

**A COMPARATIVE ANALYSIS OF MODERN BANKING SERVICES  
EXTENDED BY PRIVATE AND PUBLIC SECTOR BANK IN  
TIRUNELVELI DISTRICT**

*Thesis submitted to*

**MANONMANIAM SUNDARANAR UNIVERSITY**

*in partial fulfilment of the requirements*

*for the award of the Degree of*

**DOCTOR OF PHILOSOPHY IN COMMERCE**

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**FEBRUARY - 2015**

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## **CERTIFICATE**

This thesis entitled **“A COMPARATIVE ANALYSIS OF MODERN BANKING SERVICES EXTENDED BY PRIVATE AND PUBLIC SECTOR BANK IN TIRUNELVELI DISTRICT”** submitted by **Ms. B. SHEEBA PEARLINE (Reg No. 7975)** for the award of the Degree of Doctor of Philosophy in Commerce of Manonmaniam Sundaranar University is a record of bonafide research work done by her and it has not been submitted for the award of any degree, diploma, associateship or fellowship of any other University/Institution.

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## **DECLARATION**

I hereby declare that the thesis entitled “**A COMPARATIVE ANALYSIS OF MODERN BANKING SERVICES EXTENDED BY PRIVATE AND PUBLIC SECTOR BANK IN TIRUNELVELI DISTRICT**” submitted by me for the Degree of Doctor of Philosophy in Commerce is the result of my original and independent research work carried out under the guidance of **Dr. M. JULIAS CEASAR, M.Com., M.Phil., MBA., PGDHRM., Ph.D.**, Dean of Arts & Asst. Professor of Commerce, St. Xavier's College (Autonomous), Palayamkottai, and it has not been submitted for the award of any degree/ diploma/ associateship or fellowship of any University or Institution.

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Signature of the Candidate

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## ACKNOWLEDGEMENT

I deem it a pleasure and privilege to place on record my appreciation and acknowledgement for all those who walked with me and helped me to accomplish this great academic task successfully.

First and foremost, I thank **GOD ALMIGHTY** for his manifold blessings and unfailing guidance throughout my research work.

I would like to express my gratitude to my guide and supervisor **Dr. M. Julias Ceasar**, Dean of Arts and Assistant Professor of Commerce, St. Xavier's College (Autonomous), Palayamkottai for his guidance and valuable supervision. His stimulating hints and suggestions enabled to add quality to my doctoral thesis.

I express my sincere thanks to **Rev. Dr. V. Gilbert Camilus. SJ**, Principal of St. Xavier's College (Autonomous), Palayamkottai for having allowed me to pursue my doctoral degree in this great temple of learning.

I wish to thank to **Rev. Fr. R. Jesu Michael Das SJ** the Secretary and **Rev. Dr. Danish Ponniah SJ**, Rector of St. Xavier's College, Palayamkottai for their inspiration, encouragement and help in the process of this research work.

With due to respect, I wish to express my sincere thanks to **Dr. C. Eugene Franco**, Head, Research Centre of Commerce, St. Xavier's College (Autonomous), Palayamkottai, who has been encouraging at every stage of my research work.

I wish to express my thanks to the **Vice Chancellor and Registrar** of Manonmaniam Sundaranar University, Tirunelveli for allowing me to complete my research in this university.

This study could not have been possible without the valuable input resources from the **Lead Bank Manager** in Tirunelveli and the other **Bank Managers and Employees**. They provided me with the necessary information and I thank them very sincerely.

I am grateful to my husband **Mr.S. Rajan**, My son **R. Jack**, my **Parents, brothers, In-laws and the loved ones** who have constantly been a source of strength and inspiration to me in executing this research work.

I also thank all the **well-wishers and friends** who have directly or indirectly helped me to complete my research work successfully.

***B. Sheeba Pearline***

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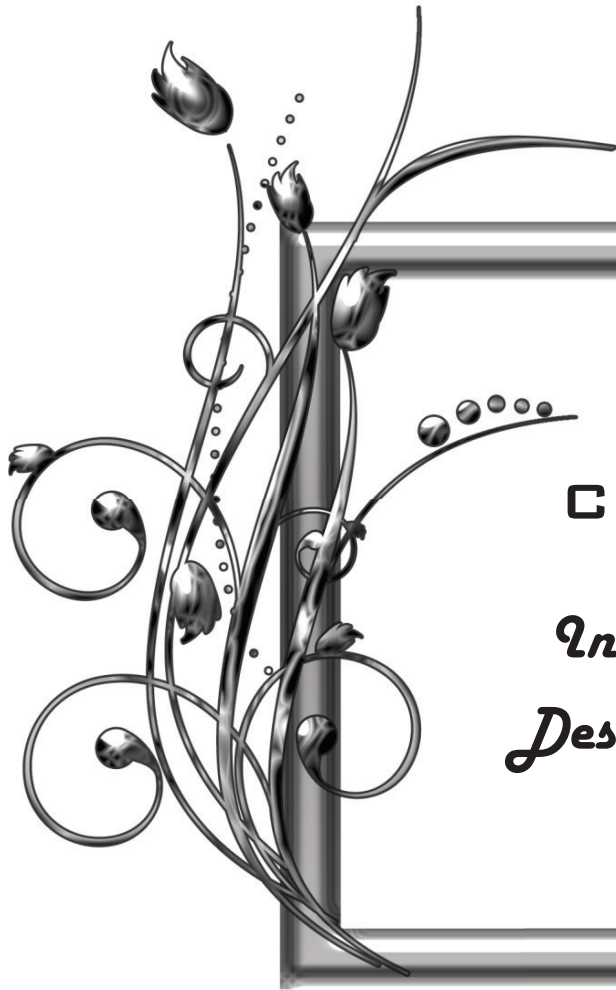
## **ABBREVIATIONS**

ABN	- ABN Amro Bank
ATM	- Automatic Teller Machine
BACS	- Bankers Automated Clearing Service
BC	- Backward Caste
CB	- Core Banking
CBS	- Core Banking Solutions
CDSL	- Central Depository Services Limited
CFA	- Confirmatory Factor Analysis
CGR	- Compound Growth Rate
CRM	- Customer Relationship Management
CTS	- Cheque Truncation System
CVC	- Central Vigilance Commission
DD	- Demand Draft
DEMAT	- Dematerialized account
DPS	- Depository Participants
DTMF	- Dual Tone Multi Frequency
ECS	- Electronic Clearing Service
EFT	- Electronic Fund Transfer
EFTPOS	- Electronic Fund Transfer at the Point of Sale
GOVT	- Government of India
GTB	- Global Trust Bank
HDFC	- Housing Development Finance Corporation Limited
HR	- Human Resource

HSBC	- Hong Kong Shanghai Banking Corporation
IB	- Internet Banking
ICICI	- Industrial Credit and Investment Corporations of India
ICT	- Information Communication Technology
IDBI	- Industrial Development Bank of India
IFSC	- Indian Financial Service Code
IMPS	- Immediate Payment Services
INFINET	- Indian Financial Network
ISIN	- International Securities Identifying Number
IT	- Information Technology
IVRS	- Interactive Voice Response System
KMO	- Kaiser-Meyar-Olkin
LAN	- Local Area Network
LPG	- Liberalization Privatization and Globalization
MBC	- Most Backward Caste
MICR	- Magnetic Ink Character Recognition
MMID	- Mobile Money Identifier
NCR	- National Capital Region
NEFT	- National Electronic Fund Transfer
NH	- National Highway
NPCI	- National Payment Corporation of India
NPS	- National Payment System
NSDL	- National Securities Depository Limited
OCR	- Optical Character Recognition
PCA	- Principal Component Analysis



PIN	- Personal Identification Number
PNB	- Punjab National Bank
POS	- Point of Sale
RBI	- Reserve Bank of India
RTGS	- Real Time Gross Settlement
SBH	- State Bank of Hyderabad
SBI	- State Bank of India
SCB	- Standard Chartered Banks
SEBI	- Securities and Exchange Board of India
SEM	- Structural Equation Modelling
SERVQUAL	- Service Quality
SIP	- Systematic Investment Plan
SMS	- Short Message Service
SPSS	- Statistical Package for Social Science
SWIFT	- Society for Worldwide Inter-bank Financial Telecommunications
TCR	- Tuticorin Airport
TELE-BANKING	- Telephone Banking
TPB	- Theory Planned Behaviour
UK	- United Kingdom
US	- United States
USA	- United States of America
UTI	- Unit Trust of India
WAN	- Wide Area Network



## CHAPTER - I

### *Introduction and Design of the Study*

## **CHAPTER - I**

### **INTRODUCTION AND DESIGN OF THE STUDY**

- 1.0 INTRODUCTION**
- 1.1 STATEMENT OF THE PROBLEM**
- 1.2 THE RESEARCH GAP**
- 1.3 OBJECTIVES OF THE STUDY**
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## **CHAPTER - I**

### **INTRODUCTION AND DESIGN OF THE STUDY**

#### **1.0 INTRODUCTION**

At the beginning of the 21<sup>st</sup> century, banks across the world have become complex financial organizations that offered a wide variety of services to international markets. Supported by technology, banks are working to identify new business places, to develop customized services, to implement innovative strategies and to capture new market opportunities. The tremendous advances in technology and the aggressive infusion of information technology had brought in a paradigm shift in banking operations. For the banks, technology has emerged as a strategic resource for achieving higher efficiency, control of operations, productivity and profitability. This has instigated the banks to take-up technology to meet the increasing customer satisfaction and to face stiff competition. Therefore, Indian banks now have to develop modern banking services with world class service standards for satisfying their customers. Banks have witnessed an amazing change in the Indian banking sector as a part of the financial sector reforms. Today, growing competition in the banking sector has moved towards customers centric banking. The competition has forced into a new marketing policy in the banking sector.

One of the major determinants of banking services is the customer satisfaction, which can be enhanced by using modern banking services. Therefore, Indian banks should try to satisfy all types of customers by providing good services. There is a need to know the level of satisfaction of modern banking customers.

Over the last decades India has experienced different degree of responsive policies in the banking sector. Indian banking sector is an important constituent of the

Indian financial system and plays a vital role through promoting business in urban as well as in rural areas in recent years. Banking sector controls are inversely related to financial development because they are mainly based on traditional macro-economic factors. The banking sector reforms in India were started as a follow-up measure of the economic liberalization and financial sector reforms in the country. The banking sector being the life line of the economy was treated with utmost importance in the financial sector reforms.

The reforms aimed at making the Indian banking industry to be more competitive, versatile, efficient and productive. The reforms in the banking industry started in early 1990s have been continued till now and the Indian banks are changing towards modern banking system.

Modernization in banking is changing the banking services, products and operational methods of banking system that depending upon manifold growth but modern banking is partially or totally machine and technology based banking. All these developments lead to facilities to customer delight as well as operational efficiency of banks and reducing operational expenses of banking services.

Information technology is considered as the key driver for the changes taking place in financial services industry and especially banking industry in India.

Bank can differ markedly in the sources of revenues as some focus on business lending, some on household lending and some on fee-earning activities. In a market driven banking sector, competition is the most dynamic elements. Increasing competition is the major problem for the banking sector and due to market competition in Indian banking industry, the pattern of banking business is changing phenomenally.

The term transformation in Indian banking industry relates to intermediate stage when the industry is passing from the earlier social banking era to the newly conceived technology based customer-centric and competitive banking. Transformation is a dynamic process during which, all known tenors undergo metamorphosis. The significant transformation of the banking industry in India is a clear evidence of changes that have occurred in the financial markets, institutions and products. While deregulation has opened up new vistas for banks to augment revenues, it has entailed greater competition and consequently greater risks. Cross border flows and entry of new products, particularly derivative instruments, have significant impact on the domestic banking sector, forcing banks to adjust the product mix, as also to affect rapid change in the processes and operations in order to remain competitive to the globalized environment. These developments have facilitated greater choice for consumers, who have become more discerning, demanding thus compelling the banks to offer a broader range of products through diverse distribution channels. All this necessitates a transformation, a transformation in the mind-set, a transformation in the business processes and finally a transformation in knowledge management that insists the banks to change all known parameters of the earlier regime. Managing transformation is thus a challenging task. When the required outcome of the transformation is pre-set, as in Indian banking today, managing transformation presents both a great challenge and opportunity.

The current transformation process in the Indian banking has many facets. They pertain to capital restructuring, financial re-engineering, technology absorption and of course human resource development. Each of these has several ingredients, presents formidable threats, also offers excellent opportunities but technology plays the most crucial role in transforming the banking sector. In the days, when technology serves the

bank customers through ATMs, Credit cards, Internet banking, Mobile , Tele banking, RTGS, DEMAT and ECS and many more where online banking turned the banks to be fully automatic and hence decline the customer visit to the banks. More and more customers are now using e-delivery channels, which have come to be associated with modern banking services. New private sector banks have leveraged the Internet effectively in taking away the customers from public sector banks and significantly increased their revenue potential. Internet banking is just one-manifestation technology capabilities of these banks. With the help of modern banking, they are making customer relation management more effective.

Most companies have transferred or are in the process of transferring their payrolls to the new private sector banks or public banks in big cities. In fact, in the face of the new competitive pressures, inherent rigidities in public sector banks to enhance their overall efficiency pose serious challenges that have widen the gap between partially and fully IT oriented banks.

Liberalization, privatization, globalization and more particularly financial sector reforms experienced that as compared to new private sector banks and foreign banks, in public sector banks very less transformation has taken place, i.e., why their level of performance is comparatively low. This transformation in new private sector banks and foreign banks is becoming threat and also motivation for Indian public sector banks. Their customer base, productivity, profitability and branch network (in domestic and in foreign countries) are continuously increasing because of convenient, speedy, cost effective and better quality services.

Technology in the banks is presently catching up with a high level of development around the world. The gaps between the Indian banks and their counterparts in the technologically advanced countries are gradually narrowing down.

The world has witnessed an information and technological revolution and this revolution has touched every aspect of public life including banking. Since two decades, due to an increasingly competitive, saturated and dynamic business environment, retail banks in many countries have adopted customer-driven philosophies to address the rapid and changing needs of their customers. Technological advances have changed the world radically, altering the manner in which individuals conduct their personal and business affairs. Over the past two decades in particular, the banking industry has invested substantial resources in bringing ICT to customers. The banking industry is undergoing through the significant technological changes; it has several impacts on customer satisfaction and loyalty. It has revolutionised every industry including banking in the world by rendering faster and cost effective delivery of products and services to the customers. Core banking solution enables banks to extend the full benefits of ATM, tele-banking, mobile banking, internet banking, card banking and other multiple delivery channels to all customers allowing banks to offer a multitude of customer-centric services on a 24x7 basis from a single location, supporting retail as well as corporate banking activities.

Now, Indian banks are investing heavily in the technologies such as branch automation and computerization, core banking, tele-banking, mobile banking , internet banking, automated teller machine (ATMs), data warehousing etc. ICT innovations in the previous few years have changed the landscape of banks in India. Today public sector and private sector banks are offering online banking services, various modern banking delivery channels to provide easy and anywhere banking. The process of bank computerization was started since 1985 in public sector banks in India. However, some private sector banks have started computerization prior to the public sector banks in India. The banks in India are using ICT not only to improve their own internal



processes but also to increase facilities and services to their customers. In this study, the researcher has made a modest attempt to explore the practice and understanding of the modern banking services extended by private and public sector banks to their customers.

## **1.1 STATEMENT OF THE PROBLEM**

The Indian banking industry has endorsed radical changes in the corporate world since 1991. After liberalization, the Indian financial sector has rapidly moved to technology enabled services throughout the world. These transactions are allowing the banks to enhance customer relationship through self-service and technology enabled services. Banking industries are one of the important service sectors in the Indian economy with modern innovations to push forward the banking service industry to enhance effective customer services. These modern banking services are paving the ways to interface the customers with their banks. Today, customers have a choice to select the modern banking services, i.e. Automatic Teller Machine (ATM), Tele Banking, Internet Banking, Mobile Banking, Credit card, Debit card, Electronic Clearing Service (ECS), National Electronic Fund transfer (NEFT), Real Time gross Settlement (RTGS), Cheque Truncation System (CTS), Dematerialisation and the like. On the other hand, the advantages of modern banking services assist to reduce the transaction cost and lesser crowding, increasing the service through rural area and to satisfy the customers. For the customers, these channels offer convenience, reduced time waste, fast transaction and other issues. Today, banks provide services through various innovative and modern technologies to make the banking work easy and convenient to the end users, which are called as ‘Modern Banking Services’. It is very important from the point of view of the banks to have a study about the satisfaction of the customers and their attitude towards modern banking services. Thus, the purpose of

the research is to study the views of the customers in using the modern banking services. This study is conducted on the selected public and private sector banks in Tirunelveli district.

## **1.2 THE RESEARCH GAP**

The term renovation in Indian banking industry relates to intermediary stage when the industry is passing from the earlier social banking era to the newly conceived modern technology based customer-centric and competitive banking. Transformation is a dynamic process during which, all known tenors undergo metamorphosis. The significant transformation of the banking industry in India clearly picture–outs the changes that have occurred in the financial institutions and technology adopted products. These modern banking services aim at meeting all needs and requirements of all types of customers.

Several researches have been undertaken in the field of economics, marketing and management subjects in India. Several articles have investigated the components, which includes service quality, customer loyalty, growth ratio, consumer behaviour, attitude of customers and the like. Most of them have conducted marketing and management point of views, a very few research works have conducted research in management studies. Therefore, the researcher has found the gap in the literature to be researched. There are some researchers who have conducted research to identify the customer satisfaction, banker's satisfaction in the traditional banking services. However, contemporary changes in the banking industry evidenced that almost banks are changing themselves as electronic banks to provide new technology adopted banking services through various innovative products, which are called as modern banking services. Previous researches in banking industry realized that, there are a very few comparative studies done to identify the customer satisfaction in modern banking

services. In terms of adaption the modern banking services to increasing the customer satisfaction in the banking industry. Hence, the present study is an attempt to comparative analyse the problems and prospects of the modern banking services to enhance the satisfaction of customers in both private and public sectors banks.

### **1.3 OBJECTIVES OF THE STUDY**

The main objectives are as follows

1. To know the origin and development of the modern banking services in Tirunelveli district.
2. To identify the modern banking services provided by private and public sector banks in Tirunelveli district.
3. To compare the problems and prospects of the modern banking services provided by private and public sector banks.
4. To analyse the customer satisfaction towards the modern banking services in Tirunelveli district.
5. To offer suitable suggestions to improve the modern banking services in Tirunelveli district.

### **1.4 SCOPE OF THE STUDY**

The present study is confined within a precise modern banking services which have been mostly used by the customers i.e. Automatic Teller Machine(ATM), Tele Banking, Internet Banking, Mobile Banking, Credit card, Debit card, Electronic Clearing Service (ECS), National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Cheque Truncation System (CTS), Dematerialisation. The research is based on data collected from customers of selected private and public sector banks in

Tirunelveli district. Other aspects of bank and banking services are not considered in this study. This study examines only the satisfaction of customers in private and public sector banks in Tirunelveli.

### **1.5 HYPOTHESES OF THE STUDY**

Based on the objectives of the study the following hypotheses are drawn

1. There is no significant relationship between reason for choosing bank and different educational qualification, occupation, Income, type of customers, type of banks in Tirunelveli district.
2. There is no significant relationship between awareness level of modern banking and educational qualification, occupation, income of customers in Tirunelveli district.
3. There is no significant relationship between parameter for selecting modern banking and educational qualification, occupation, income of customers, level of satisfaction, advantages in modern banking services, age group of customer and type of banks in Tirunelveli district.
4. There is no significant relationship between problems in modern banking services and educational qualification, type of banks in Tirunelveli District.
5. There is no significant relationship between satisfaction of grievances settlement system and different type of banks among customers in Tirunelveli District.
6. There is no significant relationship between age and type of credit card, availing modern banking services, frequency of transaction, type of account, and awareness of account opening and features of ATM.

7. There is no significant relationship between gender and type of bank, features of ATM.
8. There is no significant relationship between educational qualification and type of credit card, frequency of visiting, type of account, awareness of opening an account and features of ATM.
9. There is no significant relationship between frequency of visit and time taken to modern banking.
10. There is no significant relationship between type of bank and religion, community, occupation, type of family, educational qualification of the customers
11. There is no significant relationship between occupation and time taken for transaction, availing modern banking, number of years, type of credit card, frequency of visit, type of account and awareness of opening account
12. There is no significant relationship between income and type of bank, avail modern banking, awareness of opening account, type of credit cards, and frequency of transaction.
13. There is no significant relationship between type of family and type of bank.
14. There is no significant relationship between frequency of visit and time taken to visit and time taken to the modern banking.
15. There is no significant relationship between time taken and availing modern banking services.

16. There is no significant relationship between marital status and features of ATM.

## **1.6 OPERATIONAL DEFINITION**

### **Customers**

The term customer has not yet been statutorily defined in common parlance. The term customer means a person who has an account with the bank (whether saving, fixed or current account) and he/she should be in the habit of dealing with the bank regularly for transaction purpose.

### **Banking**

Banking refers to the business activity of accepting and safe guarding money owned by other individuals and entities, and then lending out this money in order to earn profit.

### **Public sector banks**

Public sector banks are those in which the majority stake is held by the Government of India (Govt). They include the SBI banking group (SBI and its associate banks) and 19 other nationalised banks.

### **Private sector banks**

In this type of banks, the majority of share capital is held by private individuals and corporate. The private bank includes the old private sector banks and new private sector banks.

### **Modern Banking Services**

As the name suggests, it is a new method of carrying on banking operation. It includes all non-traditional means of banking such as ATM, Internet banking, Debit

card, Credit card, Mobile banking, EFT, ECS, NEFT, RTGS, Dematerialisation and the like.

### **Core Banking**

Banking services provided a group of network through bank branches where customers may access their bank account and perform basic transactions from any of the member branch offices.

### **Mobile Banking**

Mobile banking means a device or system that allows customers of a bank to conduct a number of financial transactions through a mobile device.

### **Electronic Fund Transfer**

Transferring fund between one bank branches to other branches.

### **Credit Card**

It is a plastic card issued by a bank that allows its customer to borrow pre-approved funds at the point of sale in order to complete a purchase.

### **Automatic Teller Machine**

Computerized machine that permits bank customers to access their accounts with a magnetically encoded plastic card and a code number in the debit balance.

### **Debit Card**

Electronic card issued by a bank which allows the bank customers access their account to withdraw cash or pay for goods and services.

### **Point of Sale**

It is machine used for transferring money from customers to merchant through cards.

**Internet Banking**

To perform the transaction through internet without visiting a bank branches.

**Electronic Clearing Service**

Electronic clearing services means electronic mode of periodic transaction from one bank account to many bank accounts.

**Dematerialisation**

Accounts require that an investor open an account with an investment broker linked to a saving or other funded account.

**Tele Banking**

Tele banking is a service provided by a bank. That enables the customers to perform the transaction or query through telephone.

**Cheque Truncation System**

Cheque truncation is the process of stopping the flow of the physical cheque in the way of clearing. It is taken place on electronic image of the cheque is transmitted.

**National Electronic Fund Transfer**

NEFT means carrying out inter-bank funds transfers among the participating banks within India.

**Real Time Gross Settlement**

RTGS refers to where transferring money or securities takes place from one bank to another on a "real time" and on "gross" basis. Settlement in "real time" means payment transaction is not subjected to any waiting period.



## **Customer satisfaction**

Satisfaction is defined as pleasurable fulfilment which is a post-purchase response that occurs as the result of comparing pre-purchase expectations and perceived performance (disconfirmation). It is a consumer's state of being as a result of the consumption experience.

