Chapter 4

RESEARCH METHODOLOGY

This chapter presents the methodology adopted by the researcher to diagnose the research problem. It details out the research approach of the researcher and methods used for analysing the results. It specifies what will be measures & how it will be measured. The detailed organization of the chapter is as follows:

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References
4.1 INTRODUCTION

In the preceding chapter the literature was reviewed, clarifying and defining the concepts of consumer trust, customer satisfaction and the perceptions of people about online shopping in general. Various studies associated with consumer trust and customer satisfaction have been illustrated. In this chapter, methods will be explored by means of which the important factors can be analyzed which helps in building consumer trust and thereafter, the correlation will be studied between Consumer Trust and customer satisfaction.

4.2 STATEMENT OF PROBLEM

The fundamental problem underlying the present study is to identify the factors that build trust in online companies (with special reference to Tourism companies) and thereafter establish & understand the nature of relationship between consumer trust and customer satisfaction.

4.2.1 AIM OF THIS RESEARCH

This study has attempted to investigate the current state of affairs in terms of consumer trust and its effect on customer satisfaction in the online tourism industry. An attempt has been made to establish the significance of the chosen components of Consumer Trust, i.e. website characteristics and Service Quality for the purpose of this study. Furthermore, it will be determined to what extent the facets of consumer trust chosen as variables for the research are regarded as important. It is hoped to be able to point out specific indicators that have a significant effect and may constitute problem areas if there is low level of Consumer Trust.

Another part of the study deals with the identification of customer satisfaction and to find the correlation between the two. In other words, it was the aim of this research to establish whether consumer trust has a positive effect on customer satisfaction. Some measures will also be suggested on achieving betterment of consumer trust and customer satisfaction.

4.3 RESEARCH APPROACH

The research has been centred round a combination of approaches. It has some element of Descriptive Research as the researcher has conducted an empirical
inquiry into variables and social phenomena, where events of interest have already manifested, and there is no manipulation of variables (Kerlinger, 1986). There is also an attempt to further describe and elaborate the existence of Consumer Trust and customer satisfaction in online tourism industry.

**Exploratory studies** are usually conducted when new topics are investigated with the purpose to develop an initial understanding of some phenomenon, which is followed by a more refined research (Babby, 1983). Although there is sufficient existing theory from which to derive formal hypotheses regarding various constructs of consumer trust and customer satisfaction, the inclusion of thirty-six different facets of consumer trust represented through twelve different parameters, nine statements probing the level of customer satisfaction plus different demographic variables created the need to identify certain indicators initially on which to explore tendencies further. The research also intends to explore the causal relationship between the two major variables, i.e. CT & CS, hence it is also a causal research.

The research is undertaken by way of a survey. **Survey research**, as defined by Kerlinger (1986), is the type of research that “studies populations by selecting and studying samples chosen from the population to discover the relative incidence, distribution and interrelations of sociological and psychological variables.” Considering the aim of the research, survey research seems to be the ideal design, as it enables the researcher to determine the role of various parameters and their contribution in consumer trust and customer satisfaction with certain factors and interrelations between the two (CT & CS) as well as the effect of other variables such as educational qualification, gender, age, marital status, etc.

### 4.4 RATIONALE FOR CHOICE OF METHODOLOGY

#### 4.4.1 BASIS FOR CRITERIA FOR CONSUMER TRUST

This research relies on other researchers’ and authors’ findings, personal observations, experiences, values, and assumptions about human nature. To derive criteria for consumer trust, these researchers and authors used a combination of empirical methods, such as, surveys, observations and depth interviews to identify various antecedents of consumer trust. For this research, a composite set of criteria
was constructed from the results of different researchers and a combination of items from different questionnaires.

