What is Research?

Clifford Woody – “Research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deductions and reaching conclusions; and finally, carefully testing the conclusions to determine whether they fit the formulating hypothesis”.

- Derived from a French word – *rechercher* that means “to search closely”
- Scientific and systematic search for pertinent information – seeks facts through objectives verifiable methods

Why is research important?

- Planning and execution of marketing plan
- Quick and correct decision making
- Effective solutions on marketing problems
- Huge spending on MR

Objectives of Research

A statement, in as precise terminology as possible, of what information is needed

- To find out new techniques / generalizations with the existing theories
- To find out new generalizations / conclusions for a new theory
- To attempt to arrive at more conclusions from same set of data
- To find / study contradictions existing in the area of study
- To gain familiarity with a phenomenon or to achieve a new insight into it
- To determine the frequency with which something occur or with which it is associated with something else
- To test a hypothesis of a causal relationship between variables
- To portray accurately the characteristics of a particular individual, situation or a group
Variable

The empirical counterpart of a construct or a concept is called a variable. They are of importance because they link the empirical with the theoretical.

Types of variable

1. Independent variable
2. Dependent variable

An independent variable is the treatment, the intervention, or the experimental activity that is manipulated or varied by the researcher during the research study in order to create an effect (i.e. change) on the dependent variable.

A dependent variable is the response, the behaviour, or the outcome that is predicted and measured in research.

Qualitative Research

Qualitative Research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations.

Some examples of when qualitative research is helpful include:

- Testing response to advertising messages and concepts
- Analysing response to products and features
- Exploring what issues should be tested during quantitative research

Qualitative Research

Aliaga and Gunderson (2000), describes defines quantitative research as: Quantitative research is ‘Explaining phenomena by collecting numerical data that are analysed using mathematically based methods.

- Measuring market size
- Analyzing demand of a new product
- Determining how many people exhibit a particular attitude or behavior
- Measuring the size of particular market segments

Literature Review

A literature review is an account of what has been published on a topic by accredited scholars and researchers. Mostly it is part of the introduction to an essay, research report, or thesis. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are.
Stages in Research Process

1. Define Research Problem/objective
2. Determine Expected value of perfect information
3. Research technique and Determine Data Collection method
4. Determine the measurement techniques
5. Research Design/ Sampling
6. Data Processing and Analysis
7. Determine Time And cost
8. Define the ethics of research
9. Prepare the research report

Indicative Practice Questions:

1. Explain the process of Research in depth.
2. Discuss the importance of research in marketing.
3. Distinguish between quantitative and qualitative research
4. Short note on literature review
5. What are the objectives of research?
Hypothesis

A tentative explanation for an observation, phenomenon or scientific problem that can be tested by further investigation is termed as hypothesis.

Types of hypothesis:

- Null hypothesis
- Barren hypothesis
- Relational hypothesis
- Descriptive hypothesis
- False hypothesis

Hypothesis Development

Development of an approach to the problem includes formulating an objective or theoretical framework, analytical models, research questions, hypotheses, and identifying characteristics or factors that can influence the research design.

Importance of Hypothesis

- It provides a tentative explanation of phenomena and facilitates the extension of knowledge in an area.
- It provides the investigator with a relational statement that is directly testable in a research study.
- It provides direction to the research.
- It provides a framework for reporting conclusions of the study.
- It could be considered as the working instrument of theory. Hypotheses can be deduced from theory and from other hypotheses.
- It could be tested and shown to be probably supported or not supported, apart from man’s own values and opinions.

Characteristics of good hypothesis

- Should be very specific in nature.
- Concept of the hypothesis should be clear.
- Should be empirically testable.
• Should be related to the devices and the techniques that are available.
• Should relate to the body of the theory.
• Should recognize the specific variables and their relations.

Indicative Practice Questions:

1. What is hypothesis?
2. Explain the importance of hypothesis.
3. What are the types of hypothesis?
Research Design

Research Design

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.

Research design means to prepare detailed plan and procedures for the conduct of the research project. A research design will typically include how data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analysing data collected.