## **1.7 METHODOLOGY**

The study is an empirical study based on interview schedule method. The methodology includes primary and secondary data, selection of banks, selection of samples, tools of analysis, period of the study and pilot study which are used in this study.

### **1.7.1 Primary Data**

Primary data were collected through interview schedule distributed to the customers for the purpose of extracting the required data.

### **1.7.2 Secondary Data**

Secondary source of data consists of the existing information collected by the researcher from different sources. The external sources include RBI Reports, Annual Reports of the Banks, Magazines, Research Journals, Websites of the banks and other internet sources. Hence, the researcher has collected the required secondary sources of data to understand the history of modern banking services.

### **1.7.3 Selection of the Banks**

The researcher has selected both public and private sector banks which have a maximum level of branch automation and providing most of the modern banking services in the Tirunelveli District. For the selection of banks, the researcher has

conducted a primary investigation to investigate the availability of the modern banking services.

#### **1.7.4 Selection of the Samples**

Selection of the sample is an important part of the research work. The non-probability sampling methods were used for selection of samples and more particularly the purposive sampling method is used. The purposive sampling method provides a range of alternatives and options in selecting the sample. Hence, purposive sampling technique was adopted to collect details on customers' satisfaction regarding the modern banking services in Tirunelveli district.

As per the records given by the lead bank, there are 186 branches availing modern banking services in public sectors and 56 branches in private sector banks in Tirunelveli district. Of the total samples of 242 banks in private and public sector 1077 respondents (5 customers) for extracting information relating to the study. Some incomplete interview schedules were rejected (113 in public sector bank, 20 in private sector banks) on reasons of insufficient data. Finally the samples were selected based on the below table 1.1.

**TABLE 1.1**  
**NUMBER OF SAMPLES SELECTED FOR THE STUDY**

<b>Type of Bank</b>	<b>Total No.of Branches</b>	<b>Number of Respondents</b>	<b>Collected Respondents</b>	<b>Rejected</b>	<b>Selected Respondents</b>
Public Sector Bank	186	5	930	113	817
Private Sector Banks	56	5	280	20	260
<b>Total Number of Respondents</b>					<b>1077</b>

### **1.7.5 Tools of Analysis**

After having collected the primary data, the interview schedules were classified, arranged and master table were prepared. Data were organized and tabulated for further analysis. The data were processed with the help of statistical package for social science (SPSS). The following tools are used to make the study more effective and meaningful, namely

- ❖ Cross tabulation
- ❖ Chi square test
- ❖ Anova
- ❖ T test
- ❖ Compound growth rate and
- ❖ Factor analysis
- ❖ Kruskal –wallis test

### **1.7.6 Period of the Study**

The study is carried for a period of three years from 2011 to 2014, the secondary data relating to the study were collected for the financial year 2007 to 2013 in which four quarterly months from January to December were taken and presented in the form of a table. Due to the tremendous growth in modern banking services, the need to generalize the present data in banking through the secondary sources was used upto December 2013.

### **1.7.7 Pilot Study**

A pilot survey was conducted prior to the final distribution of the interview schedule with the target group. The purpose of the pilot test was to evaluate the clarity and appropriateness of the questions contained in the interview schedule. The pilot

study was conducted in Tirunelveli district of the Tamilnadu as per convenience with 20 customers availing the modern banking service.

### **1.8 LIMITATIONS OF THE STUDY**

Every research work is subjected to certain limitations and this study is also not an exception. The present study has the following limitations:

1. The responses to the study have been solicited from the Tirunelveli district only. The expectations of the customers in Tirunelveli may vary from those with the rest of India.
2. The customers were selected for the present study to compare modern banking services of the public and private sector banks only. As a result, the generalization of the findings of the present research should be considered carefully. Furthermore, the sample was restricted to commercial banks only.
3. The study is restricted to the modern banking services such as Automatic Teller Machine, Debit Card and Credit Card, Tele-Banking, Internet Banking, Mobile Banking, National Electronic Fund Transfer, Real Time Gross Settlement, Electronic Clearing Service, Cheque Truncation System and Dematerialisation. The other modern banking services are not considered in this study.

### **1.9 CHAPTER SCHEME**

The study is designed with the help of the following chapters.

#### **Chapter 1**

The first chapter deals with the introduction and design of the study. It consists of a statement of the problem, the research gap, objectives of the study, the scope of the

study, methodology, hypotheses, operational definition, limitation of the study and the chapter scheme.

## **Chapter II**

The second chapter presents the review of the related literature. The review is classified as modern banking services, problems and prospects of modern banking services, customer satisfaction towards modern banking services and comparative analysis of modern banking services.

## **Chapter III**

The third chapter articulates the profile of the study. The profile is presented in two segments namely General profile and Banking profile of Tirunelveli district where in the history of modern banking services are also presented.

## **Chapter IV**

The fourth chapter explains the coverage of modern banking services such as Automatic Teller Machine (ATM), Tele Banking, Internet Banking, Mobile Banking, Credit card, Debit card, Electronic Clearing Service (ECS), National Electronic Fund transfer (NEFT), Real Time Gross Settlement (RTGS), Cheque Truncation System (CTS) and Demat.

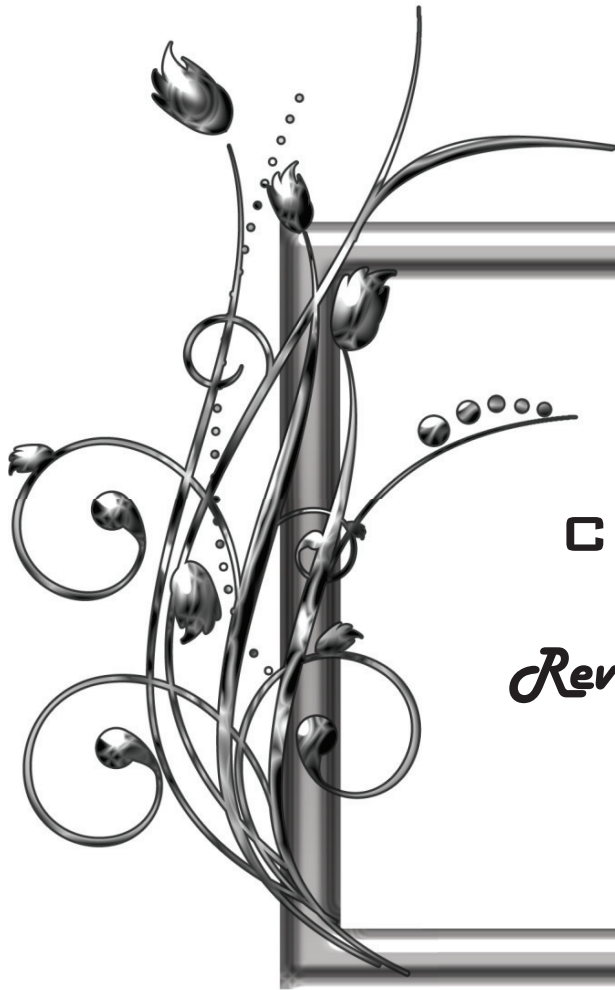
## **Chapter V**

The fifth chapter comprises of the analysis of the data which highlights the demographic profile, modern banking services in private and public sector banks, problems of the modern banking services and the customer satisfaction in the modern banking services.

## **Chapter VII**

The sixth chapter gives the findings, suggestions and conclusion. It gives full list of the major findings of the study and put forth the suggestions and ends with a conclusion. It also provides the prospects for future research.

The design of the study helped the researcher to draw the outline of the research work to be conducted. The objective of the study shows the action plan and direction of the study. This chapter also gives information about the tool to be used for the data collection, sampling method and the size of the sample and limitation of the study.



## CHAPTER - II

### *Review of Literature*

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

- 2.0 INTRODUCTION**
- 2.1 MODERN BANKING SERVICES**
- 2.2 PROBLEMS AND PROSPECTS OF MODERN BANKING**
- 2.3 CUSTOMER SATISFACTION TOWARDS MODERN BANKING SERVICES**
- 2.4 COMPERATIVE ANALYSIS OF PRIVATE AND PUBLIC SECTOR BANKS**



## **CHAPTER -II**

### **REVIEW OF LITERATURE**

#### **2.0 INTRODUCTION**

The rapid growth of the Indian economy has garnered across the globe and Indian banking sector has emerged as a favourable destination in modern banking sector over the last few years. Modern banking services enable sophisticated development in the application of technological innovation which derives the economy to grow, prosper and transform in synchronies with the changes in the environment both internal and external.

During the period of research, the researcher has visited various institutions to extract information pertaining to the study. The available literature was reviewed in getting an insight into the main objectives and design of the study. An attempt is made in this chapter to make a review of the modern banking services; under the head - “A comparative analysis of modern banking services extended by private and public sector bank in Tirunelveli district”. However for the sake of the convenience, the study has been broadly classified into the following areas.

1. Modern banking services,
2. Problems and prospects of modern banking services,
3. Customer satisfaction towards modern banking services and
4. Comparative analysis of private and public sector banks.

## 2.1 MODERN BANKING SERVICES

**Adham and Khairul Armaliah<sup>1</sup> (2000)** described that all banks must know how to adopt and implement information technology in banking in developed countries. To fill this gap, the adoption and implementation of the electronic delivery system in several locations and foreign banks in Malaysia were examined using the established innovation process model. The study focused on three objectives that are identifying the reasons why the bank adopt electronic banking delivery system and describing the activities performed by the banks.

**Rawani, A.M. and Gupta, M.P.<sup>2</sup> (2002)** empirically studied the role of information system in public and private sector banks operating in India. 27 public sector banks, 34 private sector banks and 43 foreign banks were taken as sample. Mean difference and chi- square test were employed to find out the role of information system in the banking sector. It is concluded that information system plays a supportive role in public sector banks and a strategic role in private and foreign sector banks. The future impact of information system does not vary significantly with the banking groups.

**Kiran Sahrawat<sup>3</sup> (2003)** analyses the trend in electronic banking in New Zealand. Senior bank managers have been hoping that electronic banking will reduce cost and improve operating efficiency and profitability. A sure and steady reduction in bank operating cost and charges for electronic banking techniques such as EFTPOS, (Electronic Fund Transfer at the Point of Sale) ATM, phone banking has been achieved

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<sup>1</sup> Adham, Khairul Armaliah (2000), "*The Adoption and Implementation of Information Technology In Malaysian Commercial Banks Phone Banking and Electronic Terminal Banking Systems*", Rensselaer Polytechnic Institute, Ph.D thesis, Pp 271.

<sup>2</sup> Rawani, A.M. and Gupta, M.P. (2002), "*Role of Information System in Banks-An Empirical Study in the Indian Context*", Vikalpa, Oct-Dec, Pp 69-74.

<sup>3</sup> Kiran Sahrawat (2003), "*Trend in Electronic Banking in New Zealand*", Journal of Accounting and Finance, Vol.17 (2), April-Sep, Pp 16-19.

and at the same time, it will reduce the branch and staff members. The article examined the SWOT analysis of electronic banking. The study (1996-2001) indicates that there is a decrease in the number of employees (3.96-2.76) and increase in the number of ATMs (4.2-8.4) with 202 per cent in the value of credit card transaction. There is a shift in mandatory banking to modern banking in New Zealand.

**Costanzo, L.A. et.al<sup>4</sup> (2003)** have analysed a case of telephone banking as a strategy adopted by first and second movers of innovations taking place in UK financial services industry. The study reveals that the successful innovators (First Direct) have adopted the logic of value innovation while the second movers have followed conventional logic. 90 per cent first direct customers are satisfied while in case of other banks, not more than 70 per cent customers are satisfied. The study concludes that differentiation in financial market place is not achieved with the implementation of distribution channels or just technology, but bringing to the market the unprecedented value that helps and supports modern banking practice.

**Bhasin, T.M.<sup>5</sup> (2003)** has stated that it is a well-researched fact that the use of technology in banking is actually reducing the cost per transaction. The need of the hour is that, public sector banks should adopt technology and caution approach in order to fight effectively with the new-generation private sector banks.

**Jadhav, A.S. and Jadhav, R.A.<sup>6</sup> (2004)** has described various channels of e-banking services such as Automatic Teller Machine, Telephone banking (Tele-banking), Mobile banking, Internet banking and its features. The focus is also given on

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<sup>4</sup> Costanzo, L.A., Keasey, K. and Short, H. (2003), "*A Strategic Approach to the Study of Innovation in the Financial Services Industry: The Case of Telephone Banking*", Journal of Marketing Management, Vol. (19), Pp. 259-281.

<sup>5</sup> Bhasin, T.M. (2003), "*Self-Service Technologies: Understanding Customer Satisfaction with Technology based Services Encounter*", Journal of Marketing, Vol. 64 (3), Pp50-64.

<sup>6</sup> Jadhav, A.S. and Jadhav, R.A. (2004), "Status of E-Banking in India", National Annual Convention, Pp3-5

e-banking opportunities, challenges and security aspects while performing the banking transactions on the internet. Comparison of public, private, foreign and co-operative banks and barriers to the growth of e-banking in India are also discussed. Finally the paper discusses an overview of the major private sector banks such as ICICI, HDFC, IDBI, UTI and GTB banks which provides e-banking services. Automatic teller machine is becoming a most preferred delivery channel from the common banking services. In order to enhance the reach to the rural population in the remote areas, the banks need to automate the delivery channels in the local language which could eventually lead to shrinking of the number of branches. The banking industry's security is at a higher risk due to the advent of e-banking.

**Phitkariwala, D.K.<sup>7</sup> (2006)** has studied the issues related to Cheque Truncation System (CTS) to improve customer services in banks. As the number of cheques issued are continuously rising and the cost of banks and business for producing, issuing and maintaining cheque payment system is ever increasing the cheque transaction system helps to handle this problem very easily. The study suggests that when it will be implemented to the whole country, it is certain to revolutionize the payment mechanism giving a big jump towards the efforts of providing better technology based customer services.

**Pepreya, B.K.<sup>8</sup> (2006)** suggests that Internet-banking is very useful to prompt payments and provide various facilities to the customers for 24 hours. But some risks related to security are involved as every customer wants a number of facilities anywhere anytime. So the Internet-banking should be cheap, best affordable and secure from the present risks.

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<sup>7</sup> Phitkariwala, D.K. (2006), "*Cheque Truncation: An Innovative way to Improve Customer Service in Banks*", Vol. 27(1), April-June, Pp. 23-27.

<sup>8</sup> Pepreya, B.K. (2006), "*Internet Banking*", The Indian Banker – Special Issue on e-payments and Commerce, Vol. 1(3). March, Pp. 143-45.

**Tiwari, R., Buse, S. and Herstatt, C.**<sup>9</sup> (2006) examine the installation of mobile banking and mobile financial services provided in Germany and other countries. 50 banks worldwide have been selected, half of them from Germany during May-June 2005. From Indian banks, Bank of Punjab, HDFC, ICICI are dominating, in the mobile financial services to their customers. The study explains different ways or methods to provide mobile services that contain technical part with some case studies. The study concludes that mobile banking applications are gaining popularity amongst banks and suggests mobile banking to take the route of online banking.

**Agboola, A.A.**<sup>10</sup> (2006) examines electronic payment systems and tele banking services in 36 banks of Nigeria and data is collected through questionnaires from bank workers during 2005. The findings reveal that connectivity via use of Local Area Network (LAN) and Wide Area Network (WAN) has facilitated electronic transfer of funds. 35 banks have fully networked their system to ease communication of account information. The use of Smart Cards, Point of Sales System and Computerized Credit Ratings are not very popular as less than half of the studied banks have fully adopted them. ATM, Electronic Home and Office Banking and Telephone Banking are the least fully adopted technologies due to low level of economic development, supply of power, high cost, fear of fraudulent practices and lack of facilities necessary for their operation. The study concludes that Tele-banking is capable of broadening the customer relationship, retaining customer loyalty and enabling banks to gain commanding height of market share if their problems are taken care of.

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<sup>9</sup> Tiwari, R., Buse, S. and Herstatt, C. (2006), “*Mobile Banking: The Concept, Opportunities and Challenges*” Vol. 2, Bank net India Publication, Mumbai, Pp 59-71.

<sup>10</sup> Agboola, A.A. (2006), “*Electronic Payment System and Tele Banking Services in Nigeria*”, *Journal of Internet Banking and Commerce*, Vol. 11(3), December, Accessed on 20<sup>th</sup> January, 2010.

**Srinivas, N.**<sup>11</sup> (2006) produces the information on a phenomenal growth observed today in terms of number of credit cards issued. The phrase “Buy Today and Pay Later” motivated the credit card holders to spend more than that they afford to pay. This has resulted in to vicious problems of defaults in credit card payments. The main objectives are to analyse the socio-economic profile of the factors which has contributed to such defaults. The major findings of the sample units belong to the age group of 36-45 years. 86 percentage of the respondents’ income level are above Rs 1.00-1.50 lakhs. Hence, it is suggested that the banks concerned should redesign the payment structure of credit card defaulters in a flexible and affordable instalments.

**Kumbhar, V.M.**<sup>12</sup> (2006) describes the “Alternative banking” is a new face of banking activities. It does include new financial services, products and new methods of banking operations and delivering services. In this modern banking includes automated delivery of new and traditional financial products and services directly to customers through electronic mode. Computerization is a general trend in all sectors, banks also trying Computerization as per the recommendations of Rangarajan Committee (II), the progress in implementation of the directive of the Central Vigilance Commission (CVC) on the need to computerize 70 per cent of the banking business by public sector banks before January 1, 2006. Today 67.7 percentages of public sector bank branches all branches of private sector banks and foreign banks are under core banking solution in India. All these developments in Indian banking states that, the Indian banks are moving towards modern banking by changing the face of traditional banking of Indian economy.

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<sup>11</sup> Srinivas, N. (2006), “*An Analysis of the defaults in credit Card Payments*”, Southern Economist, Vol. 45(5), Pp. 19-22.

<sup>12</sup> Kumbhar, V.M. (2006), “*Alternative banking: A Modern Practice in India*”, Department of Economics, Abasaheb Marathe College, Indian Online Article, Pp1-7.

**Rajnish Tiwari et.al**<sup>13</sup> (2007) examines the mobile banking as business strategy, its impact of mobile technologies on customer behaviour and its implications for banks. Mobile commerce is gaining increased acceptance amongst various sections of the society. Ubiquity, Immediacy, Localization, Instant connectivity, Pro-active functionality, Simple authentication procedure are the features of mobile banking technology. The samples were collected from 452 respondents and Mobile Accounting enjoys high popularity with 64 per cent users are utilising it and 36 per cent of the non-users in Mobile Banking.

**Sheel and Biswas**<sup>14</sup> (2007) investigated the satisfaction levels of HSBC-ATM cardholders (both staff and non-staff) with respect to various aspects (for instance, promptness of card delivery, the performance of HSBC-ATM, and the service quality of ATM personnel) of using HSBC-ATM and their opinions on various other related issues such as positive and inconvenient features of HSBC-ATM, also recommended to improve the service quality. The findings provide significant results related to use and worth of holding the ATM. Further, the findings helped the ATM section to identify their positive and negative features and the customer recommendation.

**Infogile Technologies**<sup>15</sup> (2007) describes the survey and market technology enabled mobile banking services that opens up huge markets for financial institutions interested in offering value added services with mobile technology. Banks can offer a wide range of services to their customers such as doing funds transfer while traveling, receiving online updates of stock price or even performing stock trading while being stuck in traffic. Mobile devices, especially smart-phones are the most promising way to

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<sup>13</sup> Rajnish Tiwari, Stephan Buse and Cornelius Herstatt (2007), “*Mobile Banking as Business Strategy: Impact of Mobile Technologies on Customer Behaviour and Its Implications For Banks*”. Portland International Conference on Management of Engineering and Technology (PICMET), Vol.1, Pp 8-13.

<sup>14</sup> Sheel and Biswas, “Satisfaction levels of HSBC-ATM cardholders” <http://epublications.bond.edu.au/ijbf/vol8/iss3/4>

<sup>15</sup> Infogile Technologies (2007), “*Mobile banking the future*” [www.infogile.com](http://www.infogile.com)

reach the masses and to create “stickiness” among current customers, due to their ability to provide services anytime, anywhere, with high rate of penetration and potential to grow.

**Verma Gupta and Sharma<sup>16</sup> (2007)** have identified that public sector banks that have initiated the process of technological advancement by computerization of branch operations, meanwhile new generation private banks have well focused business vision, with technology as an integral component. Most of the initiatives regarding technology are aimed at meeting customer expectations by offering multiple options at lower cost.

**Ramani, D.<sup>17</sup> (2007)** studied the impact of e-payment system on Indian banking sector. E-payment was required for handling large volume of business payment and remittances for hassle free, quicker and faster payment remittances at low cost and paperless transactions. The researcher highlighted various steps taken by RBI for the e-payment. It includes RTGS, deferred net settlement system such as electronic clearing services debit and credit, Electronic fund transfer and National electronic fund transfer. The researcher studied that these methods have increased the use of core banking solutions, data warehousing and data mining. E-payment had reduced the chances of fraud, improved customer service by cutting the delay in payment obligation.

**Ramalingam, P.<sup>18</sup> (2008)** studies the usage pattern of credit card holders of SBI, ICICI and ABN banks of Kanchipuram town in Tamil Nadu. The study concludes that higher income group and married persons utilise the cards to the maximum mainly for impulse purchases due to convenience and Citibank cards are more popular because

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<sup>16</sup> Verma Gupta and Sharma (2007), “*E-banking and Development of Banks*”, Deep and Deep Publications, New Delhi, Pp 3-54.

<sup>17</sup> Ramani, D. (2007), “*The E-Payment System*”, E-business, Vol-7(5), Pp 35-41.

<sup>18</sup> Ramalingam, P. (2008), “*Usage Pattern of Credit Card Holders*”, Indian Journal of Finance, Vol. 3(4), April, Pp 7-18.



of dominance in advertising. The study also reveals that Master and Visa cards are the leading card brands in India and suggest the banks to improve the overall functioning to provide satisfied credit card services.

**Premkumar and Esthen Gnanapoo<sup>19</sup> (2008)** article entitled “E-Banking the essential need of today” found that the current trends are quite comforting for customer, it does pose threats and problems to banks. As it’s that find information technology invading the banking sector, only banks which have used the right technology could come out with success. Banks are required to restructure, re-invent and re-engineer themselves to meet the necessary performance improvement and get the competitive edge due to the introduction of information technology. E-Banking is an important output of information technology which has ushered in an era of transforming the entire functioning of banks. The title in the banks from traditional to modern E-banking service has been welcomed due its advantages, but banks in India are taking time to get rooted. Banks are slow but are going to offer in further more E-banking services to keep pace with the evolving pattern of customers' demand.

**Kaleem, A. and Ahmad, S.<sup>20</sup> (2008)** aim to collect bank employees’ perceptions of the potential benefits and risks associated with electronic banking in Pakistan. The study shows that public bank employees who have professional degrees consider ‘minimizing transaction costs’ and ‘reduction in HR requirements’ as the most and the least important benefits of electronic banking respectively. Private bank employees having masters or bachelor degrees, and less than 10 years of experience, perceive ‘time saving and minimizing inconvenience’ as the major benefits of electronic banking. Branch managers viewed ‘facilitates quick response’ as the most

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<sup>19</sup> Premkumar, N.B. and Esther Gnanapoo, J. (2008) “*E-Banking the essential need of today*”, Kisan World, March, Vol.35 (3), Pp 17-19.