The method used was firstly to assemble a large number of possible components of consumer trust. The task of identifying components involved examining different types of sources, for example previous surveys, existing questionnaires and the literature about specific aspects of work in relation to consumer trust. Starting with the list of questionnaire items in previous surveys, supplemented where necessary by components drawn from the other sources, a preliminary clustering was performed to combine components that were similar. After rewording these to reduce differences in level of specificity, and phrasing them in the form of questions appropriate for use in this study. Overall 12 parameters were identified to measure the level of CT. Each of these parameters was further explored with the help of 3 statements. The response was elicited with the help of Likert’s five point scale. Another part of the questionnaire comprised of 9 statements associated with the measurement of customer satisfaction.

4.4.2 MEASUREMENT

Measurement is the assigning of numerals to response objects according to rules. In some instances it has no quantitative meaning unless such a meaning is assigned (Kerlinger, 1986). The dependent variable measured in this study is the consumer trust. The definition of consumer trust that was arrived at in Chapter II can now be further elaborated on in order to understand what it is that is to be measured. It is assumed at this stage that the presence of consumer trust will give rise to customer satisfaction. Consumer Trust is measured using 12 parameters namely, likeability, functionality, Usage convenience, site’s efficiency, information on website, reliability, communication, service customization, availability, promotional deals, value for money and cancellation/ refund policy.

4.4.3 RELIABILITY AND VALIDITY

The structured questionnaire of a previous research study carried out by Chen (Chen, 2006) has been adopted for the purpose of data collection. As per the research work conducted, the measurement achieved face validity and nomological validity as well as had high reliability. The Cronbach’s coefficient alpha values for all the factors
ranged from 0.78 to 0.95 (which is adequate and acceptable).

Certain modifications have been made in the actual questionnaire to accommodate the requirements of Indian scenario. Coefficient of correlation computed between the 36 items of CT revealed high inter-item coefficient of correlation, indicating high internal consistency among the items.

The selection of the items included in this survey on the customer satisfaction dimension was mainly guided by one concern, namely that the items should be meaningful. The ideal should also be that the items should have been validated. Although many items were taken from questionnaires that were validated, some reported better validity and reliability figures than others. It is probable that the validity and the reliability data will be affected as items are reworded or combined with other items.

4.4.4 VARIABLES

This study was concerned with variables that represent quantifications of various demographic characteristics like age, gender, marital status and educational qualification. The demographic characteristics of the members and facets of consumer trust were independent variables, while consumer characteristics and customer satisfaction were dependent variables. An independent variable presumably has an effect on the dependent variable and it is attempted to determine the effect of consumer trust on customer satisfaction.

4.5 HYPOTHESES

According to Black & Champion (1976), hypothesis is a tentative statement about something, the validity of which is usually unknown. It is a proposition that is stated in testable form and that predicts a particular relationship between two or more variables. In other words, if we think that a relationship exists, we first state it as a hypothesis and then test the hypothesis in the field. For the purpose of the study, following hypothesis has been framed which intends to test the significance of correlation between CT and customer satisfaction.

[I] (A) To analyse the customers’ perception of Shopping Orientations (Recreational Orientation, Experiential Orientation, Convenience Orientation and Economic Orientation) on the bases of various demographic characteristics (gender, age, marital status and educational qualification), following hypotheses are formulated:
H1Aa: There is no significant difference in the perception of shopping orientations between males and females.

- H1Aa1: There is no significant difference in the perception of Recreational Orientation between males and females.
- H1Aa2: There is no significant difference in the perception of Experiential Orientation between males and females.
- H1Aa3: There is no significant difference in the perception of Convenience Orientation between males and females.
- H1Aa4: There is no significant difference in the perception of Economic Orientation between males and females.

H1Ab: There is no significant difference in the perception of shopping orientations between married and unmarried population.

- H1Ab1: There is no significant difference in the perception of Recreational Orientation between married and unmarried population.
- H1Ab2: There is no significant difference in the perception of Experiential Orientation between married and unmarried population.
- H1Ab3: There is no significant difference in the perception of Convenience Orientation between married and unmarried population.
- H1Ab4: There is no significant difference in the perception of Economic Orientation between married and unmarried population.

H1Ac: There is no significant difference in the perception of shopping orientations across the age groups.

H1Ad: There is no significant difference in the perception of shopping orientations across the educational levels.

