CHAPTER 1

INTRODUCTION AND DESIGN OF THE STUDY
CHAPTER-I

INTRODUCTION AND DESIGN OF THE STUDY

Technology is evolving every new day and has its impact on everything. It is considered as the key driver for the changes taking place around the world. Modern banking is the latest and most innovative service offered by the banks. The transformation from the traditional banking to modern banking has been a ‘leap’ change. The evolution of modern banking started from the use of Automatic teller machines, Internet banking, Tele banking, Mobile banking, National electronic fund transfer and Real time gross settlement etc. Technology would be the key to the competitiveness of banking system. Indian banking as a whole is undergoing a radical change. Indian banks have always proved beyond doubt their adaptability to mould themselves into agile and resilient organizations.

The first bank in India, General Bank Of India was established in 1786. From 1786 till today, the journey of Indian banking system can be segregated into three distinct phases.

They are as follows.

1. Early phases from 1786 to 1969 of Indian banks.

2. Nationalization of Indian banks and up to 1991 prior to Indian banking sector reforms.
3. New phase of Indian banking system with the advent of Indian financial and banking sector reforms after 1991.

**1.1. BANKING TECHNOLOGY IN INDIA:**

In the five decades since independence, banking in India has evolved through above three distinct phases. During third phase, also called as Reform Phase, Recommendations of the Narasimham Committee (1991) paved the way for the reform phase in the banking. Important initiatives with regard to the reform of the banking system were taken in this phase. Important among these have been introduction of new accounting and prudential norms relating to income recognition, provisioning and capital adequacy, deregulation of interest rates and relaxing of norms for entry in the field of banking.

Entry of new banks resulted in a paradigm shift in the ways of banking in India. The growing competition, growing expectations led to increased awareness amongst banks on the role and importance of technology in banking. The arrival of foreign and private banks with their superior state-of-the-art technology-based services pushed Indian Banks also to follow suit by going in for the latest technologies so as to meet the threat of competition and retain their customer base.

Indian banking industry, today is in the midst of an IT revolution. A combination of regulatory and competitive reasons has led to increasing importance of total banking automation in Indian Banking Industry.
Information Technology has basically been used under two different avenues in Banking. One is Communication and Connectivity and other is Business Process Reengineering. Information technology enables sophisticated product development, better market infrastructure, implementation of reliable techniques for control of risks and helps the financial intermediaries to reach geographically distant and diversified markets.

The Software Packages for Banking Applications in India had their beginnings in the middle of 80s, when the Banks started computerizing the branches in a limited manner. The early 90s saw the plummeting hardware prices and advent of cheap and inexpensive but high-powered PCs and servers and banks went in for what was called Total Branch Automation (TBA) Packages. The middle and late 90s witnessed the tornado of financial reforms, deregulation, globalization etc. coupled with rapid revolution in communication technologies and evolution of novel concept of 'convergence' of computer and communication technologies, like Internet, cell phone.

In India, banks as well as other financial entities entered the world of Information technology and with Indian Financial Net (INFINET), A Wide Area Satellite Based Network (WAN), using Very Small Aperture Terminals technology (VSAT), was jointly set up by the Reserve Bank and Institute for Development and Research in Banking Technology (IDRBT) in June 1999.

The Indian Financial Network (INFINET) which initially comprised only the public sector banks was opened up for participation by other categories of members. The first set of applications that could benefit greatly from the use of
technological advances in the computer and communications area relate to the payment systems which form the lifeline of any banking activity. The process of reforms in payment and settlement systems has gained momentum with the implementation of projects such as NDS ((Negotiated Dealing System), CFMS (Centralized Funds Management System) for better funds management by banks and SFMS (Structured Financial Messaging Solution) for secure message transfer. This would result in funds transfer and funds-related message transfer to be routed electronically across banks using the medium of the INFINET. Negotiated dealing system (NDS), which has become operational since February 2002 and RTGS (Real Time Gross Settlement system) scheduled towards the end of 2003 are other major developments in the area.