<sup>20</sup> Kaleem, A. and Ahmad, S. (2008), “*Bankers’ Perceptions of Electronic banking in Pakistan*”, Journal of Internet Banking and Commerce, Vol.13(1), April, Pp14-16

important benefit of electronic banking. Bankers in all segments consider ‘government access to data’ as the biggest risk associated to electronic banking. The empirical analysis suggests that bankers in Pakistan perceive electronic banking as tool for minimizing inconvenience, reducing transaction costs and saving time.

**Aktan, B. et.al**<sup>21</sup>(2009) examined the usage of internet in Turkey to make a basic, due to diligence investigation for the financial institutions, including banking, stock trading, insurance and provision of financial information over the period 2005 and 2008. The findings show that internet usage in Turkey with its young population has continued to grow dramatically in financial services in terms of customers and financial transactions of various natures.

**Dizon, B.**<sup>22</sup> (2009) states that while big banks still conduct the bulk of their business in brick and mortar bank branches, the finance sector has been increasingly investing on e-banking facilities to offer 24-hour, queue free services to their regular clients, whether through ATM machines, mobile phones or the internet. E-banking appeal is primarily based on its convenience. Clients nowadays want instant results; they do not want to wait anymore. It is also turned out to be a more efficient way to process transactions, as internet banking does away with most of the paper work those clients has to accomplish.

**Ismail, A. et.al**<sup>23</sup> (2009) explored the relationships among service quality features, (responsiveness, assurance, and empathy) perceived value and customer satisfaction in the context of Malaysia. The empirical data is drawn from 102 members of an academic staff of a Malaysian public institution of higher learning using a survey

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<sup>21</sup> Aktan, B., Teker, E., and Erosy, P. (2009) “*Changing Face of Banks and the Evaluation of Internet Banking in Turkey*”, Journal of Internet Banking and Commerce, Vol.14(1), April, Pp 23-26.

<sup>22</sup> Dizon, B., Javier, A. (2009), “*Special Feature: Electronic Banking*”, August 19, 2009.

<sup>23</sup> Ismail, A., Abdullah, .M.M.B. and Francis, S.K. (2009), “*Exploring the Relationships among Service Quality Features, Perceived Value and Customer Satisfaction*”, Journal of Industrial Engineering and Management, Vol. 2(1), Pp 230-250, (ISSN: 2013-0953).

questionnaire. The results indicate that the interaction between perceived value and responsiveness is not significantly correlated with customer satisfaction, the interaction between perceived value and assurance also does not correlate significantly with customer satisfaction and the interaction between perceived value and empathy correlated significantly with customer satisfaction. Thus the results demonstrate that the perceived value has increased the effect of empathy on customer satisfaction, but it has not increased the effect of responsiveness and assurance on customer satisfaction.

**Thulani, D. et.al<sup>24</sup> (2009)** explored the extent of adoption and usage of internet banking (IB) by commercial banks in Zimbabwe. The study concludes that while the majority of the banks in Zimbabwe have adopted internet banking, usage levels have remained relatively low, as not many customers are using this innovation in Zimbabwe. Compatibility with existing legacy systems, cost of implementation and security concerns are the challenges faced by banks in the adoption of Internet Banking. The implications of the study are that banks in Zimbabwe should vigorously promote the usage of IB among customers while Government and the Reserve Bank of Zimbabwe should increase investments targeted at infrastructure development so as to encourage banks and individuals alike to adopt the innovation.

**Uppal, R.K. and Jha, N.K.<sup>25</sup> (2010)** studied the extent of Mobile banking in Indian banking industry during 2000-2007. The study concludes that among all e-channels, ATM is the most effective while Mobile banking does not hold a strong position in public and old private sector banks but in new private sector banks and foreign banks. M-banking is good enough with nearly 50 per cent branches providing M-banking services. M-banking customers are also the highest in E-banks. It has

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<sup>24</sup> Thulani, D., Tofara, C. and Langton, R. (2009), “*Adoption and Use of Internet Banking in Zimbabwe: An Exploratory Study*”, Journal of Internet Banking and Commerce, Vol. 14(1) April, Pp 45-49.

<sup>25</sup> Uppal, R.K. and Jha, N.K. (2010), “*Online banking in India*”, New Delhi, Anmol Publications Pvt. Ltd.

positive impact on net profits and business per employee of these banks. Among all foreign sector banks are on the top position followed by new private sector banks in providing M-banking services and their efficiency is also much higher as compared to other sectors. The study also suggests some strategies to improve m-banking services.

**Praian<sup>26</sup> (2010)** has pointed out that the banking industry is one of the core and important area of the nation, which is also the major requirement for the economic development of the nation. The banking industry has to implement lot of technology up gradation to overcome competition and keeping up with the changing times. Now, Indian banking industry looks equal by excellent in technology adaptation compared to other countries.

**Vinayaga Moorthy, A. and Senthil Kumar, K.<sup>27</sup>(2010)** in their research entitled “Role of Reach of Internet Banking in India” identified the level of security among customers in using these services, and to find out the popularity of the internet banking service in customers as users and non-users along with reasons. The numbers of internet banking users have increased from 9 per cent in 2003 to 50 per cent in 2010 due to increase in internet services. The top level internet users are China, United States, Japan and India. The major difficulties are technical problems occur sometimes which affect customers badly and the infrastructural costs of providing such services are quite high. The findings shown that the services are mostly used by maximum customers for transactions are online trading, bill payment and shopping. The major suggestion of the study is that the banks should provide the services in different languages.

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<sup>26</sup> Praian (2010), “*Indian banking industry*”, [www.nibmindia.org](http://www.nibmindia.org)

<sup>27</sup> Vinayaga Moorthy, A., Senthil Kumar, K. (2010), “*Role of Reach of Internet Banking in India*”, Vol. 2(1), Pp 1-14,

**Alkibsi Sharaf and Linda Mary<sup>28</sup> (2011)** depicted that technology-based banking services are quickly expanding and provide cost reductions per transaction, given increasing labour costs. The purpose of this research study was to determine a set of technology-based banking services quality dimensions and their association with customer satisfaction and behavioural intentions towards technology based banking services in Yemen. The study includes a recommendation that bank leaders must focus on service enjoyment and customization to enhance customers' experience using technology.

**Nishi Sharma<sup>29</sup> (2011)** states that introduction of computerized application has brought a new concept of click banking (popularly known as internet banking or electronic banking). Indian banking industry is the backbone of Indian economy and is the second largest spender to the IT which is surely in the line of current needs for improved efficiency and productivity. The application of IT in banking sector provides enormous benefits to the banks as well as its consumers. But the flip side of this changed financial landscape from brick banks to click banks; the traditional banking risks have also been exacerbated. In this reference, the present study painstakingly attempts to bestow the evolution of computerisation of banking sector in India. It analyses some of the recent IT applications and associated risks with such applications.

**Shaoyi Liao and Yuan Pu Shao<sup>30</sup> (2012)** in their paper broadly defined the provision of banking service in virtual banking. That means virtual banking exists in traditional physical branches are virtual banking exist in the forms of Automatic Teller Machine, Phone banking, Home banking and Internet banking. The people

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<sup>28</sup> Alkibsi, Sharaf and Linda Mary (2011), "*Customer Perceptions of Technology-Based Banking Service Quality Provided by Banks operating in Yemen*", Proceedings, Pp 66-67.

<sup>29</sup> Nishi Sharma (2011), "*Applications of Information Technology in Banking Sector*", Vol. 1(2), ISSN 2277-1166, pp 28-29 [www.abhinavjournal.com](http://www.abhinavjournal.com).

<sup>30</sup> Shaoyi Liao and Yuan Pu Shao (2012), "*The Adoption of Virtual Banking: An Empirical Study*", International Journal of Information Management, Elsevier science Ltd, Vol.19, Pp 63-74.

understanding adoptions and intention of virtual banking by the people can help financial institutions to formulate appropriate marketing strategies for new forms of banking. Theory planned behaviour (TPB) and innovation diffusion were used to study the virtual banking. In this study two hypotheses were tested. The first hypothesis has stated that the attitude towards virtual banking was dependent on the relative advantage, compatibility and ease to use, result demonstrability and perceived risk. The reliable measures on the perceived risk could not be obtained and only the first four construct were tested. The hypothesis was supported but the two factors found were not clear cut. One of them was a combination of ease to use compatibility and result demonstrability whereas the explanation power of this relationship is 0.56. The other results are interestingly useful for the strategic planning of information technology in banking.

**Seranma Devi, R. and Saravana Raj, M.G.<sup>31</sup> (2012)** in their article aimed to analyse the role of Information Technology (IT) in the Indian banking Industry. Indian banks are investing heavily in the technologies such as Automated Teller Machine (ATMs), Net banking, Mobile banking, Tele banking, Credit cards, Debit cards, Smart cards, CRM, Data warehousing and the like. It is essential to evaluate the impact of information technology on the performance of Indian banks in terms of extended value added services and customer satisfaction thereby. Foreign banks and Private sector banks which took more IT initiative, were found to be more efficient and more competent force than public sector banks in India. Based on the article, technological innovations have enabled the industry to open up efficient delivery channels. It is said that IT has helped the banking industry to deal with the challenges that the new economy poses. The study examines the views of banking customers on the

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<sup>31</sup> Seranma Devi, R. and Saravana Raj, M.G. (2012), “*Role of Information Technology in Banking Industry*” European Journal of Social Sciences, Vol. 29(4), Pp 472-488.

implementation of IT in banks. According to the authors, private and foreign banks use more IT-related banking services than public sector banks.

**Ritu Singh**<sup>32</sup> (2012) explains that Indian banking is one sector which has undergone rapid change and transformation. Hence, today banks is completely different from what banks yesterday. Similarly, banks tomorrow will be completely different from banks today. One technology that has and will always be consistent in transforming the face of the Indian Banking System from yester years to what it is today definitely happens to be the information and communication technologies.

**Manoranjan Dash et.al**<sup>33</sup> (2012) state that the coming out of internet has large attention to bring a most important change in the retail and financial sectors by enabling consumers to make purchases and carry out financial transactions over the Internet. The ever increasing volatility in the global environment, competition, Co-operation, change as well as changing consumer preferences have forced the retail bank to adopt new strategies to attract and retain customers. The internet provides a channel or platform linking consumers and banks. Now the banks are using electronic delivery channels such as internet, telephone and mobile. The emergence of the internet has had significance on the diffusion of internet banking. Internet banking has gained increasing popularity in recent years. Because of increased competition, banks are adopting the new technologies and tools to remain competitive to meet up the emerging requirements of consumers. This paper presents a bird's eye view on internet banking in the Indian banking context and the current trends. The objective of the study is to determine those factors that influence the formation of attitude towards internet

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<sup>32</sup> Ritu Singh (2012), “*Mapping ICT Impact*”, Online Journal, Vol. 1, Pp 7-9.

<sup>33</sup> Manoranjan Dash, Prafulla Kumar Swain, Ganesh Prasad Das, Alaka Samantaray, Dhruti Sundar Sahoo (2012), “*Consumers' Perception about Internet Banking: The Case of Odisha*”, European Journal of Social Sciences, Vol. 30( 1), Pp 92-100.

banking and their relation to the use of internet banking services. Factor analysis is used for identifying consumers' perception about internet banking in Odisha.

**Mohammed Siddik, M.**<sup>34</sup> (2012) reveals that in banking industry, E-services are revolutionizing the way business is conducted in banking after the introduction of the automated teller machine 1980. The study analyses the frequency of the usage of ATM's are more than 8 times in a month. It is also found that the respondents were quite comfortable to utilize the electronic device for the transactions frequently.

**Rajasekar, S. and Venkateshwaran**<sup>35</sup> (2013) in their paper pointed out that the Information technology has become mainstream for many organizations. In recent years, the role of IT has been changing and in some cases it is very radical rather than being seen merely as a utility, the function is increasingly expected to come up with innovative business improvements. The trend in modernisation in product and services are electronic fund transfers, Auto Sweep Facility, Smart Cards, ATM, Debit card etc. Meanwhile some problems are also faced by the elimination of manual records with the introduction of electronic funds transfers and ATMs raise the important question of IT security. This includes issues related to the confidentiality of information, prevention of data corruption and cyber-crime.

## **2.2 PROBLEMS AND PROSPECTS OF MODERN BANKING**

**Robin Kaushal**<sup>36</sup> (2003) describe in his article entitled "Impact of E-banking on operational performance and service quality of banking sector in India" that technology is the key to move towards providing integrated banking services to

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<sup>34</sup> Mohammed Siddik, M. (2012), "*A study on e-banking services in India- with Special Reference to ATM services*", Journal of Exclusive Management Science, March, Vol. 1(2), Pp 23 ISSN 2277 – 5684.

<sup>35</sup> Rajasekar, S., Venkateshwaran (2013), "*Information Technology (IT) for Banking Commerce Modernization*", www.theinternationaljournal.org, RJCBS, Vol. 2(4), February, Pp 35-40.

<sup>36</sup> Robin Kaushal (2003), "Impact of e-banking on Operational Performance and Service Quality of Banking Sector in India", Vol. 2, Pp 23-25.



customers. Indian banks have been late starter in the adoption of technology for automation of processes and the integrated banking services. ICT came into picture in the year 1980 in banking industry through the Rangarajan Committee recommendations. The main objectives are to make comparative analysis of operational performance and service quality of public and private sector banks. Kendall's coefficient of concordance, chi-square, Mann-Whitney test, cross tabulation are used, the major findings are on-site ATM are 3,205 in 2004-2005 which has increased to 8,320 in 2007-2008.

**Goi Chai Lee<sup>37</sup> (2005)** studies the status of E-banking in Malaysia especially the challenges and opportunities. The study concludes that Malaysia still has not reached a critical mass to ensure sustained momentum, which can only be achieved if the nervousness of trading via Internet is overcome. Technologies are already here, it is the desire and willingness that needs to be converted into action. Malaysian banks will have to develop appropriate E-banking strategies to successfully compete both in the local and global market place. Proper understanding and planning is required to deploy the strategy or service effectively and safely.

**Rao, N.V.M., Singh, P. and Maheshwari, N.<sup>38</sup> (2005)** studied E-Business models and real-life experiments that have been circling around the e-business models in some selected banks chosen from public sector and private sector banks. The study concludes that most of the banks offering Internet banking facility in India has high overall scores indicating high quality of their websites at all the functional and interactivity levels. ICICI Bank, State Bank of India and Bank of India now have

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<sup>37</sup> Goi Chai Lee (2005), "*E-Banking in Malaysia: Opportunity and Challenges*", Journal of Internet Banking and Commerce, Vol. 10(3), December, Pp 1-4.

<sup>38</sup> Rao, N.V.M., Singh, P. and Maheshwari, N. (2005), "*A Framework for Evaluating e-Business Models and Productivity Analysis for Banking Sector in India*" Journal of Internet Banking and Commerce. Vol. 26, Pp 34.

mobile ATMs or vans that go along a particular route in a city and are stationed at strategic locations for a few hours every day. Almost all the internet banks have privacy statements and about half of these have a security statement. The model suggests that the performance of the banking sector has improved considerably. It is believed that a mathematical approach proposed in this paper will find extensive application in other sectors of the economy.

**Garg and Jham**<sup>39</sup> (2006) investigate the factors that influence Indian customers to adopt ATMs by using factor analysis and focused on the influence of demographic and psychological variables of 296 customers of six selected banks such as SBI, PNB, ICICI, HDFC, ABN and IDBI. It is examined that most of the respondents are below the age of 35 years and the users with lesser experience face more problems in comparison to other and they look for reliability of information. There are problems of dim vision of screen and they use ATMs maximum for withdrawals and rarely for deposits.

**Robbins, E.**<sup>40</sup> (2006) tried to evaluate whether the adoption of e-banking by the banks have affected the importance of bank location. The study looked into the state of consumer adoption of e-banking products and growth of e-banking products since 1995. The study also has investigated whether consumer choice had changed as a result of increased e-banking use and how banks had responded. The study also questioned why location was still important today. The author focused that e-banking was not a perfect substitute of physical presence of banks in the market. Consumers want the convenience of e-banking products but only of those banks which fall close to their

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<sup>39</sup> Garg and Jham (2006), "*Indian Banking in Transition: Some Management Challenges*" IBA Bulletin, Vol. 25(3), March, Pp121-123.

<sup>40</sup> Robbins, E. (2006), "*Has Electronic Banking Affected the Performance of Bank Location?*", Federal Reserve Bank of Kansas City in Journal of Financial Industry Perspective, Pp 134-148.

place. So, the location of a bank branch and electronic banking were complementary to each other.

**Khan, M.D.S.**<sup>41</sup> (2007) examines the service quality of education sector and internet banking by employing SERVQUAL. The data is collected through questionnaire from students, alumni, parents and recruiters of technical institutions for education quality and from internet banking customers for internet banking quality. The study employs factor analysis to differentiate the dimensions of service quality into different factors and concludes that all type customers are more concerned with academic factor to improve the education service quality while in case of internet banking customers are satisfied with reliability of services but not very much satisfied with user friendliness dimensions. The results indicate that privacy/security and fulfilment do not contribute significantly towards the overall service quality and the males and females differ in their views towards service quality dimensions. The study also suggests some measures to improve service quality.

**Uppal, R.K. and Kaur, R.**<sup>42</sup> (2007) concludes that Indian banking industry has undergone radical changes due to liberalization and globalization measures undertaken since 1991. A highly satisfied and delighted customer is a very vital non-financial asset for the banks in the emerging IT era. This study is based on the responses of 768 customers of public sector banks, Indian private sector banks and foreign banks operating in Amritsar District of Punjab in month of September 2007. Time is major factor which affects the quality and reputation of banks. E-banks provide quick services and that is why they are becoming more popular. Hence, it is very essential that all

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<sup>41</sup> Khan, M.D.S. (2007), "*Studies on Some Aspects of Service Quality Evaluation with Special Relevance to Indian Service Industries*", Ph.D thesis, National Institute of Technology, Rourkela.

<sup>42</sup> Uppal, R.K. and Kaur, R. (2007), "*Indian Banking Industry: Comparative Performance Evaluation in the Liberalized and Globalized Era*", Gyan Management, Vol. 2, Jan-June, Pp 3-24.

banking sectors should place the right kind of systems to further cut down on service time and render instantaneous services to the customers.

**Raja, J. et.al**<sup>43</sup> (2008) evaluated the impact of e-payment system on the business opportunities. They identified that due to the growth of internet users, various electronic payment mechanisms had been developed to cater the diversity of applicants. The researchers classified the e-payments into three main groups, namely, cash like systems, check like systems, and hybrid systems which were further classified into credit cards, debit cards and electronic cheques. They identified three main issues related to e-payment that were security issues, low interest among businessmen, and heavy reliance on traditional payment methods. They also analysed that there were technical and cultural problems which hinder the path of e-payments. However, to make e-payments more effective, security threats should be reduced and people should be realized that traditional payment methods were more time consuming than electronic payment methods. They should also be realized that plastic card payments were more convenient, easier and more secure than cash or cheques.

**Thomas Ogoro Ombati et.al**<sup>44</sup> (2010) analysed the technology and service quality in the banking industry. The research was carried across sectional survey design on e-banking in Kenya. The sample in this study consists of 120 respondents. The data collected was analysed by the use of frequency, percentage, mean score and correlation analysis. The findings revealed that, secure services as the most important dimension followed by convenient location of ATM, efficiency (need not to wait) ability to set up accounts to make customers to perform the transactions immediately.

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<sup>43</sup> Raja, J., Vel Murgan, S.M., and Seetha Raman, A. (2008), “*E-payments: Problems and Prospects*”, Journal of Internet Banking and Commerce, April, Vol. 13(1), Pp 1-17.

<sup>44</sup> Thomas Ogoro Ombati, Peterson Obara Magutu, Stephen Onserio Nyamwange (2010), “*The Technology and Service Quality in the Banking Industry*”, African Journal of Business and Management, Vol. 1, Pp151-164.

**Rajani, A. and Jadhav<sup>45</sup> (2010)** explained that problems and prospects of bank computerization in selected co-operative banks at Pune. The scope of the research is limited only to the co-operative banks in Pune city. From Pune city 18 co-operative banks have been selected for the purpose of this study. Therefore this study focuses on technological development in co-operative banks.

**John Enni<sup>46</sup> (2012)** stated that the past few years in retail banking have undoubtedly been challenging. The economic crisis put the industry and the organizations within it under intense pressure and there are few signs of that pressure abating. Alongside economic pressures, the industry faced the constant threat of criminals looking to take advantage of gaps in security defences to steal from both banks and their customers.

**Mohini S. Samudra and Milind Phadtare<sup>47</sup> (2012)** depict that, in the 1990s, the banking sector in India saw greater emphasis being placed on technology and innovation. Banks began to use technology to provide better quality services to their customers and at greater speed. Technological advancement allowed them to offer services like Internet banking and mobile banking, making it convenient for customers to interface with their banks from geographically diverse places. The present paper attempts to study the adoption of mobile banking in Pune city. This has been considered as it offers a wide array of constructs, thereby enabling a structured study of the adoption. The paper identifies various factors facilitating the adoption of mobile banking using exploratory factor analysis.

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<sup>45</sup> Rajani, A. and Jadhav (2010), “*Problems and Prospects of Bank Computerisation – A Study of Selected Co-operative Banks in Pune*”, Ph.D thesis

<sup>46</sup> John Enni (2012), “*Swapping PINs for Palms – The Potential of Biometric Technology in Retail Banking*”, Biometric Technology Today, Vol. 4, Pp 8-9.

<sup>47</sup> Mohini S. Samudra and Milind Phadtare (2012), “*Factors Influencing the Adoption of Mobile Banking with Special Reference to Pune City*”, ASCI Journal of Management, Vol. 42 (1), Pp 51–65.

**Komi Agbesi<sup>48</sup> (2013)** paper assessed how Information and Communication Technology adoption should be organized and managed to enhance the service innovation practices of the firm; and evaluate how service innovation practices improve the competitive advantages of a firm. The quantitative sampling technique was used to administer fifty questionnaires to a sample size of fifty respondents from the Headquarters of Unique Trust Bank. Data collected were analysed and interpreted using both descriptive and analytical approach. The paper analyses both theoretically and empirically how Information and Communication Technology related spending can affect bank profits via competition in financial services that are offered by the banks. The paper utilizes a Hotelling model to examine the differential effects of the Information Communication Technology (ICT) in moderating the relationship between costs and revenue. The results from both methods indicated significant productivity improvement after the adoption of ICT. It concludes that, the implementation of modern technology increase the profitability of the firms and hence, increases productivity.

### **2.3 CUSTOMER SATISFACTION TOWARDS MODERN BANKING SERVICES**

**Wan, W.N. et.al<sup>49</sup> (2005)** studied the customers' adoption of banking channels in Hong Kong. They covered four major banking channels namely ATM, Branch Banking, Telephone Banking and Internet Banking. The study segmented the customers on demographic variables and psychological beliefs about the positive attributes processed by the channels. The psychological factors were ease of use, transaction security, transaction accuracy, speediness, convenience and time utility,

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<sup>48</sup> Komi Agbesi (2013), "*Information and Communication Technology Adoption Impact on Firms: A Case Study of Union Trust bank*", Vol. 4(3), Pp 12, ISSN-L:2223-9553, <http://www.journals.savap.org.p>

<sup>49</sup> Wan, W.N., Luk, C.L. and Chow, C.W.C. (2005), "*Consumers' Adoption of Banking Channels in Hong Kong*", International Journal of Bank Marketing, Vol. 23, Pp 255-272.

provision of different personal services, social desirability, usefulness, economic benefits and user involvement.

