Chapter 3: Research Methodology
Research Methodology is a “way of investigating a given problem that is called as research problem. In Methodology, researcher uses different criteria for solving/searching the given research problem. Different sources use different type of methods for solving the problem”. (Industrial Research Institute, 2010).

According to Goddard & Melville (2004), “answering unanswered questions or exploring which currently do not exist is a research”. 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”. Redmen & Mory (2009), define research as a systematized effort to gain new knowledge.

“In Research Methodology, researcher always tries to search the given question systematically in our own way and find out all the answers till conclusion. If research does not work systematically on problem, there would be less possibility to find out the final result. For finding or exploring research questions, a researcher faces lot of problems that can be effectively resolved with using correct research methodology” (Industrial Research Institute, 2010).
Research Objectives

Prior to the beginning it is fundamental to characterize the goals of research. This is the most vital piece of the methodology and will prevent from squandering time and exertion in later stages. Three inquiries ought to be asked of oneself:

- What is the motivation behind the exploration?
- What information is constantly looked for?
- How will it be utilized?

In the event that the expense is restrictive one ought to purchase at any rate a couple of hours of expert examination time to get counsel in leading your statistical surveying. This could help you abstain from acquiring defective information which will create deceiving and conceivably excessive conclusions.

Research design

A research design is a framework for undertaking the research that maps out the procedures necessary for acquiring information needed for finding solutions to the problem at hand. Research Design is broadly classified into the following two types:

1. Exploratory Research Design
2. Conclusive Research Design

The objective of exploratory research is to explore or search through a problem or situation to provide insights and understanding. It is flexible, versatile and often the front end of total research design. It is accomplished through expert surveys, pilot surveys, secondary data (analyzed qualitatively) and qualitative research.

Conclusive Research is more formal and structured than exploratory research. It is based on large, representative samples and the data are subjected to quantitative analysis. The findings are considered to be conclusive in nature. This research design can be further classified into:

(i) Causal Research, and

(ii) Descriptive Research

The objective of causal research is to determine cause and effect relationships. It is accomplished by manipulation of one or more independent variables and control of other mediating variables.

The objective of Descriptive Research is describing market characteristics. It is marked by the prior formulation of specific hypotheses, is preplanned and has structured design. The methods used are surveys, panels, secondary data (analyzed quantitatively) and observational data. It is further subdivided into two:

(i) Longitudinal design

(ii) Cross –sectional design
In **Longitudinal Designs**, a fixed sample of population elements is measured repeatedly on the same variables. The sample remains the same over time, thus providing a continuing series snapshots that give a clear idea of the overall picture.

**Cross Sectional Designs** involve the collection of information from any given sample of population elements only once. They may be **single cross-sectional** or **multiple cross-sectional**. In single cross sectional designs, only one sample of respondents is drawn from the target population.

**Accumulation of Data**

**Primary and Secondary Data:**

Primary data are those which are gathered anew by the researcher for the express purpose of addressing the problem at hand. It is gathered by the following methods.

1. Observation
2. Questionnaire
3. Interviews
4. Expert opinion requisition
Collection of secondary data

The secondary data are those which have already been collected by someone for the purposes other than the problem at hand. The following are the sources of secondary data.

1. Government statistics
2. Trade associations
3. Commercial services
4. Research publications
5. National and International associations

Hence the secondary data should possess the following qualities:

1. Reliability
2. Suitability

1. RELIABILITY: The following points have to be considered:

i. Who gathered the information?

ii. Is the compiler trustworthy?

iii. What was the extension and object of the examination?

iv. Was the information gathered by the utilization of legitimate strategies?

v. What was the time of the gathering of information?

vi. What was the level of precision fancied and accomplished?
2. SUITABILITY: In the event that the reliability of data has been established it doesn't imply that they are suitable for each examination. Data which is discovered suitable for one request may not be suitable for another. This implies that the suitability of the data for the request under scrutiny is exceptionally vital.

Sampling

The sampling process comprises several stages:

- Define the population
- Lock in the sampling frame
- Identify a sampling method
- Deciding on the sample size
- Identifying the sampling plan
- Choosing the Sample

Sampling frame

It can be characterized as the rundown comprising of the units of the population.