Internet has significantly influenced delivery channels of the banks. Internet has emerged as an important medium for delivery of banking products and services. The Internet has provided a new and inexpensive channel for banks to reach out to their customers. It allows customers to access banks’ facilities round the clock and 7 days a week. It also allows customers to access these facilities from remote sites/home etc. Detailed guidelines of RBI for Internet Banking has prepared the necessary ground for growth of Internet Banking in India.

1.1.2 PATH WAY OF TECHNOLOGY:

In India the practice of banking has undergone a significant transformation in the nineties. Due to the privatization policy announced by the Reserve bank of India in 1993, technological initiatives in Indian banking have gradually gathered
momentum. Over the years, bank of all kinds, whether foreign, private, public sector or co-operative have shown tremendous technological maturity

The first wave in banking technology began with the use of Advanced Ledger Posting Machine (ALPM) in the 1980s. The RBI advised all banks to go in for massive computerization at the branch level. There were two options: automate the front office or back office. Many banks opted for automating the front office in the first phase. Banks like State Bank of India concentrated on the back office automation at the branch level. The Rangarajan Committee report of 1985 ensured that banks had to get computerized.

With the second wave of development in late 1980s came Total Bank Automation (TBA). This automated both the front-end and back-end operation within the same branch. TBA comprised of total automation of a particular branch with its own database.

In the third wave, the new private sector banks entered the field. These banks opted for a different model of having a single centralized database instead of having multiple databases for all their branches. This was possible due to the availability of good network infrastructure. In the beginning of the 1990s, leased line costs were coming down. Earlier, banks were not confident of running the whole operation through a single data center. However, Private sector banks showed that it can be done efficiently, other banks began to show an interest, and they also began consolidating their databases into a single database. Banks followed up on this move by choosing suitable application software that would support centralized operations.
The fourth wave started with the evolution of the ATM delivery channel. This was the first stage of empowerment of the customer for his own transactions. This showed the power of technology and how the reach can be increased phenomenally at a great pace. Seeing these, all the banks started revamping their retail delivery channels. Their core focus became the number of customers they can service at lower cost. The fourth wave ended with the evolution of telebanking and mobile banking.

The fifth wave happening now is the Real Time Gross Settlement System and the National Electronic Fund Transfer system of the RBI. RTGS system is setup, operated and maintained by RBI to enable funds settlements on real time basis across banks in the country. The current payment system involves settlement of payments on a “settlement day” and interest is invariably computed to accrue on a daily basis. RTGS system is a software package which provides online settlement of payment between financial institutions. In this system payment instructions between banks are processed and settled individually and continuously throughout the day but inter-bank settlement takes place only afterwards typically at the end of the day. The objective of the NEFT System is to establish an electronic funds transfer system to facilitate an efficient, secure, economical, reliable and expeditious system of funds transfer and clearing in the banking sector throughout India, and to relieve the stress on the existing paper based funds transfer and clearing system.

Thus technology adoption has changed the face of banking in India. What started as a mere automation of some routine work processes in banks in the mid 80’s has moved on to become business process re-engineering which has resulted in
making banking services branchless, anytime and anywhere; facilitated new product
development and, enabled near real time service delivery. All the stakeholders have
benefited from the expansion of delivery channels, product innovation and efficiency
enhancement which have been facilitated by technology adoption. Banks, however, need
to guard against losing personal touch with their customers in such technology driven
environment as this would result in their losing valuable information needed for their
business. **Overall, technology that began its journey in Indian banking as an enabler,
has now become a business driver, and is poised to be an inseparable part of
banking business process.**

This journey has come to the present stage by virtue of the push given by the
Reserve Bank. Reserve Bank of India started this push with the Rangarajan Committee
Report I & II (1989) on Computerization in Banks, followed by Narasimham committee
(1991), Saraf (1993) and Vasudevan Committee (1998) Reports. Some of the significant
developments during this journey have been introduction of MICR based cheque
clearing, automation of bank branches, computerization of Govt. business, setting up of
IDRBT, commissioning of INFINET, launching of IT based delivery channels, providing
guidelines for internet banking, implementation of NFSS etc. The role played by the
Reserve Bank continues.