**Shah, M.H. and Siddiqui, F.A.<sup>50</sup> (2006)** analyses the relationship between service quality and customer satisfaction in internet banking and five service quality dimensions selected. A qualitative research approach is used to get a better understanding of this issue. A small quantitative survey has been also conducted to support the results obtained from the qualitative study. Nine service quality dimensions i.e. efficiency, reliability, responsiveness, fulfilment, privacy, communication, personalization, technology update and logistic/technical support are identified in this study. The quality performance of all the nine dimensions is shown to have a strong impact on customer satisfaction.

**Islam et.al<sup>51</sup> (2006)** examined the satisfaction level of ATM card holders of a leading bank (HBSC) in Bangladesh. The study found significant relationship of ATM service quality with customers' satisfaction. The study identified that location, personnel response, quality of currency notes, promptness of card delivery and performance of ATM were positively and significantly related to customer' satisfaction. The security, frequent breakdown of machine, and insufficient number of ATM were major contributors of customers' dissatisfaction.

**Akter, M.S. and Ghosh, S.K.<sup>52</sup> (2006)** examine the gap between expectations and perceptions of customers in Dhaka city of Bangladesh regarding banking services with a special focus on SERVQUAL model, The study concludes that in four

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<sup>50</sup> Shah, M.H. and Siddiqui, F.A. (2006), "*Organizational Critical Success Factors in Adoption of E-banking at the Woolwich Bank*", International Journal of Information Management, Vol. 26, Pp 442-456.

<sup>51</sup> Islam et.al (2006), "*Customer Satisfaction of ATM Service: A Case Study of HSBC ATM*", Retrieved July 13, 2009, <http://papers.ssrn.com>.

<sup>52</sup> Akter, M.S and Ghosh, S.K. (2006), "*Customers' Expectations and Perceptions toward Banking Services Through SERVQUAL Model – An Evaluation of A Multinational Banks*", Services in Bangladesh, Strategies of Winning Organizations, Pp 491-502.

dimensions like reliability, empathy, tangibility, assurance, the gap between perceptions and expectations is significant except responsiveness where it is insignificant which means banks do not extend that level of services which will satisfy the customers' expectations. The study also suggests some recommendations to minimize this gap.

**Kukkudi, J. and Deene, S.<sup>53</sup> (2006)** study the impact of ATMs on customer satisfaction with special reference to SBH in Gulbarga district with sample size of 100 respondents. It concludes that ATMs are used mostly by the age group of 25 – 35 years comprising more male members. 79 per cent uses ATMs weekly where 85 per cent are aware about the restrictions concerning ATMs usage and the numbers of ATMs are sufficient to meet current needs. It suggests popularizing ATMs among the maximum customers.

**Parisa Alagheband<sup>54</sup> (2006)** provides the theoretical aspect of electronic banking services of Iranian customers. Electronic banking services have changed the nature of financial services delivered to customers by providing these services, banks can get notable cost savings, reduce their branch networks and downsize the number of their service staff. But since the customers do not adopt and use these services, banks cannot make profit from these new services. Recently, a number of Iranian banks have started to offer electronic banking services to their customers. But still electronic banking is an unknown concept from customer point of view. The major findings are 54 per cent of the customers have no knowledge of the technology services. The best result to create awareness to all banking customers in online or offline services.

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<sup>53</sup> Kukkudi, J. and Deene, S. (2006), "*Impact of ATMs on Customer Satisfaction - A Case Study of SBH in Gulbarga District of Karnataka*", Strategies of Winning Organizations edited by Upinder Dhar, Santosh Dhar and Vinit Singh Chauhan, Excel Books, New Delhi, Pp 509-515.

<sup>54</sup> Parisa Alagheband (2006), "*Adoption of E-Banking Services by Iranian Customers*", M.sc project in electronic commerce, Lulea University in Technology, Pp 1-64.



**Rajnish Tiwari and Stephan Buse<sup>55</sup> (2006)** exhibit the Mobile Banking, availment of bank related financial services via mobile devices, builds a cornerstone of Mobile Commerce. An empirical survey of customer acceptance conducted within the frame of our research clearly reveals a major growing interest in Mobile Banking. However, since the degree of interest and the willingness to pay vary for individual services, it seems to be necessary to design specific services taking the needs and wishes of relevant target groups into consideration. This paper examines the opportunities for banks to generate revenues by offering value-added, innovative mobile financial services while retaining and even extending their base of technology-savvy customers.

**Mishra, J.K. and Jain, M.<sup>56</sup> (2007)** studies various dimensions of customer satisfaction in nationalized and private sector banks. Two stage factor analyses are computed to arrive at the dimensions of customer satisfaction. The study analyses ten factors and five dimensions of customer satisfaction for nationalized and private sector banks respectively. The study concludes that satisfaction of the customers is an invaluable asset for the modern organizations, providing unmatched competitive edge; it helps in building long term relationship as well as brand equity. The best approach to customer retention is to deliver high level of customer satisfaction that result in strong customer loyalty.

**Rajesh Kumar Srivastava<sup>57</sup> (2007)** describes internet banking is still at infancy stage in the world. This research was carried out to validate the conceptual

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<sup>55</sup> Rajnish Tiwari and Stephan Buse (2006), “*Mobile banking as Business Strategy: Impact of Mobile Technologies on Customer Behaviour and its Implications for Banks*”, Technology Management for the Global Future - Proceedings of PICMET '06, July 8-13, 2006, Istanbul, Pp 1935-1946.

<sup>56</sup> Mishra, J.K. and Jain, M. (2007), “*Constituent Dimensions of Customer Satisfaction: A study of Nationalized and Private Banks*”, Prajnan, Vol. 35(4), Pp 390-398.

<sup>57</sup> Rajesh Kumar Srivastava (2007), “*Customers' perception and usage of Internet Banking*”, Innovative Marketing, Vol. 3(4), Pp 67-77.

model of internet banking. The causes were identified and researched through correcting the causative factors so that internet banking can be used by more people. This will help the banking operations to be more cost effective. Research is focused on the customer's perceptions about internet banking and the drivers that drive consumers. Qualitative exploratory research using questionnaire was applied. 500 respondents were selected for study after initial screening. They were all bank customers. The studies revealed that education, gender and income play an important role in usage of internet banking.

**Doungtratana Sattabusaya<sup>58</sup> (2007)** made a research with the main objective to identify the key factors that determine success and move intention of Internet banking users toward their actual behaviour. The research setting was in Bangkok, Thailand. The research design was based on positivistic paradigm with a triangulation approach in the process of collecting and analysing data. The data was collected through 1,200 survey questionnaires and 9 semi-structured interviews of top managers and senior consultants of the participated banks who involved with Internet banking projects. Statistical analysis included descriptive statistics,  $R^2$ , t-test, F-test, Confirmatory Factor Analysis (CFA), and the Structural Equation Modelling (SEM) techniques.

**Kesseven Padachi et.al<sup>59</sup> (2007)** have studied the development and the increasing progress that is being experienced in the Information and Communication Technology that has brought about a lot of changes in almost all facets of life. This paper examines the customers' choice of banks that is influenced by the quality of e-banking services provided. In this study stratified sampling was used; the survey

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<sup>58</sup> Doungtratana Sattabusaya (2007), "*Internet banking*", Cardiff Business School, Cardiff University.

<sup>59</sup> Kesseven Padachi et.al (2007), "*Analyzing the Factors that Influence the Adoption of Internet Banking in Mauritius*", International paper on Computer Science and IT Education, pp 407-410

instrument was developed questionnaire comprising open ended and Likert type of questions. The instrument contained 36 items and was administered to about 400 respondents, while 360 completed and returned their questionnaire. The statistical techniques used for the analysis were the chi-square and correlation which recommends that various measures should be put in place to ensure more security such as installation of encrypted software, verification system of customer's identification cards, frequent change of password, examining test questions and using mixed password such as the use of alphanumeric amongst others.

**Uppal, R.K.<sup>60</sup> (2008)** described that in the post-LPG (Liberalization Privatization and Globalization) era and Information Technology era, transformation in Indian banks is taking place with different parameters and the curves of banking services are dynamically altering the face of banking, as banks are stepping towards e-banking from traditional banking. The paper empirically analyses the quality of e-banking services in the changing environment. With different statistical tools such as weighted average method and ranking. The paper concludes that most of the customers of e-banks are satisfied with the different e-channels and their services, but the lack of awareness is a major obstacle in the spread of e-banking services. The paper also suggests some measures to make e-banking services more effective in the future.

**Divya Singhal and Padhmanabhan, V.<sup>61</sup> (2008)** investigate the internet banking. The analysis is done with the help of statistical tools clearly indicating the factors responsible for internet banking. Factor analysis results indicate that utility request, security, utility transaction, ticket booking and fund transfer are major factors.

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<sup>60</sup> Uppal .R.K (2008), "*Customer Perception of E-Banking Services of Indian Banks: Some Survey Evidence*", The ICFAI University Journal of Bank Management, Vol. 7(1), Pp 63-78.

<sup>61</sup> Divya Singhal and Padhmanabhan, V. (2008), "*A Study on Customer Perception towards Internet Banking: Identifying Major Contributing Factors*", The Journal of Nepalese Business Studies, Vol. 5(1), Pp 101-111.

Out of total respondents more than 50 per cent agreed that internet banking is convenient and flexible ways of banking and it also have various transaction related benefits.

**Abdul-Aziz Abdul Razaq Hashim et.al<sup>62</sup> (2008)** investigates the customer perception in Qatar. Online banking, which was introduced in 1980's, has come a long way since then, though it was only in the mid 1990's that internet banking caught on and emerged in the developing countries. The researchers have found that a significant number of customers are either not aware of the IB services or do not trust the IB as a channel to conduct their banking transactions. The main disadvantages are found that lack of knowledge could be one of the factors for having a low rate of IB usage and it requires the government to support the bank industry in achieving this objective because security is an issue that concerns the whole society.

**Murali, R. et.al<sup>63</sup> (2008)** evaluate consumer perceptions on quality of e-services and Internet banking adoption in Malaysia. The data is collected from 150 retail banking customers of the Klang Valley area. Results show that Internet banking users and non-users have different expectations towards e-service quality preferences. Not all of the dimensions are preferable by the respondents. The study also discusses implications and recommendations to improve Internet banking service quality in Malaysia.

**Riquelme et.al<sup>64</sup> (2009)** examines the impact of customer service and online internet banking service attributes on overall satisfaction of bank customers in Kuwait.

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<sup>62</sup> Abdulaziz AbdulRazaq Hashim, Mohammed, N. and Chaker (2008), "*Customers' Perception of Online Banking in Qatar*", Oxford Business and Economics Conference Program, Pp 24-26.

<sup>63</sup> Murali, R., Richard, S., Nafis, A. and Mudiarsan, K. (2008), "*Information Technology in Malaysia: E-service Quality and Uptake of Internet Banking*", Journal of Internet Banking and Commerce, Vol.13 (2), August, Pp 23-27

<sup>64</sup> Riquelme et.al (2009), "*Internet Banking Customers Satisfaction and Online Service Attributes*", Journal of Internet Banking and Commerce, Vol. 14(2), Pp. 1-6.

185 customers have selected as the sample size through questionnaire. The cross tabulations and regression and discriminate analysis are used to analyse the technique. The major findings are 84.4 per cent of the customers were found to be very satisfied from online services but were still using multiple channels to conduct transactions. Both customers and online service attributes were found to have significant impact on customer satisfaction. Customers less satisfied with the way the complaint was handled were found to be female, less educated and use ATMs in less frequency than customers that were satisfied with the complaint handling procedure.

**Azouzi Dhekra<sup>65</sup> (2009)** aims to check if the current and prompt technological revolution altering the whole world has crucial impacts on the Tunisian banking sector. On the basis of empirical analysis, the study concludes that panoply of factors is affecting the customers' attitude toward e-banking. For instance; age, gender and educational qualifications seem to be important and they split up the group into electronic banking adopters and traditional banking defenders and so, they have significant influence on the customers' adoption of E-banking. It also shows that despite the presidential incentives and in spite of being fully aware of the E-banking benefits, numerous respondents are still using the conventional banking. Fear of loss because of transactions errors or hackers plays a significant role in an alienating Tunisian customer from online banking. Finally, the study highlights the limitations and suggests some research perspectives.

**Kamble, S.S., Sawhney Shweta and Bansal Ritika<sup>66</sup> (2009)** aimed to identify online service quality dimensions that facilitate the customer satisfaction for the e-

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<sup>65</sup> Azouzi Dhekra (2009), "*The Adoption of Electronic Banking in Tunisia: An Exploratory Study*", Journal of Internet Banking and Commerce, Vol. 14(3) December, Pp 22-24.

<sup>66</sup> Kamble, S.S., Sawhney Shweta and Bansal Ritika (2009), "*The Relationship between Service Quality Dimensions and Customer Satisfaction in E-Tailing Environment: An Empirical Study on Online Travel and E-mart Retail Model*", Advances in Management, Vol. 2(3), March, Pp 4-6.

travel and e-mart online retail. Further, they evaluate how well these dimensions are perceived by the customers so as to provide an objective measure of service performance. Ten e-service quality dimensions are identified and the extent to which current online retailers provide online service attributes are analysed to be low or moderate on most of the dimensions for both the e-travel and e-mart service providers. The model tested for the relationship between the service quality dimensions and customer satisfaction is also found to be correlated at a low level.

**Nyangosi et.al**<sup>67</sup> (2009) collected customers' opinions regarding the importance of E-banking and adoption levels of different e-banking technologies in India and Kenya. The study highlighted the trends of e-banking indicators in both countries. The overall result indicates that customers in both countries have developed a positive and they give much importance to them.

**Hua, G.**<sup>68</sup> (2009) investigates the online banking acceptance in China by conducting an experiment to investigate how users' perception about online banking is affected by the perceived ease of use of website and the privacy policy provided by the online banking website. The 110 undergraduate students in Chinese University are involved in the investigation. The study finds that both perceived ease of use and privacy policy have a significant impact on user's adoption of online banking. The study also investigates relative importance of perceived ease of use, privacy and security. Perceived ease of use is of less importance than privacy and security. Security is the most important factor influencing user's adoption. The study also discusses the implications of these results and limitations of e-banking.

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<sup>67</sup> Nyangosi et.al. (2009), "*The Evolution of e-banking: A Study of Indian and Kenyan technology awareness*", International Journal of Electronic Finance, Vol. 3(2), Pp 149-165.

<sup>68</sup> Hua, G. (2009), "*An Experimental Investigation of Online Banking Adoption in China*", Journal of Internet Banking and Commerce, Vol. 14(1), Pp 34-36.

**Syed Abdul Mannan**<sup>69</sup> (2010) examines that technology in Indian banks and customers perception. The study is based on primary data, which is collected through the issue of questionnaire to the bank customers. 22 per cent banks are selected from both private and public sector bank in Maharashtra. The major findings are almost 92 per cent of the respondents have agreed that electronic banking is more convenient and suitable in present life; on the other hand 7.9 per cent of the respondents have disagreed on reason of less education.

**Muhammad Asif Khan**<sup>70</sup> (2010) study investigates the significant dimensions of ATM (Automated Teller Machine) service quality and its effect on customer satisfaction. Questionnaire was used to collect the data from a convenience sample of 500 customers of multinational and national banks. Regression results indicate that convenience, efficient operation, security and privacy, reliability and responsiveness are significant dimensions of ATM service quality and that ATM service quality positively and significantly contributes toward customer satisfaction. The study makes a significant contribution to the quality management literature because few empirical studies are available dealing with this aspect of the banking sector in Pakistan.

**Manish Tanwar et.al**<sup>71</sup> (2011) have studied to explore bank employees' perception toward adoption of Information Technology to satisfy both sophisticated customers (who demand flexibility of interactions with no time and location constraint, security of information, privacy and convenience) as well as the organization's own needs (including more sophisticated services with more profit, security of networks,

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<sup>69</sup> Syed Abdul Mannan (2010), "*Technologies in Indian banks and customers' perception: An Empirical Study in Maharashtra*", International Conference of Business and Information, University of Kelaniya, Srilanka, Pp 12-21.

<sup>70</sup> Muhammad Asif Khan (2010), "*An Empirical Study of Automated Teller Machine Service Quality and Customer Satisfaction in Pakistani Banks*", European Journal of Social Sciences Vol. 13(3), Pp13-14.

<sup>71</sup> Manish Tanwar et.al (2011), "*Perception of Bank Employees Towards Adoption of Information Technology in Private Sector Banks of India*", International Journal of Research in Commerce, Information Technology and Management, Vol. 1(2), Pp 109-117, [www.ijrcm.org.in](http://www.ijrcm.org.in).

hardware and bank application, cost containment or reduction and customer loyalty) when implementing e-banking technologies. The study was conducted in four private sector banks of India from Bikaner to Jaipur regions of Rajasthan. Descriptive research methodology was used to accomplish the study using random convenience sampling technique. A questionnaire was developed based on five parameters remedy, Relative advantage, Complexity, Potential risk, Strategic advantage by decision-making process and Innovation and development to ascertain the perception of the employees. The data was collected from 180 bank employees (Executive, Manager, Officer) through structured questionnaire method out of which 129 employees replied to the questionnaire. Simple frequency percentage was adopted as the statistical measure and hypothesis testing was analysed using chi-square. The result reveals that all the banks are using Information technology as a strategic weapon to remain competitive against other. In conclusion, the study revealed that Information Technology has tremendously improved growth and performance of the banks. Information Technology has led to increase customer satisfaction, improved operational efficiency, reduced transaction time, gives the bank a competitive edge reduced the running cost and ushered in swift response in service delivery.

**SanthiyaValli, G.<sup>72</sup>(2011)** conducted a study to evaluate the service quality of State Bank of India by identifying the major factors responsible for customer satisfaction. The major limitation of the study was based on the perception of customers of only five branches of State Bank of India in Coimbatore district. The study concentrates only on qualitative aspects. Non-probability convenience sampling technique was applied in the selection of bank customers.

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<sup>72</sup> Santhiyavalli, G. (2011), “*Customer’s Perception of Service Quality of State Bank of India - A Factor Analysis*”, IJMBS Vol. 1(3), September, Pp 32-36 ISSN 2330-9519.



**Dharmalingam, S. and Kannan, K.V.**<sup>73</sup> (2011) made an analytical study based mainly on the primary data collected through a scientifically developed questionnaire. The questionnaire have been personally administered on a sample size of 240, chosen on a convenient basis from three Private Banks, i.e. ICICI, AXIS and HDFC Bank. The Gap analysis shows that Product variety is having more gaps between customer expectation and perception on of service quality. Banks have to understand the changing needs of customers, their aspirations and expectations to create value. Banks should have a strong customer relationship management system that would indicate the worth of the customer and able to understand his needs.

**Sharaf Alkibsi and Mary Linda**<sup>74</sup> (2011) highlighted that, technology-based banking services are quickly expanding and provide cost reductions per transaction, given increasing labour costs. The purpose of this quantitative correlational descriptive research study was to determine if a set of technology-based banking service quality dimensions had an association with customer satisfaction and behavioural intentions towards technology based banking services in Yemen. The study includes a recommendation that bank leaders focus on service enjoyment and customization to enhance customers' experience using technology.

**Bindiya Tater et.al**<sup>75</sup> (2011) research paper explores the perception of Indian customers towards the use of technologies with respect to such factors as convenience, privacy, security, ease of use, real time accessibility, and accurate record of varied transaction that enable customer's adoption of Banking Technology. Other factors such

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<sup>73</sup> Dharmalingam, S. and Kannan, K.V. (2011), "*Customer Perception on Service Quality of New Private Sector Banks in Tamilnadu - An Empirical Study*", Journal of Banking and Financial Services, Vol. 1(5), Pp 45-47, ISSN 2231-4288, <http://www.skirec.com>.

<sup>74</sup> Alkibsi, Sharaf and Linda Mary (2011), "*Customer Perceptions of Technology-Based Banking Service Quality Provided by Banks Operating in Yemen*", MCIS 2011 Proceedings, Pp 66-67.

<sup>75</sup> Bindhya Tater, Manish Tanwar and Krishna Murari (2011) "*Customer Adoption of Banking Technology in Private Banks of India*", The International Journal of Banking and Finance, Vol. 8(3), Pp 73-88.

as slow transfer speed, technical failure, frauds and unawareness among customers that make hindrance in adoption are also tested. All the banks are using information technology as a strategic vehicle to stay competitive against other players. There is no significant difference between adoption rates of banking technologies by the customers of different private banks.

**Himani Sharma<sup>76</sup> (2011)** conducted an empirical study with the banker's perspective on E-banking. The objectives of the study are to study bankers' perspectives on E-banking activities impact and promotional measures used by banks to promote E-banking. 192 of the bankers are taken as the sample respondents. The major finding on the impact of e-banking is 73.96 per cent of the bankers respondent that print media is used by the banks to a large extent for the purpose.

**Dhanabhakya, M. et.al<sup>77</sup> (2011)** explored the service quality of internet banking operation in Coimbatore from customers' perspective. It has observed that customers are satisfied with the reliability of the services provided by the banks but are not very much satisfied with the 'user friendliness' dimension. A seven dimension model using regression analysis is developed for measuring the overall outcome of service quality of internet banking. The result indicates that the two dimensions, viz. privacy and security and 'fulfilment' are not contributing significantly towards the overall service quality. This is an implication that the customer feel that bankers fail in providing the services on these two dimensions satisfactorily.

**Prema, C.<sup>78</sup> (2011)** made a study on consumers' adoption and perceived characteristics of internet banking. The following characteristics are included

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<sup>75</sup> Dr.Himani Sharma (2011), "*Bankers' Perspectives on E-Banking*", Njrim, Vol. 1(1), Pp71-85.

<sup>77</sup> Dhanabhakya, M., Anita and S. Nayak (2011), "Service Quality of Internet Banking", Southern Economist, August, Vol.15, Pp 19-24.

<sup>78</sup> Prema, C. (2011), "*A Framework for Understanding Consumer Perceived Characteristics of Internet Banking as Predicators of its Adoption*", Indian Journal of Marketing, Pp 46-52.

voluntariness, perceived usefulness, convenience, compatibility, easy to use, visibility, trial ability, security, privacy, risk and reliability in the perceived attributes.

**Jajoo Rupa Dwarkadas<sup>79</sup> (2011)** indicates that the consumer perspective towards credit card. The demand for credit cards is growing over time. The number was around 11 million, while debit cards were at more than 20 million in 2009. The distribution has increased with local banks becoming more aggressive. The sample size is 200 from Nanded city in Maharashtra. The comparative analysis is done in order to determine perceptions of credit card services provided by SBI and ICICI bank. 59 per cent were males and 41 per cent were females. It shows that majority of credit card users were male.

**Rahmath Safeena et.al<sup>80</sup> (2011)** determined the factors influencing the consumer's adoption of internet banking in India. The study investigates the influence of perceived usefulness, perceived ease of use and perceived risk on use of IB. It is an essential part of a bank's strategy formulation process in an emerging economy like India. Survey based questionnaire design with empirical test was carried out. The results have supported the hypothesis. The statistical tools such as correlation matrix, chi-squared and factor analysis were used. The Internet users are generally low with majority of them between 20 and 30 years age group.

**Aashish Shashikant Jani<sup>81</sup> (2012)** examined the customer perception on the use of E-technology in the retail banking sector. The objectives are to identify factors affecting customer preference for the use of technology in retail banking. To compare

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<sup>79</sup> Jajoo Rupa Dwarkadas (2011), "*Consumer perspective towards credit card*", International Referred Research Journal, Vol. 12, Pp73-79.

