well received in the audience. Concept tests frequently involve qualitative research. Focus groups, depth interviews and projective techniques are some of the commonly used qualitative techniques that are well suited for exploring and generating ad concepts as well as for understanding the reasons for failed ads.

Concept testing involves testing the “idea” of something, rather than the actual thing itself. The concept is communicated with a rough illustration or photograph, along with a written description. Think of a concept as a rough print ad, although concepts can be presented in storyboard or video form. Concept testing is widely used to evaluate new product ideas, so that potentially successful new products can be identified early on. Then limited research and development resources (and limited marketing resources) can be focused on the new product concepts with the greatest probability of consumer acceptance in the marketplace. Concept testing can also be used to help evaluate advertising concepts, promotional concepts, packaging concepts, and strategy concepts.

Concept testing is used to generate communication designed to alter consumer attitudes toward existing products. These methods involve the evaluation by consumers of product concepts having certain rational benefits, such as "a detergent that removes stains but is gentle on fabrics," or non-rational benefits, such as "a shampoo that lets you be yourself."

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Such methods are commonly referred to as concept testing and have been performed using field surveys, personal interviews and focus groups, in combination with various quantitative methods, to generate and evaluate product concepts.

The concept generation portions of concept testing have been predominantly qualitative. Advertising professionals have generally created concepts and communications of these concepts for evaluation by consumers, on the basis of consumer surveys and other market research, or on the basis of their own experience as to which concepts they believe represent product ideas that are worthwhile in the consumer market.

The quantitative portions of concept testing procedures have generally been placed in three categories:

**(1) concept evaluations**: where concepts representing product ideas are presented to consumers in verbal or visual form and then quantitatively evaluated by consumers by indicating degrees of purchase intent, likelihood of trial, etc.,
**(2) Positioning:** which is concept evaluation wherein concepts positioned in the same functional product class are evaluated together, and
**(3) product/concept tests:** where consumers first evaluate a concept, then the corresponding product, and the results are compared.

Types of **Concept Testing:**

**a. Card concept test–** Creative strategies are presented to respondents in the form of headline, followed by body copy placed on a white card for review. Each concept is placed n the separate card.
**b. Poster test:** This is similar to card test but expands illustrations and copy and places them on a large poster instead of a white card.
**c. Layout test:** Layout test involves showing a rough copy of a print ad or artwork for a TV ad. Layout tests are more finished than a poster tests in that they use the total copy and illustration as they will appear in the finished ad. Additionally, whereas a card or poster test measures the appeal of the basic concept, the purpose of the layout test may e to measure more subtle effects such as communication, understanding and confusion.

**2. Name testing**
Starting with the right name is the cornerstone of an advertising campaign. Creating such a name is an art as well as a science with rules and guidelines rooted in sociology, psychology, semantics, and the law. Simply put, a good campaign name gives a good first impression and evokes positive associations with the brand.

**3. Slogan testing:**
A slogan, a tagline etc. of a product or service is tested by a manufacturer or researcher. As the samples are informed about the product or service, it enables them to form a connection between the proposed slogans and taglines and products or services. Rating scales are used to choose the most preferred slogan.

Slogans are also tested in a similar fashion where the respondents are given details about the product or service and chose the best fit.

The purpose of the slogan testing is to find out whether the slogan achieves the following:
1. Aid memory recall: It should be easy and pleasant to remember.
2. To describe the use of a product.
3. To suggest the product's special advantage or unique benefit.

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**3. Copy testing measures and methods:** a. Free association, b. Direct questioning, c. Direct mail tests, d. Statement comparison tests, e. Qualitative interviews, f. Focus groups

## Copy testing

Copy testing start at the end of creation process and before the production start. Copy testing is a general class of tests that evaluate and diagnose the communication power of an advertisement – either broadcast (television, radio), print (newspapers, magazines), or more recently, the Internet.

**When Used**

Copy tests are an integral part of the creative development process, and (of necessity) always follow the development of one or more advertising alternatives. These alternatives attempt to embody an advertising strategy that has been identified through previous phases of research.

**Copy Testing definition:** Research that measures responses to marketing communication copy in a test environment to evaluate the copy's effectiveness in fulfilling the intended objectives.

Copy testing is a method used by advertisers to see whether or not an ad will work once it is produced. The premise is that exposure to an ad should affect the way a consumer perceives a product or service.

By conducting copy testing, advertising campaigns can be revised and sometimes corrected. It is believed that by using copy testing an advertising agency will be able to lower the chances that their advertising campaign will be unsuccessful.

**Copy tests are usually conducted**

(1) After a strategic/positioning study indicated an opportunity for the brand that, in turn, feed copy development;

(2) After qualitative research (focus groups, in-depths) has been used in the creative development process; or

(3) After tracking research has indicated that the current campaign is no longer building awareness or image. Practically speaking, copy tests can be conducted at any time there is new advertising that needs to be evaluated.

**Copy testing questions**

- What message are we really communicating?
- Is anyone offended by our advertising?
- Is our advertising clear and easy to understand?
- Does our advertising project the right image?
- Are we saying the right things?

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**Techniques of Copy Testing:**

**a) ANIMATICS**

This is art work in the form of either cartoons or realisticdrawings showing limited movement.

**b) PHOTOMATICS**

These are photographs shot in sequence still images areworked into a sequence. Like a storyboard, it shows staccato framesto show how the story goes. Various elements can be changed inthis method and as you look at the image you can decide whatchanges need to be made. This makes manipulation easier andinvolves lesser time and technology.

**c) LIVEMATICS**

This involves filming or taping live talent and is very close tothe finished commercial. This method is useful because it canshowcase the entire range of emotions that the respondents displaywhen shown the product. This can be used to convey the mood of the final commercial when the real model will be used.

**d) RIPOMATICS**

The conversion is made from footage of other commercialstaken from ad agency promotional reels. They are usually used forexperimentation on visual techniques.(e.g. Prints taken from foreign miniature samples and customized).

**Copy Test Designs**

*There are two basic copy testing approaches for TV – – off-air, and on-air.*

**(a) Off-air:** Off-air tests focus on whether the copy effectively communicated its intended strategy, and provides more diagnostic information on specific copy elements than on-air tests. Off-air approaches are "forced exposure" tests (usually in a mall or theater environment), in which respondents view a clutter reel of competitive ads, with the test ad in the middle. Because a lower state-of-finish is acceptable, off-air stimuli are less costly, and these tests are more often used at an earlier stage of the copy development process.

**(b) On-air tests:** On-air tests are executed on an unused cable TV channel among people who have been recruited to view a fictitious ½-hour pilot TV show. Respondents see ads for other categories, but see only one test ad. On-air tests excel at evaluating copy performance in a real-world setting, and whether the advertisement "broke through" (i.e., was recalled).

Similar off-air approaches are used for radio testing (no "on-air" versions exist). Print testing usually involves placement of the test ad in a mocked-up version of a national magazine, or can also involve eye-tracking to determine which elements were seen while reading the ad.

**Systems for copy testing**

Many companies have specialized systems for copy testing. The advantage of using specialized companies is their normative databases, often spanning years of tests in many categories.

**Measures typically include:**

- Recall of ad ('day after recall' or DAR)
- Main point communication
- Proven recall (correct playback of copy elements)
- Total copy and situational/visual playback
- Purchase intent, or a pre-post persuasion score
- Brand likes, dislikes
- Imagery/personality ratings
- Attribute/brand performance ratings
- Classification and demographics

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Because of the high cost associated with the production of an ad or commercial, advertisers are increasingly spending more monies testing a rendering of the final as at early stages. Slides of the artwork posted on a screen or animatic and photomatic roughs may be used to test at this stage.

The test is of little value if it does not provide relevant, accurate information. Rough tests must indicate how the finished commercial would perform.
Some studies have demonstrated that these testing methods are reliable and the results typically correlate well with the finished ad.

Most of the tests conducted at the rough stage involve lab settings, although some on- air field tests are also available. Popular tests include comprehension and reaction tests and consumer juries. Again, the Internet allows field settings to be employed.

# Various methods of Copy testing

**1. Free Association tests**
Free association utilizes the 'projective hypothesis' by encouraging the respondent to provide the first set of words or associations that comes to mind after their exposure to a stimulus - such as a product category, brand name or brand symbol Then follow up with probes and amplifications. Initial reactions tend to be pragmatic but later ones show paths to emotional ideas

- Ask respondents to say what comes into their head when exposed to the copy
- Then follow up with probes and amplifications
- Initial reactions tend to be pragmatic but later ones show paths to emotional ideas

Verbal association tests help to obtain information about the attitude of a respondent to certain idea or concepts named by the words of the respondent's native language. A typical procedure is as follows: participants are asked to respond to a copy with the words that the stimulus evokes in their mind.

