Chapter III - Research Methodology

Introduction

The important part of this chapter is data collection & classification section. This chapter is focus on research methodology which used by the researcher for find out result of the research. This chapter briefly discusses type of data, sampling, area of study, and tools to be used for data collection.

3.1 Meaning of Research

Research refers to search for knowledge. It is really a method of critical thinking. It comprises defining problems, formulating by hypothesis or suggested solutions, collecting organizing and evaluating data conclusion to determine whether they fit the formulated hypothesis. Thus, the term ‘research’ refers to a critical, careful and exhaustive investigation or inquiry or experimentation or examination having as its aim to revision of accepted conclusion, in the light of newly discovered facts. According to Abraham Kaplan, “Research methodology is the description, explanation and justification of various methods of conclusion research.”

Research methodology is the specification of methods and procedures for acquiring the information needed to structure or to solve problem. It is the over-all operational pattern or framework of the research that stipulates what information is to be collected, from which sources, and by what procedure.
3.2 Objectives of the Research Studies

With reference to the proposed research work “A Study of Customer Relationship Practices in Hotel Industry in India.” The researcher will have to focus over the following objectives.

The main objectives of the research are,

1) To examine different customer relationship management practices adopted by hotels in India.
2) To analyze that management of Indian hotels are well organized and structured to CRM.
3) To studying the effects of customer relationship practices on service quality, retention and customer satisfaction.
4) To examine the technology based practices to increase customer relationship in Indian hotel industry.
5) To understand and identify the Customer Relationship Management Practices followed by the hotels.
6) Suggesting useful and practical CRM solution that could be used in every type of Indian hotels.

3.3 Hypotheses of the Research Study

According to research objectives of this study, hypotheses were generated and stated as follows:

$H_01$: There is no significant impact of customer need on CRM.

$H_02$: There is no significant impact of customer retention on CRM.
H\textsubscript{0}3: There is no significant impact of customer development on CRM.

H\textsubscript{0}4: There is no significant relation between customer needs and customer development.

H\textsubscript{0}5: There is a no significant relation between customer development and customer retention.

H\textsubscript{0}6: There is no significant relation between customer needs and customer retention.

### 3.4 Conceptual Framework

**Figure 3.1: Conceptual Framework**

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[Diagram showing the conceptual framework with nodes for Customer need Assessment & Acquisition, Customer development through personalization & Customization, Customer Relationship Management, Customers Retention & Referral new customers, and arrows indicating the hypotheses H\textsubscript{0}1 to H\textsubscript{0}6.]
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3.5 Research Design

The study was exploratory and empirical in nature. Primary data and secondary data are used for research in which, secondary data is used as a supplement of primary data. Primary data are collected with the help of structured questionnaire. The questionnaire is based on the Customer Relationship Marketing Model, given by Dash, 2003. Questions were asked relating to CRM practices like customer need assessment and acquisition, customer development through personalization and customization, customer retention, new customer referrals and benefits from CRM approach etc.

Sampling Technique

Random sampling technique was used to identify the respondents of the study.

Population

The population for the study consists of customer relationship officer of the registered hotels in India and customers who avail the services of these hotels. The list of Hotels was taken from the Hotel and Restaurant Association of India and tourism department of India. From the list, the hotels were categorized into four categories; these hotels are budgeted hotels, 1 star and 2 star and 3 star hotel. The targeted population of the study is 1,800 and sample size of 400 is the 22.22% of targeted population.

Sample Size

Sample size was 400
Table No. 3.1 Description of Sampling

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Name of hotels</th>
<th>Sample size</th>
<th>Customers</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Budgets hotels</td>
<td>100</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>2</td>
<td>1 star</td>
<td>100</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>2 star</td>
<td>100</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>3 star</td>
<td>100</td>
<td>40</td>
<td>60</td>
</tr>
</tbody>
</table>

3.6 Questionnaire

Structured questionnaires were prepared for the study and it was prepared by studying Das model of customer relationship management. The questionnaires are divided into two parts. First section of the questionnaire consist demographic profile of customers and employees. In first section, questionnaire demographics include gender, age, marital status, educational qualification, income and awareness about CRM. In the second part of questionnaire, various items related to the customer relationship practices and their factors were included. The variables are measured on five point Likert scale where 1= strongly disagree and 5= strongly agree.

3.6.1. Collection of Data

In order to test the formulated hypothesis empirically a survey has been conducted through a questionnaire. The questionnaires were filled in hotels with the permission of their managers and respondent were requested to fill the structured questionnaire. A cover letter was attached with the questionnaire to provide the information regarding the filling of questionnaire and they were insured that their information will be used only for research purpose and remain strictly confidential. The questions were of both types: close ended open ended and questions were arranged in logical order. Special attentions were paid to keep questions clear, concise,
brief and unambiguous. The study is based on primary data and full care was taken to maintain the accuracy in data collection.