The introduction of technology-enabled banking service delivery probably
started off with HSBC bank introducing ATM for the first time in India way back in
Internet banking was introduced in India in 1996 by ICICI bank with the launch of ‘infinity’.\(^1\) Even though these electronic delivery channels were introduced by foreign banks and new private banks in order to surmount their limitation of fewer branches, of late even the public sector banks are also aggressively investing in these services. So the action in this field really got heated up during the recent years. This thrust on computerization and automation has led to massive investments in the banking sector in India. For instance as on March 31st, 2005, public sector banks in India had incurred an expenditure of Rs.9,487 crores on computerization and development of communication network.\(^3\)

In banking, in the past, the technology strategy was considered as subordinate to business strategy. But now with so much advancement in technology it has become as important as business strategy. Technology has provided an altogether new way of interacting and providing service to bank customers rather than merely replicating activities of the bank employees.


\(^2\) Rajneesh De and Padmanabhan, Indian express, 16\(^{th}\) september, 2002

Thus we come to know that technology plays a vital role in the Indian banking sector. So a question rises in our mind that whether the customers understand this technology; whether they adopt it; whether they accept it; whether they have any satisfaction with these technologies; whether they have any problem in using that; if they have any problem what are the solutions? So this study focuses these questions. The focus of this research is on technologies that customers independently use for banking without any interaction with or assistance from employees. The Technology-Enabled Banking Self-Services covered under this study include Automated Teller Machines (ATMs), Internet banking, Tele banking, Mobile banking, Real Time Gross Settlement and National Electronic Fund Transfer. This study is made on the customers of banks in TIRUNELVELI DISTRICT which is located in southern TAMILNADU.

1.2 Statement of the problem:

Modern banking is the latest development that has added a new dimension to banking transactions by making it more convenient, which has eliminated the long wearisome waiting-lines. Adoption of technology enhances the quality of risk management systems in banks. Indian banking has come a long way and is maturing rapidly to adopt technology. While private sector banks have been the early adopters, public sector banks have been doing a fast catch up. Banks stand to gain by investing in technological that integrate all their delivery channels.
But, there are some serious problems that we may encounter while banking through the technology, due to which many still prefer to go directly to the banks instead of availing this facility. Banks which have made adequate investment in technology have consequently faced an erosion of their market shares.

Wide spread technology deployment in the banking business has brought to the fore some new issues and challenges. These can be broadly divided into two categories- Costs and Risks. Costs- in terms of increasing expenditure on IT deployment and, risks – resulting from - reliance on IT systems without necessary safeguards. In case of internet banking, one of the major challenges faced by banks involved which is the issue relating to authentication and the concerns arising in solving problems unique to electronic authentication such as issues of data integrity, non-repudiation, evidentiary standards, privacy, confidentiality issues and the consumer protection. It is considered as the major problem in using banking technologies.

In case of internet banking, for carrying out this properly, a basic knowledge of computers and the Internet is required, which limits the number of people willing to avail this facility. Many people, who are not comfortable with computers and the Internet, often find it difficult to use this service. Therefore, for beginners, it is really time-consuming. In addition to this, people also find a difficulty in trusting a completely mechanized system like Internet banking, in case of financial matters. In many instances, a simple mistake, like clicking a wrong button, may create a big problem. And so, many individuals often keep wondering if they have properly executed the transaction.
While banking through the Internet, we have to be careful about the security of our Internet bank account. The security of our Internet bank account depends to a great extent on the security of our computer, password and PIN number. Any leakage of information regarding our password or PIN number and banking transactions can allow computer hackers to gain access to our bank account, which is the most common online banking problem. This can lead to unauthorized and criminal transactions being conducted without our knowledge. By the time we get our bank statement and detect such transactions, it may be too late.

In this, we have to make sure that the banking session is secure, as in many instances we may encounter proxy websites. These proxy websites can easily access our bank account, if they can track our user name, password or PIN number.

Sometimes, it can be time-consuming and tedious, as many websites take quite a long time to get started. Besides this, our Internet bank account may also take considerable time to get started. We may also encounter technical difficulties and connectivity problems while conducting banking transactions. Of course, there is a customer care department in almost every bank to look into such matters, but often, we may not be able to get the necessary assistance due to the congestion in the computer and telephone network. On the other hand, in normal banking, we can simply converse with the bank officials to sort out any problem.