**2. Direct questioning**
Direct questioning - elicits a full range of responses from which researchers can infer how well advertising messages convey key copy points. It is especially effective for testing alternative ads in the early stages of development.

The heart and soul of copy research is the depth interview, a lengthy (one to two hours), one-on-one, personal interview, conducted directly by the copy researcher. Much of the power of the depth interview is dependent upon the insight, sensitivity, and skill of the researcher. The interviewing task cannot be delegated to traditional marketing research interviewers—who have no training in motivational techniques.

**3. Direct Mail Tests**

Direct Mail: This is done with the use of coupons. One group is shown a TV ad and the other is not. Then both groups are given coupons to buy the product that has been advertised. The researcher then measures the influence of TV ads on both groups. (this Is a lab test) – specific only to coupons sent via DM.

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This shows the impact level of a mailer. Also gives an insight into consumer attention spans and levels to your mailer in some cases (booklets that come through mail are often less used than when the booklet is advertised on TV)

**4. Statement-comparison tests:** In Statement comparison, respondents are given different sentences and asked to give their opinion.

**5. Qualitative interviews:** The heart and soul of copy research is the depth interview, a lengthy (one to two hours), one-on-one, personal interview, conducted directly by the copy researcher. Much of the power of the depth interview is dependent upon the insight, sensitivity, and skill of the researcher. The interviewing task cannot be delegated to traditional marketing research interviewers—who have no training in motivational techniques. Unlike conversations in daily life, which are usually reciprocal exchanges, qualitative interviews involve an interviewer who is in charge of structuring and directing the questioning. In qualitative interviews, open-ended responses to questions provide the evaluator with quotations, which are the main source of raw data. It reveals the respondents' levels of emotion with respect to copy. Qualitative interviews also promote understanding and change, the emphasis is on intellectual understanding of the copy rather than on producing personal views. The task for the qualitative evaluator is to provide a framework within which people can respond in a way that represents accurately and thoroughly their point of view about the copy."

**6. Focus Groups:** Definition: limited to those situations where the assembled group is small enough to permit genuine discussion among all its members". Interviewing more than one person at a time sometimes proves very useful; some young people need company to be emboldened to talk, and some topics are better discussed by a small group of people who know each other.Interviewer asks group members very specific questions about a topic after considerable research has already been completed. Focus group can be define as a "carefully planned discussion designed to obtain perceptions about the test copy in a permissive, non-threatening environment"

- **Use of focus groups**

Focus groups can be used at any point in a research program. Stewart and Shamdasani have summarized the more common uses of focus groups to include:

1. obtaining general background information about a topic of interest;
2. generating research hypotheses that can be submitted to further research and testing using more quantitative approaches;
3. stimulating new ideas and creative concepts;
4. diagnosing the potential for problems with a new program, service or product;
5. generating impressions of products, programs, services, institutions, or other objects of interest;
6. learning how respondents talk about the phenomenon of interest which may facilitate quantitative research tools;
7. interpreting previously obtained qualitative results

**The Moderator's Role**

- To develop a rapport with the group/ must inspire confidence
- To ensure people become relaxed and eager to talk
- To promote interaction
- To focus discussion on topic areas
- When a topic is no longer generating fresh ideas the flow of discussion should be changed

# 4. Pre-testing

**Pre-testing:** This is the test of the copy before it is given to the media.
**The purpose of pre-testing is as follows:**
• To spot errors in the copy
• To make communication more effective
• To design the ad better
• To reduce wastage in advertising
• To ensure that the money is spent prudently.

Pre-testing is a type of research that involves gathering reactions to messages and materials prior to widespread use. Pre-testing is the stage of advertising research in which a complete ad is tested. It is important that the objectives of pre-testing research relate back to the agreed advertising strategy. Pre-tests may occur at a number of points, from as early on as idea generation to rough execution to testing the final version before implementing it. More than one type of pre-test may be used. A number of variables can be evaluated in pre-testing, including the ability of the ad to attract attention, comprehension by the reader/viewer, recall, persuasion, attitude toward the brand, credibility and irritation level. Pretests should be used as guides and not as absolute predictors of winners or losers.

**In pre-testing it is always best to use multiple measures to evaluate. In particular, the multiple measures recommended are:**
**1. Impact:** The ability of the advertising to be noticed and remembered.
**2. Communication:** The ability of the advertising to impart a message, which is clearly and uniformly understood by the target market.
**3. Relevancy:** The ability of the advertising to persuade consumers that their needs will be met by the product.
**4. Affinity Building:** The ability of the advertising to generate consumer affinity (liking) for both the advertisement and the brand being advertised.
**5. Call to Action:** The ability of the advertising to motivate consumers to try or re-buy the brand being advertised.
**6. Brand Building Ability:** The ability of the advertising to create, change or reinforce certain key predetermined brand attributes ( features, benefits, feelings) as encompassed in the brand's positioning objectives and strategy.
**7. Involvement:** The ability of the advertising to involve the consumers, or keep him/her interested.
**8. Brand fit:** The ability of the advertising to demonstrate brand fit, or keep him/her interested.
**9. Creative Diagnostics:** The pre-test should elicit a host of creative diagnostics to help answer the "whys?" that always emerge from behind the above measures.
**Print Pre-testing:**

# Print pre testing

1. Direct questioning
2. Focus group
3. Portfolio test
4. Paired comparison test
5. Order-of-merit test
6. Mock magazine test
7. Direct mail test.

1. **Consumer Jury Test:** Few consumers form a group and act as jury to show their preferences for one or two ads out of several being considered. The jury members rank the ads and respond to the questions like which was the most impressive ad or which ad provoked you most to go ahead and buy the product or which ad did you notice first and so on.
2. **Portfolio test:** In a pre-test, a portfolio of advertisements is used. The respondent is asked to go through the portfolio, then it is taken away, and the respondent is asked; What advertisements do you remember seeing?' the recognition test may thus be combined with the recall or impact test which has been described below.
3. **Paired comparison test:** Paired-comparison designs (in which the consumer is asked to use two copies and determine which copy is better) appeal to our common sense. The Paired-Comparison is a wonderful design if presenting evidence to a jury, because of its "face value" or "face validity." It can be a very sensitive testing technique (i.e., it can measure very small differences) between two copy. Also, the paired-comparison test is often less expensive than other methods, because sample sizes can be smaller in some instances. Paired-comparison testing, however, is limited in value for a serious, ongoing copy testing program. The paired-comparison test does not tell us when both copies are bad and does not lend itself to the use of normative data. It is heavily influenced by the "interaction effect" (i.e., any variations in the control copy will create corresponding variance in the test copy 's scores).
4. **Order-of-merit test:** Here the ranking of the advertisements are done by a group of people called the jurors. The point system is given to an average of 4-5 copies that they are given to rank. The order of merit is the one, which determine which the best advertisement by the jurors is and which has been rated as the worst. The points given by the jurors are then added together to determine which is the ad, which has got the maximum points. This is the one that is the chosen one.
5. **Mock ("dummy") magazine test:** Readers are told the magazines publisher is interested in evolutions of editorial content and asked to read the magazines as they normally a would. In an improvement on the portfolio test, ads are placed in "dummy" magazines developed by an agency or research firm. The magazines combine regular editorial features of interest to the reader, as well as the test ads, and are distributed to a random sample of homes in predetermined geographic arrears. Then they are interview-generating capabilities of the ads are assessed. The advantage of this method is that it provides a more natural setting than the portfolio tests. Readership occurs in the participant's own home, the test more closely approximates.
6. **Direct mail test:** Direct mail is the most common form of direct marketing, advertising that conveys its messages straight to the consumer or another business rather than using an intervening medium such as television or print advertising.
7. **Direct questioning:** Direct questioning - elicits a full range of responses from which researchers can infer how well advertising messages convey key copy points. It is especially effective for testing alternative ads in the early stages of development. The heart and soul of copy research is the depth interview, a lengthy (one to two hours), one-on-one, personal interview, conducted directly by the copy researcher. Much of the power of the depth interview is dependent upon the insight, sensitivity,

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and skill of the researcher. The interviewing task cannot be delegated to traditional marketing research interviewers—who have no training in motivational techniques.

8. **Focus group:** A number of respondents (participants) convened by an interviewer to discuss questions or issues relating to the research topic. The interviewer's role is to facilitate & moderate the discussion and ensure it covers the key questions & issues. Participants may raise important new issues/questions.

