CHAPTER - III

RESEARCH METHODOLOGY

The purpose of this chapter is to give a detailed explanation of the chosen research methodology. This chapter provides an overview of the research design, the questionnaire development including the research steps, dimension and scaling, the sampling design, and the data collection method. The soundness of any research depends on the efficient collection of the data in sequence, and analyzing the same in an appropriate manner. For this research context primary data were collected from laptop users and who purchased their laptop one year before of this research survey. As it has been highlighted in the literature review, the area of consumer confusion is lacking empirical research and mainly in experimental settings had been done to examine single components that contribute to confusion. Hence, further attempts were needed to investigate the concept thoroughly in a real-life setting in emerging economy like India. Due to the complexity of the concept and the number of factors leading to consumer confusion, it was not possible to determine the levels of perplexity and also to test a specific framework via quantitative methods. Therefore, it is required to gather the state of knowledge by investigating consumer purchase related confusion in a qualitative and exploratory research. The context of this research focus on laptop market and its related aspects and how it causes confusion among first-time buyers.

3.1. RESEARCH DESIGN

The research design used in the study is descriptive by nature. Descriptive research is concerned with the analysis of the relationship between non-manipulated
variables and the development of generalizations, extending in conclusions beyond the sample observed. Descriptive research studies are designed to obtain pertinent and precise information concerning the current status of phenomena and whenever possible, to draw valid general conclusions from the facts disclosed. They are restricted not only to fact finding but way after result in formulation of important principle of knowledge and solution of significant problems concerning local state, national and international uses. Descriptive studies are more than just a collection of data: they involve measurement, classification analysis, comparison and interpretation. Descriptive research studies investigate phenomena in their natural setting. Their purpose is both immediate and long range which constitutes a primitive type of research and does not aspire to develop organized body of scientific law.

Descriptive research is mainly done when a researcher wants to gain a better understanding of a topic for example, in social science and business research, researcher seeks to measure frequency of shopping, consumer preferences and also attempts to discover causes even they cannot control the variables. The method of research utilized in the descriptive research is all kinds of survey methods, panels and also the use of probability sampling.

In the present study descriptive research was used to describe the demographic characteristics of Laptop holders (Consumers). In short descriptive research deals with everything that can be counted and studied.

### 3.2. POPULATION OF THE STUDY:

The population for the study included individuals who have Laptop purchase experiences before one year of the survey and currently residing at various parts of Coimbatore city.
3.3. PERIOD OF THE STUDY:

The data were collected during the period of January 2009 to December 2009.

3.4. AREA OF THE STUDY:

Area of the study was confined to urban, semi urban and rural areas of Coimbatore. Coimbatore city is an upcoming metropolitan city which comprises of upper class, middle class and lower class of society and it is of cosmopolitan nature. The demographic nature of city has a uniform approach and hence the sample will be helpful in the analysis of primary data.

3.5. SAMPLE DESIGN AND PROCEDURE

The sample for the main study consists of consumer who hold laptop for the past one year and who reside in and around Coimbatore. At the first step, the researcher contacted the major distributors, showroom and franchisees in Coimbatore who deal with laptop sales and collected the database of those consumers who purchased a laptop in the year 2008-09. A total of four thousand six hundred and twenty one data were received from the major distributors, showrooms and franchisees. These data were considered as the sample frame for the study. The researcher then fixed the sample size as one thousand in the ratio of 4:1. The names of the consumers were sorted in ascending order and by systematic random sampling procedure, 1000 consumers were contacted. Mostly all consumers agreed to supply information and showed willingness to cooperate. All the respondents were contacted directly and were explained the purpose of the study by the investigator. The final sample was restricted to 716, since data of some respondents could not be collected and in other cases the responses were not valid enough for consideration.
3.6. SAMPLE SIZE

The sample size for the current study consists of 716 Laptop holders who purchased their laptop during the year 2008-2009. The sample included 455 males and 261 females who reside in urban, semi urban and rural areas of Coimbatore.

3.7. INSTRUMENT USED FOR DATA COLLECTION

The instrument used for collecting information from the respondents followed three sections. The first section of the questionnaire was related to the demographic details of the respondents and the second section was related to confusion perceived by the respondents and the strategies followed by the respondents while purchasing of laptop.

The demographic information was sex, age, marital status, area of resident, occupation, educational qualification, family income, current laptop competency and skill. The purpose of these demographic details is to identify the possibilities of demographic factors that influence consumer confusion.

The second part of the questionnaire contains details on laptop brands that the respondents purchased, source of purchase, information source and purchase factor considered by them during the purchase of laptop.