<sup>80</sup> Rahmath Safeena, Hema Date and Abdullah Kammani (2011), "*Internet Banking Adoption in an Emerging Economy: Indian Consumers' Perspective*", International Arab Journal of E-Technology, Pp 32-36.

<sup>81</sup> Aashish Shashikant Jani (2012), "*A Study of Consumer Perception on the Use of E- Technology in the Retail Banking Sector: A Comparative Study of Public Sector and Private Sector Banks*", Indian Journal of Marketing, January, Pp 46-58.

the customer perception in terms of different technology provided by public and private sector banks. The scope of the study is specific to Bhavnagar, a popular city and district of Gujarat. The study includes the different factors affecting consumer perception and modern technology provided by banks.

**Harsha Vardhan Reddy, D.V. and Ramana, D.V.<sup>82</sup> (2013)** analysed that the customer satisfaction is a significant subject for most marketers. It becomes imperative for service providers to meet or exceed the target customers' satisfaction with quality of services expected by them. The service quality has been regarded as the key factor in order to succeed and have endurance in banking industry, especially when there has been continuously growing pressure from other institutions working in the same industry and demanding customer requirements. In this paper, the authors have highlighted the important key factors and made several interbank comparisons. Some important characteristics were listed out by which customer's satisfaction was observed on rating basis. Further, these were prioritized according to the factors identified. To meet the objective of the paper, multivariate statistical techniques were applied and results were explored in new dimensions. The study outlines that the private sector banks provide higher customer satisfaction when compared to the nationalized and public sector banks and in turn there are combinations where a set of nationalized and public sector banks will meet the satisfaction levels of the customers.

#### **2.4 COMPERATIVE ANALYSIS OF PRIVATE AND PUBLIC SECTOR BANKS**

**Al-Hawari, M. et.al<sup>83</sup> (2005)** developed a comprehensive model of banking automated service quality taking into consideration the unique attributes of various

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<sup>82</sup> Harsha Vardhan Reddy, D.V. and Ramana, D.V. (2013), "*A Study on Customer Satisfaction with Service of Banks*", www.abhinavjournal.com, Vol. 2(7), Pp 34-36, ISSN 2277-1166.

<sup>83</sup> Al-hawari, M., Hartely, N. and Ward, T. (2005), "*Measuring Banks' Automated Service Quality: A Confirmatory Factor Analysis Approach*", Marketing Bulletin, Vol. 16 (1), Pp 3-5.

delivery channels including ATM, Internet Banking, Telephone Banking and other dimensions tested for uni dimensionally, reliability and validity using confirmatory factor analysis. They compiled a list of major dimensions of ATM service quality based on previous studies. The dimensions include secure locations, user – friendliness of the ATM system, convenient location and function of ATM. These dimensions were also tested by conducting an empirical study.

**Mohamad Rizal Abdul Hamid et.al<sup>84</sup> (2007)** made a comparative analysis of interact of banking unit, the main purpose of the study is to comparatively analysis of internet banking in Malaysia and Thailand. The study analyses the availability of the internet banking basic services and the features of the banking services. Further the research concentrates the problems facing the institutions in both the countries. The data were collected from 9 local banks and 4 foreign banks in Thailand and Malaysia. Finally, the empirical study concluded that the government should step-in enforcing laws on protecting consumer rights. The government, as the statutory body should provide guidelines for internet banking services and monitoring over banks operation to ensure their operation are legitimate.

**Ritu Sehgal and Sonia Chawla<sup>85</sup> (2011)** highlighted that the Indian banking sector is developing at an astounding rate. As per Prathima Rajan, an analyst in Client's banking group, "Indian banking industry assets are expected to reach US \$ 1 trillion by 2010". On the other side, development of technology is uplifting the functioning and services of banking sector. With the development and adoption of technology in banking sector, banking customers are also expecting more day by day. Therefore, the

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<sup>84</sup> Mohamad Rizal Abdul Hamid, Hanudin Amin, Suddin Lada (2007), "*A Comparative Analysis of Internet Banking in Malaysia and Thailand*", Journal of Internet Business, Vol. 4, Pp 1-18.

<sup>85</sup> Ritu Sehgal, Sonia Chawla (2011), "*Impact of Internet Banking on Customer Satisfaction: A Comparative Study of Public Sector Banks, Private Sector Banks and Foreign Sector Banks*", International Journal of Research In Commerce, Information Technology and Management, Vol. 1(2), Pp 156-163, [www.ijrcm.org.in](http://www.ijrcm.org.in).

service providers are becoming further customer centric in their approach of providing services in order to provide customer satisfaction. The paper presents the analysis of 225 Internet banking customers of three sectors of banks that is public sector, private sector and foreign sector banks of Jalandhar City. In case of public sector bank, State Bank of India (SBI), for private sector bank, Industrial Credit and Investment Corporation of India (ICICI) bank and for foreign sector bank, Standard Chartered banks (SCB) have been taken for study. The percentage, frequency analysis and chi-square tests have been applied for analysis to explore the results of the survey. The major findings are 72 per cent of the respondents of SBI, 76.6 per cent respondents of ICICI bank and 80 per cent respondents of SCB are satisfied with Internet banking of their respective banks. There is no significant relation between occupation and choice of bank of customers of SBI, ICICI bank and SCB. The Null hypothesis has been accepted. The study reveals that majority of the respondents of all the three sectors of banks are satisfied with Internet banking of their respective banks.

**Puja Khatri and Yukti Ahuja<sup>86</sup> (2011)** study compared the public and private sector banks in terms of customer satisfaction and the variables of service quality. Hypotheses are framed that there is significant difference between respondents' of public and private sector banks as regards different variables of quality. The total numbers of respondents surveyed were 122 and judgmental sampling technique was used in Delhi. Analysis of the information has been done by using the statistical package SPSS. Different tools like Mean, Standard deviation and T-test have been used. Most of the respondents are satisfied in private sector banks.

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<sup>86</sup> Puja Khatri and Yukti Ahuja (2011), "*Comparative Study of Customer Satisfaction in Indian Public Sector and Private Sector Banks*", International Journal of Engineering and Management Sciences, Vol. 1(1), Pp 42-51.

**Poonam Sawant, Tandale and Kulkarni, R.V.<sup>87</sup> (2012)** conducted a review on information communication technology and service quality in banking industry. This study reviewed researches carried out in the area of e-banking in terms of customer's perception towards e-services, technology, service quality, privacy and security. Information and Communication Technology (ICT) is important in e-banking to improve the performance and efficiency of banking transactions and to bring new quality to services as it re-organizes knowledge and effectively incorporates intelligent access to and use of the data in e-banking. The purpose of this study is to offer insights into the e-banking adoption and its implications for e-banking growth in public and private sector banks in India.

**Robert Raja Singh<sup>88</sup> (2014)** thesis highlights that the challenge of each bank is to work towards ensuring that customers prefer its products and services to those of other competing banks. The key to develop and nurture a close relationship with customers is the appreciation of their needs and preferences and fulfilment of their requirements. Employment of Information Technology to appropriately analyse and understand the needs of existing customers better, to ensure that customers get their benefits and to explore the possibility of cross-selling products to gain a competitive advantage is the other issue drawing their attention. Thus, in this current competitive scenario, both private and public sector banks are to survive on competition, succeed and make profit. There is hardly any other option but to identify customers' needs and benefits and find ways and means to serve their needs and provide them with benefits. Thus bankers are bound to attract customers by providing them a spectrum of services

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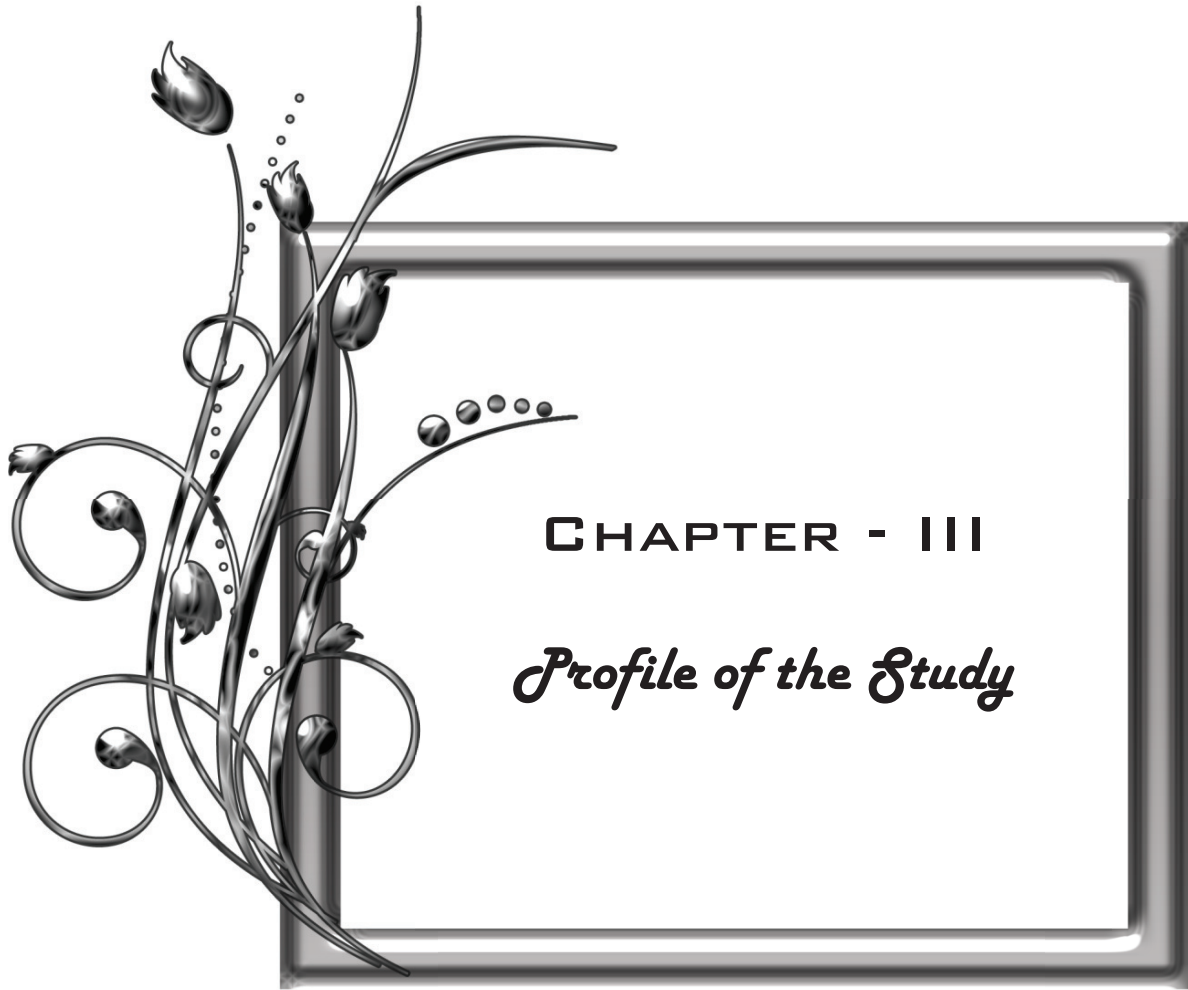
<sup>87</sup> Poonam Sawant, Tandale and Kulkarni, R.V. (2012), "*Information and Communication Technology and Service Quality in Banking Industry*". Vol. 12, Pp 82-83.

<sup>88</sup> Robert Raja Singh (2014), "*A Comparative Study on Customer Benefits with Special Reference to Public and Private Sector Banks in Kanyakumari District*", Ph.D Thesis, M.S university.

like, online banking, ATM banking and Tele banking. Banks can enhance customer service by leveraging on technology, maintaining efficient service delivery standards and business process. Further, it is observed that some banks lose their good clients to competitors due to a variety of reasons. In Kanyakumari District, with the increased number of both private and public sector banks, the problem increases. Banks in this district find it very difficult in getting new customers as well as in retaining the existing customers. All these lead to the undertaking of the present study.

The review of literature relating to Modern banking services, Problems and prospects of modern banking services, Customer satisfaction towards modern banking services, Comparative analysis of private and public sector banks help the researcher to understand various studies conducted in this field. The reviews collected from various sources paved the way to identify the research gap and to make researcher to consider the directions given by various authors.





## CHAPTER - III

### *Profile of the Study*

## **CHAPTER - III**

### **PROFILE OF THE STUDY**

#### **3.0 INTRODUCTION**

#### **3.1 GENERAL PROFILE OF TIRUNELVELI DISTRICT**

3.1.1 Population

3.1.2 Topography

3.1.3 Industry

3.1.4 Tourist Spots

3.1.5 Education

3.1.6 Transport

#### **3.2 BANKING PROFILE OF TIRUNELVELI**

3.2.1 Public Sector Banks

3.2.2 Growth of Deposits in Public Sector Banks

3.2.3 Growth of Advances in Public Sector Banks

3.2.4 Growth of Branches in Rural Area

3.2.5 Growth of Branches in Semi-Urban Area

3.2.6 Growth of Branches in Urban Area

#### **3.3 PRIVATE SECTOR BANKS**

3.3.1 Growth of Deposits in Private Sector Banks

3.3.2 Growth of Advances in Private Sector Banks

3.3.3 Growth of Branches of Private Sector Banks in Rural Area

3.3.4 Growth of Branches of Private Sector Banks in Semi-Urban Area

3.3.5 Growth of Branches of Private Sector Banks in Urban Area

#### **3.4 HISTORY OF BANKING IN INDIA**

## **CHAPTER - III**

### **PROFILE OF THE STUDY**

#### **3.0 INTRODUCTION**

This chapter is divided into three parts. The first part is the general profile of Tirunelveli district. It includes population, income, industry, education, hospital and its historical aspects of Tirunelveli district. The second part deals with the banking profile of Tirunelveli district. It contains a list of public and private banks and foundation of banks in India as well as Tirunelveli district and it includes history of modern banking services and committees related to use of IT in Indian banking industry

- General Profile of Tirunelveli
- Banking Profile of Tirunelveli
  - ❖ Public sector banks in Tirunelveli
  - ❖ Private sector banks in Tirunelveli

#### **3.1 GENERAL PROFILE OF TIRUNELVELI DISTRICT**

Tirunelveli an ancient city is about 2000 years old and is a town of hoary tradition. Tirunelveli is the capital of Tirunelveli District. This district was formed on 1st September 1790. Later came under the direct control of the British Crown Queen Victoria. The name Tirunelveli has been composed of the three Tamil words, i.e. ‘Thiru – Nel – Veli’ meaning Sacred Paddy Hedge and it’s also known as Nellie<sup>1</sup>. It is the twin city, namely Tirunelveli and Palayamkottai. It is the administrative headquarters of the Tirunelveli District. It is situated 700 km (430mi) south west of the state capital Chennai. Total geographical area of the district is 6770 Sq. Kms. This constitutes just 5.6 per cent of the area of the State.

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<sup>1</sup> Gazetteers of India (2010), Tamil Nadu State, Tirunelveli District, Vol.1, Pp 1.

## TIRUNELVELI DISTRICT



CHART 3.1

DISTRICT MAP

### 3.1.1 Population

The total population of Tirunelveli district was 3,077,233 lakhs as per the census in 2011 of which 15,20,912 lakh males 15,56,321 lakh female populations. There are percentage of the total population of the district are living in urban areas of the district.

Tirunelveli district is populated with a person who includes males and females. Details of the population data are given below table 3.1<sup>2</sup>.

**TABLE 3.1**  
**TIRUNELVELI DISTRICT POPUATION**

Population	Number of people	Percentage
Male	15,20,912	49.424
Female	15,56,321	50.575
<b>Total</b>	<b>30,77,233</b>	<b>100</b>

*Source: Censes of India 2011*

### 3.1.2 Topography

This district is located in the southern part of Tamilnadu and surrounded by Virudhunagar district on the north, Tuticorin on the east, Kanyakumari district on the south, and Western Ghats on the west. Tirunelveli has its own individuality from rice to culture. The lofty legendary life line of this district is the river Tamiraparani that flows across the district. It caters to the various spheres of activities like agriculture, industry and in providing the main source of drinking water.<sup>3</sup>

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<sup>2</sup> [http://censusindia.gov.in/2011-prov-results/paper2/prov\\_results\\_paper2\\_indiavol2.html](http://censusindia.gov.in/2011-prov-results/paper2/prov_results_paper2_indiavol2.html)

<sup>3</sup>Ibid

### **3.1.3 Industry**

Tirunelveli district is not industrially backward. The Government has declared the following taluks as the most backward taluk viz., Radhapuram, Tenkasi, Sankarankovil and other as backward taluks. There are 25 medium and major industries such as cement, cotton yarn, calcium carbide, sugar, cotton seed oil, printing paper and flour mills etc., in addition there are about 14,389 small scale industries registered in this district. The types of industries in this district are mainly Agro-based, chemical based, mineral based, textile based and metal engineering and so on. There are about 3,985 household units engaged in activities like handloom, khadi, mat, mat weaving, basket making, palm leaf products, palmiah tapping, palmgur pottery, brick making, tiles making, black smithy, carpentry, leather tanning, metal and allied works and handicrafts.

The handloom products are marketed in North India. The fine car mats from Pattamadai and the exquisite quality of silk mats of Pattamadai is incomparable in quality and has won world fame, also the Tirunelveli have specialities which earned many laurels to the district.

### **3.1.4 Tourist Spots**

The main tourist spots of Tirunelveli are Courtallam, Pappanasam, Sanctuary at Mundanthurai and Kalakadu, Manjolai Hills, Sankarankoil, Swamy Nellaiappar Kanthimathiambal Temple, Tamirabarani, Tirukkurungudi, Thirupudaimarudur, Thiruvengatanathapuram, Vishnu Temple, Balasubramaniasamy Temple.

### **3.1.5 Education**

During the 1790s, Christian missionaries established a lot of schools in Tirunelveli. The number of converting Christians increased in the region during the 19<sup>th</sup>

century and the number of schools also increased simultaneously. Tirunelveli is known for its educational institutions, many of which are located at Palayamkottai which is known as the "Oxford of South India". Tirunelveli has the following Educational Institutions<sup>4</sup> in table 3.2.

**TABLE 3.2**  
**LIST OF EDUCATIONAL INSTITUTIONS**

S.No	Educational Institution	Total
1	Universities	2
2	Arts and Science colleges	25
3	Medical College	1
4	Siddha Medical College	1
5	Veterinary College and Research Institute	1
6	Engineering Colleges	20
7	Law College	1
8	Pre-kinder Gardens	241
9	Primary Schools	1501
10	Middle Schools	431
11	High Schools	114
12	Higher Secondary Schools	185
13	Teacher-Training Institutes	28

*Source: District Collectorate Office (2012)*

### 3.1.6 Transport

Tirunelveli has an extensive transport network and is well-connected to other major cities by road, rail and air. The Tirunelveli city is well connected by roads with NH7.<sup>5</sup> The main bus station was relocated from Tirunelveli and Palayamkottai that easily connects all the places. The Tirunelveli junction railway station is one of the

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<sup>4</sup> Tirunelveli district profile, www.nelli.nic, 2012

<sup>5</sup> Lead bank details(2013),Pp5

oldest, busiest and most important one in Tamil Nadu. It is connected to major cities in all four directions, Madurai-Sankarankovil to the north, Nagercoil to the south, Tenkasi-Kerala (Kollam) to the west and Tiruchendur to the East. There is no airport in Tirunelveli. The closest airport to Tirunelveli city is the Tuticorin airport (TCR), located at Vaagaikulam, Thoothukkudi district, about 28 km east of Tirunelveli. The Madurai Airport and Thiruvananthapuram International Airport are about 150 km away by road.

### **3.2 BANKING PROFILE OF TIRUNELVELI**

#### **3.2.1 Public Sector Banks**

In the year 1955 Imperial Bank of India was nationalised to form State Bank of India with the stated objective of extension of banking facilities on a large scale, more particularly in the rural and semi urban areas and for diverse other public purposes, the seven banks forming subsidiaries of SBI were nationalized in the year 1960. It brought one third of the banking segments under the direct control of the Government of India.

Nationalized banks or public banks dominate banking system in India. The first phase of financial reforms led to the Nationalization of banks in India which took place in 1969 by Mrs. Indira Gandhi the then Prime Minister. The major objective behind nationalization was to spread banking infrastructure in rural areas and make available cheap finance to Indian farmers. Before 1969, State Bank of India (SBI) was the only public sector bank in India. The total deposits of the banks nationalized in the year 1969 have amounted to 50 crores. This move increased the presence of nationalized banks in India, with 84 per cent of the total branches coming under government control.

Public sector banking was enlarged on 15<sup>th</sup> April 1980 with the nationalization of six more Indian banks, whose liabilities exceeded Rs. 200 Crore on 14<sup>th</sup> March 1980 after nationalization the term limited was dropped from the name as Central



Government has now become the only shareholder of nationalized bank and the nationalized banks are subsequently referred to as “Public Sector Banks”.

**TABLE 3.3**

**PUBLIC SECTOR BANKS IN INDIA**

<b>S. No.</b>	<b>Bank name</b>	<b>Year of Establish</b>	<b>Origin of the Bank</b>	<b>Total No. of Branches</b>
1	Allahabad Bank	1865	Alahabad	2,686
2	Andhra Bank	1923	Hyderabad	1,888
3	Bank of Baroda	1908	Vadarora	4,463
4	Bank of India	1906	Mumbai	4,467
5	Bank of Maharashtra	1935	Pune	1,777
6	Canara Bank	1906	Bangalore	4,245
7	Central Bank of India	1911	Mumbai	4,574
8	Corporation Bank	1906	Mangalore	1,746
9	Dena Bank	1938	Mumbai	1,414
10	IDBI	1965	Mumbai	1,652
11	Indian Bank	1907	Chennai	2,061
12	Indian Overseas Bank	1937	Chennai	3,131
13	Oriental Bank of Commerce	1943	Gurgaon	2,065
14	Punjab and Sind Bank	1908	New Delhi	1,147
15	Punjab National Bank	1895	New Delhi	6,047
16	State Bank of Bikaner and Jaipur	1963	Jaipur	1,060
17	State Bank of Hyderabad	1941	Hyderabad	1,606
18	State Bank of India	1955	Mumbai	15,214
19	State Bank of Mysore	1913	Mysore	840
20	State Bank of Patiala	1960	Patiala Punjab	1,138
21	State Bank of Travancore	1945	Trivandrum	1,038
22	Syndicate Bank	1925	Udupi	2,856
23	UCO Bank	1943	Kolkata	2,576
24	Union Bank of India	1919	Mumbai	3,622
25	United Bank of India	1950	Kolkata	1,740
26	Vijaya Bank	1931	Mangalore	1,560
<b>Total Number of Banks In Public Sector Banks</b>				<b>76,613</b>

**Source: 1) *www.rbi.org.in*, accessed on November 25, 2013.**

**2) *Website of respected banks and survey***

**3) *Details collected through particular banks.***

Table 3.3 explained that commercial banks are playing a vital role for their customers in providing the modern banking services. These banks have very huge number of branches in India nearly 76,613 in the year of 2013. The State Bank of India has highest number of branches in India with 15,214 branches.