The widespread adoption and usage of ATMs is testified by the Banknet India’s ATM User Survey Report 2006 in which 95% of the respondents preferred banking via ATMs over the conventional branch banking. According to Internet &
Mobile Association of India’s (IAMAI) Report – Online Banking 2006, only about 12% of the internet users avail internet banking facility, which shows that the internet banking has not really picked up in India.

However many customers today consider these technologies such as internet, ATM, telephone and mobile banking as essential part of their banking experience. Anyhow this is true only in the urbanized metropolitan cities. Lack of trust environment is another major problem experienced in India. These factors impede the growth of modern banking. Anyhow, there is evidence in the literature and other sources that certain segments of the bank customers, especially those belonging to the well educated, young, relatively well-off and residing mainly in urban areas, taking to internet banking and other forms of electronic banking self-services. This is also evident from the reduction in the branch transactions and the increase in the net transactions in many of the banks. For instance ICICI bank’s net transactions as a percentage of its total transactions rose from 2 percent in the year 2000 to over 18 percent in 2006 and HDFC bank’s net transactions grew to 16 percent in 2006 from 3 percent in 2001. Examination of published works revealed that even though several studies were conducted mainly in developed countries and a few in developing countries about the adoption of technology. Mols (1999) in Denmark, Minna Mattila (2006) in Finland, Patricia (2003) in France, Daniel. E (1999) in U K, Line Ricard (2001) in France, Milind Sathye (1999) in Australia, Laforet & Li (2005) in China,Erikson(2005) in Estonia to name a few such studies - the studies pertaining to this topic done in India are limited in number. Even the few published studies done in India deal with only aspects pertaining to any one of the technology-such as ATM or Internet banking (Singh and Malhotra, 2005; Mukherjee and
As the customers tend to use the various services of the different banking channels in a complimentary manner, the research confined to aspects pertaining to only one channel is deemed incomplete to capture the banking transaction-specific consumer behaviors in totality. Hence there is a strong agenda for the study taking multiple self-service banking delivery channels together such as ATMs, Internet banking, Telebanking, Mobile banking, RTGS, and NEFT.

With this background in view, an attempt has been made to evaluate the Modern Banking Technologies and its Impact on Various Customers (with reference to TIRUNELVELI DISTRICT). The present study aims to analyze the areas of demographic profile, users’ adoption of modern banking technologies, impact of modern banking technologies, level of satisfaction of customer on modern banking technologies and the problems in utilizing the modern banking technologies.

1.3 OBJECTIVES OF THE STUDY:

The main objective of the study is to examine the modern banking technologies and its impact on various customers (with reference to Tirunelveli District) the specific objectives are,

1. To study the evolution of technology in Indian banking sector,

2. To study about the profile of the study area TIRUNELVELI DISTRICT,

3. To study the socio economic profile of the respondents of TIRUNELVELI DISTRICT,
4. To ascertain their adoption of modern banking technologies among the respondents,

5. To study the impact of modern banking technologies on respondents,

6. To measure the level of satisfaction of customer on modern banking technologies,

7. To study the problems of respondents in utilizing the modern banking technologies,

8. To offer suitable suggestions based on the findings to expand the banking service.

1.4 SCOPE OF THE STUDY:

The present study attempts to examine the Modern Banking Technologies and its impact on various customers (with reference to Tirunelveli District). It examines how far the Modern Banking Technologies has developed in the study area and the impact of Modern Banking Technologies on various customers based on age, community, religion, literacy level, income level, and social status and belonging bank. The present study is from the standpoint of the State Bank of India, Tamilnadu Mercantile Bank, Indian Overseas Bank, Axis Bank and Canara Bank and their customers.