- Major step in the research process /procedure
- Set before the commencement of work of research project, the researcher has to prepare research design
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Step in planning the Research design

1. Determining work involved in the project
2. Estimating costs involved
3. Preparing time schedule
4. Verifying results

Functions of a research design:

- Identify the problem clearly and justify its selection.
- Review previously published literature dealing with the problem area.
- Clearly and explicitly specify hypotheses central to the problem selected.
- Clearly describe the data which will be necessary for an adequate test of the hypothesis and explain how such data will be obtained.
• Describe the methods of analysis which will be applied to the data in determining whether or not the hypotheses are false.

Types of Research Design:

1. Causal research design:
   Causality studies may be thought of as understanding a phenomenon in terms of conditional statements in the form, “If X, then Y.” This type of research is used to measure what impact a specific change will have on existing norms and assumptions.

2. Descriptive research design
   Descriptive research designs help provide answers to the questions of who, what, when, where, and how associated with a particular research problem; a descriptive study cannot conclusively ascertain answers to why.

   Cross-sectional
   • Study involving a sample of elements from the population of interest at a single point of time
• Information/data on a number of characteristics are collected from the sample elements
• Such data are analyzed for drawing conclusions.
• Include field studies and surveys.

Longitudinal
• Based on panel methods and panel data
• A panel is a sample of respondents who are interviewed not only once but thereafter from time to time

3. Exploratory research design

An exploratory design also referred to as formulative research design is conducted about a research problem when there are few or no earlier studies to refer to or rely upon to predict an outcome.

Indicative Practice Questions:

1. What is research design?
2. What are the types of research design?
3. State the importance of research design.
4. What are the functions of research design?
Sampling

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.

Sample

A group of people, objects, or items that are taken from a larger population for measurement.

Two types of sample:

1. Representative sample
2. Non-representative sample

Sampling Process

An operational sampling process can be divided into seven steps as given below:
Types of Sampling

Sampling Techniques

Non-Probability Sampling Techniques
- Convenience
- Judgmental
- Quota

Probability Sampling Techniques
- Simple Random Sampling
- Systematic Sampling
- Stratified Sampling
- Cluster Sampling
- Multistage Sampling

Content Courtesy: Dr, Hanif Lakdawala
Advantages of Sampling

- Sampling is cheaper than a census survey
- Economical
- Quality of interviewing, supervision and other related activities can be better than the quality in a census survey
- Saves time

Disadvantages

- Sampling gives rise to certain errors.
- When the information is needed on every unit in the population such as individuals, dwelling units or business establishments, a sample survey cannot be of much help for it fails to provide information on individual counts.
- While in a census survey it may be easy to check the omissions of certain units in view of complete coverage, this is not so in the case of sample survey

Indicative Practice Questions:

1. Explain the process of sampling.
2. Explain different types of sampling.
3. State advantages and disadvantages of sampling

Data Collection Methods

Primary Data Collection Methods:

1. Depth Interviews

Depth Interviews or In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. It is often described as a conversation with a purpose. It is an extensive dialogue between the researcher and the respondent.

2. Focus Groups
A focus group discussion (FGD) is a good way to gather together people from similar backgrounds or experiences to discuss a specific topic of interest. The group of participants is guided by a moderator who introduces topics for discussion and helps the group to participate in a lively and natural discussion amongst them. It is a form of group interviewing in which a small group – usually 10 to 12 people – is led by the moderator in a loosely structured discussion of various topics of interest.

3. Survey

Surveys represent one of the most common types of quantitative, social science research. In survey research, the researcher selects a sample of respondents from a population and administers a standardized questionnaire to them. The questionnaire, or survey, can be a written document that is completed by the person being surveyed, an online questionnaire, a face-to-face interview, or a telephone interview.

4. Observations

According to Oxford Concise Dictionary, observation means ‘accurate watching, noting the phenomenon by which they occur in the nature with regard to the cause and effect of mutual relations.’

Observation is way of gathering data by watching behaviour, events, or noting physical characteristics in their natural setting. Observations can be overt or covert.

5. Experimentation

An experiment is a controlled study in which the researcher attempts to understand cause-and-effect relationships. The study is "controlled" in the sense that the researcher controls (1) how subjects are assigned to groups and (2) which treatments each group receives.

Secondary Data Collection Methods:

The secondary sources can be classified into two categories - Published and unpublished sources.

