Chapter 4
CHAPTER– 4

PRESENT STUDY AND RESEARCH METHODOLOGY

4.1 Present Study:

Due to the essence of the information technology revolution, companies take the opportunity to build better and strong relationships with customers comparing by previously possible in the offline world. By using tools which help them to be a highly interactive, customized experience, to build nurture, and sustain long-term customer relationships than ever before. The purpose of this is to transform these relationships into greater profitability by increasing repeat purchase rates and reducing customer acquisition costs.

Companies try to understand the customer behavior and focus on the long term profitable customers, big companies fill this space of understand the customer behavior by devolving software which help the companies to achieve their goals.

Since, this study aims to focus on the usage of Customer Relationship Management (CRM) Software at Indian companies and to provide a managerially useful, end-to-end view of the CRM process from the users’ perspective.

What do managers need to know about their customers and how that information is used to develop a complete CRM
perspective, which aspect had been improved after using the software? This study concentrates on companies’ perceptions for implementing the Customer Relationship Management (CRM) Software. The population for the study, thus, is all the companies in India that had obtained Customer Relationship Management (CRM) Software.

4.2 Objectives of the Study:

The objectives of the study are:

1. To determine how database is structured in different industries.

2. To understand why CRM software is successful in some organization and not in some other organization.

3. To understand the advantages of CRM software over traditional CRM.

4. To understand how CRM software speeding up the process on relationship among the internal departments in the organization.

5. To understand how CRM software help in effectiveness of the marketing strategy of the organization.

6. To determine how CRM software help organizations in enhancing customer services.
4.3 Hypothesis Testing:

1. There is no impact of information technology on CRM strategy.

2. The CRM software is not worth the cost which the companies spend on it.

3. The CRM software didn’t improve the internal and external relations of the organization

4.4 Research Design:

In the beginning of the research, an exploratory work was carried out to identify major industries that have implemented the Customer Relationship Management (CRM) Software. For this purpose, secondary data were collected with the help of available books, business magazines, journals, newspapers, annual reports, websites and internet etc. It was observed from the previous resources that nine industries Tourism, Banking, Pharmaceuticals, Engineering, Insurance, Telecommunication, Airlines, Financial services, Information Technology formed a majority of the proportion of the Customer Relationship Management (CRM) Software companies in India.
4.4.1 The Universe:

For this research, the universe was identified as all the companies in the world that have implemented the Customer Relationship Management (CRM) Software.

4.4.2 The Population:

Since, the study was related to the Indian companies, all the Customer Relationship Management (CRM) Software companies in India were considered as population. From the Universe of total Customer Relationship Management (CRM) Software companies in the world, the number of Customer Relationship Management (CRM) Software companies in India was considered as a population.

4.4.3 Sampling Unit:

Every Customer Relationship Management (CRM) Software company in India was defined as sampling unit for the purpose of the study.

4.4.4 Size of the Sample:

When the proposal was submitted, it was decided to get the response from 100 companies. However, at the time of sending the questionnaire, it was thought to put in all efforts and get as much response as possible. The total number of responses filled the questionnaire was 145, which was much
more than earlier thought number of 100 on account of strenuous and sustained efforts.

4.4.5 Sampling Design:

All the Customer Relationship Management (CRM) Software companies have some heterogeneity in different aspects. But, they have some homogeneity among them in terms of implementation process, expectation from the features, benefits from the services, and other such aspects. To study the Customer Relationship Management (CRM) Software companies, a selection of these aspects, in research terms popularly known as variables, is quite necessary. Therefore different variables pertaining to the features were selected.

4.4.6 Sources of Data:

The study draws information from two sources i.e. primary data and secondary data.