1.5 IMPORTANCE OF THE STUDY:

Technology solutions would make flow of information much faster, more accurate and enable quicker analysis of data received. This would make the decision making process faster and more efficient. For the Banks, this would also enable development of appraisal and monitoring tools which would make credit management much more effective. The result would be a definite reduction in transaction costs, the
benefits of which would be shared between banks and customers. With greater use of technology solutions, we expect IT spending of Indian banking system to go up significantly. The important benefit derived from information technology deployment is the ability of banks to provide innovative delivery channels. Online banking, debit and credit card payments, ATM access to other bank customers, Point of Sales terminals, Mobile banking, Tele banking, RTGS, NEFT etc. have all changed the way Bank customers are able to transact for their day to day needs, thereby creating a huge eco system of convenient banking facilities which substantially reduces the need for physical proximity and handling of cash. It also provides access to a large number of global retail markets to our citizens. Thus the technology’s need is very essential for doing a single activity of banking operation now a day. Technology plays an important role in Indian banking sector. In future day’s traditional banking will be stopped completely. So the customers of banks have to be known about this kind of banking technologies. Because they are the users; they are the operators; they are the beneficiaries. So we should examine the knowledge of the customers on banking technology. Thus the study analyzes the customers’ adoption, impact, satisfaction and their problem in using these kinds of banking technologies.
1.6 HYPOTHESES:

To give a specific focus to the objectives, hypotheses have been formed to test the objectives on clear terms using appropriate statistical tools. It necessitates the development of hypotheses at each and every stage of the analysis. The study involves 15 hypotheses which are listed down, proved and explained in detail in the fifth and sixth chapters. The following is the list of hypotheses formulated for the study.

$H_1$ : Perceived ease of use, Perceived usefulness, Attitude toward using and Behavioral intention to use will have a positive effect on users’ adoption of ATM.

$H_2$ : Perceived ease of use, Perceived usefulness, Attitude toward using and Behavioral intention to use will have a positive effect on users’ adoption of Internet Banking (IB).

$H_3$ : Perceived ease of use, Perceived usefulness, Attitude toward using and Behavioral intention to use will have a positive effect on users’ adoption of Mobile Banking (MB).

$H_4$ : Perceived ease of use, Perceived usefulness, Attitude toward using and Behavioral intention to use will have a positive effect on users’ adoption of Tele Banking (TB).

$H_5$ : Perceived ease of use, Perceived usefulness, Attitude toward using and Behavioral intention to use will have a positive effect on users’ adoption of
National Electronic Fund Transaction (NEFT).

**H7**: Perceived ease of use, Perceived usefulness, Attitude toward using and Behavioral intention to use will have a positive effect on users’ adoption of overall Modern Banking Technologies (MBT).

**H8**: There may be a significant impact of Modern Banking Technologies (MBT) on the banking customers.

**H9**: There will be a significant difference in impact of Modern Banking Technologies (MBT) between the genders categories of the customers.

**H10**: There will be a significant difference in impact of Modern Banking Technologies (MBT) among the age categories of the customers.

**H11**: There will be a significant difference in impact of Modern Banking Technologies (MBT) among the literacy level of the customers.

**H12**: There will be a significant difference in impact of Modern Banking Technologies (MBT) among the social status of the customers.

**H13**: There will be a significant difference in impact of Modern Banking Technologies (MBT) among the income level of the customers.

**H14**: There will be a significant difference in impact of Modern Banking Technologies (MBT) among the Customers of Different Bank.
1.7 RESEARCH METHODOLOGY:

The present study evaluates the Modern Banking Technologies and its Impact on Various Customers (with reference to TIRUNELVELI DISTRICT). The methodology adopted in the present study includes the research design, the sampling technique, the collection of data, the period of study and tools of analysis.

1.7.1 Research Design

Research design is the arrangement of conditions for collection and analysis of data, in a manner, that aims to combine relevance to the research purpose, with economy in procedure. A descriptive cross-sectional survey based questionnaire design was used as research design. According to Amin (2005) this is one of the most commonly used research method in social sciences and is used to gather data from a sample of a population at a particular time. In the study, both quantitative and qualitative techniques were employed in the data collection process, analysis, presentation and discussion of findings.