[I] (B) To analyse the customers’ perception of Attitude towards online shopping on the bases of various demographic characteristics (gender, age, marital status and educational qualification), following hypotheses are formulated:
H1Ba: There is no significant difference in the perception of attitude towards online shopping between males and females.

H1Bb: There is no significant difference in the perception of attitude towards online shopping between married and unmarried population.

H1Bc: There is no significant difference in the perception of attitude towards online shopping across the age groups.

H1Bd: There is no significant difference in the perception of attitude towards online shopping across the educational levels.

H1Ca: There is no significant difference in the perception of perceived risk of shopping online between males and females.

H1Cb: There is no significant difference in the perception of perceived risk of shopping online between married and unmarried population.

H1Cc: There is no significant difference in the perception of perceived risk of shopping online across the age groups.

H1Cd: There is no significant difference in the perception of perceived risk of shopping online across the educational levels.

H2: Consumer Trust has no significant impact on Customer Satisfaction.

To test the above hypothesis, the impact of seven constructs of Consumer Trust on Customer Satisfaction has been studied.

H2A: Website Characteristics has no significant impact on Customer Satisfaction.

H2B: Personalization has no significant impact on Customer Satisfaction.
H2C: Website Information has no significant impact on Customer Satisfaction.
H2D: Promotional deals have no significant impact on Customer Satisfaction.
H2E: Availability has no significant impact on Customer Satisfaction.
H2F: Price Competitiveness has no significant impact on Customer Satisfaction.
H2G: Refund Policy has no significant impact on Customer Satisfaction.

**4.6 OBJECTIVES**

Objectives of the research are

1. To identify and examine the various dimensions of consumer characteristics of online tourism companies.
2. To analyze various consumer characteristics with respect to different aspects of demographic variables like age, gender, marital status and educational qualification.
3. To identify the critical factors responsible for building trust in tourists.
4. To analyze the relationship between CT and CS.
5. To study the companies’ perspective about online buying behaviour.
6. To develop a theoretical model of antecedents of consumer trust in online tourism companies.

Research Question, “**Which factors are responsible for creating trust in online tourism companies?**” indicates a more explorative approach. It is not hypothesized that there is a significant relationship between any particular facet of consumer trust and overall CT. The objective is rather to determine the most significant predictors of the consumer trust.

**4.7 SAMPLING**

Research findings should ideally benefit a bigger realm than the particular domain available for sampling. Ecological validity, meaning the degree to which the results obtained are not restricted to the particular population from which the sample was taken is the ultimate objective. In the first instance, however, care had to be taken to draw a sample that would be representative of the entire population where the research study was conducted, i.e, Indians who plan their tours online. A sincere attempt has been made to incorporate the respondents with varying demographics to
better understand the relationship, it could safely be said that the results can be generalized to the rest of the online industry.

In a qualitative research, like this, researcher explores the anthropological situations where the discovery of meaning can benefit from an intuitive approach like Judgment Sampling. This method relies on the judgment of the researcher when choosing the members of population to participate in the study. The sampling frame for the study was customers planning leisure tours via online tourism companies.

Judgment sampling method is used when a limited number of individuals possess the trait of interest. It is the only viable sampling technique in obtaining information from a very specific group of people. This method is also useful when the researcher knows a reliable professional or authority that he thinks is capable of assembling a representative sample.

4.8 DATA COLLECTION

There are two sources of data. Primary data are those data, which are collected as fresh and for the first time, and thus happens to be original in character. Primary data collection uses surveys, experiments or direct observations. For the purpose of this research primary data has been collected with the help of multiple-choice, close ended, structured questionnaire from the customers. The questionnaire has been discussed at length in the following section.

Also, responses and opinions of few members of Ministry of Tourism and top level management of few online tourism companies have been incorporated. Secondary data collection may be conducted by collecting information from a diverse source of documents or electronically stored information. Secondary data has been collected from library of IITTM Noida, Delhi University, Fore School of Management, Published Journals, Online Journals, Books, Magazines, proceedings of seminars and conferences, Internet etc.