**TABLE 3.4**

**PUBLIC SECTORS BANKS AND NO. OF BRANCHES IN TIRUNELVELI**

<b>S. No.</b>	<b>Bank name</b>	<b>Total</b>	<b>Rural</b>	<b>S.Urban</b>	<b>Urban</b>
1	Allahabad Bank	2	0	1	1
2	Andhra Bank	1	0	0	1
3	Bank of Baroda	4	0	0	4
4	Bank of India	4	1	1	2
5	Canara Bank	31	10	21	0
6	Central Bank of India	10	2	4	4
7	Corporation Bank	5	1	1	3
8	IDBI	1	0	0	1
9	Indian Bank	23	3	10	10
10	Indian Overseas Bank	62	27	23	12
11	Punjab National Bank	4	1	2	1
12	State Bank of India	25	7	10	8
13	State Bank of Travancore	8	1	5	2
14	Syndicate Bank	3	0	1	2
15	UCO Bank	1	0	0	1
16	Union Bank of India	4	0	3	1
17	Vijaya Bank	1	0	0	1
<b>Total</b>		<b>186</b>	<b>53</b>	<b>82</b>	<b>54</b>

*Source: Lead bank in Tirunelveli (2013) (Indian Overseas Bank)*

Table 3.4 reflects the total number of branches of public sector banks 186 in Tirunelveli District, which include 53 in the Rural, 82 in semi urban and 54 in urban areas. All the commercial banks are making continuous effort to improve the branches.

As per changing environment in the banking industry and technology updating in banks from Tirunelveli district, the banks invested a lot of funds to provide various modern banking services. The modernization of technology or automation is a primary step of providing modern banking services. This survey shows that all selected banks and their respective branches were fully computerized and are having a core banking solution. Almost all public sector banks were providing Demat, ATM, debit card, credit card, ECS, Tele Banking, Mobile Banking, Internet Banking, NEFT, RTGS, Cheque Truncation System. However Allahabad bank, Bank of Maharashtra and Central Bank of India are not providing the Demat account.

**TABLE 3.5**

**MODERN BANKING SERVICES IN TIRUNELVELI PUBLIC SECTOR BANKS**

S.No	Bank Name	1	2	3	4	5	6	7	8	9	10	11
1	Allahabad Bank	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Andhra Bank	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Bank of Baroda	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Bank of India	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Canara Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Central Bank of India	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Corporation Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	IDBI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Indian Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	Indian Overseas Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	Punjab National Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	State Bank of India	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	State Bank of Travancore	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	Syndicate Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	UCO Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	Union Bank of India	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	Vijaya Bank	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

**Source:** 1) *www.rbi.org.in* accessed on NOV 25, 2013

2) *Website of respected banks and survey*

3) *The details collected through particular banks*

Services are

- 1 - Demat
- 2 - ATM
- 3 - Debit Card
- 4 - Credit Card
- 5 - ECS
- 6 - Tele Banking
- 7 - Mobile Banking
- 8 - Internet Banking
- 9 - NEFT
- 10 - RTGS
- 11 - Cheque Truncation System.

### **3.2.2 Growth of Deposits in Public Sector Banks**

Mobilization of resources is a key challenge facing the banking sector. The details of growth of deposits in Tirunelveli district are presented in the below table 3.6.

**TABLE 3.6**  
**GROWTH OF DEPOSITS IN PUBLIC SECTOR BANKS (in Rupees)**

<b>Banks</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>CGR</b>
State Bank of India	68,74,249	8,1,14,500	91,55,100	1,14,26,300	1,29,40,200	17.44
State Bank of Travancore	13,17,342	16,99,367	19,82,698	22,38,721	21,35,679	13.21
Allahabad Bank		15,704	3,83,10	50,285	64,660	25.34
Andhra Bank	52,470	67,479	1,01,618	92,410	1,00,907	17.62
Bank of Baroda	4,22,705	5,59,833		13,74,207	5,01,912	13.21
Bank of India	1,98,866	5,55,792	2,44,561	3,61,720	3,92,554	9.75
Canara Bank	77,22,739	91,32,206	99,34,222	98,41,520	1,10,05,024	8.14
Central Bank of India	10,56,451	11,10,944		14,37,645	14,12,673	8.71
Corporation Bank	5,69,463	6,99,162	1,41,169	9,40,139	9,13,022	29.38
IDBI				34,553	34,553	-
Indian Bank	42,70,463	52,59,000	63,32,057	74,44,090	87,30,872	19.97
Indian Overseas Bank	95,57,200	1,20,47,800	1,33,36,472	1,47,96,003	1,70,28,300	98.97
Punjab National Bank	4,83,569	6,27,321	6,78,491	8,46,601	8,46,601	15.21
Syndicate Bank	2,08,415	2,68,415	3,32,673	3,49,192	3,72,692	15.32
Union Bank of India	4,85,503	6,20,616	7,98,797	12,98,561	10,83,018	26.41
UCO Bank	2,59,525	2,78,678	2,97,627	3,76,787	3,93,654	12.02
Vijaya Bank	67,194	74,375	73,531	78,427	1,02,085	98.88

*Source : Secondary Data*

Table 3.6 shows the growth of deposits in Tirunelveli district. The table reveals that the deposits of the Indian Overseas Bank has increased from ₹95,57,200 in 2008-09 to ₹1,10,05,024 in 2012-13, the deposits of State Bank of India has also increased from ₹68,74,249 in 2008-09 to ₹1,29,40,200 in 2012-13. The deposits of Canara Bank have increased from ₹77,22,739 in 2008-09 to ₹1,10,05,024 in 2012-13 and the deposits of Indian bank have increased from ₹42,70,463 in 2008-09 to ₹87,30,872 in 2012-13. It is further clear from table that the growth of deposits in Indian Overseas bank, State Bank of India, Canara Bank and Indian bank in Tirunelveli district has recorded a compound growth rate of 98.97, 17.44, 8.14 and 19.97 per cent respectively.

### **3.2.3 Growth of Advances in Public Sector Banks**

Credit is a crucial input for economic development of any individuals and every individual need credit for a variety of reasons. They need credit to meet requirements for working capital, long term investment in agriculture and other income bearing activities apart from credit needs for food, housing, health, education and other social obligations. The details of growth of advances in Tirunelveli district are presented in Table.3.7.

**TABLE 3.7**  
**GROWTH OF ADVANCES IN PUBLIC SECTOR BANKS (in Rupees)**

<b>Banks</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>CGR</b>
State Bank of India	72,31,353	77,69,400	78,19,400	79,90,600	92,20,500	5.29
State Bank of Travancore	15,56,112	18,06,977	21,70,994	22,47,507	27,24,935	14.29
Allahabad Bank		1,292	5,714	36,660	86,234	106.11
Andhra Bank	80,217	76,937	89,537	94,806	85,929	3.51
Bank of Baroda	3,00,332	3,71,437		3,04,685	2,49,307	-7.28
Bank of India	2,66,405	3,09,496	2,81,185	3,79,011	4,85,408	15.05
Canara Bank	36,34,821	41,20,844	53,16,458	59,19,927	67,86,587	17.48
Central Bank of India	4,89,540	6,74,391		8,79,151	10,99,467	14.36
Corporation Bank	1,51,875	1,70,375	12,051	3,78,626	5,94,784	42.29
IDBI				33,110	33,110	-
Indian Bank	32,86,086	39,31,900	50,97,492	63,49,582	71,34,197	22.48
Indian Overseas Bank	40,88,400	49,06,200	64,88,260	84,92,429	1,06,65,100	27.96
Punjab National Bank	4,53,226	6,23,835	6,48,892	10,40,749	10,40,749	24.27
Syndicate Bank	1,84,459	2,19,299	2,48,941	3,12,572	3,55,369	18.15
Union Bank of India	4,00,588	6,45,463	8,77,980	10,81,956	10,68,847	27.17
UCO Bank	2,53,267	2,62,418	2,81,936	3,11,251	4,09,485	11.96
Vijaya Bank	98,032	1,02,598	1,07,020	1,04,709	1,27,799	5.43

*Source : Secondary Data*

Table 3.7 shows the growth of advances in Tirunelveli district. The table reveals that the advances of the Indian Overseas Bank has increased from ₹40,88,400 in 2008-09 to ₹1,06,65,100 in 2012-13, the advances of State Bank of India has also increased from ₹72,31,353 in 2008-09 to ₹92,20,500 in 2012-13. The advance of Canara Bank has increased from ₹36,34,821 in 2008-09 to ₹1,10,05,024 in 2012-13 and the advance of Indian bank has increased from ₹32,86,086 in 2008-09 to ₹71,34,197 in 2012-13. It is further clear from table that the growth of advances of Indian Overseas bank, State Bank of India, Canara Bank and Indian bank in Tirunelveli district has recorded compound growth rates of 27.96, 5.29, 17.48 and 22.48 per cent respectively.

### **3.2.4 Growth of Branches in Rural Area**

Opening of bank branches at all banked rural areas is a pre-requisite for bringing all households into the banking fold. The details of growth of branches in rural areas in Tirunelveli District are shown in Table 3.8.



**TABLE 3.8****GROWTH OF BRANCHES IN RURAL AREA**

<b>BANKS</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
State Bank of India	9	9	9	9	7
State Bank of Travancore	0	0	0	1	1
Allahabad Bank	0	0	0	0	0
Andhra Bank	0	0	0	0	0
Bank of Baroda	0	0	0	0	0
Bank of India	1	1	1	1	1
Canara Bank	7	7	8	10	10
Central Bank of India	2	2	2	2	2
Corporation Bank	0	0	0	0	1
IDBI	0	0	0	0	0
Indian Bank	2	2	2	2	3
Indian Overseas Bank	21	21	22	27	27
Punjab National Bank	1	1	1	1	1
Syndicate Bank	0	0	0	0	0
Union Bank of India	0	0	0	0	0
UCO Bank	1	1	1	1	1
Vijaya Bank	0	0	0	0	0
<b>Total</b>	<b>44</b>	<b>44</b>	<b>46</b>	<b>54</b>	<b>54</b>

**Source : Secondary Data**

Table 3.8 shows the growth of branches in rural areas in Tirunelveli district. The table reveals that the branches opened by Indian Overseas bank have increased from 21 in 2008-09 to 27 branches in 2012-13, the branches opened by Canara bank have increased from 7 to 10 branches, the branches opened by Indian bank have increased from 2 to 3 branches and the State Bank of India has declined two branches in 2012-13.

### 3.2.5 Growth of Branches in Semi-Urban Area

The details of growth of branches in semi-urban areas in Tirunelveli District are shown in Table 3.9.

**TABLE 3.9**

#### **GROWTH OF BRANCHES IN SEMI-URBAN AREA**

<b>Banks</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
State Bank of India	4	4	6	6	10
State Bank of Travancore	5	5	3	3	5
Allahabad Bank	1	1	1	1	1
Andhra Bank	0	0	0	0	0
Bank of Baroda	0	0	0	0	0
Bank of India	1	1	1	1	1
Canara Bank	11	11	12	12	21
Central Bank of India	3	3	3	3	4
Corporation Bank	2	2	2	2	1
IDBI	0	0	0	0	0
Indian Bank	9	9	10	10	10
Indian Overseas Bank	20	20	21	23	23
Punjab National Bank	2	2	2	2	2
Syndicate Bank	0	0	0	0	1
Union Bank of India	3	3	3	3	3
UCO Bank	0	0	0	0	0
Vijaya Bank	0	0	0	0	0
<b>Total</b>	<b>61</b>	<b>61</b>	<b>64</b>	<b>66</b>	<b>82</b>

*Source : Secondary Data*

Table 3.9 shows the growth of branches in semi-urban areas in Tirunelveli district. The table reveals that the branches opened by Indian Overseas bank have increased from 20 in 2008-09 to 23 branches in 2012-13, the branches opened by Canara bank have increased from 11 to 21 branches, the branches opened by Indian bank have increased from 9 to 10 branches and the branches opened by the State Bank of India have increased from 4 to 10 branches in 2012-13.

### 3.2.6 Growth of Branches in Urban Area

The details of growth of branches in urban areas in Tirunelveli District are shown in Table 3.10.

**TABLE 3.10**  
**GROWTH OF BRANCHES IN URBAN AREA**

<b>BANKS</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
State Bank of India	7	7	7	7	8
State Bank of Travancore	0	0	2	2	2
Allahabad Bank	0	0	0	0	1
Andhra Bank	1	1	1	1	1
Bank of Baroda	2	2	2	2	4
Bank of India	2	2	2	2	2
Canara Bank	10	10	9	9	10
Central Bank of India	3	3	3	3	4
Corporation Bank	1	1	1	1	3
IDBI	1	1	1	1	1
Indian Bank	8	8	8	10	10
Indian Overseas Bank	10	10	10	12	12
Punjab National Bank	1	1	1	1	1
Syndicate Bank	1	1	2	2	2
Union Bank of India	2	2	2	2	2
UCO Bank	1	1	1	1	1
Vijaya Bank	1	1	1	1	1
<b>Total</b>	<b>51</b>	<b>51</b>	<b>53</b>	<b>57</b>	<b>65</b>

*Source : Secondary Data*

Table 3.10 shows the growth of branches in urban areas in Tirunelveli district. The table reveals that the branches opened by Indian Overseas bank have increased from 10 in 2008-09 to 12 branches in 2012-13, the branches opened by Indian bank have increased from 8 to 10 branches, the branches opened by State Bank of India have increased from 7 to 8 branches and the branches opened by Canara bank have declined one branch in 2010-11.

### **3.3 PRIVATE SECTOR BANKS**

In the pre-independence era all the banks in India were private sector banks. After nationalisation of banks in 1969 public sector banks came to occupy a dominant role in the banking structure. Private sector banks in India received a flip in 1994 when the Reserve Bank of India encouraged setting up private sector banks as part of its policy of liberalisation of the Indian Banking Industry. Housing Development Finance Corporation Limited (HDFC) was amongst the first to receive an 'in principle' approval from the Reserve Bank of India (RBI) to set up a bank in the private sector.

Private sector Banks have played a major role in the development of the Indian banking industry. They have made banking more efficient and customer friendly. In the process, they have jolted public sector banks out of complacency and forced them to become more competitive. It is well recognised that India is one of the fastest growing economies in the world. Evidence from across the world suggests that a sound and evolved banking system are required for sustained economic development. India has a better banking system in place of other developing countries. The table 3.11 explained about all private sector banks with its origin, establishment and total No of branches. HDFC bank has a network of over 3,939 branches across India as on December 2013.

**TABLE 3.11****PRIVATE SECTOR BANKS IN INDIA**

<b>S. No.</b>	<b>Bank Name</b>	<b>Year of Establish</b>	<b>Origin of the Bank</b>	<b>Total no. of Branches</b>
1	Axis Bank Ltd.	1994	Mumbai	2,149
2	Bank of Rajasthan	1943 -2010 Merged with ICICI	Udaipur, Rajasthan	
3	Catholic Syrian Bank Ltd.	1920	Thrissur, Kerala	401
4	City Union Bank Ltd.	1904	Kumbakonam, Tamil Nadu	394
5	Development Credit Bank Ltd.	1930	Mumbai	110
6	Dhanlaxmi Bank Ltd	1927	Thrissur, Kerala	279
7	Federal Bank Ltd.	1945	Aluva, Kochi	1,132
8	HDFC Bank Ltd.	1994	Mumbai	3,939
9	ICICI Bank Ltd.	1954	Mumbai	3,247
10	Indusind Bank Ltd.	1994	Mumbai	588
11	ING Vysya Bank Ltd.	2002	Bangalore	598
12	Jammu and Kashmir Bank Ltd.	1938	Jammu and Kashmir	731
13	Karnataka Bank Ltd.	1924	Mangalore	578
14	Karur Vysya Bank Ltd.	1916	Karur, Tamil Nadu	608
15	Kotak Mahindra Bank Ltd.	1985	Mumbai	611
16	Lakshmi Vilas Bank Ltd.	1926	Karur, Tamil Nadu	334
17	Nainital Bank Ltd.	1922	Nanital	101
18	Ratnakar Bank Ltd.	1943	Kolhapur	143
19	SBI Commercial and International Bank Ltd.	Acquired by SBI		
20	South Indian Bank Ltd.	1929	Thrissur, Kerala	778
21	Tamilnad Mercantile Bank Ltd.	1921	Tuticorin	356
22	YES Bank	2003	Mumbai	1,983
<b>TOTAL NO .OF BRANCHES</b>				<b>19,060</b>

**Source: 1) [www.rbi.org.in](http://www.rbi.org.in) accessed on Nov. 25, 2013**

**2) Website of respected banks and survey**

**3) Details collected through particular banks**

**TABLE 3.12****PRIVATE SECTOR BANKS AND NO. OF BRANCHES IN TIRUNELVELI**

S. No.	Bank name	Total	Rural	S.Urban	Urban
1	Axis Bank Ltd.	4	2	2	0
2	City Union Bank Ltd.	7	0	6	1
3	Federal Bank Ltd.	4	0	3	1
4	HDFC Bank Ltd.	2	0	1	1
5	ICICI Bank Ltd.	9	7	2	0
6	Karur Vysya Bank Ltd.	7	0	6	1
7	Lakshmi Vilas Bank Ltd.	2	0	1	1
8	South Indian Bank Ltd.	2	0	1	1
9	Tamilnad Mercantile Bank Ltd.	19	10	8	1
<b>Total</b>		56	19	30	7

*Source: Lead bank in Tirunelveli (2013), (Indian Overseas Bank)*

Table 3.12 reveals the total number of branches of private sector banks 56 in Tirunelveli District, which include 19 in the Rural, 30 in semi urban and 7 in urban areas.

Modern banking provides number of services at the door step of customers which is otherwise not possible. All the private sector banks offered modern banking services through different types of delivery channels. Even though some banks are not providing or offering the service are listed below.

**TABLE 3.13****MODERN BANKING SERVICES IN TIRUNELVELI PRIVATE SECTOR**

S.No	Bank Name	1	2	3	4	5	6	7	8	9	10	11
1	City Union Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Axis Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	HDFC Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	ICICI Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Tamilnadu Mercantile Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	The Federal Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	The Karur Vysya Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	The Lakshmi Vilas Bank Ltd.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	The South Indian Bank Ltd.	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*Source: 1) [www.rbi.org.in](http://www.rbi.org.in), accessed on Nov. 25, 2013*

*2) Website of respected banks and survey*

*3) Details collected through particular banks*

Services are

- 1 - Demat,
- 2 - ATM,
- 3 - Debit Card,
- 4 - Credit Card,
- 5 - ECS,
- 6 - Tele Banking,
- 7 - Mobile Banking,
- 8 - Internet Banking,
- 9 - NEFT,
- 10 - RTGS,
- 11 - Cheque Truncation System.

### 3.3.1 Growth of Deposits in Private Sector Banks

The details of growth of deposits of private sector banks in Tirunelveli district are presented in Table 3.14.

**TABLE 3.14**  
**GROWTH OF DEPOSITS IN PRIVATE SECTOR BANKS**

Private sector banks	2008-09	2009-10	2010-11	2011-12	2012-13	CGR
Axis Bank Ltd.	4,54,374	7,89,900	7,89,900	7,89,900	9,77,285	16.55
City Union Bank Ltd.	9,35,006	10,17,603	10,17,603	12,59,621	13,74,614	15.61
Federal Bank Ltd.	11,746	1,43,165	1,43,165	1,78,431	2,68,912	92.97
HDFC Bank Ltd.	1,66,599	2,21,640	2,21,640	2,21,640	2,21,640	5.92
ICICI Bank Ltd.	12,09,100	13,41,700	13,41,700	17,14,723	19,12,000	29.10
Karur Vysya Bank Ltd.	10,27,771	10,91,678	10,91,678	12,66,776	14,15,644	8.21
Lakshmi Vilas Bank Ltd.	4,15,730	5,106	5,106	5,106	6,68,179	9.95
South Indian Bank Ltd.	1,51,572	1,96,692	1,96,692	2,41,457	2,59,150	13.63
Tamilnad Mercantile Bank Ltd.	37,81,100	46,03,972	46,03,972	46,03,972	63,78,792	16.57

**Source : Secondary Data**

Table 3.14 shows the growth of deposits of private sector banks in Tirunelveli district. The table discloses that the deposits of the Tamilnad Mercantile Bank Ltd. have increased from ₹37,81,100 in 2008-09 to ₹63,78,792 in 2012-13, the deposits of ICICI Bank Ltd. have also increased from ₹12,09,100 in 2008-09 to ₹19,12,000 in 2012-13. The deposits of Karur Vysya Bank Ltd. have increased from ₹ 10,27,771 in 2008-09 to ₹14,15,644 in 2012-13 and the deposits of City Union Bank Ltd. have increased from ₹9,35,006 in 2008-09 to ₹13,74,614 in 2012-13. It is further clear from table 3.14 that the growth of deposits of Tamilnad Mercantile Bank Ltd, ICICI Bank Ltd, Karur Vysya Bank Ltd and City Union Bank Ltd in Tirunelveli district has recorded a compound growth rate of 16.57, 29.10, 8.21 and 15.61 per cent respectively.



### 3.3.2 Growth of Advances in Private Sector Banks

The details of growth of advances of private sector banks in Tirunelveli district are presented in Table 3.15.

**TABLE 3.15**  
**GROWTH OF ADVANCES IN PRIVATE SECTOR BANKS**

Private sector banks	2008-09	2009-10	2010-11	2011-12	2012-13	CGR
Axis Bank Ltd.	3,66,358	9,62,473	14,11,000	14,11,000	16,10,577	39.70
City Union Bank Ltd.	4,08,268	3,91,074	8,81,121	8,80,043	10,18,633	30.19
Federal Bank Ltd.	73,819	84,534	97,427	1,07,825	3,25,250	37.84
HDFC Bank Ltd.	1,16,088	2,06,343	2,35,361	2,35,361	2,35,361	16.72
ICICI Bank Ltd.	30,61,200	29,79,000	23,67,700	2,39,99,629	32,83,800	71.85
Karur Vysya Bank Ltd.	6,34,761	7,15,120	11,23,102	17,06,781	19,04,213	35.89
Lakshmi Vilas Bank Ltd.	5,97,390	7,28,250	5,707	5,707	5,98,278	38.39
South Indian Bank Ltd.	1,30,465	2,14,775	3,10,711	4,00,606	5,89,761	43.91
Tamilnad Mercantile Bank Ltd.	29,06,100	31,71,800	45,06,538	45,06,538	89,97,468	29.84

**Source : Secondary Data**

Table 3.15 shows the growth of advances of private sector banks in Tirunelveli district. The table exhibits that the advances of the Tamilnad Mercantile Bank Ltd have increased from ₹29,06,100 in 2008-09 to ₹89,97,468 in 2012-13, the advances of ICICI Bank Ltd. have also increased from ₹30,61,200 in 2008-09 to ₹32,83,800 in 2012-13. The advances of Karur Vysya Bank Ltd have increased from ₹6,34,761 in 2008-09 to ₹19,04,213 in 2012-13 and the advances of City Union Bank Ltd have increased from ₹4,08,268 in 2008-09 to ₹10,18,633 in 2012-13. It is further clear from table that the growths of advances of Tamilnad Mercantile Bank Ltd., ICICI Bank Ltd, Karur Vysya Bank Ltd and City Union Bank Ltd. have recorded a compound growth rate of 29.84, 71.85, 35.89 and 30.19 per cent respectively.

### 3.3.3 Growth of Branches of Private Sector Banks in Rural Area

The details of growth of branches of private sector banks in rural areas in Tirunelveli District are shown in Table 3.16.

**TABLE 3.16**

#### **GROWTH OF BRANCHES OF PRIVATE SECTOR BANKS IN RURAL AREA**

<b>Private sector banks</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
Axis Bank Ltd.	2	2	2	2	2
City Union Bank Ltd.	0	0	0	0	0
Federal Bank Ltd.	0	0	0	0	0
HDFC Bank Ltd.	0	0	0	0	0
ICICI Bank Ltd.	7	7	7	7	7
Karur Vysya Bank Ltd.	0	0	0	0	0
Lakshmi Vilas Bank Ltd.	0	0	0	0	0
South Indian Bank Ltd.	0	0	0	0	0
Tamilnad Mercantile Bank Ltd.	8	8	8	10	10

**Source : Secondary Data**

Table 3.16 shows the growth of branches of private sector banks in rural areas in Tirunelveli district. The table discloses that the branches opened by Tamilnad Mercantile Bank Ltd have increased from 8 in 2008-09 to 10 branches in 2012-13, the branches of ICICI Bank Ltd has 7 branches in 2012-13, the branches of Axis Bank Ltd have 2 branches in 2012-13.