1.7.2 Sampling Technique

The customers targeted were government and private bank customers. To the scale of this study, as in many cases, the actual population of bank customers’ figure could not be obtained since it is usually difficult to specify the actual number of the population and specify the elements.\(^6\) Hence, 300 customers were selected from State Bank of India, Tamil Nadu Mercantile Bank, Indian Overseas Bank, Axis Bank and Canara Bank as a sample in the primary research surveys. These respondents were selected using convenience sampling method.

1.7.3 Collection of Data

The present study was based on both primary and secondary data. Well structured and pre tested questions based on the variables contained in the interview schedule (Appendix A) were used for collecting primary data by personal interview method. The questions contained in the interview schedule were mainly dichotomous questions and five point Likert scale questions. The combination of the two types of questions ensures the collection of complete information from the respondents. Before doing the actual data collection, the validity and reliability of the research instrument “interview schedule” was tested.

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Validity being the appropriateness, meaningfulness and usefulness of specific inference made from test scores, instrument validity was ascertained in a number of ways which included, discussing the questionnaire with the colleagues in the department, thereafter adjustments were done before submission to the supervisor who assessed the face validity. The instruments were then pre-tested after which the content validity was measured. This helped to assess the appropriateness of sentence construction, comprehensiveness of instruments of interview schedule and language clarity. Comments were received on the acceptability of the instrument of interview schedule vis-à-vis, length and the privacy of respondents. These comments were helpful in designing the final interview schedule that will be used to generate data. To measure the validity of variables, content validity index was calculated. CVI for expert 1 was 0.8372 and for expert 2 was 0.8724 implying that the questions in the interview schedule were valid for the study variables.

Reliability of an instrument being the consistency of an instrument in measuring what it is intended to measure, it was established by first using internal consistency approach followed by carrying out pilot study. The pilot study was conducted among 20 respondents purposively chosen and reliability was tested using a Cronbach’s alpha. Reliability is determined by Cronbach’s coefficient alpha (\(\alpha\)), a popular method for

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measuring reliability suggests that for any research at its early stage, a reliability score or alpha that is 0.60 or above is sufficient.

Table 1.1

: Reliability Statistics

<table>
<thead>
<tr>
<th>Determinants</th>
<th>No. of items</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Adoption of Modern Banking Technologies</td>
<td>6</td>
<td>.845</td>
</tr>
<tr>
<td>Impact of Modern Banking Technologies</td>
<td>7</td>
<td>.922</td>
</tr>
<tr>
<td>Satisfaction on Modern Banking Technologies</td>
<td>5</td>
<td>.892</td>
</tr>
<tr>
<td>Problems to utilize Modern Banking Technologies</td>
<td>5</td>
<td>.934</td>
</tr>
</tbody>
</table>

Source: Primary data

As shown in Table 1.1, the reliability scores of all the constructs were found to exceed the threshold; all measures demonstrated good levels of reliability (greater than 0.80).

The interviews with the help of interview schedule were conducted in a structured form, and they were conducted with customers at designated points on the banking site in the area of study. The completed schedules were checked and the omissions and commissions were rectified on the spot.

Secondary data have been collected from books, journals, newspapers, periodicals, reports, internet, and unpublished PhD theses. The data from Reserve Bank

of India (RBI) and Institute for Development & Research in Banking Technology (IDRBT) have also been collected from their websites.

1.7.4 Framework of Analysis:

Data have been collected through the survey using structured interview schedule were prepared by cleaning, coding and entering them in a computer at the end of each day. The analysis was carried with the help of using popular statistical package SPSS 16.

The demographic profile of the sample has been analyzed with the help of 15 indicators. Descriptive statistical procedures including cross-tabulations, frequency distributions and percentage analysis were used to analyze the demographic profile of the bank customers and to draw inferences. Graphical illustration was also used to provide an apparent visual illumination on the demographic profile of the bank customers.

In order to test the conceptual research framework model for Modern Banking Technologies whether it is fit or not, regression analysis was used. Multiple regression analysis was further used to find out the effect of variables on the model. Reliability analysis of Cronbach’s coefficient alpha (α) test was used as assumption test to determine the normal distribution of the data of the variables.