# Broadcast Pre-testing:

**Television and radio advertising:**

**1. Trailer tests:** Large Screens in shopping malls show advertisements. A real life like shopping environment is created to measure consumer behavior. One group is given coupons to purchase selective brands, and the other group is not given the coupons. The redemption rate of the coupons may give an idea about the effectiveness of the test ads. Interviews conducted in a set location, (typically either a field research facility in an office or a shopping mall) for the purpose of interviewing people in that area.

**2. Theatre test:** During a regular show in a theatre, advertisements are shown in regular slots and are tested for recall. The audiences in the theatre are unaware of the tests and are asked to recall the ad. Consumers in the theatre are asked then to remember the ad (or maybe even all the ads) – to check if the ad is clutter breaking.

**3. Live telecast tests**: Ads are put on air either by narrow casting or live telecasting. These ads are test ads, and not the regular ads. Later, viewers are interviewed to know their reactions. Here the inaccuracies of artificial testing environment are not encountered.

**4. Clutter test:** It is the method of pre-testing in which commercials are grouped with noncompetitive control commercials and shown to prospective customers to measure their effectiveness in gaining attention, increasing brand awareness and comprehension, and causing attitude shifts. Commercials are shown with non competing control ads to determine attitude shifts and detect weaknesses.

# Challenges to pre testing

Factors other than advertising creatively and/or presentation may affect recall during pre-testing. Interest in the product or product category, the fact that respondents know they are participating in a test, or interviewer instructions (among others) may account for more differences than the ads itself.

Recall may not be the best. Some researchers argue that for certain types of products (those of low involvement) ability to recognize the ads when shown may be better measures than recall.
Limitation of the juror: Jury selected may not be competent enough to evaluate the ad copy.
Limited concepts: Even the quantity of concepts exposed to the respondents is limited. Here creativity is restricted.

**Halo effect:**

Halo effect is the greatest limitation of pretesting. When we consider a person good (or bad) in one category, we are likely to make a similar evaluation in other categories. Thus the 'Halo effect' is when a person's perception of another is influenced by their appearance.

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Most commonly attractive people are judged as having a more desirable personality than someone of average appearance. A common example of the halo effect is when a person is assumed to be smart because he or she is wearing spectacles. Another is that good-looking schoolchildren (or a good looking person versus a more plain looking person) are assumed to be more clever.
The halo effect may or may not have anything to do with the physical appearance of the person. It is equally applicable to any attribute one holds as valuable. A person who is good at "X" is deemed to be good at "Y" even if the two items are not related. Of course, the halo effect does not actually confer accuracy, it simply addresses that the reasoning is flawed. In marketing, a halo effect is one where the perceived positive features of a particular item extend to a broader brand. It has been used to describe how the iPod has had positive effects on perceptions of Apple Computer are other products. Sometimes participants rate an ad good on all characteristics because they like a few and overlook specific weaknesses. This tendency, called the halo effect, distorts the ratings and defeats the ability to control for specific components.

Of course, the reverse may also occur-rating an ad bad overall due to only a few bad attributes. Subjective reaction on the part of consumers noticed by researchers when attempting to analyze consumer attitudes and their relationship to the market structure, particularly in the area of advertising or brand evaluation. For example, in theory, an individual should be able to evaluate each feature of a given brand independently and should have no difficulty giving a high rating to one feature while giving another a low rating. However, in practice, researchers have noticed that respondents have a tendency to give a high rating to all the brand's features if they like the brand, and a low rating to all the features if they do not like the brand. This is known as a halo effect.

The halo effect makes it difficult to evaluate brands in terms of their strengths and weaknesses. However, if a brand name has a quality reputation in the marketplace, the halo effect may work to the brand's advantage, particularly when the company is introducing a new product into the line.

# Post-testing

Post-testing: This is the testing, which is done after the ad copy has come out in the media and the audience has seen the advertisement.

Post-testing typically involves interviewing readers to determine how many remember seeing a particular ad, if they read it, and what they remember about it.

**Post-testing measures the following factors:**

- Has the advertisement campaign result in sales?
- Has it created memorability for the brand name?
- Has it created positive image and a favorable attitude towards the company and the brand?
- How much advertising is necessary on a continued basis, to sustain the same level of consumers' interest in the brand?
- Are the consumers convinced that the brand is superior of competitors

**The purpose of post-testing is as below:**

- To find out the impact of an ad in terms of it being noticed, seen and read.
- To find out its credibility.

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- To find out its comprehension
- To measure its memorability.
- To assess its effect on buyers.
- To assess its fit with the promotion and marketing mix
- To assess whether it has achieved its objectives.
- To assess the relative effectiveness of different copies and media plans.
- To improve future advertising efforts.

**The post-testing methods.**

This actually gives us an idea about the actual performance of the ad in terms of exposure, perception, communication and sales effect. We can assess the credibility and comprehension of the ads.

**Few of the methods of this type of tests are:**

1. **Recall tests**: In this type of tests the individuals are asked to answer about the ads entirely on the basis of their memory. It could be aided recall, where they are given few cues to help them recall and unaided recall, which of course is based on memory alone.
2. **Recognition test:** It determines the readership of advertisements in the publications and is conducted by personal interviews with readers and magazines or newspapers. The interviewers locate the readers of the particular issue of the publication in questions. They then go through the publication, page by page, with the respondent indicating those advertising elements which e or she recognizes as having read. The scores developed by the recognition method indicate the proportion of qualified readers of a publication who claim to have "seen" (noted), "read some" or "read most" of the individual advertisements.

   The above describes the method used for post-test, In a pre-test, a portfolio of advertisements is used. The respondent is asked to go through the portfolio, then it is taken away, and the respondent is asked; What advertisements do you remember seeing?' the recognition test may thus be combined with the recall or impact test which has been described below.
3. **Triple association test**: Here the respondent is given certain cues wherein he can relate to a certain brand. For example – "Thanda Matlab", if the answer is coca cola, then it is correct. And if the respondent is able to connect the product with the company then it is a triple association.
4. **Sales effect tests:** They measure the various stages of buyer awareness, preference, buying intention and actual purchase in relation to actual advertising effort.
5. **Sales results tests:** The additional sales generated by the ads are recorded. It is difficult however to correlate an increase in sales to advertising alone.
6. **Inquires test:** These are couponed ads of consumer durables. They invite consumers to send back the coupon to seek a demo or more details. The number of enquires determine the effectiveness of the ads.
7. **Attitude test:** Attitudes show our predisposition towards objects, ideas, people and places. They indicate overall feelings. The change in attitude as a result of advertising is assessed. The assumption is that a favorable attitude towards a product will lead to a purchase. Most ads are designed either to reinforce or change the existing attitudes.

# Neuroscience in Advertising Research

**Neuroscience: A New Perspective:**

Martin Lindstrom's 2008 book Buyology makes a similarly strong claim: that neuroscience will play a revolutionary role in research and marketing in the future. As a result, many marketers are challenging accepted modes of advertising development and research on the grounds that "neuroscience says" that what we've done before is wrong.
However, we don't believe that marketers need to turn their backs on tried-and-true research techniques in favor of the apparent objectivity of neuroscience. Rather, marketers should use neuroscience-based research in conjunction with established techniques when (and only when) it adds value. If used in isolation, such methods can be hard to interpret, but when combined with qualitative or survey-based research, they can add a powerful new dimension of insight.
*Which Methods to Use*

*In choosing among neuroscience–based techniques, we have found it useful to ask the following questions:*

• Does the approach tell us something meaningful about brands or marketing?

• Does it tell us something we don't already know, and enough to justify its cost?

• Is it practical and scalable?

From among the many new techniques that have emerged from recent learning on the workings of the brain, we have identified three that meet all three of these tests. These are: implicit association measurement, eye-tracking, and brainwave measurement. When used in conjunction with established methods, these techniques can yield insights that lead to more effective marketing.
*Implicit Association Measurement*
While implicit association measurement is not strictly a "neuroscience" technique, what it shares with other truly biometric methods is the principle of inferring consumers' responses, rather than asking direct questions. The approach relies on the fact that the brain stores information in networks of ideas and responses. An experience of a brand Implicit association techniques help reveal the "raw" ideas stirred up by brands and ads before any filtering for sense or social desirability has taken place.

**When to Use Neuroscience**

Clearly, these three neuroscience-based research techniques have value to offer. We believe that they tend to add the most value when dealing with needs and situations such as the following:

a. **Sensitive material:** Qualitative and survey methods are most vulnerable to distortion when sensitive material is involved. Methods that don't rely on explicit questions can reveal unstated attitudes more effectively.

b. **Abstract or "higher order" ideas:** Consumers may find it difficult to express some of the abstract ideas at the heart of some brands' positionings. Implicit association methods are useful to probe for ideas that participants might be too self-conscious to verbalize, or simply unable to articulate.

c. **A need to probe for transient responses to ads or brand experiences:** Consumers are great at talking about the gist of an ad or brand, but they may not be able to explain how they got there. Eye-tracking and EEG can help researchers fill in the blanks by identifying the focus of attention and illustrating the highs and lows of emotional and cognitive response to a piece of creative.

d. **A need to understand consumers' feelings:** When questions are framed correctly, consumers can talk about their feelings in response to surveys and qualitative research. But neuroscience-based methods can add an additional level of detail about the timing of these responses and their origins.