### 3.3.4 Growth of Branches of Private Sector Banks in Semi-Urban Area

The details of growth of branches of private sector banks in semi-urban areas in Tirunelveli District are shown in Table 3.17.

**TABLE 3.17**  
**GROWTH OF BRANCHES OF PRIVATE SECTOR BANKS IN**  
**SEMI-URBAN AREA**

Private sector banks	2008-09	2009-10	2010-11	2011-12	2012-13
Axis Bank Ltd.	0	0	0	0	2
City Union Bank Ltd.	0	0	0	1	6
Federal Bank Ltd.	0	0	0	3	3
HDFC Bank Ltd.	0	0	0	0	1
ICICI Bank Ltd.	2	2	2	2	2
Karur Vysya Bank Ltd.	2	2	2	4	6
Lakshmi Vilas Bank Ltd.	1	1	1	1	1
South Indian Bank Ltd.	0	0	0	0	1
Tamilnad Mercantile Bank Ltd.	5	5	5	8	8

**Source : Secondary Data**

Table 3.17 shows the growth of branches of private sector banks in semi-urban areas in Tirunelveli district. The table discloses that the branches opened by Tamilnad Mercantile Bank Ltd. have increased from 5 in 2008-09 to 8 branches in 2012-13, the branches opened by Karur Vysya Bank Ltd. have increased from 2 to 6 branches and the branches opened by City Union Bank Ltd have increased from 1 branch in 2011-12 to 6 branches in 2012-13.

### 3.3.5 Growth of Branches of Private Sector Banks in Urban Area

The details of growth of branches of private sector banks in urban areas in Tirunelveli District are shown in Table 3.18.

**TABLE 3.18**

#### **GROWTH OF BRANCHES OF PRIVATE SECTOR BANKS IN URBAN AREA**

<b>Private sector banks</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
Axis Bank Ltd.	1	1	1	1	0
City Union Bank Ltd.	1	1	2	2	1
Federal Bank Ltd.	1	1	1	1	1
HDFC Bank Ltd.	1	1	1	1	1
ICICI Bank Ltd.	0	0	0	0	0
Karur Vysya Bank Ltd.	1	1	1	1	1
Lakshmi Vilas Bank Ltd.	1	1	1	1	1
South Indian Bank Ltd.	1	1	1	1	1
Tamilnad Mercantile Bank Ltd.	1	1	1	1	1

**Source : Secondary Data**

Table 3.18 shows the growth of branches in urban areas in Tirunelveli district. The table reveals that the branches opened of Karur Vysya Bank Ltd have only one branch in 2012-13. The branches opened by City Union Bank Ltd have decreased from 2 to 1 branch, the branches of Lakshmi Vilas Bank Ltd branches only one branch in 2012.

### **3.4 HISTORY OF BANKING IN INDIA**

The banking system of India should not only be hassle free but it should be able to meet new challenges posed by the technology and any other external and internal factors. For the past three decades India's banking system has several outstanding achievements to its credit. The most striking is its extensive reach. It is no longer confined to only metropolitans or cosmopolitans in India. In fact, Indian banking system has reached even the remote corners of the country.

The government's regular policy for Indian bank since 1969 has paid rich dividends with the nationalization of 14 major private banks of India. The first bank in India, though conservative was established in 1786. From 1786 till today, the journey of Indian Banking System can be segregated into three distinct phases.

They are as mentioned below:

- Early phase from 1786 to 1969 of Indian Banks **(Phase I)**
- Nationalization of Indian Banks and up to 1991 prior to Indian Banking Sector Reforms. **(Phase II)**
- New phase of Indian Banking System with the advent of Indian Financial and Banking Sector Reforms after 1991. **(Phase III)**

The three Phases are listed below:

#### **Phase I**

The General Bank of India was set up in the year 1786 next Bank of Hindustan and Bengal Bank. The East India Company established Bank of Bengal (1809), Bank of Bombay (1840) and Bank of Madras (1843) as independent units and called it as

Presidency Banks. These three banks were amalgamated in 1920 and Imperial Bank of India was established which started as private shareholders banks, mostly Europeans shareholders.

In 1865 Allahabad Bank was established and first time exclusively by Indians, Punjab National Bank Ltd. was set up in 1894 with headquarters at Lahore. Between 1906 and 1913, Bank of India, Central Bank of India, Bank of Baroda, Canara Bank, Indian Bank, and Bank of Mysore were set up. Reserve Bank of India came in 1935.

During the first phase the growth was very slow and banks also experienced periodic failures between 1913 and 1948. There were approximately 1100 banks, mostly small. To streamline the functioning and activities of commercial banks, the Government of India came up with The Banking Companies Act, 1949 which was later changed to Banking Regulation Act 1949 as per amending Act of 1965 (Act No. 23 of 1965). Reserve Bank of India was vested with extensive powers for the supervision of banking in India as the Central Banking Authority.

During those day's public has lesser confidence in the banks, as an aftermath the deposit mobilization was slow. Abreast of it the savings bank facility provided by the Postal department was comparatively safer and people had more trust with post-office savings than the banks.

## **Phase II**

Government took major steps in this Indian Banking Sector Reform after independence. In 1955, it nationalized Imperial Bank of India with extensive banking facilities on a large scale especially in rural and semi-urban areas. It formed State Bank

of India to act as the principal agent of RBI and to handle banking transactions of the Union and State Governments all over the country.

Seven banks forming subsidiary of State Bank of India was nationalized in 1960 and on 19<sup>th</sup> July 1969 major process of nationalization was carried out. It was the effort of the then Prime Minister of India Mrs. Indira Gandhi. 14 major commercial banks in the country were nationalized. The Second phase of nationalization Indian Banking Sector Reform was carried out in 1980 with six more banks. This step brought 80 per cent of the banking segment in India under Government ownership.

The following are the steps taken by the Government of India to Regulate Banking Institutions in the Country:

- 1949: Enactment of Banking Regulation Act.
- 1955: Nationalization of State Bank of India.
- 1959: Nationalization of SBI subsidiaries.
- 1961: Insurance cover extended to deposits.
- 1969: Nationalization of 14 major banks.
- 1971: Creation of Credit Guarantee Corporation.
- 1975: Creation of Regional Rural Banks.
- 1980: Nationalization of six banks more.

After the nationalization of banks, the branches of the public sector bank in India rose to approximately 800 per cent in deposits and advances which took a huge jump by 11,000 per cent. Banking in the sunshine of Government ownership gave the public an implicit faith and immense confidence about the sustainability of these institutions.

### **Phase III**

This phase has introduced many more products and facilities in the banking sector in its reforms measure. In 1991, under the chairmanship of M Narasimham a committee was set up which worked for the liberalization of banking practices. The country is flooded with foreign banks and their ATM stations. Efforts are being put to give a satisfactory service to customers, Phone banking and net banking were introduced. The entire system became more convenient and swift and time is given more importance than money.

The financial system of India has shown a great deal of resilience. It has sheltered from any crisis triggered by any external macro-economic shock as other East Asian Countries suffered. This is all due to a flexible exchange rate regime, the foreign reserves are high, the capital account is not yet fully convertible, and banks and their customers had limited foreign exchange exposure.

The Reserve Banks of India with the drive of the technology initiatives in the banking sector has played important role in the implementation of the information technology. The foundation for large-scale induction of IT in the banking sector was provided by the recommendations of the committees headed by Dr. C. Rangarajan in 1984. The list of committees related to use of IT in Indian banking industry are listed below.<sup>6</sup>

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<sup>6</sup> *Committees recommended by modern banks based on technology* [www.rbi.in](http://www.rbi.in)



**TABLE 3.19**

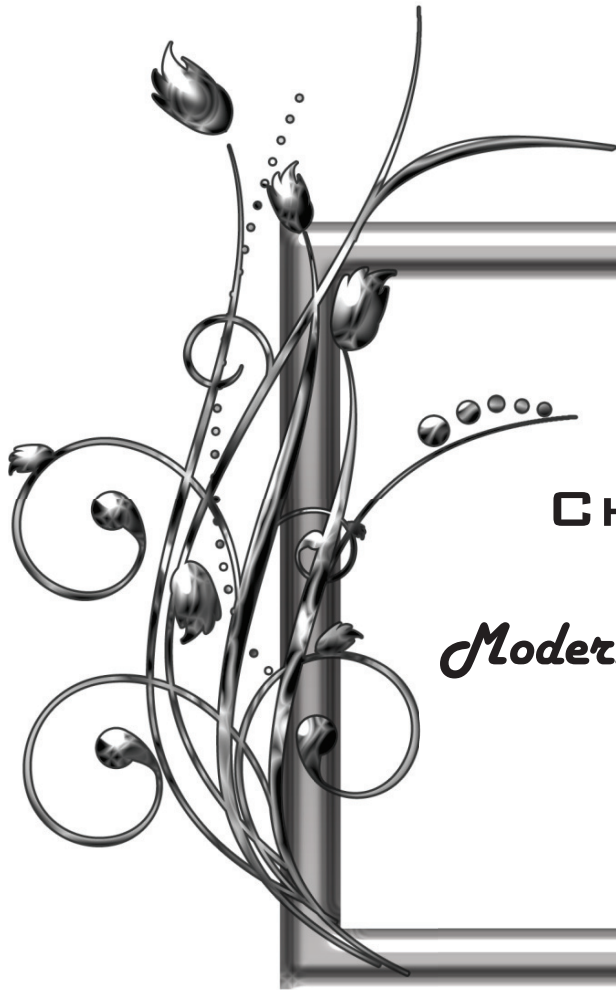
**COMMITTEES RELATED TO USE OF MODERN BANKING SERVICES IN  
INDIAN BANKING INDUSTRY**

<b>Year</b>	<b>Name of the Committee</b>	<b>Chairman</b>
1979	Committee on Consumer Services in Banks	R.K. Talwar
1982	Working Group to consider feasibility of introducing MICR/OCR Technology for Cheque Processing	Dr. Y.B. Damle
1984	Committee on Mechanisation in the Banking Industry	Dr. C. Rangarajan
1987	Committees on Communication Network for Banks and SWIFT implementation	Shri. T.N.A. Iyer
1988	Committee on Computerisation in Bank	Dr. C. Rangarajan
1990	Committee on Customer Service in the Banks.	M. N. Goiporia
1993	Ghosh Committee on Frauds and Malpractices in Banks	Shri. A. Ghosh
1994	Committee on Technology Issues relating to Payments System, Cheque Clearing and Securities Settlement in the Banking Industry	Shri. W.S.Saraf
1995	Committee for proposing Legislation on Electronic Funds Transfer and other Electronic Payments	Smt. K.S.Shere
1991 1998	Narshimhan Committee (I and II) The Committee on Banking Sector Reforms	Shree. R. Narshimhan
1996	Committee on Technology Upgradation on the Banking Sector	A. Vasudevan
1998	S. H. Khan Working Group	S. H. Khan
2000	Committee for Suggesting a Framework for Electronic Benefit Transfer	R.B. Barman
2001	Working Group on Internet Banking	S. R. Mittal
2001	Advisory Group on Payment and Settlement System	M.G. Bhide
2001	Expert Committee on Legal Aspects of Bank Frauds	N. L. Mitra
2002	Working Group on Electronic Money	Mr.Zarir J. Cama
2002	Committee on Payment Systems	Dr.R.H. Patil
2003	Working Group on Cheque Truncation and E-cheques	Dr.R.B. Barman
2004	Expert Group on Internet Deployment of Central Database Management System	A. Vaidyanathan
2005	Working Group on Regulatory Mechanism For Cards	R. Gandhi

<b>Year</b>	<b>Name of the Committee</b>	<b>Chairman</b>
2007	The Working Group on Preparing Guidelines For Access to Payment Systems	R. Gandhi
2008	The Working Group on Technology Up gradation of Regional Rural Banks	Shri. G. Srinivasan
2008	Working Group on IT support for Urban Cooperative Banks	R. Gandhi
2009	The Working Group To Review The Business Correspondent Model	P. Vijaya Bhaskar
2011	Working Group on information security, electronic banking, technology risk management, and cyber frauds	Shri. G. Gopalakrishna
2011	High Level Committee for Preparation of the Information Technology Vision Document 2011-2017	Dr. K.C. Chakrabarty
2012	Working Group report on Cloud computing option for Urban Cooperative Banks	Shri. A.K. Hirve - Member Secretary
2014	Report of the Technical Committee on Mobile Banking	Mr. B. Sambamurthy

***Source: Vijay Op.cit (2010) Edited by Author***

The chapter about the profile of the modern banking services in Tirunelveli district gives detailed information regarding profile of Tirunelveli and banking profile of Tirunelveli district. The banking profile helped the researcher to know the public and private sector banks in India and Tirunelveli district. The history of modern banking services helped the researcher to understand the growth of modern banking in the study area. In the light of these, the research her has got confidence over the practical aspects of the banks, their functions and other innovative prospects. The knowledge over modern banking services has helped the researcher to connect a model towards research work.



## CHAPTER - IV

### *Modern Banking Services in India*

## **CHAPTER - IV**

### **MODERN BANKING SERVICES IN INDIA - AN OVERVIEW**

#### **4.0 INTRODUCTION**

#### **4.1 MODERN BANKING SERVICES IN INDIA**

#### **4.2 FEATURES OF MODERN BANKING SERVICES**

#### **4.3 TYPES OF DELIVERY CHANNELS**

#### **4.4 CORE BANKING**

#### **4.5 ELECTRONIC FUND TRANSFER (EFT)**

#### **4.6 CLASSIFICATION OF MODERN BANKING SERVICES**

4.6.1 Object Based Services Through Customers

4.6.2 Object Based Services Through Banks

4.6.3 Customer Having a Modern Banking Services

4.6.4 Bank Based Modern Banking Services

## **CHAPTER - IV**

### **MODERN BANKING SERVICES IN INDIA – AN OVERVIEW**

#### **4.0 INTRODUCTION**

This chapter begins with general information on the Indian banking industry, concepts of modern banking and features of modern banking services. This chapter also presents prospects of modern banking services in India. Statistical data from Reserve Bank of India is also presented which show the prospects of the modern banking services in India.

#### **4.1 MODERN BANKING SERVICES IN INDIA**

India is considered among the top economies in the world, with tremendous potential for its banking sector to flourish. Banking sector is an important constituent of the Indian financial system, which plays a vital role in promoting business in urban as well as in rural areas in recent years. The banking sector reforms in India were started as a follow up measures of the liberalization and financial sector reforms in the country. The banking sector being the lifeline of the economy was treated with utmost importance in the financial sector reforms. The reforms were aimed at to make the Indian banking industry more competitive, versatile, efficient and productive. The reforms in the banking industry started in early 1990s have been continued till now and the Indian banks are changing towards modern banking. The Indian banking asset is totalled US\$ 1.8 trillion in Financial Year 2013 and is expected to touch US\$ 28.5 trillion in Financial Year 2025.<sup>1</sup>

Modernization in banking sector changing the banking services, products and delivery channels of banking system which depends upon man force, but modern

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<sup>1</sup> *Indian Banking Sector*, [www.ibdf.org](http://www.ibdf.org), retrieved on 7.2014.

banking is partially or totally machine and technology based banking services. All these developments are lead to facilitate customers' delight as well as operational efficiency of banks and reducing operational expenses of banking services.

Information technology is considered as the key driver for the changes taking place in financial services industry and especially in Indian banking industry. Banks can differ markedly in the sources of revenues. Some banks have been traditionally in forefront of harnessing technology in the India. The Indian banks changed dramatically since 1980 and the wave had started continuously with it. After the technology innovations, banks have brought about the speedy processing, wider network and enhance the customer access and awareness in the unprecedented scale. The development of technology banking provides more diversified and convenient services through the bank branches. The Reserve Bank of India encouraging the modern banking services to India. That was widely accepted and creating digital and IT revolution. The total modern banking users in the country are estimated to 90 lakh in 2003 and however, this is expected to grow exponentially more than 20 cores by 2020. Day by day the modern banking services are increasing and the Reserve Bank of India is playing important role, which lead to the core banking services to swift banking services.

#### **4.2 FEATURES OF MODERN BANKING SERVICES**

The following features are

##### **Round the clock service**

Modern banking services provide 24\*7 hours banking services. Customers can enjoy round the clock banking service through the self-service banking. They have freedom from thence about official time of bank.

**People free contact**

The modern banking transactions reduce the face to face contact of customer and services provider. Customers can use the banking services through technology banking. Technology banking means of Internet banking, Mobile banking, ATM, Credit card and so on. While, lack of face-to-face contact is biggest obstacle to modern banking because it is hard to identify right customer by ID and password than face to face identification.

**Homogeneity**

Traditional services have a heterogeneity concerns to the potential for high variability in the performance of services is special characteristics of the services it make difficult to establish standard. However, modern banking services are homogenous of one specific bank due to same types of channel and service specifications, while their actual performance may be differ by place and speed of internet connectivity.

**Cost effectiveness**

Modern banking services provide cost effectiveness to both customers and banks. Banks can deliver banking services through different channels at transaction costs far lower than traditional ways. It has been proved that modern banking channels are cheaper than traditional banking services.

**Accessibility**

Modern banking allows expanded customer contact through increased geographical reach and lower cost of delivery channels. It provides borderless banking services throughout the world where the internet connectivity is available. One can access and operate one's account from anywhere in the world.

#### **4.3 TYPES OF DELIVERY CHANNELS**

The rapid growth of the Indian economy has garnered across the globe and India has emerged as a favourable innovation in modern banking sector over the last few years. Modern banking services have enabled sophisticated development in the computerization and technology innovation. The innovation derives the economy to grow, prosper and transform in synchronies with the changes in the environment, both internal and external. In fact, the banking sector has witnessed radical transformation, based on many innovations in services, systems, business models, technology, governance and regulation. A liberalized and globalized financial infrastructure has provided an additional impetus to this gigantic effort.

The pervasive influence of technology has revolution in banking sector. The use of progressive and advanced method of services in banking industry is called “Modern Banking”. It is also known as E-banking, Electronic banking, Online banking, Virtual banking, Direct banking, Cyber banking and Technology banking. The modern technology has made it possible that one can do most banking transactions from any situation to even without stepping into a physical financial structure through modern banking services. The modern banking services including Automatic Teller Machine, Debit Card, Credit Card, Electronic Clearing service and Core Banking are the services controlled by RBI. These service transaction costs have crumbled over the astronomical brick and mortar structure by rapidly yielding ground to click and order electronic banking with a plethora of new products. Banking has become boundary less and virtual with a day and night model through automatic teller machine, It helps us to withdraw cash at any time, Internet banking has supports speedy transaction, mobile banking is a cheapest and latest technology, plastic cards are easy to pay bills, and NEFT, RTGS, SWIFT help us to transact the money within an international level and



its eliminate the inconvenient in operation. Modern banking services provide many proficient banking services to the customer.

The modern banking services are working belongs to the Core banking and Core banks are controlled by the National payment system. Where the diagram customer trying to access the core banking services like Mobile banking, Internet Banking, Electronic Clearing services, Demat, Tele banking, ATM, POS, EFTPOS, Debit card and Credit card are anytime anywhere services, Cheque truncation system, NEFT/RTGS, SWIFT services can be used by the customer when the financial institution available timings only. On modern banking services transactions are processing between banks, ATM, POS and EFTPOS through national payment system with electronic fund transfer. The mechanism of modern banking services can be explained with the help of the following diagram.

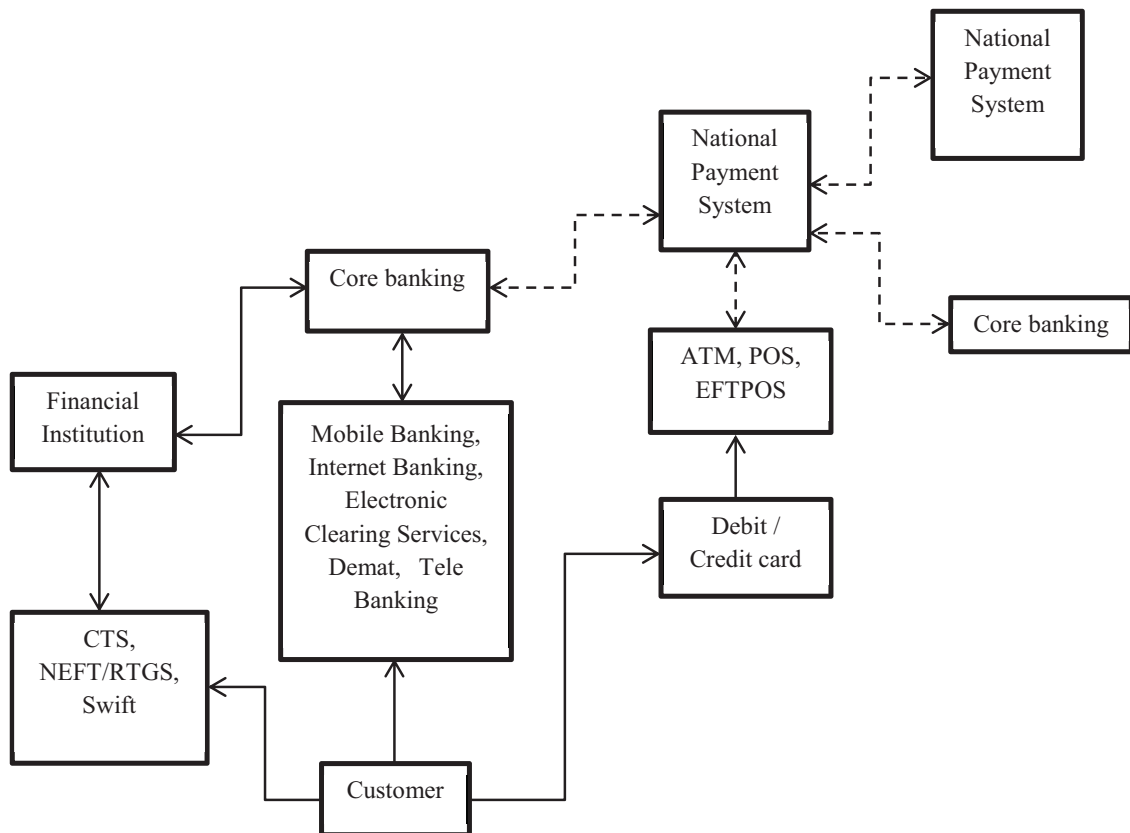


CHART 4.1

## MODERN BANKING SERVICES

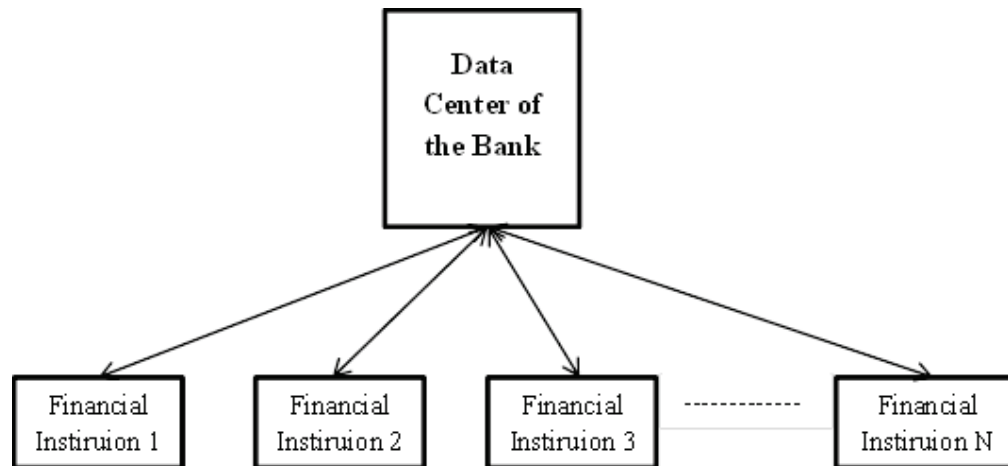
### 4.4 CORE BANKING

Core Banking (CB) is a **group of networking** bank branches, customers can operate their accounts and avail banking services from any branch banks on core banking solutions (CBS) network. **HSBC** is the first bank to opt for **core banking solution (CBS)** way back in **1999**<sup>2</sup>. Core banking system is the backend data processing application for processing all transactions that have occurred during the day and posting updated data on account balances on the main frame.

