CHAPTER 03

RESEARCH METHODOLOGY AND RESEARCH DESIGN
3.1 Introduction of social websites which are doing marketing and which is affecting consumer behavior.

Social websites which are doing marketing is a new method of gaining importance or attention among various consumers. Now a days electronic mouth is going to play crucial role. Social Media Marketing pulls attraction and push those people who are reading and want to share it on their social websites.

Social websites which are doing marketing created new avenue for most marketers and consumers who can communicate, exchange ideas, sell and purchase of variety of goods and also services through use of social websites which are doing marketing.

Technology in general and internet in particular is filled with many people who are individuals who wanted to satisfy, share communicate due to that there are many companies now a days have pages on social websites which are doing marketing to give information about various types of product, and also services and many more.

In modern times scenario social websites like blogs, FaceBook, Twitter, Skype etc. is going to play very crucial role in decision making of the consumer. Social Media marketing is not only powerful tool have emerged but also it is very cheap too. Most surveys showing that around 75 percent Indians who are in the young age are using social websites for sharing with each other, communicating, buying, selling and also purchasing of goods like olx.com.

As today popularity of these sites increasing due to that various corporate houses and even Government organizations are using it as a tool to reach masses audiences in the way to attract them.

Consumers are using Social websites in their routine life for many different reasons or purposes. Many of the people who want to maintain relationship interpersonally. Due to various advantages of social media not only to consumer but to a businessman also to connect with the end user or consumers directly.

Hence, it becomes very much important to understand how social websites are going to change behavior of consumers and our study is trying to look into this.
3.2 Procedure for research methodology for the current study of impact of social media on consumer buying behavior with reference to thane district

The most important thing have to understand that Research methodology is system to solve the related problem. It is not only science but also an art how to do research scientifically. It is the logic to be used in the context of research. Here problem can be identified from the various literature reviews and previous knowledge. The researcher has to understand the problem which gives him the direction how to solve the problem. Research methodology consists of series of actions or steps necessary to carry out research work effectively. It not only involves research methods but also logic behind the methods we use, in the context of research.

3.3 Research area according to various parameters:

The researcher has tried to collect the on the basis of various parameters and various areas are selected from the thane district which are as follows:

Location: Researcher has selected area related to district of thane that is Bhinwadi, wada, Ulhasnagar, city of thane and near by area.

Demographic ratio: Data collected from various categories of males and females.

Age group of range: As we know that social websites which are now doing the job of marketing are vary much popular not only among young generation but also from every age and every corner of the city and town and mostly teen agers and almost in the ages of all people are going for online now. So age is ranging from 18 to 55 years and above also taken into consideration.

Occupation: on the basis of occupation the data collected from various students, professionals, service class employees, housewives and even from various business class people and others are taken into for that.

3.4 Methods of collection of data:

A technique of data collection refers to tools/methods of selecting the units for data. In the broader sense, there are two techniques for selection of units in the process of collecting data they are:

1. Census technique
2. Sample technique.
Data plays an important role in research. Facts, information or premises properly collected and formally presented for the purpose of drawing conclusions may be called data. Statistical information collected, formatted and presented for the purpose of establishing relationships between variables can be included in the data.

Mostly there are two way to collect data as popularly known as primary and secondary data. So data can be collected through two different sources that is Primary that is first hand and Secondary data which is already published

1. **Primary Data:**
Primary data is know as first hand information in order to find out the solution of a specific problem. Primary data is collected from its primary sources i.e. source of its origin, where the data is generated. It is first time collected by its investigator for statistical analysis.

2. **Secondary data:**
Secondary data are the data are in actual existence, in records, having been already collected and also treated statistically. In short, it is the data that have been already collected, presented, tabulated and located with analytical that have been collected by some agencies, government department and research workers. It can be obtained from records, books, government publications and journals.

Utmost care has taken by the researcher while collecting the data from the various sources.

3.5 **Period of study**
Last Twenty Years up to 2016

3.6 **Sampling technique / size**
The survey will be conducted on the basis of sampling method. The total population Is 2000 customers. The researcher is going to develop sample design, the researcher will be collecting the information from 600 customers that is 30% of the population were selected for the present study in Thane city, Other than thane city and village areas in the Thane city.