4.4.6.1 Primary Data:

To collect the primary data, a questionnaire was prepared. More than 250 Customer Relationship Management (CRM) Software companies were approached and from those 145 responses were received. The companies had been contacted in several ways either by personal meeting or by post or by email. In email, the questionnaire had been designed first by Microsoft Word document and then it had been sent to the
respected manager company’s email address but there was a problem in the responding by the manager so the questionnaire had been redesigned by Google document which allowed the respondent to answer it by online procedure. Out of those 145 responses, 39 incomplete responses were ignored because the answers were not dependable due to incomplete data. Hence, total 106 companies from India are taken as the sample for the purpose of the study.

4.4.6.2 Secondary Data:

The published Books, Papers, Journals, Magazines, Reports, Newspapers, Websites; and unpublished research work on Business Management, customer relationship, Customer Relationship Management (CRM) are used as secondary data sources. These references taken in form of secondary data are used in other chapters.

4.4.7 Instruments for Data Collection:

Two instruments for data collection were used: One personal discussion with Head Branches / Management Representative, and the second instrument through structured questionnaire.
4.4.7.1 Discussions with the Branch Managers/Management Representative:

Before designing the questionnaire, detailed discussions were carried out with Branch Managers of five different companies and with Management Representative of two companies. The main reasons behind this discussion were (i) to understand the reason behind implementing the Customer Relationship Management (CRM) Software, and (ii) to understand what are the different aspects which had been improved after implementing the CRM software, so it can be included in the questionnaire. These discussions not only enabled for the comprehensive approach to the whole issue, but also help to design and prepare a better questionnaire.

4.4.7.2 The Instrument [Questionnaire]:

Primary data was collected through structured questionnaire having closed-ended as well as a few open-ended questions. The questionnaire is given as Annexure-X. The questionnaire is divided into three parts. This questionnaire dealt with:

4.4.7.2.1 Details of CRM Software:

In this part, the questions were asked about the structure of the database which the companies had for their CRM software. The following questions were asked:
1. Which database your company is using to store the customer information
2. How do you collect the data of your customers
3. Which information related to your customer is included in your database
4. How do you communicate with your customers

Analysis and interpretation of responses to these questions are discussed in Chapter -5 under paragraph 5.3

4.4.7.2.2 Rationale and Benefits of the CRM Software:

This part was the most important in the questionnaire. In this part following information was sought:

- Ranking of reasons for implementing the CRM Software.

- Dichotomous questions with reference to the reports generated by the CRM software, cost for implementing the CRM Software.

- Ranking question about the different aspects which the CRM Software had improved and the higher cost of the CRM Software.

- Opinion of the respondent about the 26 statements related to the CRM Software. Here five point Likert Scale was used.
• An open-ended question about the difficulties faced by the organization.

• Analysis and interpretation of responses to these questions are discussed in chapter -5 under paragraph 5.4

4.4.7.2.3 Organizational Details:

This part was designed to identify the type of organization where it belonged and the name of the respondent and his or her designation.

Analysis and interpretation of responses to these questions are discussed in chapter -5 under paragraph 5.2.

4.4.7.3 Methods of Data Collection:

As mentioned earlier, experts on the subjects were also consulted, to ensure that the questions were properly phrased, and the suitability of the questionnaire was tested with a small sample of firms. In this way, the first revision of the questionnaire (pre-test) was done with seven persons (five head branches of different companies and two management representatives of two other companies) to ensure a suitable coverage of the domain of each construct. In the second stage, the questionnaire was sent to four firms on the basis of convenient sampling. After studying their written response, some variable were modified. After such pilot survey, which enabled to modify and add or eliminate a few variables, then
a copy had been submitted to three marketing faculties to give their opinion in the final copy after considering their advices this enabled the questionnaire to look easier and better for the responses and then final questionnaire was designed.

The final questionnaire was emailed and posted to 250 companies in selected cities on the basis of convenient sampling. To receive better response, personal visits were made to Mumbai, Vadodara, Rajkot, Ahmadabad, Anand and Vallabh Vidyanagar. The companies had been contacted in several ways either by personal meeting or by post or by email. In email, the questionnaire had been designed first by Microsoft Word document and then it had been sent to the respected manager companies email address but there was a problem in the respond by the manger so the questionnaire had been redesigned by using Google document which allow the responding to answer in online procedure.