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Known as consumer neuroscience, or neuromarketing, this type of investigation probes people's unconscious responses to advertising in order to help identify winning ads. For instance, the United States Postal Service is working with researchers using imaging machines to see if direct mail lights up certain parts of the brain that e-mails don't. Spanish-language broadcaster Univision has paid dozens of young Hispanics to don EEG caps and measured their brain waves while they watched ads in English, Spanish, or Spanglish to better understand their impact. The idea of neuromarketing started to win wide attention five years ago, although there's conflicting evidence about how well it works. A 2011 report by the Advertising Research Foundation, paid for by companies including Clorox and General Motors, concluded that the technology was not yet "bona fide advertising science."

The techniques—which include cameras that spot facial expressions—are meant to replace pen-and-paper surveys or focus groups, in which consumers are asked if they can remember ads and whether they plan to buy the product shown. That business, known as copy testing, is worth about $750 million a year globally and is part of a larger global market for ad effectiveness research estimated at $2.5 billion, says David Brandt, executive vice president for advertising effectiveness strategy at Nielsen.

Since 2011, Nielsen has operated a division called Nielsen Neuro, which uses EEG measurements of brain waves to study ads at 11 laboratories located around the world. According to Brandt, Nielsen has studied more than 100 commercials and linked the EEG results to actual changes in product sales. The division also carried out the work for Univision, which found that Hispanics reacted better to Spanish-language ads. Brandt says neuromarketing technologies account for about 4 percent of the copy testing market but are growing quickly.

More than a dozen companies, most of them small, offer neuroscience tools to customers today. Perhaps the biggest name in the field is Nielsen. The company has earned patents on new types of EEG caps and is trying to come up with cheaper, more portable ways to measure consumer reactions, hoping that if they become as cheap as paper surveys and can be used on a wider scale—in malls, not just in labs—they will come to have more impact.

The Super Bowl project is an annual event for Innerscope, which emerged out of research at the MIT Media Lab that looked at the physiological responses of poker bluffers and speed daters. The company works with several technologies, but on game day it was using a belt to measure subjects' heart rate and breathing while electrodes taped to their fingers tracked galvanic skin response, some of the same measures polygraphs use to spot the heightened emotions caused by telling lies. At Innerscope, these readings are combined into what the company calls an "engagement trace"—a line that moves up and down as an ad progresses, reflecting the viewer's emotional state, says Carl Marci, a psychologist who is chief science officer at the company. The more emotional the viewer, says Marci, the better the chance he or she will remember an ad.

TV companies are looking for technologies that can protect their $78 billion in annual U.S. ad revenue against changing viewer habits and help match the sort of click-by-click tracking advertisers enjoy on the Web, says Dan Aversano, senior vice president for client and consumer insights at Turner Broadcasting, the owner of CNN and an Innerscope research partner. "We can bring that into television," Aversano says.
At its research lab in New York City, Turner has belted up participants who use a smartphone or tablet while watching TV and found that although they looked at the TV less during ad breaks, they remained engaged with the TV audio track. In a report it began circulating last year, Turner recommends that its advertisers consider snapping viewers' eyes back using "sirens, alarms, screams" just before a brand name appears.

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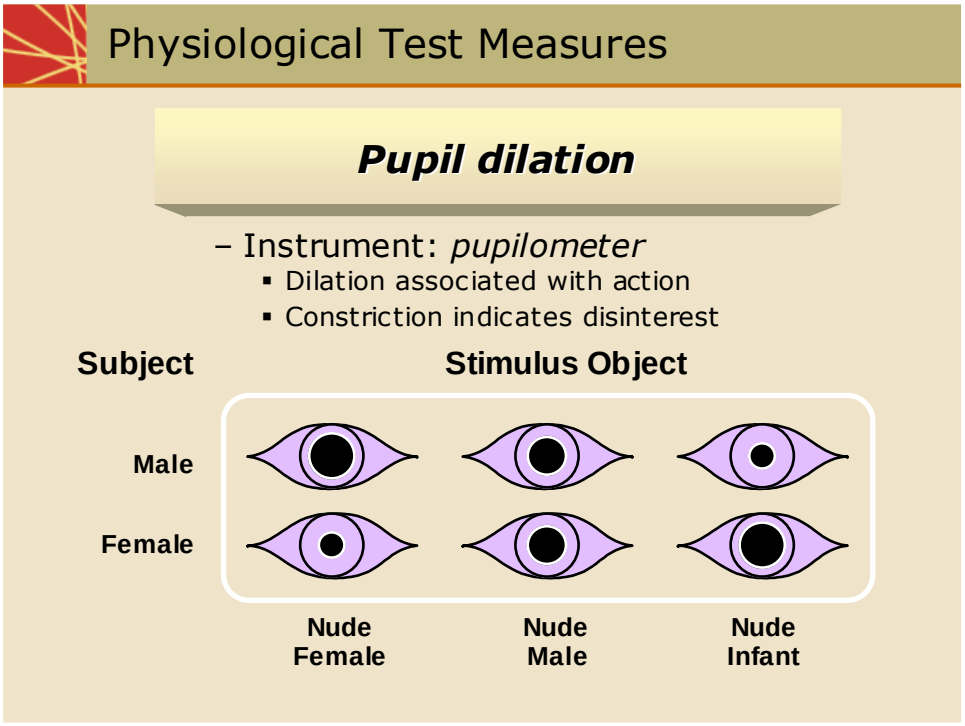
# Physiological rating scales

Physiological measures detect how consumers react to messages, based on physical Reponses. Eye-tracking systems have been developed to monitor eye movements across print ads. Another Physiological measures is a pyscho-galvanometer , which galvanic skin responses (GRS) .,GRS is a measure of minute changes in perspiration which suggests arousal related to some stimulus in this case , an advertisement .

Voice response analysis is another high-research procedure. Inflections in the voice when discussing an ad indicated excitement and other physiological states . Other less frequently used physiological measures record brain wave activity , heart rate , blood pressure and muscle contraction .

**1. Pupil metric testing**
Perceptoscope or Pupilometric Devices Record changes in pupil's dilatation. Dilatation indicates reading and attention. Contraction shows his dislike to what is being read. It evaluates interesting appealing visual stimuli. It is developed by Eekhard Hess and James Polk. Left eye is photographed o record dilatation.
Physiological Test Measures




**2. Eye-movement camera**
It is used in advertising research; this equipment tracks the movement of the eye over press advertisements, showing the path which the eye takes and indicating the sequence of interest that the features arouse. It

measures the eye movement over the layout of test ads. The route taken by the eye is noted. The pauses are noted. The areas of interest and attention can be judged.

## Eye Movement Research

- **Objective:**
  - To track eye movements to determine . . .
    - What readers read on print ads
    - Where attention is focused in TV commercials
- **Method:**
  - Eye movements are tracked using . . .
    - Fiber optics
    - Digital data processing
    - Advanced electronics
  - Scan paths on
    - Print ads and material
    - Billboards
    - Commercials
- **Output:**
  - Relationships among what is . . .
    - Seen
    - Recalled
    - Comprehended

## Using EyeTracking to test ads


**3. Galvanometric Response:**

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It means change in skin conductivity due to changes in moisture content (perspiration); measured by current flow as indicated on a galvanometer. This change may have a correlation with psychological stimuli (e.g. fear or other emotion) and arguably may provide a measure of a respondent's reaction to an advertisement

- ***Galvanic skin response (GSR), [aka Electodermal response (EDR)]***
- Sensitive to affective stimulation
- May present a picture of attention
- May measure long-term recall
- Useful in measuring effectiveness

**4. Voice pitch analysis**

A type of analysis that examines changes in the relative frequency of the human voice that accompany emotional arousal. Greater the deviation from the person's normal (baseline) voice, the greater the emotional intensity of the person's reaction to a stimulus, such as a question. Used in packaged research, to predict brand preference, and to determine predisposition to buy a product. It is also now used to measure consumers' emotional responses to advertising. How ever, the validity of Voice Pitch studies is questionable.

**5. Brain Wave Research:**

Brain pattern analysis or Brain wave analysis equipment are non-invasive and resembles a pair of headphones. It takes brain wave measurement continuously from the surface of the head and converts them into an Engagement Index (EI) five times per second through a proprietary algorithm NASA. It helps in evaluating winners from also-rans, which ads do a better job of engaging the viewers.