Respondents were facing some problems in understanding the questions. Some of them were contacted telephonically to solve their problem in filling questionnaire.

3.6.2. Pre-test

A pilot study was conducted on 50 respondents to finalize various questions for questionnaire. By applying pre-test, researcher has deleted some items, which were repetitive in nature and found to be unanswerable by the respondents. After the collection of data, Reliability test were conducted to check the reliability and validity of the data. The values of cronbach’s alpha were found more than .60. Therefore, research scales were considered reliable and the questionnaire were prepared for final study.

3.7 Data Analysis

Collected data was analyzed with the help of different statistical calculations using SPSS software. Statistical package for social science (SPSS) version 20.0 for windows seven was used for data analysis and hypotheses testing. Collected data was also analyzed with the help of various types of pie chart, graphs, bar charts etc. by using Microsoft Excel 2010, for windows seven.

- Reliability
- Normality
- Factor Analysis
- Regression analysis
- Mean and Frequency Analysis & Pie-charts
3.7.1 Reliability Evaluation

Reliability refers to the similarity of results provided by independent but comparable measures of the same object, trait, or construct (Churchill Jr: 1987). A similar definition, noting the amount of agreement between independent attempts to measure the same theoretical concept, was proposed by (Bagozzi: 1994). In essence, it is a method that describes the degree to which observations or measures are consistent or stable (Rosenthal and Rosnow: 1991) or accurate and precise (Thorndike, Cunningham, and Hagen: 1991). The Cronbach Alpha reflects both the number of items and their average correlations. Thus, when a Cronbach Alpha value is small, the test is either too short or the items have very little in common and vice versa (Nunnally and Bernstein: 1994). This method has been recommended by (Churchill Jr: 1979, 1987) and (Nunnally and Bernstein: 1994), and used in numerous other studies (Crook and Booth: 1997). Other factors that could not be assessed using Alpha were determined. It was determined through correlations that the higher the Cronbach Alpha value, the greater is the internal consistency, and therefore the greater is the reliability of the measure.

3.7.2 Validity

Validity is a criterion which indicates the degree to which an instrument measures what is expected to be measure by it. There are three types of validity (1) Content validity (2) criterion related validity (3) construct validity.

**Content validity**

It explains how much a measuring instrument covers the study topic. It can be explained by containing a respective sample of universe or by giving proper representation of each
segment of population. It can be explained by containing a respective sample of universe or by giving proper representation of each segment of population.

**Construct validity**

It confirms various propositions of research with the most popular theories.

**Criterion related validity**

It relates to our ability to predict outcomes. This type of validity confirms the success of measures used for estimating purpose.

In the undertaken research each and every contents of measurement is related to the research topic. Content validity was used to check the validity of scale. Construct validity is also used and most popular test such as t-test, factor analysis was applied for the analysis of data.

### 3.7.3. Factor Analysis

Factor analysis is used to find latent variables or factors among observed variables. In other words, if your data contains many variables, you can use factor analysis to reduce the number of variables. Factor analysis groups variables with similar characteristics together. With factor analysis you can produce a small number of factors from a large number of variables which is capable of explaining the observed variance in the larger number of variables. The reduced factors can also be used for further analysis. There are three stages in factor analysis.
First, a correlation matrix is generated for all the variables. A correlation matrix is a rectangular array of the correlation coefficients of the variables with each other.

Second, factors are extracted from the correlation matrix based on the correlation coefficients of the variables.

Third, the factors are rotated in order to maximize the relationship between the variables and some of the factors.

3.7.4. Regression Analysis

Regression analysis determines the relation between two variables. There are two variable dependent variable and independent variable. It explains the effect of independent variable on dependent variable. The relationship between variables can be express in such a way.

\[ Y = a + b \, X \] (Regression equation)

Where, \( X \) = Independent variable and \( Y \) = Dependent variable

Multiple Regressions: multiple regressions describe the relationship between one dependent and two or more than two independent variables.

\[ Y = a + b_1 \, X_1 + b_2 \, X_2 \ldots \] (Multiple regression equation)

In this study, correlation between variable were calculated then stepwise multiple regression applied to compute the teenagers influence on consumer decision making on the basis of their socialization, their influencing strategies, various products categories and on various buying decision making stages etc.
3.7.5 Correlation

If two variables are correlated, the change in one variable is accompanied with change in other variable and vice-versa. There are two types of correlation positive and negative. When the increase in one variable result increase in the corresponding variable such type of correlation is called positive correlation and in contrast of this, increase in one variable decrease in corresponding variable, called negative correlation.

- The correlation analysis was used to find the relation between all four constructs of the study.