CHAPTER 3
Methodology refers to the procedural framework within which the research is conducted. This chapter represents the framework of the study by giving a clear description of the specific steps that were taken to address the research problem and the tests applied on each of the hypothesis formulated in the study. Following diagram shows the contents of the research methodology used in the study. Firstly, it talks about the research design used in the study which consisted of qualitative and quantitative research thereafter; the sampling methodology used for data collection is discussed. Thirdly, the research methodology covers the instruments used for data collection which in this study was questionnaire and finally it describes the techniques used for analysis of data.

<table>
<thead>
<tr>
<th>1. Research Design</th>
<th>Qualitative Research</th>
<th>Quantitative Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Universe</td>
<td>Sampling Unit</td>
<td>Sample Design</td>
</tr>
<tr>
<td>3. Instrument for Data Collection</td>
<td>Questionnaire</td>
<td>Pilot Study</td>
</tr>
<tr>
<td>4. Analysis of Data</td>
<td>Coding of Questionnaire</td>
<td>Analysis Technique</td>
</tr>
</tbody>
</table>
3.1 Research Design

Research design is a very vital element for any study. It helps the researcher to identify the proper steps to be taken to conduct the study and analyse the data. Many researchers have defined ‘Research Design’ where; Burns and Grove (2003) defined it as “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the finding.”. Parahoo (1997) describes a research design as “a plan that describes how, when and where data are to be collected and analysed”. Polit et al (2001) defined that a research design as “the researcher’s overall for answering the research question or testing the research hypothesis”. Research design describes the data collection methods and its analysis (Burns & Bush, 2002).

Since the purpose of a study may involve both qualitative and quantitative results, mixed methodology has been proposed by many authors to be appropriate in some cases. The study here explores the various factors of CRM in Banking and Insurance Sector hence, the study is exploratory in nature. Moreover, the study helps in analyzing the difference in the level of CRM in Banking and Insurance Sector hence, it also is analytical in nature.

3.2 Universe

From a statistical point of view, the term ‘Universe’ refers to the total of the items or units in any field of inquiry. The universe can be finite or infinite. In finite universe the number of items is certain, but in case of an infinite universe the number of items is infinite, i.e., we cannot have any idea about the total number of items. Here, in this study the universe is finite as the study compares the level of CRM in Banking and Insurance Sector; hence the universe comprises of customers from both Banking and Insurance Sector in India.

3.2.1 Sampling Unit

Selection of sampling unit depends on the probability of collecting data to address research’s questions & research objectives from the entire population.
For the purpose of the study customers from Banking and Insurance Sector in India are selected as sample unit.

3.2.1 Sample Design
Non-probability sampling is that sampling procedure which does not afford any basis for estimating the probability that each item in the population has of being included in the sample. When population elements are selected for inclusion in the sample based on the ease of access, it can be called convenience sampling which is a type of Non-Probability sampling. For achieving this research study’s purpose, convenience sampling method is used. Convenience sampling as said is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher.

3.2.2 Sample Size
This refers to the number of items to be selected from the universe to constitute a sample. A sample size of 500 respondents is good (Comrey & Le, 1992; and Tabachnick & Fidell, 2001). A sample of 200 to 500 is considered adequate for most customer surveys (Hill and Alexander, 2000). In census, data is collected from entire population, which is not possible due to resource constraints. It is not possible to study all customers of all Banks and Insurance companies serving in India hence a sampling criteria is used as it provides valid alternative to the census. Therefore, keeping in mind all these researchers sample size criteria, a sample size of 500 for both Banking and Insurance Sector customers are taken.

3.4 Hypothesis
On the basis of exhaustive literature review and content validity, the factors which constitute to development of overall CRM were Tangibles, Empathy, Assurance, Customer Satisfaction, Customer Service, Responsiveness, Information Technology, Marketing, Customer Loyalty, Trust, Convenience
and Commitment. These factors were used to measure the level of CRM in both sectors. Hence, in order to compare the CRM level of Banking and Insurance Sectors on various factors the following hypotheses were formulated for the purpose of study.

- **Ho1**: There is no significant difference in the level of **Tangibles** in Banking and Insurance Sector.
- **Ho2**: There is no significant difference in the level of **Empathy** in Banking and Insurance Sector.
- **Ho3**: There is no significant difference in the level of **Assurance** in Banking and Insurance Sector.
- **Ho4**: There is no significant difference in the level of **Customer Satisfaction** in Banking and Insurance Sector.
- **Ho5**: There is no significant difference in the level of **Customer Service** in Banking and Insurance Sector.
- **Ho6**: There is no significant difference in the level of **Responsiveness** in Banking and Insurance Sector.
- **Ho7**: There is no significant difference in the level of **Information Technology** in Banking and Insurance Sector.
- **Ho8**: There is no significant difference in the level of **Marketing** in Banking and Insurance Sector.
- **Ho9**: There is no significant difference in the level of **Customer Loyalty** in Banking and Insurance Sector.
- **Ho10**: There is no significant difference in the level of **Trust** in Banking and Insurance Sector.
- **Ho11**: There is no significant difference in the level of **Convenience** in Banking and Insurance Sector.
- **Ho12**: There is no significant difference in the level of **Commitment** in Banking and Insurance Sector.
- **Ho13**: There is no significant difference in the level of **Overall Customer Relationship Management** in Banking and Insurance Sector.
3.5 Instruments for Data Collection