# MODULE VIII

# Marketing research

1. Introduction to marketing Research

Understanding **market research** and using it to your advantage is vital in reaching out to your target audience and increasing your sales. ... Understand the needs of existing customers and why they chose your service over competitors. Identify new business opportunities and changing **market** trends. **Market research** is one of the key factors used in maintaining competitiveness over competitors. ... **Market**-**research** techniques encompass both qualitative techniques

such as focus groups, in-depth interviews, and ethnography, as well as quantitative techniques such as customer surveys, and analysis of secondary data.

**Need and Importance of Marketing Research!**
The most important task of a marketer is to get the right product at the right place with the right price to the right person. Besides, it was also necessary to go back and find whether consumer is getting optimum satisfaction, so that consumer remains loyal. These aspects made it imperative for the marketers to conduct marketing research.

**The following points explain the need for and importance of marketing research:**

**1. Identifying problem and opportunities in the market:** It helps in identifying new market opportunities for existing and new products. It provides information on market share, nature of competition, customer satisfaction levels, sales performances and channel of distribution. This helps the firms is solving problems.

**2. Formulating market strategies:** Today, markets are no more local. They have become global. Manufactures find it difficult to contact customers and control distribution channels. Competition is equally severe. The consumer needs are difficult to predict. Market segmentation is a compli-cated task in such wide markets. The marketing intelligence provided through marketing research not only helps in framing but also in implementing the market strategies.

**3. Determining consumer needs and wants:** Marketing has become customer-centric. However, large-scale production needs intermediaries for mass distribution. Due to prevalence of multi channels of distribution, there is an information gap. Marketing research helps in collecting information on consumers from structured distribution research and helps in making marketing customer oriented.

**4. For effective communication mix:** In an era of micro- rather than mass-marketing, communica-tion plays a vital role. Marketing research uses promotional research to study media mix, adver-tising effectiveness and integrated communication tools. Research on such aspects will help in promoting effectively a company's product in the market.

**5. Improving selling activities:** Marketing research is used to analyse and evaluate performances of a company within a market. It also studies effectiveness of a sales force. It helps in identify-ing sales territories. Such information helps the companies in identifying areas of shortcoming in sales. It also examines alternative methods for distribution of goods.

**6. For sales forecasting:** The most challenging task for any production manager is to keep optimum levels of inventory. However, production is undertaken in anticipation of demand. Therefore, scientific forecast of sales is required. Marketing research helps in sales forecasting by using market share method, sales force estimate method and jury method. This can also help in fixing sales quotas and marketing plans.

**7. To revitalize brands:** Marketing research is used to study and find out the existing brand position. It finds out the recall value of brands. It explores the possibilities of brand extension or prospects of changing existing brand names. The main purpose of marketing is to create brand loyalty. Marketing research helps in developing techniques to popularize and retain brand loyalty.

**8. To facilitate smooth introduction of new products**: Marketing research helps in testing the new products in one or two markets on a small scale. This helps in finding out consumer response to new product and develop a suitable marketing mix. It reveals the problems of the customers regarding new products. Thus, it controls the risk involved in introducing a new product.

**9. Determine export potentials:** The development in transport and communication has helped in globalization and digitalization of world trade. This has helped in boosting the growth of international markets. Marketing research helps in conducting market survey for export. It. collects information on marketing environ-ment prevailing in a country. By collecting data on consumers from different countries, it indicates export potentials.

**10. Managerial decision-making:** Marketing research plays a vital role in the decision-making processes by supplying relevant, up-to-date and accurate data to the decision-makers. Managers need up-to-date information to access customer needs and wants, market situation, technological change and extent of competition.

# New product research

The **new product development process** has the potential to be haphazard because of the inherent uncertainty in the process, as well as the myriad methods available for product development. Setting up an organizing framework to identify the stages in the process, and the methods applicable to each stage, should help in bringing order to the process. Our purpose in this article is to lay out a framework and identify key methods that are most likely to be useful in each stage. The focus here is on methods that use quantitative data collected mainly through the web thus bringing more validity and flexibility to the process along with speed to market.

We envision the new product development process as an iterative multistage process. This is a straightforward way of looking at the process that starts with idea generation, moves to development of individual features and then to full product development and finally into product testing. Of course, this is one example of how the process can be viewed and not a rigid framework. There has to be considerable fluidity in the system to accommodate feedback, skipping of stages, use of new methods and perhaps the introduction of new stages.

**Idea Generation**

Many methods are available for the idea generation stage such as brainstorming, Delphi and focus groups. The basic approach is to harness creativity in some form for the development of new ideas. While there is much to recommend for the more qualitative approaches, one of the drawbacks is the lack of quantitative validity to the ideas at this stage. That is, the ideas have not been shown to have popularity in the constituency that matters – the customers. We have found that the Smart Incentives approach can provide both creativity and validation in the same step. Respondents to a survey compete with each other to produce ideas thus introducing creativity into the process. The generated ideas are then evaluated by a peer group to provide the required market validation. This approach can be useful for generating ideas on both whole products and individual features. (Please refer to the article **You May Get More Than You Pay For** for a more complete explanation of this topic)

**Feature Development**

Feature development is the process of identifying features that would be of interest to customers. Traditional methods such as Importance Scales can be used, but may not provide sufficient discrimination between features. Pairwise comparisons of features are a straightforward method for identifying feature importance. The task is simple, but can be tedious if a large list of features needs to be culled. More recently developed methods such as Max-Diff scaling can provide a better alternative. Max-Diff is similar to pairwise comparison, except that more than two features are evaluated at a time (3-5) and the most and least preferred alternative is chosen from each set. Some advanced statistical analysis on the back end provides a score for each feature that is generally more discriminatory than a regular importance scale.

Another alternative is the Kano method where the positive and negative aspect of each feature is rated in order to distinguish the "must have" features from the "nice to have" features. [Please refer to the article Asymmetry in Product Features: Use of the Kano Method for further explanation on this topic]. The final method in this stage (that straddles this and the next stage) is the Selfexplicated Method (SEM). Respondents rate the desirability of each level of each attribute as well as the importance of each attribute. Combining these two pieces of information gives attractiveness scores (similar to conjoint utilities) for each attribute level. Although all attributes and levels are rated by respondents (as in conjoint analysis), since they are presented individually, this method may be more appropriately seen as useful for feature development. [Please refer to the article Conjoint Analysis Versus Self- Explicated Method: A Comparison for a more complete explanation of this topic]

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**Product Development**

In this stage, combinations of features are used to build or evaluate the product. The Configurator allows survey respondents to build their ideal product by selecting from a list of available features. Usually, prices are provided at the feature level to ensure that respondents make realistic decisions. As respondents build their own ideal products, the most popular features and feature combinations rise to the surface, resulting in the automatic development of preference based market segments. [Please refer to the article Product Configurator for a more complete explanation of this topic]

The Optimizer is different in that respondents make choices from among fully formed products. Information from their choices is taken into account in creating successive products that are more preferred till the process finally converges on the respondent's ideal product. This method is more appropriate when the design and packaging (i.e. the visual element) is more important. As with the Configurator, the market segments itself into preference based segments.

The various flavors of conjoint (such as traditional, discrete choice, adaptive) can also be used in this stage to identify feature importance. But care has to be taken to ensure that the basic assumptions are met and that the right type of conjoint is used. [For a more detailed explanation of conjoint analysis, please refer to the article Deriving Value from Research: The Use of Conjoint Analysis for Product Development]

**Product Testing**

Conjoint analysis can be fruitfully used in this stage also to estimate the interest in various product combinations and especially in running market simulations. The latter ability is very important in cases where a strong competitive market exists and reasonable estimates of take-rates and ability to choose the ideal combination for the market are requisites.

Concept testing is much more limited than conjoint and is usually used when the product is almost set except for perhaps one or two questions, often relating to price. [Please refer to the article Monadic Versus Laddering Pricing for a comparison of pricing techniques] Assessing the market's appetite for the product in its current form is the overriding objective of concept testing.

In short, the chaos of the product development process can be structured, and appropriate methods applied, to gain maximum benefit at different stages.

# 2. PRODUCT RESEARCH

The purpose of product research is to develop a product line which meets the needs of consumers in general.

Product research facilitates the process of making products more attractive, useful and agreeable to consumers.

**Meaning of Product Research:**

Product research is one major area of MR. It is concerned with different aspects of a product which include name, features, uses, package used, brand name given, price, consumer support and so on.