The last section of the questionnaire was designed to measure the level of consumer confusion. Based on the previous research articles and discussion with subject experts, the questionnaire was designed to identify the major confusion factors, to know what ways consumers adopted to reduce their confusion while purchasing the laptop, post purchase dissonance and level of satisfaction. 67 items were developed to measure the similarity confusion (10 items), over
choice/overload confusion (11 items), unclarity confusion (24 items), technical confusion (7 items) and post purchase dissonance (12 items). A five point Likert scale ranging from “strongly agree = 5” to “strongly disagree = 1” was used to measure these 67 above set items. In order to know the strategies followed by the consumers to reduce different level of confusion, an open ended question “How did you overcome the different level of confusion” were asked. To measure the level of satisfaction of the respondents on their purchase and usage of laptop-a five point Likert scale ranging from “strongly agree = 5” to “strongly disagree = 1” was used. A close ended question was asked to know whether the consumer will recommend the current laptop brand or company to prospective. Questionnaire is attached in annexure section.

3.8. PILOT STUDY

The pilot study laid foundation to identify the level of confusion which existed among the consumers who purchased laptop.

3.8.1. OBJECTIVES OF THE PILOT STUDY

1. To administer the instrument.
2. To understand whether the instrument was capable of eliciting the opinion from the respondents.
3. To know whether the respondents had any difficulty in following the procedure with regard to elicit the response from the respondents.
4. To estimate the time required to complete the questionnaire.
5. To find out the face and content validity of the instrument.
6. To find out the reliability of the instrument
The questionnaire developed by the researcher was distributed to five experts in the field of management sciences for review. The main thrust was to determine whether the questionnaire items and dimension adequately reflected the instruments prescribed by objectives, and were in consistent with the establishment of content validity and face validity, as described by Benson and Clark (1982). A few suggestions and remarks were made by the experts and they were considered while administering the instrument for the study.

A pilot study was carried out by administering the questionnaires to 30 consumers who purchased laptop a year before the survey. This was done to find the effectiveness of the questionnaire and to restrict the study to the requirement based on the responses given by the respondents. The pilot study helps to modify the questionnaire by removing certain irrelevant questions and by adding more questions that would fetch related information on consumer confusion, which equipped the researcher to improve the standard of the questionnaire.

3.8.2. RESULTS OF THE PILOT STUDY

The questionnaires obtained from the respondents through pilot study were coded and tabulated. The Likert scale used in the questionnaire enabled the scholar to apply some statistical tools using Statistical Package for Social Science (SPSS) Version 16. The results of pilot study evidently explored the existence of different types of confusion among the consumer who purchased laptop one year before.

The verbatim records of the transactions that took place in administering the instruments and the responses of the respondents of the pilot study to the instrument administered were analyzed with response to the specific objectives of the pilot study.
The informal questions comments and discussion, which the investigator had with the respondents at the time of administering the instruments, revealed that the instrument had adequate stimulus value to elicit genuine responses for each of the statements. The perusal of the transactions lends credibility to the data collected through the instrument. It is concluded that the instrument developed for the study provided necessary data required.

The experience in the pilot study showed that at least one hour was needed for the respondent to answer the questions in the instrument.

The reliability co-efficient of the instrument administered in this study was determined by test-retest method. The estimate of test-retest reliability was determined by administering the same test to the samples on two different occasions. This approach assumes that there were no substantial changes in the instrument being measured between the two occasions. The reliability co-efficient was estimated by Spearman Brown prophecy formula from the reliability co-efficient of the test-retest. The reliability coefficient of the instrument was 0.76

3.9. DATA COLLECTION PROCEDURE FOR THE MAIN STUDY

The instrument developed by the researcher to measure the consumer confusion was individually administered to the consumers included in the study. In order to have a rapport with the respondents, the investigator had an informal talk with the respondents on topics of interest to them even before administering the instrument. The respondents were informed that they were being requested to participate in a research program in management for which the investigator was seeking their cooperation and support. The respondents were clearly informed that the results would be confidential. The language of the instrument was English,
since all the consumers of the study had secondary and higher education which had English as compulsory subject. The nature of hypotheses of the study was not revealed to the respondents and the respondents were encouraged to respond to the instrument freely and frankly.

3.10. THE STATISTICAL ANALYSIS

The data obtained with the research instruments from the consumers included in the main study were scored and tabulated. The main thrust of the data analysis was to test the hypotheses. Analyses of variance, Regression analysis, Z-test, Co-efficient of correlation, Chi-square test and Factor analysis were computed. The details of the analysis and their results are presented in the next chapter.

3.11. SUMMARY OF CHAPTER THREE

This chapter has given a detailed explanation and discussion about chosen research methodology. Research and Sampling procedure, Population of the study, Data collection instrument, pilot study and data collection procedure and finally statistical tools were described in detail.