In order to conduct the study, a self-designed structured questionnaire was prepared. The questions in the questionnaire were designed to measure the level of CRM in Banking and Insurance sectors. The questions in the questionnaire tried to find the factors of Customer Relationship Management prevalent in the sectors. The above opinions were measured by requesting respondents to indicate, on a five-point Likert-type scales, anchored on "1 = Strongly Disagree", "2 = Disagree", "3 = Neither Agree nor Disagree", "4 = Agree" and "5 = Strongly Agree". Convenience sampling method was adopted to fill in the questionnaire as the data was randomly collected from the customers of Banks and Insurance companies all over India. The customers from Banks were those who hold savings bank account in either public or private sector Banks operating in India. For Insurance sector data was collected from the customers who have purchased a life insurance policy from either public or private sector Insurance Companies operating within India.

500 questionnaires were administered on the customers of Banking and Insurance Sector each. I received 469 filled and valid questionnaire from Banking customers and 459 from Insurance customers. Data so collected was recorded in excel sheets. Data analysis was carried out by SPSS (the Statistical Package for Social Science) software.

3.5.1 Pretesting of Questionnaire

Pretesting of the questionnaire improves it and customers easily respond (Saunders et al. 2000). For small-scale questionnaires, it is not likely to have ample time or financial resources for such testing (Fink, 1995). However, it is still important to have the questionnaire pilot tested. For most questionnaires, the minimum number for a pilot testing is 30. Therefore, during first stage of pilot testing of questionnaire, I took help from experts of the selected Banks & Insurance companies as well as from randomly selected customers of Banks. They gave their comments on the questionnaire. During second stage of pilot
testing of questionnaire, 30 questionnaires were given as per Fink (1995), each to randomly selected customers of Banks and Insurance Company. During this second stage, feedback from each customer was received. During the final third stage of questionnaire pilot testing, 30 questionnaires were distributed to customers of Banks and Insurance companies and finally got positive response. It is to mention here that respondents of pilot testing of this questionnaire were excluded for having unbiased responses.

3.6 Analysis of Data
For the analysis of data from respondents, following procedure was adopted:

3.6.1 Coding of questions
The researcher did coding of questions before entering these into SPSS software version 16.00. Questions relating to factors identified in the literature review were coded as follows:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANGIBLES (TG)</td>
<td>TG1, TG2, TG3, TG4, TG5, TG6 and TG7</td>
</tr>
<tr>
<td>EMPATHY (EM)</td>
<td>EM1, EM2, EM3, EM4, EM5, EM6, EM7 and EM8</td>
</tr>
<tr>
<td>ASSURANCE (ASS)</td>
<td>ASS1, ASS2, ASS3, ASS4, ASS5, ASS6, ASS7 and ASS8</td>
</tr>
<tr>
<td>CUSTOMER SATISFACTION (CS)</td>
<td>CS1, CS2, CS3, CS4, CS5, CS6, CS7 and CS8</td>
</tr>
<tr>
<td>CUSTOMER SERVICE (CSER)</td>
<td>CSER1, CSER2, CSER3, CSER4, CSER5, CSER6, CSER7, CSER8, CSER9, CSER10, CSER11 and CSER12</td>
</tr>
<tr>
<td>RESPONSIVENESS (RE)</td>
<td>RE1, RE2, RE3, RE4, RE5, RE6, RE7, RE8, RE9, RE10, RE11 and RE12</td>
</tr>
</tbody>
</table>
3.6.2 Data Analysis Techniques

A data analysis statistical technique is dependent on the purpose of research study (Malhotra, 1999).

For the purpose of study, various factors were identified with the help of available literature and Content Validity i.e. extent to which a measuring instrument provides adequate coverage of the topic under study. Thereafter, to measure the reliability, Cronbach's Alpha for Banking Sector and for Insurance Sector was computed on the data collected. In order to meet the objectives of the research i.e. to measure the level of CRM in Banking and Insurance Sector, mean values were calculated for individual factors and overall CRM. Further, correlation was applied on the data collected to measure the relationship between the factors of CRM and overall CRM for both the sectors. To develop a functional relationship between the factors of CRM in both the sectors, multiple regression analysis was carried out on the data collected. Lastly, Z test
was applied to compare the level of Customer Relationship Management on various factors between Banking and Insurance sectors.

Thus, the above methodology gives a framework for data collection and analysis. With the help of this framework, data was collected for both the sectors which was further analyzed with the help of tools suggested above. This further aided in testing of the hypothesis which were formulated in order to achieve the purpose of the study. The empirical findings of the tests suggested in the above methodology are discussed in the next chapter.