The term product research covers all aspects relating to manufacturing and marketing of a product. Product planning and development, product innovation and modification, product pricing, product life cycle studies branding, labelling, packaging, etc. are the different areas aspects) of product research

Packaging and branding are treated as two components of product research. This is because they are closely connected with the product itself. Moreover, sale depends on the product as well as on its packaging and branding. In product research, existing products of the company are made superior (in quality) and agreeable to consumers.

In addition, new products with promising market demand are developed. This is called new product research. Product research is directly related to product-mix which is one component of basic marketing mix.

**There are four components of product mix.**

These are:

1. Product range
2. Brand,

3. Package and
4. Service after sale.

**Product research has two important aspects.** These are:

a. Technical aspect of a product, and
b. Marketing aspect of a product.

Technical research of a product is conducted in the laboratory in order to develop a product with latest design and features at the lowest possible cost. Products marketing research relates to the attitudes of consumers and their preferences towards the specific product.

Product research is necessary at the product planning stage. This is because marketing will be easy and quick when the produce manufactured is as per the needs and expectations of consumers. For this, product opportunities must be studied and product must be adjusted accordingly. Marketing efforts will not be rewarded if the product to be sold is not as per the needs and expectations of consumers.

This suggests that marketing research should start at the product promotion stage.
The researcher should suggest the details of product (nature, features, packaging, etc.) which can be marketed effectively. This creates proper background for success in marketing efforts

**IMPORTANCE/ADVANTAGES OF PRODUCT RESEARCH:**

Product research is important as it offers the following advantages:

1. Product research helps to explain the features of the product.
2. It helps to simplify the product line.
3. It enables a manufacturer to develop new products with good market demand in the existing product line.
4. Product research brings best sales returns.
5. It widens market for the product and also creates goodwill for the product and its manufacturer.
6. It facilitates appropriate price fixation of the product. (7) Product research brings to the limelight the different uses of the product for effective publicity for sales promotion.
7. It facilitates modification and renovation of existing products so as to make them highly competitive and agreeable to consumers.
8. It enables a manufacturer to introduce attractive package and brand name to the product for sales promotion.

**METHODS OF CONDUCTING PRODUCT RESEARCH:**

**There are three methods used for the conduct of product research as explained below:**

Product Testing

**1) Paired Comparison Testing –** Consumers are not told about the brand being tested and are given a new and an old product and are asked to choose. The samples know that they are testing and are therefore aware about a probable difference.
FMCG's would often do this since there are so many products. This is like the Classic Coke Test Case. This kind of testing tells us about branding – the strength of branding – are consumers aware of product variations? Do people really understand the style that a fashion house stands for. Response rates for distinctions would be high because people know that there is a test happening. Placebo Testing also has an effect here because the palette assumes that there are differences – and thus the palette expects change and there is a false perception of things being different.

**2) Staggered Comparison Test –** Respondents Test 2 Brands with a time lag with the identities masked. One half of the respondents receive Brand A and the other half receives Brand B. The respondents are then given the same products in reverse and are asked to note any difference in the brands.
This kind of comparison tests the ideas of respondents with respect to their influence by peer pressure and their association with a product with respect to how their choices are dictated.

**3) Disguised Comparison Test:** This duplicates the actual market where for different brands, the same packaging is used and the respondents are told that they will be asked about their reactions later. In this case, the respondents are studied in order to recognize if they have noticed any difference at all. Further, they are not aware of the test being taken and believe the products to be free samples

This is the opposite of the 2 above. The sample does not know they are part of the test. They are just given free samples. They just think that they are getting 2 free samples. They don't know that they are getting test. Sometimes they don't realize that its different. They think it's the same product.

# 4. Branding Research

Manufacturers, traders and consumers support branding practice as it is useful to them in different ways. Large number of products is sold in the market by brand name as consumers develop affinity to such brands and refer to them when they visit retail shops.
In order to secure these advantages, brand selected should be promising. An ideal brand needs certain qualities.

For example, it should be brief, simple and easy to remember and pronounce.
Similarly, it should be suggestive, decent, attractive and as per the current tests and fashions accepted by consumers. Research department suggests appropriate brand names to the products of the company.

For this, surveys are conducted and information is collected through interviews, etc.
Such studies offer suitable guidance to management for the introduction of appropriate brand name for the product.

The research team will provide necessary information on the basis of which the management will have to take final decision regarding brand name. This decision is critical as the results (good or bad) will be available only when the brand is actually introduced in the market.

***Branding Research can be done at every stage of Brand building process, the various researches related to Brands are:***

**1. Brand Character Research:** The brand character research can be done using both qualitative and quantitative techniques.
**Qualitative research involves the understanding of:**

- Personality of each option
- Fit with the name of each option

- Fit with the brand association of each option
- Fit on the pack
- Fit with the proposed role in advertising of each option
- Comparison among the character options
- Fit with specific brand extension options
- Quantitative research focuses on ascertaining the following information:
- Thoughts evoked by each options, and grouping of these thoughts as positive and negative
- Likeability of each option
- Specific likes and dislikes of each option
- Uniqueness of each option
- Comparison of each option with the symbols of the competition
- Rating of each option's fit with the pack
- Preference amongst symbol options
- Preference amongst name options

**2. Brand Logo Research:**
When a new logo is to be chosen it is always advisable to evaluate it among two independent sets of people one to evaluate the logo in isolation and the other to evaluate the logo on the pack.

Evaluation of logo in isolation looks at its likeability, distinctiveness, comprehension of message conveyed, by logo options, preference among logo options, and preference of logo among key competition. Evaluation of logo on the pack also looks at the same alternatives along with the speed with which the respondent would identify the test logo pack among a clutter of other similar packs. This helps to evaluate how the logo would stand out in the shelf.

**3. Brand Name Research:**
A Brand name research is important for any brand throughout its lifecycle. It involves personal interviews in which some basic concept statements may be exposed to respondents along with the name. then the respondent are asked to recall the name after having read the same. This indicates the names notice ability and ease of recall. Then spontaneous responses are ascertained to name in terms of:

*Latent Association*
- What thoughts come to mind upon hearing this name?
- What negative and positive associations exist with new corporate name, product name or service name? What barriers have to be overcome with negative latent associations? How does sound symbolism or phonosemantics (the meaning of sounds) affect the evaluation of a name's latent association?
- What does the name mean to you?
- How would you pronounce this name?
- What do you particularly like/dislike about this name?
- Which product the name suit? Or not suit?
- Which name you like the most and why?

After the ascertaining the responses to these, a preference ranking is done of the names and the best among them is chosen. This methood also helps in ascertaining the names ability to communicate to the respondent, the barriers to comprehension, descriptiveness of the name etc.

**4. Brand Association Research:**

For existing brands or existing competition of new brands, respondents mind would already have brand associations. In such cases, the evaluation should include the following questions:

- Ascertain the current state of affairs, without exposing the respondents to the new concepts
- Expose new concepts
- Ascertain the response to new concepts
- Compare the responses generated before and after exposure of new concepts to understand their effects.

**5. Brand Loyalty Research:** Brand Loyalty research explore the relationship among brand trust, brand affect, and brand performance outcomes (market share and relative price) with an emphasis on understanding the linking role played by brand loyalty.
Brand Loyalty research generate both statistical and qualitative data — benchmarked, comparative and evaluative measures. These, combined with specific diagnostic data, provide the tools to effect improvements:

- Overall satisfaction
- Ratings of performance on specific aspects of the product/service
- Reasons for lack of satisfaction/poor ratings
- Salience and hierarchy of needs/preferences/expectations
- Gap Analysis/Strategic Priority Analysis
- Loyalty and propensity to recommend/re-purchase
- Drivers of satisfaction and loyalty
- Reputation/image of the brand
- Value for money
- Customer Segmentation
- and include, where feasible, lapsed and potential customers

**6. Brand Health research:**
The health of a brand is measured by its brand equity. Brands with high equity can command and sustain price premiums and are more successful with line extensions and new category entries.
Brand Health research allows companies to set competitive brand strategies and provides brand with a Brand Equity Index. The BEI can be analysed in relation to the
brand's market share and will help determine whether the brand's share gain is at the expense of long-term brand equity or whether the brand has the potential to expand its market share.

**7. Brand awareness research:**
Market awareness and perceptions of brand can rise and fall quickly in a changing market. The first step is to obtain a systematic understanding of the shape of market perception of brand through survey research.

**Typical Brand Awareness Research questions include:**

- Which single company comes to mind first as a provider for IT solutions?
- Which other companies come to mind?
- What qualities does the market leader possess that the other companies do not?
- What factors drove your decision to select your primary vendor?
- To what degree are you aware of the company's capabilities in the area of IT solutions?
- What three words best describe the company's position in the industry?
- What is your perception of the company's products? Experience? Technology? Service? Sales processes?