Factor Analysis was used for the factor extraction among the factors Modern Banking Technologies. In Factor Analysis, Principal Component Analysis (PCA) and Varimax rotation method were used to extract and identify the underlying factors for modern banking technologies and rank the variables based on loading. Kaiser-Meyar-
Olkin (KMO) test was used as assumption test for Factor analysis. In order to find out whether any significant impact of modern banking technologies occurs on the customers and the impact of modern banking technologies on various aspects of customers, One-Sample $t$ Test procedure and One Way ANOVA were used respectively.

In order to find out the level of satisfaction of customers on the Modern Banking Technologies, the following standardized formula was used.

\[
(\bar{x} + SD) < \text{Score} \quad \approx \text{High Level}
\]

\[
(\bar{x} - SD) > \text{Score} \quad \approx \text{Low Level}
\]

\[
(\bar{x} + SD) \text{ to } (\bar{x} - SD) \quad \approx \text{Medium Level}
\]

Regression analysis was used to find out the significant impact of variables of Modern Banking Technologies (MBT) on customer satisfaction and reliability analysis of Cronbach’s coefficient alpha ($\alpha$) test was used as assumption test for regression analysis.

Nonparametric test of Friedman Test was performed to create the ranking for the problems of customers to utilize the Modern Banking Technologies. One Way ANOVA was used to find out the significant difference in problems of customers to utilize the Modern Banking Technologies (MBT) among State Bank of India, Tamil Nadu Mercantile Bank, Indian Overseas Bank, Axis Bank and Canara Bank and also to find out the most and least problems of customers to utilize the Modern Banking Technologies (MBT) among the banks.
1.8 PERIOD OF THE STUDY:

The study was conducted in the year 2010 – 12. The primary data were collected from the customers of State Bank of India, Tamil Nadu Mercantile Bank, Indian Overseas Bank, Axis Bank and Canara Bank during the period from July 2011 to December 2011.

1.9 LIMITATION OF THE STUDY:

The present study of Modern Banking Technologies and its impact on various customers (with reference to Tirunelveli District) had a number of limitations.

1. Present study has covered only the customers of State Bank of India, Tamil Nadu Mercantile Bank, Indian Overseas Bank, Axis Bank and Canara Bank in Tirunelveli District.

2. The customers who are using the modern banking technologies were selected as sample for this study. The non users of modern banking technologies were not considered to the study.

3. The study was mainly based on convenience sampling method instead of census method. Hence the findings of the study cannot be generalized.

4. It was also very difficult to obtain necessary information from the customers because they were reluctant to disclose all the information available with them.

5. The study covered only Tirunelveli District. Hence the findings and conclusions of the study are entirely applicable to the study area only and it may not hold good for other areas.
6. There was limited time with most interviewees because interviews were held in banks and therefore they were not completely free from frequent interruption.

1.10 CHAPTER SCHEME:

The present study “Modern Banking Technologies and Its Impact on Various Customers (with reference to Tirunelveli District)” has been organized under seven chapters.

Chapter one includes details related to banking technology and its pathway in Indian Banking Sector. Besides, the statement of the problem, objectives, methodology, scope of the study, limitations and scheme of work has been presented.

Chapter two gives a review of the past studies related with the present study. Further, it discusses the concepts used in the present study.

Chapter three discusses the background of the Indian banking sector in general and the technological development that has taken place in this sector in particular.

Chapter four deals with the analysis and interpretation of the demographic profile of the respondents.

Chapter five describes the analysis and interpretation of the users’ adoption and impact of banking technology among the respondents.

Chapter six includes with the analysis and interpretation of the satisfaction level and problem of respondents in using modern banking technologies.
Chapter seven concludes the report by presenting the summary of findings, managerial implications and suggestions, significant contributions that emerged from the study and recommendations for future research.

CHAPTER SUMMARY:

In this chapter banking technology in India and the pathway of technology in Indian banking sector have elaborately discussed. Design of the study has been also conducted by this chapter. It included the Statement Of the problem, Objectives of the study, Scope and Importance of the study, Research Methodology, Period of the study, Limitation of the study and chapter scheme.