4.8.1 THE QUESTIONNAIRE

In determining the degree of correlation between consumer trust and customer satisfaction, it must be determined which facets of trust are regarded as important by the customers and to what extent these aspects are fulfilled, and also to make an
assessment about their perception of customer satisfaction. For the purpose of this study, the questionnaire has been divided into four parts:

- **Part I:** Demographic Profile of Respondents
- **Part II:** Consumer Characteristics
- **Part III:** 12 Dimensions of Consumer Trust
- **Part IV:** Measure of Customer Satisfaction
Part I: Demographic Profile of Respondents

Several demographic items were included to represent the variables in question. The relevant demographic characteristics are gender, age, educational qualifications, income, marital status, family size, etc of the consumers. For example, it may be possible that individuals of different educational levels may have different perception of online tour planning and might perceive differently for the same websites.

Part II: Consumer Characteristics

Each and every person is unique in himself/herself. They have certain beliefs and values, which generally do not change easily. To build trust amongst its customers, a company must first understand its customers. It helps in not only retaining the existing customer base, but also help in attracting the new ones without incurring much of an expenditure. Consumer trust for an online environment is a critical element for the success of any and every type of organization, which is perfectly achieved via understanding its customers in the exact sense what they want. In this study, consumer characteristics have been studied in terms of behaviour of the customers in response to online shopping in general. Customers with similar tastes and preferences can be clustered together for deriving good results.

For the purpose of this study, Consumer characteristics have been further broken down into variables like:

A. Consumer’s shopping orientation: The questionnaire sought responses pertaining to the respondent’s general predisposition toward acts of shopping. For the purpose of this study, following shopping orientations were considered and evaluated, namely:

1. **Recreational Orientation**: Consumers who enjoy shopping whether they buy or not.

2. **Experiential Orientation**: Consumers who purchase the products only if they see and touch them once before its final purchase.

3. **Convenience Orientation**: These consumers are busy in their routines and wish to spend least time in shopping
4. **Economic Orientation:** Consumers of this category look out for best deals whether online or offline, where they can avail maximum price benefits.

B. **Consumer’s attitude towards online shopping:** This part of the study will help in determining the customer’s general attitude towards shopping online.

C. **Perceived risk of shopping online:** This factor analyzed the association of risk with online shopping.

Analyzing these factors will give an estimate as to how the customer perceives the idea of shopping if given an option to purchase online or offline. This will let us understand as to which type of consumers opt for online shopping and further, how trust building can be done to retain these customers.

**Part III: 12 Dimensions of Consumer Trust**

The dependent variable measured in this study is “**Customer Satisfaction**” with the independent variable i.e. “**Consumer Trust**”. Overall 12 dimensions are identified to measure the level of Consumer trust. The chosen dimensions of Consumer Trust have been categorized into 2 sections:

A. **Website Characteristics Dimensions:** A good website attracts more number of people towards itself and selling job of the company becomes easier. This study will help in identifying the areas for improving the website for having more and more visitors.

1. **Likeability of Site:** To know whether the visitors get attracted towards their website.

2. **Functionality of Website:** To measure whether the website is functioning properly or not.

3. **Usage Convenience in Web Design:** To determine the convenience level of the user in using this website.

4. **Site’s Efficiency:** Its ease in finding and comparing different locations and its cost vis-à-vis travel agents.
5. **Website Information**: To identify requisite quantity and quality of updated information in the website.

6. **Reliability of the Website**: To identify whether the site has created any kind of trouble for the user of the website in terms of information and financial security.

B. **Service Quality Dimensions**: It is an assessment of how well a delivered service conforms to the client’s expectations. Through this study significant SQ dimensions will be identified to create more value for the customers.

7. **Communication**: To analyze as to how the company responds to the customer.

8. **Service Customization**: To know whether the site personalizes its services for its customers to make them feel special.

9. **Availability**: To determine the ease in availability of good options every time by the website.

10. **Promotional Deals**: To study the promotional offers/deals offered by the company to its customers.

