Chapter – III
CHAPTER – III
RESEARCH METHODOLOGY

3.1 Research Design

Descriptive research design is used in this study because of to explore the facts and figures without any dilutions of its originality and concept.

3.2 Nature of Data

1. Primary and secondary
2. Primary data is collected from the respondents.

The secondary data are collected from journals, magazines, publications, reports, books, dailies, periodicals, articles, websites, company publications, manuals and booklets etc.

3.3 Period of Study

The study period consisting of seven years and spread over between April 2011 to July 2018.

3.4 Study Area

The study is conducted to analyze the performance on commercial vehicle finance of Banking and Non-Banking Institutions in Namakkal district of Tamil Nadu.

3.5 Pre-testing

A preliminary investigation was undertaken by contacting 100 customers of heavy vehicle users. They were requested to express their opinion about the service quality and performance of heavy vehicle loans and satisfaction. The preliminary investigation was conducted in different parts of Namakkal district. The convenient sampling method was applied to collect the preliminary samples. The Cronbach Alpha method and test were applied to check the reliability of the data.
3.6 Sampling Design & Sample Size

Convenience sampling procedure was used for selecting the samples from the huge population of the customers of heavy vehicle loans in Namakkal district. After testing its reliability, the revised questionnaire was administrated to a total of 500 respondents in the district and able to obtain 401 usable samples, the researcher circulated them in all the taluks of the district.

A total of 500 questionnaires were received. The scrutiny of these led to the rejection of 99 response sheets on account of incomplete responses. Thus, 401 completed questionnaires are considered for the research, these 401 responses are distributed over all the taluks of Namakkal district.

3.7 Pilot Study

A pilot study was conducted to validate the questionnaire and to confirm the feasibility of the study. The personal interaction with customers of heavy vehicle loans gave the output of their perception namely, awareness, service quality and effectiveness.

Out of these factors, the predominant factors were extracted through ranking process of mean values. The numerical values of the total scores of each factor are arranged in the descending order and indispensable factors are established. The filled-up questionnaires are collected from 100 respondents and Cronbach’s Alpha Criterion is applied to test the reliability. The value determined is 0.796 proving the reliability of the instrument. This also explains that the statements in the questionnaire are understood by the customers at 79.6 percent level. The quality of the questionnaire was ascertained and the test showed high reliability. The variables considered for the analysis satisfy the normal probability distribution. Based on the pilot study, the questionnaire is modified suitably to elicit response from the sample group.
3.8 Validity Evaluation

Validity is synonymous with the accuracy of the measuring instrument. It is defined as the degree to which what is observed or measured, is the same as what was purported to be measured. External validity relates to the degree of generalizing ability, and internal validity which relates to the degree of validity of statements made about.

The method used in the thesis has its own inherent external validity issues related to the customer perception on heavy vehicle loans and popularity of the product. Its external validity is limited as it is unlikely that respondents will recommend (by word-of-mouth). The highly usable products are more likely to be recommended. However, respondents differ in their perceptions of heavy vehicle loans mainly relating to the constraints and the service quality dimensions to determine the performance of vehicle loans, which is the main issue being investigated.

Determining validity is considered the most important consideration in questionnaire evaluation and involves content-related validity, criterion-related validity and construct-related validity. Construct-related validity refers to the question of what the instrument is, in fact, measuring. It addresses the psychological qualities contributing to the relation between X and Y. There is no direct measure of construct-validity, but it can be discovered via the emergence of meaningful factors through factor analysis. In the case of the scales used in this thesis, construct-validity is shown through exploratory or confirmatory factor analysis and the fact is that the scales have been validated in previous research contexts.

Content-related validity focuses on the adequacy of the domain of the characteristics captured by the measure and is also known as face validity. It refers to whether the test adequately samples the relevant material it purports to cover. One of the
best ways to determine face validity is by the researcher defining what the variable is and what is not and then to take a large sample to be measured and refined.

Criterion-related validity refers to the degree to which the test correlates with one or more outcome criteria. Criterion-related validity is characterized by prediction of an outside criterion and checking the instrument against some outcome. In the case of the present research, this can be seen by the expected changes in respondent’s reactions depending on the consumer perception towards performance of heavy vehicle loans.

3.9 Scale Development

This thesis employs two different scales in its measurement of the perception of respondents about the service quality satisfaction of customers of heavy vehicle loans. Each scale has its own range and options. The variety and number of scales are Likert’s five-point scale and bipolar scale (ex., Yes / No type).

The questionnaire comprises both optional type and statements in Likert’s five point’s scale. The responses of these sections are obtained from the heavy vehicle loan customers in the five-point scale, which ranges as follows: 5 – Strongly Agree. 4 - Agree. 3 – Neutral. 2 – Disagree. 1- Strongly Disagree.

This allowed for the standardization of results as well as making it easier for respondents to complete the questionnaire. The author and supervisor discussed the Likert’s five-point scale and decided to assign the numerical value 3 for undecided or neutral. By referring to several approaches in statistics, it was decided to assign 3 to neutral. Undecided had a connotation that, the statements in the questionnaire do not have proximity to the respondents. But neutral implies that they are well acquainted with the statements in the questionnaire but they want to remain equidistant from the two extremities of agreement and disagreement. This would not affect the high Cronbach value.
3.10 Designing of the Questionnaire

The questionnaire used for the study has three parts. The first construct is to arrive at the demographic factors of the respondents. It has questions like the age of the respondent, education, income level, occupation and experience.

The second part of the questionnaire deals with the different type of vehicle loans the customers purchase. It includes the questions to the customers regarding how they access to different types of vehicle loans questions in the form of ranking style regarding the source of the information and the preference of customers. The third part of the questionnaire deals with the dimensions of service quality and performance evaluation process. The questions in the second and third parts are obtained in the form of Likert’s 5-point scale respectively.

3.11 Data Analysis

All data analysis is conducted using SPSS V-20. Sample means, Standard Deviation and N are presented in the analysis chapter for all the variables of the study. The data are screened in order to obtain the variance between various service quality elements. Factor Analysis, Cluster Analysis, One Way Analysis of Variance (ANOVA), Linear Multiple Regression Analysis, T-test, Ranking Analysis, Non-parametric Chi-square Analysis of association Structural Equation Model are applied to analyze the data.

3.12 Limitations of the Study

- Due to paucity of time and cost constraints, the study is confined to Namakkal district only.
- The study has been conducted based on the responses of the selected respondents of Namakkal district. Hence the inferences, findings of the analysis need not hold good for another city or the country at large.
The study is limited to the 401 responses of heavy vehicle loan customers in Namakkal district. More responses would have made an extensive study possible.

3.13 Chapterization

Chapter – I

This chapter is speaking about the introduction of commercial vehicle finance, operational difficulties of banking and non-banking financial institutions, significance and scope of the study, statement of the problem and ends with objectives.

Chapter – II

In this chapter, the relevant literature pertaining with variables have been given and end with research gap.

Chapter – III

This chapter deals about research design, nature of data, construction of data collection tool, testing of reliability & validity, sampling design & size, statistical tools used and ends with limitations.

Chapter – IV

In this chapter the collected data has been analyzed with suitable statistical tools and relevant interpretations have been made.

Chapter – V

In this chapter, the summary of findings, suggestions and conclusion have been incorporated.