Then their answers were printed in the form of the questionnaire for the analyzing purpose. All of these questionnaires were sent to, and filled in by, the person(s) responsible for the CRM Software in the companies, usually head branches, management representative, or customer relationship manager.

Out of those 145 responses, 39 incomplete responses were ignored because of the insufficiency of the data. Hence, total 106 companies from India were taken as the sample for the
purpose of the study. Table 4.1 given below depicts the breakup of all the 106 respondent organizations.

**Table 4.1 Breakup of respondent organizations**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism</td>
<td>18</td>
</tr>
<tr>
<td>Banking</td>
<td>10</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>5</td>
</tr>
<tr>
<td>Engineering</td>
<td>6</td>
</tr>
<tr>
<td>Insurance</td>
<td>10</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>5</td>
</tr>
<tr>
<td>Airlines</td>
<td>5</td>
</tr>
<tr>
<td>Financial services</td>
<td>13</td>
</tr>
<tr>
<td>Information Technology</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>106</strong></td>
</tr>
</tbody>
</table>

**4.5 Data Analysis Techniques:**

Raw data contained in the questionnaire needs to be converted into a suitable form so that suitable statistical analysis can be carried out. For this purpose, data are to be coded and transferred from the questionnaires to the computer. Any mistake in this process can seriously hamper the statistical result and the interpretations. Once the data transferred properly, data analysis can be initiated. The data obtained against various questions from 106 valid respondents were properly coded and transcribed into computer.

Decision as which of the statistical techniques should be used were made on the basis of the statistical techniques should be
used were made on the basis of various criteria like (a) objectives of the study (b) Characteristics of the research design etc.

The following paragraph provides a view of various data analysis techniques, which had been used for overall analysis techniques, which had been used for the overall analysis. Detailing of these techniques has been done in chapter -5 at appropriate places for better understanding.

4.5.1 Univariate Techniques:

Univariate Techniques are appropriate when there is a single measurement of each element in the sample, or there are several measurements of each element but each variable is analyzed in isolation. Univariate techniques can be classified based on whether the data are metric or non-metric. Metric data are measured on an interval or ratio scale. Non-metric data are measured are measured on nomial or ordinal scale.

4.5.1.1 Frequency Distribution (Non-metric data):

For certain questions where one variable was to be considered at a time, frequency distribution was carried out, to obtain a count of number of responses. Bar chart, clustered column charts; percentages etc. were used for farther analysis of such questions. Other statistics (associated with frequency distribution) like mean, mode, variance and standard deviation were also used to find the central tendency and the variance of the data.
4.5.1.2 One-sample ‘t’ test, Two-group ‘t’ test, and one way ANOVA (Metric data):

For hypothesis testing, one sample ‘t’ test was carried out at 95% confidence level. To carry out farther analysis of data of different industries, two-group ‘t’ test, one-way ANOVA, and Least Significant Difference (LSD) multiple compressions test were carried out. This helped two ways (a) in accepting/rejecting hypothesis and (b) making pair-wise comparisons.

4.5.2 Multivariate Techniques:

Multivariate techniques are suitable for analysing data when there are two or more measurements of each element and where the variables analysed simultaneously.

4.5.2.1 Dependence Techniques:

In order to obtain relationship between different parameters like types of industries, cross tabulations were used this helped in merging of frequency distributions of two or more in a single table and then getting meaningful inference from the same.

4.5.2.2 Interdependence Techniques (Variable interdependence):

To find the interdependent relationship if any, between the 26 statements, factor and cluster analysis were carried out.
Factor analysis helped in data reduction and summarization in seven factors. Factors help in explaining the correlations amongst a set of variables.

Cluster Analysis is a multivariate procedure used for segmentation applications in marketing research. This is because a cluster means a group of similar objects. Cluster analysis help helped in segmented the responses to two clusters.