3.7 **Statistical methods**
There are millions of people who are researchers are using various statistical methods. For calculation of whether hypothesis are giving correct result or not. Many researchers are preparing many hypothesis even many of them
don’t know how to do proper test applicable and due to that improper and invalid result is coming. In simple language hypothesis means testing of two variables with each other and one will be treated as alternative hypothesis whereas other will null. For example a coin when through in air two possibilities will come that 0.50 chances are coming head and 0.5 chance at tale. In short everybody knows what probability in general and particularly in stats. Everywhere normality testing is a mandatory steps to be followed in hypothesis testing. No doubt hypothesis is a mathematical temporary solution which is not proved yet and it is like a mathematical expectations based on the variance. Hypotheses are based on amount of information collected by the researcher. It has a proper validity and reliability too. It is based on certain assumption which cannot be accurate. If respondents have not given proper response the result will be inaccurate. May be the hypothesis is working for someone and for other it may be null and vice versa. Hypothesis can be tested on the basis of parametric and non-parametric test like z-test, t-test, one way anova are the type of parametric test whereas wilcoxon mann whithney test, Krushal wallies test are non-parametric. It depends upon the researcher which of test he will apply for the testing of hypothesis.

In case of parametric test population parametric must be taken into consideration. It is always based on many assumptions. Whereas in case of non-parametric it does not involve population parametric, it can be calculated on the basis of measured on any scale, it can be used with all types of scale, it is very easy to calculate or compute these kinds of test. It may be noted in this regard that it may be exact procedure adopted like in case of parametric. But it has many problem in testing of hypothesis like it require larger amount of data in under to arrive at conclusion.

For the purpose of various analyses simple data descriptive statistics methods will used. Charts and diagrams will be used to emphasis and highlight growth of impact of social media. In addition to this, the statistical tools such as tabulation, charts, measures of dispersion, ANOVA, Chi-square tests will be used by the researcher.

3.8 Hypothesis testing

The hypothesis will be tested by the following techniques:
1. CHI-SQUARE TEST
2. ANOVA
3. Multi-variate analysis
4. Factor analysis.

3.8.1 Chi-square test
Chi-square is the measure which checks or evaluates extent to which a set of the observed frequencies of a sample of deviates from the corresponding set of expected frequencies of the samples. It is the measure of aggregate discrepancies actual and expected frequencies. This distribution is called $\chi^2$ distribution. It was first introduced by helmet in 1875. It is also known as “goodness for fit”. It is used as test static in testing hypothesis that provides the theoretical frequencies with which observed frequencies are observed.

It is denoted as $\chi^2 = \sum \frac{(F_0-Fe)^2}{Fe}$

3.8.2 Anova (analasis of variance)
In stats we mostly want to get an information if the mean of two popular are equal. To answer this, we need to use Anova (analasis of variance). It is a particular type of statistical hypothesis testing mostly used in the analysis of experimental data. In the typical application of Anova (analasis of variance), the Hypothesis which is Null is that all groups are simply random samples of the same population. The wordings of Anova (analasis of variance) is the synthesis of different types ideas and it is always used for various purposes and implement it.

3.8.3 Multi-variate analysis
The importance of Multi-variate analysis is to show the related structure and meaning clearly showing within these sets of variables through application and inferences of many statistical method. It is showing richer original design, it can help control for the error.

3.8.4 Factor analysis
Factor analysis is yet another tool for testing hypothesis as it shows data reduction tool. It shows correlated variables with a smaller set of variable. It allows to use gain insight to categories, it is also useful in regression. It helps us to explain various variables using few factors.
3.9 **Study of object selection**

The Researcher has interacted with various customers who are the active users of the internet in general and various social websites in particular. Customers who are interacted with the researchers are the actively using online marketing and before any purchasing they will decide everything before buying product online. Due to limitations of monetary factors and time the researcher has collected the data from the resident of Thane, Bhinwdi, wada, Ulhasnagar.

3.10 **Design of the present research**

In the current research, mostly qualitative primary data collected through oral interview with various types of customers through questionnaire which is pre coded and pre tested near by area; where as secondary data collected among various Social Websites, various Literature Review, National, International Journals and various Thesis.

3.11 **Interview questions design for consumers**

The questionnaire is sub divided into four parts which are as follows:

**First part:**

The questions which are designed for customers is starting with the personal information of the customer that is Name of customer, Age, Gender, Education, Occupation etc.

**Second part:**

The second part of the questions are related with the internet users or mobile users who are using internet on mobile.

**Third Part:**

The third part of the questions are related with the information about social media marketing and how consumer are using social websites which are doing marketing for buying purpose.

**Fourth Part:**

The last that is fourth part shows the suggestions given by the customers.

3.12 **Utility of the research**

1. Checking of there is positive or negative impact of co-relation between social websites which is doing marketing and consumer Buying behavior.
2. Understanding the concept of Social Media Marketing.
3. Understanding the concept of Consumer behavior and various different
types factors affecting it

4. Understanding of various Social Media Marketing tools like Face Book, twitter, Skype and their importance for consumer.

5. Understand the concept of Social Media Marketing and it impact on consumer Buying behavior.

6. How Traditional Marketing is different from Social Media Marketing.

7. Need to understand why Social websites which are doing marketing has changed the outlook of customer towards buying behavior.