1. Published Sources
   - Govt. Publications
   - International Bodies
   - Semi Govt. Publications
   - Private Publications
   - Reports of Committee and Commissions
   - Newspapers and Magazines
   - Research Scholars

2. Unpublished Source
   - There are certain records maintained properly by the govt, agencies, private offices and firms. These data are not published.
Designing Questionnaire

Questionnaire

A questionnaire is simply a ‘tool’ for collecting and recording information about a particular issue of interest. It is made up of a list of questions, and may also include clear instructions and space for answers or administrative details.

Types of questionnaire:

1. Structured questionnaire
2. Unstructured questionnaire

Guidelines for Devising a Good Questionnaire

- Wording must be kept simple
- Use short sentences
- Avoid ambiguous words
- Avoid double negatives
- Avoid biasing the responses
- Avoid “loaded” questions
- Avoid personal or intimate questions
- Consider the respondent’s frame of reference
- Unneeded questions must be avoided
- Must consider the objective(s) of the research
- What type of content will responses to the question yield?
- What type of scale, index, or typology should be used?
- Self-administered questionnaires must give clear, detailed instructions.
- Lay-out of the page must be neat and attractive
- Categories of responsive must not overlap
- Responses must be mutually exclusive
- Types of questions

Measurement Scales:

1. Nominal scale
2. Ordinal scale
3. Interval scale
4. Ratio scale
Attitude measurement scales

1. Likert scale
2. Semantic differential scale
3. Stapel’s scale
4. Constant sum scale

Projective Techniques

Projective Techniques are indirect and unstructured methods of investigation or data collection. Projective techniques are typically divided into five groups (Linzey, 1959):

1. Associative techniques
   • Word association test
   • Successive word association test
2. Completion techniques
   • Sentence completion
   • Story completion
3. Constructive techniques
   • Thematic Apperception test
   • Bubble drawing (cartoon method)
4. Expressive techniques
   • Roleplay
   • Brand personification

Indicative Practice Questions:

1. What are the different types of primary data collection methods?
2. What is secondary / desk research?
3. Write a note on the sources of secondary data.
4. Explain projective techniques.
5. What are measurement scales?
6. Explain different types of attitude measurement scales.
7. What is a questionnaire?
8. What are the guidelines to prepare an effective questionnaire?
Research Report

Research Report Format

Title: Be specific. Tell what, when, where, etc. In one main title and a subtitle, give a clear idea of what the paper investigated.

Body

• Introduction: Sections may be combined in short reports.
• Statement of the Problem: This is a general introduction to the topic.
• Data Collection technique
• Research design / Sampling Method
• Major Finding
• Recommendation
• Conclusion

End Matter

• Bibliography or Literature Cited: These are the bibliographic reference for each of the works cited in the End Notes.
• Appendix: Any tables, figures, forms, or other materials that are not totally central to the analysis but that need to be included are placed in the Appendix.

The general guidelines that should be followed for any report or research paper are as follows:
• Consider the audience
• Be concise and precise
• Understand the results and draw conclusions

Stages of writing a research report:
• Preparing
• Collecting and organising information
• Planning Before writing the report, prepare a detailed plan in outline form.
• Writing the report

Indicative Practice Questions:
1. What are the essentials of a research report?
2. Explain the structure of a research report.
Advertising Research

Advertising research is a specialized area of marketing research. Advertising research helps entrepreneurs to categorize the needs and wants of target customers as well as their social, psychological, and economical background.

Copy Research
• Starts with the beginning of creation process
• Assures the account team about the performance of the advertisement

Purposes of Copy Research

• Idea Generation
• Concept Testing
• Audience Definition
• Audience Profiling

Copy Research methods

1. Concept Testing
   • Advertising professionals have generally created concepts and communications of these concepts for evaluation
   • Focus is to determine which concepts represent product ideas that are worthwhile in the consumer market

2. Name Testing
   • Right name is the cornerstone of brand building
   • Good name to identify a company

3. Slogan Testing
   • Purpose of slogan testing is to find out whether the slogan achieves the following:
     ✓ Aid memory recall
     ✓ Describe the use of a product
     ✓ Suggest USP

Copy Testing Methods:

• 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.
  • Starts at the end of creation process and before the production start
  • Is a general class of tests that evaluate and diagnose the communication power of an advertisement – either broadcast, print or more recently, the Internet

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?