Sampling techniques

Probability and nonprobability sampling
A **probability sampling** is one in which each person in the population is known and each has a certain likelihood of being chosen.

Probability sampling includes:

- Simple Random Sampling
- Systematic Sampling
- Stratified Sampling
- Cluster Sampling
- Sequential Sampling
- Double Sampling

**Nonprobability sampling** is a sampling technique where the samples are collected in a process that does not give all the units in the population a shot at being selected.

Nonprobability sampling methods include

- Convenience sampling,
- Quota sampling
- Judgmental sampling.
- Snowball sampling

**Simple random sampling**

In this type of sampling, every part of the population has an equivalent chance of being chosen as subject. The whole methodology of examining is
carried out in one step a solitary venture with each subject chosen freely and independently of alternate parts of the population

- **Systematic sampling**

  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 is determined by dividing the population size by the sample size and rounding to the nearest integer.

- **Stratified sampling**

  This is a two-step process in which the population is partitioned into subpopulation or strata that are mutually exclusive and collectively exhaustive. Elements then are chosen from each stratum by a random procedure.

- **Cluster sampling**

  Cluster sampling is a probability sampling strategy utilized when "natural" groupings are obvious in a measurable populace. It is regularly utilized within marketing research. In this system, the aggregate populace is isolated into these groups (or clusters) and a sample of the groups is chosen. Then the required information is collected from the elements within each selected group. This may be done for each component in these clusters or a subsample of components may be chosen inside each of these groups.

- **Sequential Sampling**

  Sequential sampling is a non-probability sampling technique wherein the analyst picks a solitary or a gathering of subjects in a given time interval,
goes through with his study, dissects the results then picks an alternate gathering of subjects if necessary and so on.

- **Double Sampling**

  In double sampling certain populace components are tested twice. In the first stage specimen is chosen and some data is gathered from all the components in the example. In the second stage, a sub example is drawn from the first specimen and extra data is gotten from the components in the sub-test.

- **Convenience sampling**

  Convenience sampling is a non-probability sampling technique where subjects are chosen due to their convenient accessibility and nearness to the researcher. The subjects are chosen only on the grounds that they are simplest to select for the study and the analyst did not consider selecting subjects that are illustrative of the whole populace.

- **Quota sampling**

  In quota sampling, the populace is initially portioned into fundamentally unrelated sub-bunches, generally as in stratified examining. At that point judgment is utilized to choose the subjects or units from each one fragment focused around an indicated proportion. It is this second step which makes the strategy one of non-probability sampling.

- **Judgmental sampling**

  Judgmental sampling is a non-probability sampling technique where the researcher selects units to be sampled based on their knowledge and
professional judgment. The process involves choosing individuals from the population based on the researcher's knowledge and judgment.

- **Snowball sampling**

Snowball sampling is a non-probability sampling technique that is used by researchers to identify potential subjects in studies where subjects are hard to locate. This sampling method is made use of if the sample for the study is limited to a very small subgroup of the population. After observing the initial subject, the researcher asks for assistance from the subject to help identify people with a similar trait of interest and so on and the process goes on like a chain.
Research Methodology used in the study

Research Methodology is the description of the methodology used in the research. The research Objectives with reference to this research is given below.

Research Gap: Purpose and Rationale of the Study

A Research Gap is “the missing element in the existing research literature. A research gap is defined as a topic or area for which missing or insufficient information limits the ability to reach a conclusion for a question. In another words, it indicates a finding from a research in which a key question has not been answered. A research need is defined as a gap that limits the ability of decision-makers (policy-makers, patients, practitioners) from making decisions”.

TV advertising being much older than Internet advertising has a solid research base behind it. However, Internet is a relatively new medium, so research work on it is no match to that on TV. The Internet has been able to become an extremely important medium and is growing day by day. There have been studies conducted on the effectiveness of Internet advertising and TV advertising separately but there is not much work on the comparison of these two advertising media. Whatever research has been done on the comparison is from the business manager’s point of view.

Secondly, studies in this field have been conducted mostly in the West and there is a real shortage of studies in the Indian context. Internet penetration is increasing at a rapid pace in India but continues to be low still. This study is an attempt to capture the views’ of the audience that uses both TV and Internet

Objectives and Scope of Study
The objective of the study was to try and understand the perception of TV and Internet as advertising media in the eyes of the audience they were purporting to serve.