11. **Value for Money**: To check whether the company provides full value for money in terms of entire package vis-à-vis travel agents and other competitors.

12. **Cancellation/Refund Policy**: To see if the company adopts a good refund policy and provision for cancellation to its customers.

Each of these dimensions was further explored with the help of 3 statements. The response was elicited with the help of Likert’s five point Scale of Agreement (where 1: Not at all Agree 2: Slightly Agree 3: Moderately Agree 4: Agree to much extent 5: Strongly Agree).

**Part IV: Measure of Customer Satisfaction**

The last part of the questionnaire deals with the measures of customer satisfaction. 9 statements have been measured on five point scale to assess the customer satisfaction.
level (where 1: Not at all Agree 2: Slightly Agree 3: Moderately Agree 4: Agree to much extent 5: Strongly Agree). The list of statements includes:

1. A trustworthy website has a positive effect on satisfaction of consumer.
2. E-tourism companies deliver the services up to my expectations.
3. I am satisfied on the experience with e-tourism companies.
4. I feel that all transactions with e-tourism company are secured.
5. I am highly satisfied by purchasing tour package from e-tourism companies
6. Satisfaction with e-tourism company will strengthen consumer trust
7. Satisfaction with e-tourism company will positively impact my intention to buy again.
8. In future also, my all travel needs will be catered to e-tourism companies
9. I will be recommending others also to purchase from e-tourism companies

The items were presented as 5-point Likert scales, with 1 indicating that a person ‘Not at all agree’ and 5 indicating a person ‘Strongly agree’. The middle value of the scale (3) indicated that a person ‘Moderately agrees’ with the opinion.

All items are keyed in the same direction and, therefore, the questionnaire might be prone to response style bias, in other words, always making choices in the middle area or choosing the alternative which is socially acceptable.

4.9 DATA COLLECTION PROCEDURE

A total of 500 respondents were selected for the purpose of the research. Primary data of these respondents has been collected through Questionnaires, telephonic interviews (with prior approval) and electronic mails. Total 500 questionnaires were distributed, out of which only 367 (73.4% effectiveness) were considered worth for the purpose of analysis. Total period of data collection was 9 months, i.e. from February 2013 to October 2013.
4.10 DATA ANALYSIS:

Data has been analysed in five phases. The first phase deals with the **percentage analysis** of data. Second part of the analysis includes **Factor Analysis** to find the most significant predictor of CT. Thereafter, **descriptive analysis** was undertaken followed by various tests of significance (**t-test and MANOVA [Multiple Analysis of Variance]**) for testing the proposed hypothesis regarding dependence of consumer characteristics on demographic variables. Lastly, relationship between Consumer Trust and Customer Satisfaction has been analyzed using **Regression analysis**.

1. **Percentage Analysis of Data** consists of reducing a series of related amounts to a series of percentages of a given base. It helps ease in understanding the data and facilitates better comparison.

2. **Factor Analysis** is applied to split the variables and highlight the major factors in the study.

3. **Descriptive Analysis** helps in describing and analysing the data better.

4. **Statistical Test Analysis**

   a. **T-Test Analysis** are used to find the significance difference between consumer characteristics and demographic variables namely gender and marital status.

   b. **MANOVA** (Multiple Analyses Of Variance) has been used to test hypotheses for age group and educational qualification as there are several correlated dependent variables and single overall test is desired on this set of variables instead of performing multiple individual tests. Moreover, it will help in exploring how independent variables influence some patterning of response on the dependent variables. That is, to test hypothesis about how the independent variables differentially predict the dependent variables.

5. **Regression Analysis** has been used to test the impact of factors building trust on customer satisfaction.

MS Excel and SPSS Statistics 17.0 were used for classification, tabulation, coding and presentation of data.
4.11 CONCLUSION

In investigating the variables that predict impact of consumer trust on customer satisfaction, a broad study was undertaken in which some hypotheses were formulated about the contribution of certain general factors. However, the study has a multiple purpose in the sense that it also explores a number of different variables or a combination of variables that helps in building consumer trust.