Based on understanding of the company's direction how do it perceive its position over the next 12–24 months?

In the fast moving technology industry in which companies are launched, merged, acquired, and morphed into new business, Brand Awareness research is critical to establishing and maintaining the desired market awareness and perceptions of your company.

# 4. Pricing Research

Pricing research involves first a pricing strategy assessment supported by strong pricing research capabilities. Sound pricing market research requires a broad strategic perspective together with a focus on your pricing decision options.

Pricing research finds optimum price-product-feature configurations in the context of market positioning opportunities. Pricing studies, we employ both qualitative research and quantitative research tools.

Pricing research usually concentrates on customers' sensitivity to pricing. This price sensitivity is driven by the nature of the market, the target within that market, the differentiation level of product or service, and the value of brand.
Pricing is one of the more technical areas of market research.

**Pricing research**

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**There are four main approaches:**
•Several different research methods are commonly used in pricing research—each with their own strengths and weaknesses. There are four techniques that are commonly used the four techniques are:

1. **Gabor-Granger or Van Westendorp Price Sensitivity Meter**
2. **Concept Test**
3. **Conjoint Analysis**
4. **Discrete Choice Modeling**

1. **Gabor-Granger or Van Westendorp Price Sensitivity Meter (PSM)**

**In Gabor-Granger** pricing research customers are asked to complete a survey where they are asked to say if they would buy a product at a particular price.
The price is changed and respondents again say if they would buy or not. From the results we can work out what the optimum price is for each individual.

By taking a sample of customers we can work out what levels of demand would be expected at each price point across the market as a whole (the demand curve in the following graph).

Using this estimate of demand, the price elasticity (or expected revenue) can be calculated and so the optimum price-point in the market established.

The Price Sensitivity Meter (PSM) is used fervently by some researchers. The premise of the PSM is to ask respondents four price-related questions and then evaluate the cumulative distributions for each question.
**Specifically, respondents are asked:**
1. *At what price would you consider the product to be so expensive that you would not consider buying it? (Too expensive)*

2. *At what price would you consider the product to be priced so low that you would feel the quality couldn't be very good? (Too cheap)*

3. *At what price would you consider the product starting to get expensive, so that it is not out of the question, but you would have to give some thought to buying it? (Expensive)*

4. *At what price would you consider the product to be a bargain—a great buy for the money? (Cheap)*

In this method, the optimal price point for a product is the point at which the same number of respondents indicate that the price is too expensive as those who indicate that the price is too cheap. Many pricing researchers question that this is the definitive optimal price for a product

### 2. Concept Test/Concept Evaluation

The standard purchase intent question from a concept test is also commonly used for pricing research. Respondents are presented with a product concept and asked how likely they would be to purchase this product at a specific price.

Typically the researcher will expose independent samples of respondents to different prices. The standard purchase intent question is shown below.

- *(After introducing the product concept)*
- **How likely, would you be to purchase this product in the next 12 months**
- **if it costs Rs 9000?**
- *Definitely would purchase*
- *Probably would purchase*
- *Might or might not purchase*
- *Probably would not purchase*
- *Definitely would not purchase*

- To evaluate price sensitivity using this example, a sample of respondents evaluates this concept at Rs 9000, a different sample of respondents evaluates the same concept at Rs5000, and another sample of respondents evaluates the concept at Rs 14000.

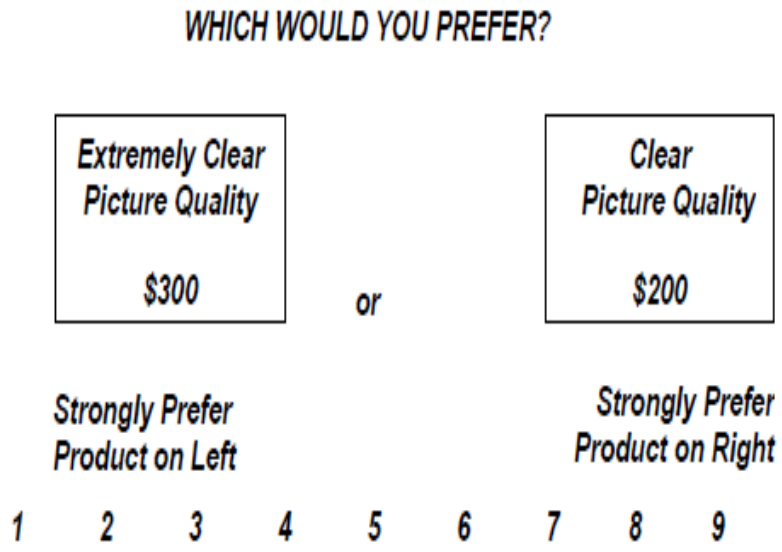
A demand curve is constructed by evaluating purchase intent at each price

3. **Conjoint analysis:**

Conjoint (trade-off) analysis is one of the most widely-used quantitative methods in Marketing Research. It is used to measure preferences for product features, to learn how changes to price affect demand for products or service, and to forecast the likely acceptance of a product if brought to market.

Like concept tests, conjoint analysis presents concepts to respondents. However, instead of exposing each respondent to a single concept, in conjoint analysis each respondent is exposed to many concepts. For each treatment, respondents are asked to make hypothetical trade-offs between configured products. For example, a respondent might be asked to express his preference between two smart phone hand sets alternatives, as follows:

Like concept tests, conjoint analysis presents concepts to respondents. However, instead of exposing each respondent to a single concept, in conjoint analysis each respondent is exposed to many concepts.
For each treatment, respondents are asked to make hypothetical trade-offs between configured products. For example, a respondent might be asked to express his preference between two VCR alternatives, as follows:




In conjoint analysis, respondents are forced to make trade-offs between products and product features, much as buyers are forced to do when actually shopping.

Each respondent answers a series of trade-off questions; in each question the combination of features shown together changes. In this way, a large number of product features can be evaluated.

Each respondent provides enough information through his or her trade-offs that the utility of each product characteristic (including price) can be estimated for each respondent.

This individual-level estimation allows for the identification of individual differences that can lead to a market segmentation scheme and can be used to help predict acceptance of products by different individuals in a heterogeneous market.

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These utilities also allow prediction of preference for any product that can be defined using the product characteristics in the study.

These preferences can be modeled in a market simulator. A market simulator allows “what-if” analysis for any configuration of products in any competitive environment. A demand curve can be produced from these simulations.

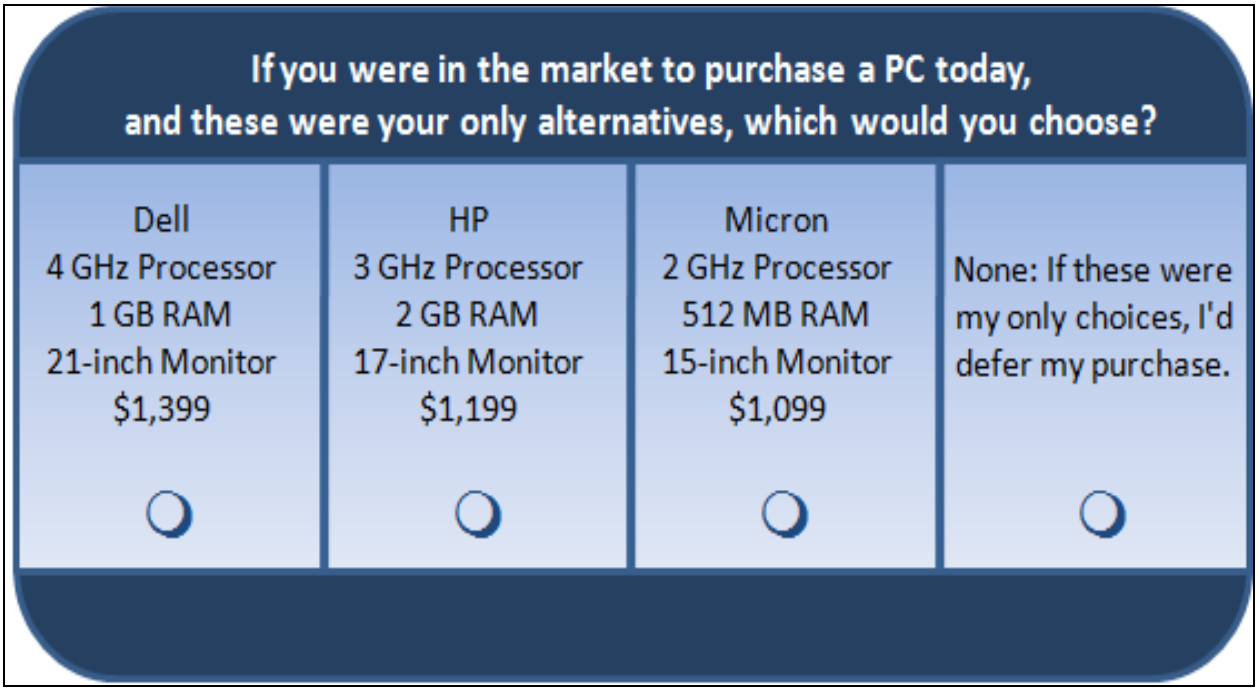
**Discrete Choice**

Choice-Based Conjoint (CBC) is used for **discrete choice modeling**, a research technique that is now the most often used conjoint-related method in the world. The main characteristic distinguishing choice-based from other types of conjoint analysis is that the respondent expresses preferences by choosing from sets of concepts, rather than by rating or ranking them. The choice-based task is similar to what buyers actually do in the marketplace. Choosing a preferred product from a group of products is a simple and natural task that everyone can understand.