*Scale Development*

Ducoffe and Leong et al have devised their scales to compare the effectiveness of Internet and traditional media. The present scale was devised by deriving from these scales. The Informativeness, Entertainment, Irritation and Deceptiveness were part of the scale of Ducoffe and Attention, Emotions, Precipitating action and Attitude were part of the scale by Leong et al.

The internal reliability scores were measured using Cronbach’s alpha.
Research Questions

Research Questions are an important part of the research. The following is the main question being investigated in the study followed by supplementary questions.

The Main Research Question:

- Among TV and Internet, is one type of advertising perceived to be more effective than the other in the eyes of the audience?

Supplementary Research Questions:

- Among TV and Internet, is one type of advertising perceived to be more informative than the other in the eyes of the audience?
- Among TV and Internet, is one type of advertising perceived to be more attention-grabbing than the other in the eyes of the audience?
- Among TV and Internet, is one type of advertising perceived to be more emotion-arousing than the other in the eyes of the audience?
- Among TV and Internet, is one type of advertising perceived to be more action-precipitating than the other in the eyes of the audience?
- Among TV and Internet, is one type of advertising perceived to be more attitude-changing than the other in the eyes of the audience?
- Among TV and Internet, is one type of advertising perceived to be more entertaining than the other in the eyes of the audience?
- Among TV and Internet, is one type of advertising perceived to be more irritating than the other in the eyes of the audience?
- Among TV and Internet, is one type of advertising perceived to be more deceptive than the other in the eyes of the audience?
The following research objectives follow directly from the above research questions

**Research Objectives**

- To compare the effectiveness of TV and Internet advertising in general.
- To compare the effectiveness of TV and Internet advertising on the **informativeness** parameter
- To compare the effectiveness of TV and Internet advertising on the **attention** parameter
- To compare the effectiveness of TV and Internet advertising on the **emotions** parameter
- To compare the effectiveness of TV and Internet advertising on the **precipitating action** parameter
- To compare the effectiveness of TV and Internet advertising on the **attitude** parameter
- To compare the effectiveness of TV and Internet advertising on the **entertainment** parameter
- To compare the effectiveness of TV and Internet advertising on the **irritation** parameter
- To compare the effectiveness of TV and Internet advertising on the **deceptiveness** parameter
Research Methodology

- Types of Data: Primary and secondary
- Research Design: Descriptive
- Data Collection: Questionnaire
- Sample size: 400
- Sample Profile: Males in Graduation course and above
- Geographical Location: Aligarh
- Sampling Scale: Likert Scale
- Sampling Technique: Stratified random sampling (because of homogeneous subgroups)

Research Hypotheses

The following hypotheses have been proposed based on the survey of literature:

Null Hypothesis 1: Consumers perceive TV ads to be more informative than ads on Internet

Alternative Hypothesis 1: Consumers perceive Internet ads to be more informative than ads on TV
Null Hypothesis 2: Internet ads are more effective in catching the attention of users as compared to TV ads.

Alternative Hypothesis 2: TV ads are more effective in catching the attention of users as compared to Internet ads.

Null Hypothesis 3: Internet ads are more effective in stimulating emotions when compared to TV ads.

Alternative Hypothesis 3: TV ads are more effective in stimulating emotions when compared to Internet ads.

Null Hypothesis 4: TV ads are more effective in precipitating action than Internet ads.

Alternative Hypothesis 4: Internet ads are more effective in precipitating action than TV ads.
Null Hypothesis 5: Internet is more effective in changing and maintaining attitudes as compared to the Internet

Alternative Hypothesis 5: TV is more effective in changing and maintaining attitudes as compared to the Internet

Null Hypothesis 6: Internet ads are more entertaining than TV ads

Alternative Hypothesis 6: TV ads are more entertaining than Internet ads

Hypothesis 7: Ads on TV cause more irritation among users than Internet ads

Hypothesis 7: Ads on the Internet cause more irritation among users than TV ads

Null Hypothesis 8: Consumers consider TV ads to be less deceptive than ads on Internet

Alternative Hypothesis 8: Consumers consider Internet ads to be less deceptive than ads on TV

References


5. Ibid, 340-354.