Types of Copy Tests:
• Animatic Rough
• Photomatic Rough
• Steal-o-matic or Live-Action Rough
• rough cuts

**Methods of copy testing**

• Free association
• Direct questioning
• Direct mail tests
• Statement comparison tests
• Qualitative interviews
• Focus groups

**Pretesting**

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

**Methods of Print pre-testing**

• Consumer Jury Test
• Portfolio test
• Paired comparison test
• Order of-merit test
• Mock magazine test
• Direct mail test

**Broadcast pre-testing: Television and radio advertising**

• Trailer tests
• Theatre test
• Live telecast test
• Clutter test

**Challenges to Pre-testing**

• 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: Thus the 'Halo effect' is when a person's perception of another is influenced by their appearance

**Post-testing**

Testing, which is done after the ad copy has come out in the media and the audience has seen the advertisement

**Methods of post-testing:**

• Recall tests
• Recognition test
• Triple association test
• Sales effect tests
• Sales results tests
• Enquires test

**Neuroscience**

Unlike the traditional methods of reviewing advertising as whole, neuroscience tries to establish second by second analysis.

**When to use neuroscience:**

• Sensitive material
• Abstract ideas
• To probe brand responses
• To understand customer’s perspective
• Advertising and emotions

**Physiological Rating Scales**

**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

**Eye-movement camera**

• Used in advertising research
• 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

**Galvanometric Response**

• Means change in skin conductivity due to changes in moisture content

**Voice pitch analysis**

• Type of analysis that examines changes in the relative frequency of the human voice that accompany emotional arousal

**Brain Wave Research:**

• Brain pattern analysis or Brain wave analysis equipment are non-invasive and resembles a pair of headphones

**Indicative Practice Questions:**

1. Explain Copy testing.
2. What are the different methods of copy research?
3. Explain pre-testing.
4. Write a note on post-testing
5. Write a note of various physiological rating scales.
6. Write a short note on Halo Effect
7. Explain advertising research in detail.
8. Write a note on broadcast pretesting.
9. Write a note on print pretesting

**Marketing Research**
New Product Research

Product definition is a critical starting point in the development of any new product.

New Product Planning

New product plan helps resolve issues related to the markets, the types of products and the opportunities that the company will invest in and the resources required to support product development

Types of New product Research

- New Markets/Existing Products research
- Existing Markets/Existing Products research
- New Markets/New Products research
- Existing Markets/New Products research

Branding Research

- Manufacturers, traders and consumers support branding practice
- Consumers develop affinity to brands and refer to them when they visit retail shops

Various researches related to Brands are:

- Brand Character Research
- Brand Logo Research
- Brand Name Research
- Brand Association Research
- Brand Loyalty Research
- Brand Health research
- Brand awareness research

Pricing Research

- Pricing is one of the more technical areas of market research
- Involves first a pricing strategy assessment supported by strong pricing research capabilities
- Finds optimum price-product-feature configurations in the context of market positioning opportunities
- Pricing studies, employ both qualitative research and quantitative research tools.
- Usually concentrates on customers’ sensitivity to pricing

Types of Pricing researches

- Gabor granger method
- Conjoint analysis
- Concept test
- Discrete Choice modelling
- Van-westerndorp price sensitivity meter
- Brand price trade-off

**Packaging Research**

- Deals with the needs and expectations of consumers about the package (size, shape, colour combination, durability, material used, etc.) used
- Useful for making product packages secured, attractive and agreeable to consumers
- Acts as a sales promotion technique
- Makes the product attractive and agreeable to consumers
- Package on a retail shelf is the last opportunity to influence consumers before they decide to buy
- Final sales pitch at the “moment of truth,” when the brand-choice decision is made

**Following are the packaging research methods:**

- Package Screen
- Package Check
- Package Test
- Custom/Ad Hoc Packaging Research

**Shelf Impact**

- 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
- 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
- Respondents are questioned about what they see and what they understand, as the length-of-time exposure increases

**Simulated Display**

- 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
Indicative Practice Questions:

1. Explain Product Testing
2. Explain Product research
3. Explain Package research
4. What are the different strategies of pricing research?
5. Explain branding research
6. Write a note on shelf impact
7. Write a note on stimulated display