CBC is often used to study the relationship between price and demand, and is especially useful when the price-demand relationship differs from brand to brand, and when only a few features need to be considered. One of the strengths of CBC is its ability to deal with interactions, such as when different brands have different sensitivities to price changes. Most conjoint methods are based on "main effects only" models that ignore the existence of such interactions. In contrast, CBC may be used to evaluate all two-way interactions.

The researcher must decide on attributes and their levels, and compose whatever explanatory text is desired for the interview screens. Apart from that, everything can be done automatically. The CBC System provides all the tools needed to conduct a choice-based conjoint study via Web, CAPI (PCs not connected to the Web), or paper-based surveys. Our CBC system includes three analysis modules and a market simulation module for testing "what if" scenarios.

In discrete choice, the respondent is presented with a set of products and the respondent is asked to pick one, as illustrated below




The results from discrete choice modeling are very similar to those from conjoint. For instance, both approaches are able to produce utilities at the individual level, and both discrete choice and conjoint allow what-if simulations. Discrete choice modeling has been used with great success in pricing research

# 5. Packaging Research

**MEANING OF PACKAGING RESEARCH:** Packaging research is one aspect of product research. It deals with the needs and expectations of consumers about the package (size, shape,colour combination, durability, material used, etc.) used.
Packaging research is useful for making product packages secured, attractive and agreeable to consumers.

Packaging research plays a positive role in modem marketing.

- It acts as a sales promotion technique.
- It makes the product attractive and agreeable to consumers.
- Packaging needs constant changes as per the expectations of consumers and also as per the current trends in packaging designs.

For achieving these objectives, packaging research is useful.

Moreover, the advantages of packaging (as noted above) indicate the importance and need of packaging and packaging research. For large-scale marketing, attractive packaging is a must. It should be used for established as well as for new products. In addition, renovations should be made in the packages after some interval.
For this package research is useful. Manufacturers, in India, now take active interest in package research. As a result, we observe new packages of varied sizes, shapes and colour combinations in the market for all types of products particularly consumer items such as soaps, cosmetics and oils.

Packaging research has special significance in export marketing as packaging of export items needs to be safe, secured, and also attractive to foreign buyers. Packaging needs to be as per the standard packaging norms used in different countries. In addition, packaging of export items needs to be as per the legal provisions made in different countries. Moreover, packaging rules and procedures are very strict in European countries.

**WHY PACKAGING RESEARCH UNDERTAKEN?** Packaging research is undertaken in order to find out reasonably correct and reliable answers to the following packaging problems/issues:
(1) Whether the existing package used for the specific product is attractive and agreeable to consumers and is also as per the current trends in the field of packaging.
(2) Whether certain modifications/alterations are necessary in the existing packages (used by the company) so as to make them attractive and as per the tastes and requirements of consumers.
(3) Whether the existing packages are eco-friendly (in regard to material used and colour-combination) and to introduce suitable modifications in them so as to make them eco-friendly. (e.g., avoiding the use of thin plastic bag or replacement of plastic containers through the use of thick paper, wood, etc.)
(4) Whether the packaging material used is safe, durable and gives full protection to the product against moisture, light, high temperature and shock and whether any other material which is more economical and safe can be used/introduced.
(5) Whether the existing package gives clearly visible identity to the product and its brand.
(6) Whether the cost of packaging is high and how to bring down the packaging cost and thereby to make the product competitive as well as attractive in the market.
(7)Whether the existing package facilitates proper disposal or reuse of the packaging material after the use of the product.
(8) Whether there is scope for improvement in the packaging so as to make it attractive, eco-friendly and easily/quickly saleable.

Package graphics and copy are critical marketing variables in many product categories, particularly for non advertised or under advertised brands in self-serve shopping environments.

The package on a retail shelf is the last opportunity to influence consumers before they decide to buy. It's the final sales pitch at the "moment of truth," when the brand-choice decision is made. The better the package design and copy, the greater the likelihood that consumers will choose that brand. Any new package design, or significant change in an existing package, should always be subjected to the scrutiny of objective consumer feedback.

**Following are the packaging research methods:**

1. Package Screen
2. Package Check
3. Package Test
4. Custom/Ad Hoc Packaging Research

**1. Package Screen**

**Early-Stage Package Designs**

the package design process typically begins with the creation of a large number of "rough" or early-stage designs. Ten to twenty package designs, or more, are common at this beginning stage. The research objective is to identify the package designs that resonate with consumers, so that creative efforts can be focused on

further development of the better designs. Package Screen is an Internet-based system to accomplish this winnowing task.

**How Does Package Screen Work?**
A representative sample of 200 to 300 target audience consumers are recruited from a panel. These participants are invited to come to a location and view the early-stage package designs. Each respondent sees all of the package designs one at a time (front panel only) on his/her computer monitor, in randomized order. Then, each person views the package designs a second time and answers four questions about each design. The answers to these four questions are fed into a mathematical model to calculate an overall score for each design. The highest-rated designs are recommended for further development.

**2. Package Check**
Diagnostic Feedback

The next step in the design process is to learn more about the better designs so that further improvements can be made. Package Check is, designed to provide this diagnostic feedback.

**How Does Package Check Work?**
A representative sample of target-audience consumers are recruited to as a panel and view each package design. The respondents see only one package design (i.e., a monadic test) and then answer a series of questions about their reactions, including a series of open-ended questions.

The report includes answers to standard questions, compared to the organizations action standards, as well as verbatim responses to open-ended questions. The verbatim detail is valuable to creative teams as they strive to improve the graphic design, as well as the copy, on the package. A typical PackageCheck study is based on 75 completed interviews

**3. Package Test**
Finished Or Near-Finished Package Designs
As packages near the end of the design process, a more complete evaluation is required, with comprehensive measurements to assess all of the important elements of package design.

Package Test is comprehensive, testing system to evaluate finished (or near-finished) package designs. A representative sample is recruited from one of our worldwide Internet the panels, and qualified respondents are invited to evaluate the package design.

Respondents first see the package's front panel, and later view the other panels. The research design is monadic. The report includes answers to standard questions, as well as the coded responses to all open-ended questions, along with our analysis and interpretation.
A mathematical model, based on a number of key variables, calculates an overall score for the package design and compares it to action standards. A typical Package Test project is based on 150 completes.

**4. Custom/Ad Hoc Packaging Research**
Package Communication
What is the package communicating? What is the package failing to communicate?
Depth interviews are typically used to explore package communication issues. Usually, the test package is shown at different time exposures (1/500 of a second, 1/200 of a second, etc.) using a tachistoscope.
At each exposure level, package recognition and communication are examined.
Then the respondents are asked to examine and to read the package in detail, with no time limits.

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The consumer's reactions to every detail of package graphics and copy are explored in the interview. The purpose of this research is to learn how to improve brand recognition and package communication.

**5. Shelf Impact**

Does the average consumer notice the package on the shelf?

To evaluate shelf impact, we typically build representative displays of the test package in a competitive environment.

These displays are photographed from angles representative of the consumer's perspective. The test package is rotated within the display.

The best photographs (with correct rotations) are shown to a representative sample of consumers, at various time exposures (1/200 of a second, 1/100 of a second, and so on) with a tachistoscope. The respondents are questioned about what they see and what they understand, as the length-of-time exposure increases. This methodology helps determine the visibility (or attention value) of a test package, relative to competitive packages.

**6. Simulated Display**

The ultimate test of a package is whether it stimulates trial of a product.

To measure a package's trial potential, a representative display of a product category (with all major competitive brands) is assembled. Matched samples of consumers are instructed to "shop" the display.

Their brand decisions, and the reason for those decisions, are explored in post-shopping interviews.

Simulated display allows us to measure a package's trial potential and helps us learn how to improve its trial potential.

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