The advancement of technology has led to the way of doing business in banking. These technologies have cut down time, working simultaneously on different

<sup>2</sup> Core Banking, [www.hclinsys.in/HSPCB\\_bancmate\\_CBS\\_case study.pdf](http://www.hclinsys.in/HSPCB_bancmate_CBS_case study.pdf)

issues and increasing efficiently. Where computer software performs the transaction and these applications support the operation where core banking may stand for centralised online real time exchange. Normally CBS functions will include transaction account, loans, mortgages and payments. Banks may interconnect the services from communication line like telephone, satellites and internet. This is the new platform to change the way of banking. These applications also have the capability to address the needs of corporate customers, providing a comprehensive banking solution.<sup>3</sup> Thus the core banking is a step towards enhancing customer convenience through anywhere and anytime banking.



**CHART 4.2**  
**CORE BANKING**

The above diagram explained the core banking services. The centralized storage data's of a bank has been stored in data centre of the bank. The financial institutions and modern banking services of the banks are connected and access the data's from the data centre.

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<sup>3</sup> *Core Banking System*, [www.gather.com](http://www.gather.com), Retrieved on 8.14.2014

#### 4.5 ELECTRONIC FUND TRANSFER (EFT)

RBI has introduced **electronic fund transfer system** in **1997** which may be referred to as 'RBI EFT' system as per recommendations of the **electronic payment act 1995**. EFT system was introduced for **inter-city, intra-city and inter-bank fund transfer** mechanism by which can be transfer of fund between any bank branches to any other bank branch from one city to another designated city using EFT platform is possible.<sup>4</sup> The objective of the EFT system has been to establish a fund transfer and clearing in the banking sector throughout India and it reduces the paper based fund transfer and clearing system.<sup>5</sup>

#### 4.6 CLASSIFICATION OF MODERN BANKING SERVICES

Service Type	Customer Having	Customer Using Through Bank
<b>Objects</b>	Credit Card Debit Card	Automatic teller machine Point of Sale
<b>Services</b>	Mobile Banking Internet Banking Tele Banking Electronic Clearing Service Dematisation	Cheque Truncation System National electronic fund transfer Real Time Gross Settlement SWIFT

*Source: Designed by Author*

##### 4.6.1 Object Based Services Through Customers

###### a) Credit Card

A credit card is a **plastic card** with a strip invented with the intention to simplify the complicated banking process. A card which can be used to obtain cash,

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<sup>4</sup> GuruSamy,S. (2010),Banking Theory law And Practices,2<sup>nd</sup> Edition ,Tata McGraw-Hill Publishing Company Ltd., New Delhi, Pp153-167.

<sup>5</sup> Sundaram, K.P.M,Varshney, P.N (2014), *Banking Theory Law and Practice*, Pp3-6.

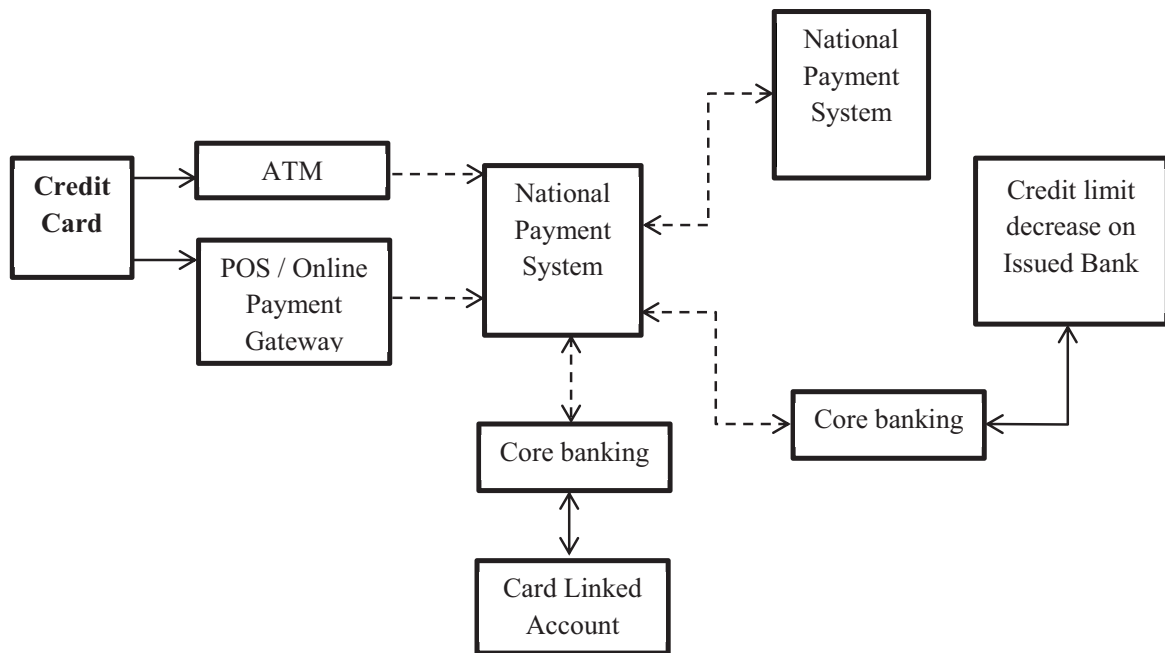
goods, or services up to **stipulated credit limit**. That is called credit card.<sup>6</sup> Most of the credit card printed as **CR-80** size and **0.33** thicknesses. It is considered as standard. These cards are **durable** and can be embossed and encode. It will appear different colours to like grey, black, golden colour too. In **1950**, the modern credit card was introduced in **America by Frank Menomara** for hotel payment.

The supplier is later paid by the credit card company which in due course is reimbursed by the credit card holder who will be **charged interest** at the end of the credit period if money still owes. The credit card is a payment card issued to users as a system of payment. It allows the cardholder to pay for goods and services based on the holder's promise to pay for them. The issuer of the card creates a revolving account and grants a line of credit limit to the consumer (or the user) from which the user can borrow money for payment to a merchant or as a cash advance to the user.

The credit card is used among ATMs, Point of Sale, and Online Payment Gateway Services. The services have forwarded the information of the credit card to the National Payment System. The national payment system processes the transactions from the credit card issued bank through core banking. The transaction details stored to the credit card linked account through their core banking. If, the credit card is an international card, the national payment system is connecting to another country's national payment system and done the above processes.

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<sup>6</sup> *Credit Card Meanings*, credit card .com, Retrieved on 122.4.2013



**CHART 4.3**  
**CREDIT CARD**

#### **b) Debit Card**

A debit card is a **plastic card** which provides an alternative payment method to cash when making purchases. It is also known as **bank cards, check card, and electronic card.**<sup>7</sup> A debit card is used at an ATM or point of sale (POS) terminal that facilitate a customer to have funds straight debited from the customer's bank account. The debit cards usually allow for instant withdrawal of cash, acting as the ATM card for withdrawing cash. Most of the banks issue Visa debit cards, while some banks issue Maestro cards. The debit card transactions are routed through the Visa or Master Card networks rather than directly by the issuing bank.

There are two types of debit cards:

<sup>7</sup> *Meaning of Debit Card*, [http://wiki.answers.com/Q/What\\_is\\_the\\_meaning\\_of\\_a\\_debit\\_card](http://wiki.answers.com/Q/What_is_the_meaning_of_a_debit_card)

- **Online debit card:** Require the card to be present with the card holder entering a PIN to complete the sale.<sup>8</sup>
- **Off-line debit card:** Off line transactions may or may not be authorized by the card holder. However, now most of the banks are providing online debit cards use of the card based payment system was introduced during **1960s** in India.<sup>9</sup>

**TABLE 4.1**  
**CARD PAYMENT**

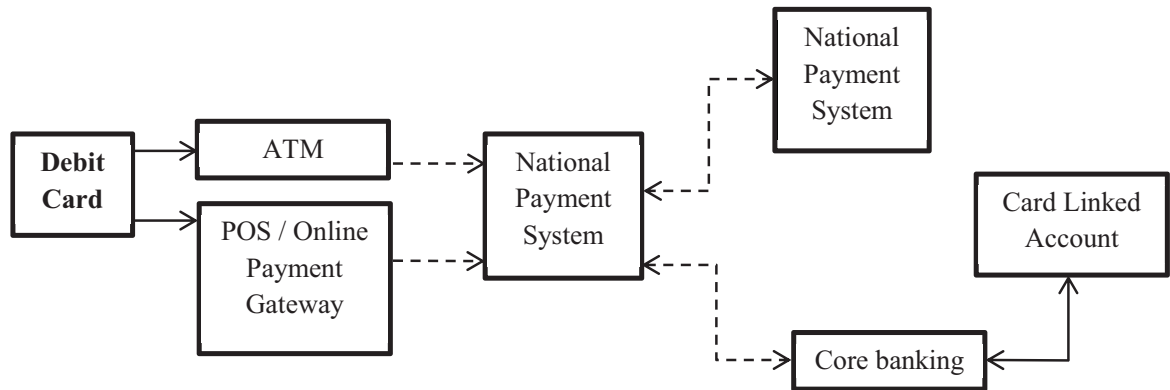
	<b>(POS Transaction) (Amount in Billion)</b>	
<b>Year</b>	<b>Credit Cards</b>	<b>Debit Cards</b>
2006 – 2007	170	60
2007 – 2008	228	88
2008 – 2009	260	128
2009 – 2010	234	170
2010 – 2011	265	237
2011 – 2012	320	328
2012 – 2013	397	469

*Source: RBI, statistical tables in trend and progress in 2006-2013*

The card base as well as the usages has picked up during the last seven years drastically. See the table 4. In the year of 2006-2013 credit card transactions have increased from 170 billion to 397 billion and debit card based transactions have increased from 60 billion to 469 billion.

<sup>8</sup> *Types of debit card*, [www.en.wikipedia.com](http://www.en.wikipedia.com),

<sup>9</sup> *History of debit card*, [www.mint.com](http://www.mint.com)



**CHART 4.4**  
**DEBIT CARD**

#### 4.6.2 Object Based Services Through Banks

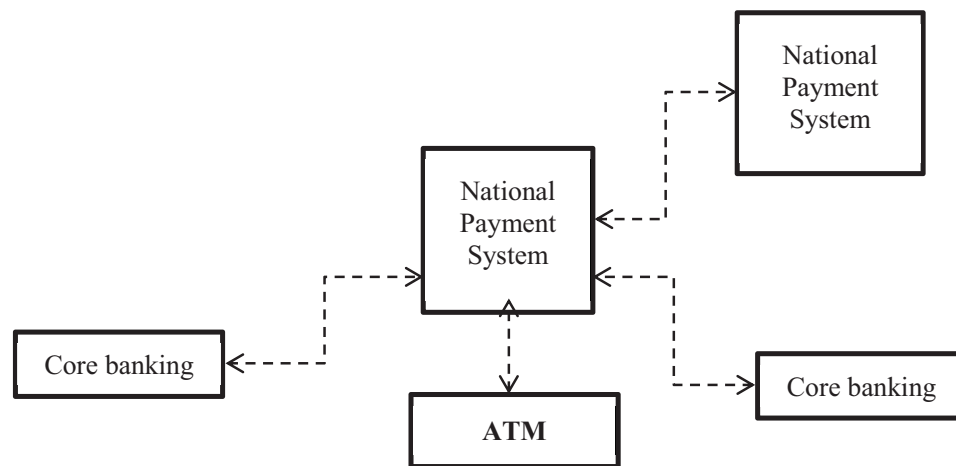
##### a) Automatic Teller Machine

Automatic Teller Machine (ATM) is an electronic machine. It is otherwise called Robotic Teller, Money Machines, Cash Machines, which works throughout the day and night. The history of ATM can be traced back to the 1960s, when the first ATM machine was invented by **John Shepherd-Barron** who was the managing director of **De La Rue** Instruments. The machine was used by Barclays Bank on 27<sup>th</sup> June 1967. Afterwards, **Mr. Good Fellow** designed a system which accepted a machine readable encrypted card, to which he added a numerical keypad, then it is called as an **Automatic cash dispenser machine**. In India the first ATM was introduced by **Hong Kong** and **Shanghai Banking Corporation** (HSBA) in the year of **1987**. ATM started out as cash withdrawal machines, but nowadays it has played a multi role in the modern banking sector.

In 2011, there were **16 lakh** ATMs throughout the world. An ATM machine connected to a data system and the national payment system activated by a bank



customer to obtain cash with draws and other banking services. An ATM card is in build with debit and credit cards. The ATM linked to the national payment system and national financial switch.<sup>10</sup> In ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe that contains a unique card number. The authentication is provided by the customer entering a **Personal Identification Number** (PIN). Then only the customers can access their bank accounts in order to make cash withdrawals and checking balance of their account. The ATM machine is continually being enhanced with a tough-screen and advanced transaction.



**CHART 4.5**  
**AUTOMATIC TELLER MACHINE**

<sup>10</sup> National Financial Switch (NFS) is the largest network of shared automated teller machines (ATMs) in India. It was designed, developed and deployed by the Institute for Development and Research in Banking Technology (IDRBT) in 2004, with the goal of inter-connecting the ATMs in the country and facilitating convenience banking for the average Indian. It is run by the National Payments Corporation of India (NPCI).

TABLE 4.2

## ATM CENTRES ESTABLISHED BY COMMERCIAL BANKS IN INDIA

(Numbers in Billion)				
Year	Banking Sector	On-site	Off-site	Total
2006 – 2007	Public	10,289	6,040	16,329
	Private	4,258	5,541	9,799
2007 – 2008	Public	12902	8886	21,788
	Private	5315	6652	11,967
2008 – 2009	Public	17379	9898	27,277
	Private	6996	8324	15,320
2009 – 2010	Public	23797	16,883	40,680
	Private	8,603	9,844	18,447
2010 – 2011	Public	29,795	9,692	39,487
	Private	10,648	13,003	23,651
2011 – 2012	Public	34,012	24,181	58,193
	Private	13,249	22,830	36,079
2012 – 2013	Public	40,241	29,411	69,652
	Private	15,236	27,865	43,101

*Source: RBI Trend and Progress 2006-2013*

Bank of India was first bank to introduced ATM in **Bombay** in **1988** followed by **Vijaya Bank** at **Delhi** in **1989** and then after most of commercial banks have started their ATM service facilities.

As on 2006 the public sector banks, there are 16,329 ATMs totally. On-site 10,289 ATM, off-site 6,040 ATM installed in India. In private sector banks totally 9,799 ATMs, online ATMs are 4,258, offline ATMs 5,541 in the year of 2006 respectively. Now a days it has increasing in public sector banks totally 69,652. On-site ATMs 40, 241 and off-sites ATMs 29,411. In private sector banks 43,101 on-site ATMs 40,241, off-site ATMs 29,411 respectively.

## b) Point of Sale

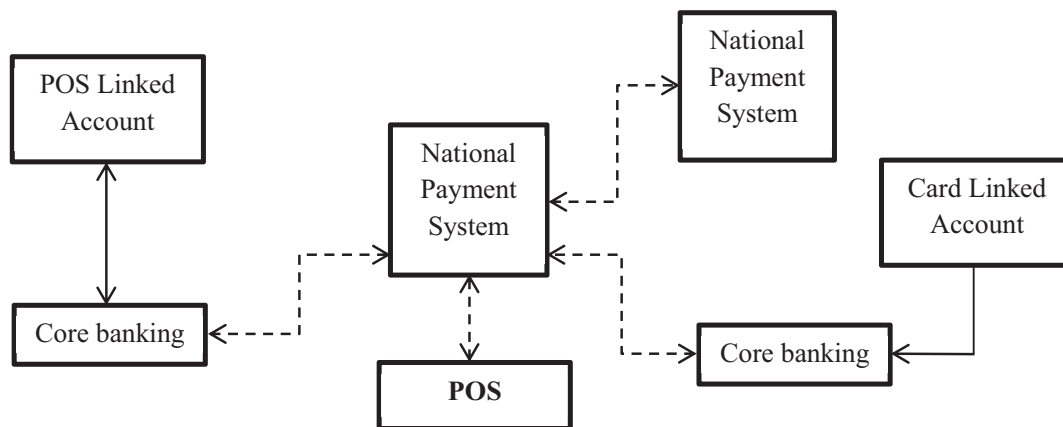
A Point of Sale was introduced in **1974** for **McDonalds' Restaurants** after in **1992 Martin Goodwin** and **Bobhenry** created the first point of sale were introduced in Microsoft windows platform.<sup>11</sup> A Point of sale (POS) is the method for paying for goods or services without needing to carry cash. POS is an electronic payment system involving electronic funds transfers based on the use of payment cards, such as debit or credit cards, at terminals located at points of sale. When the customer confirms the purchase, either by signature or security PIN, the POS equipment contacts the store's bank electronically about the transaction. A message is also sent to the customer's bank. Unless there is reason for the POS transaction not to be completed, the funds will then be transferred between the two accounts. The POS transaction takes a matter of only a few seconds.

Before the POS customer has had the goods put into a bag, the POS transaction will be complete. Confirmation of the POS transaction is sent to the store and passed on to the customer in the form of a printed POS transaction record. POS customers have the option of asking the store for cash in addition to the purchases. Now the POS was more advanced because it was used as **cloud based POS** (online POS) at **2000**.<sup>12</sup> This has the advantage for the customer of saving a trip to a bank or cash machine, and it also reduces bank charges as only one POS transaction is counted. Debit card or Credit card where swiped on point of sale. Point of sale processed the card and sends their details, to the national payment system and gets the given amount from the Card linked account to the point of sale linked account through the core banking.

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<sup>11</sup> *Point of Sale*, [www.wikipedia.com](http://www.wikipedia.com), retrieved on 6.30.2014 and [www.rbi.com/faq](http://www.rbi.com/faq)

<sup>12</sup> The Online POS System Revolution, [small business bonfire.com](http://smallbusinessbonfire.com), retrieved on 1.12.2012



**CHART 4.6**  
**POINT OF SALE**

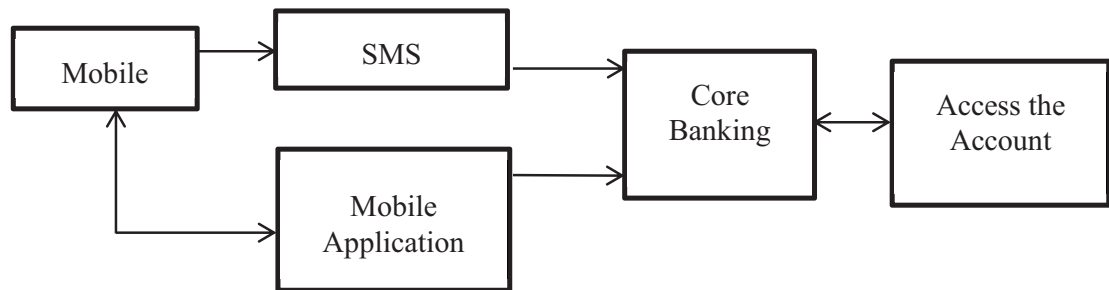
#### **4.6.3 Customer Having a Modern Banking Services**

##### **a) Mobile Banking**

Mobile banking was introduced in **1999** in **European countries** are using this service after 2010. It (also known as M-Banking, m-banking, SMS Banking) is a term used for performing balance checks, account transactions, payments and so on via a mobile device such as a mobile phone. Mobile banking is a way for the customer to perform banking actions on his or her cell phone or other mobile device. The amount of transaction on cell phone or smart phone depending on the banking institution. Some banks offer only the option of text alerts, which are messages sent to cell phone that alert to activity on account such as deposits, withdrawals, and ATM or credit card use. With the combination of two most recent technological advancements internet and mobile phone, a new service (mobile data service) is thus enabled and the first such wireless internet commercial transaction is performed by the banking industry.<sup>13</sup>

<sup>13</sup> *Mobile banking in India*, market, report, www. Pluggd.in, 297.

According to RBI data the total of **4.7 Crore** mobile transaction took place in the year of 2012 November in India ranked at **21<sup>st</sup>** almost **34** countries on **2013**.<sup>14</sup> We can use the mobile banking through SMS and Mobile application. To send SMS and get details from the account through core banking to mobile. To use mobile application and process the bank processes on core banking to the account.



**CHART 4.7**

## **MOBILE BANKING**

- **Mobile banking via Text Messages**

Mobile text gives the ability to access the eligible account from mobile phone or device via text messaging<sup>15</sup>.

- **Mobile Banking via web**

Mobile web gives access to online website of using the mobile web browser on a particular bank website.

- **Mobile Banking using via Mobile Application**

The particular bank provides or designed for the smart phone application. The mobile application gives fast access to a full range of banking service by using the phone. The IMPS<sup>16</sup> (Immediate Payment Services) is an instant interbank fund transfer

<sup>14</sup> *Mobile Banking*, [www.business today.in](http://www.business today.in), Retrieved on 1.25.2013.

<sup>15</sup> *Mobile Banking*, [www.statebank.com](http://www.statebank.com)

<sup>16</sup> *Immediate Payment Services*, [www.vijayabank.com](http://www.vijayabank.com)

services through mobile phone under the aegis of **National Payment Corporation of India**. IMPS facilitates the customer to use mobile instrument as a channel for accessing bank account and remitted fund there from the **seven digit MMID** number provided by **IMPS**.

#### **b) Internet Banking**

Online banking was first introduced in the early 1980s in **New York** by **Mary J. Cronin**, after in Atlanta and it opened for business in **October 1995**. In **1998**, it was acquired by the **Royal Bank Financial Group**, Canada. Internet banking not limited to the **USA**, many banks in the developed and developing countries are using this technology. The internet banking is otherwise called Electronic banking, Virtual banking and Online banking. Only **1** per cent are the internet users did the transaction in **1998**. This was increased **16.7** per cent in the year of **2011**.<sup>17</sup>

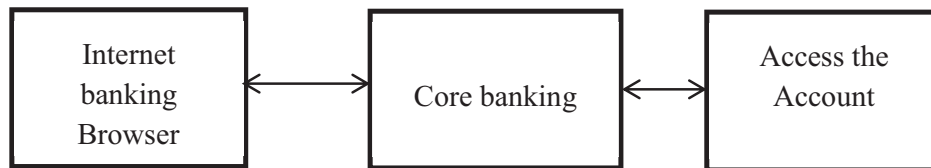
Internet is a networking of computers. Internet banking is a networking operations can be performed through the personal computer without physically visiting the branch bank. It is not a single network, through a global interconnected networks providing free exchange of information. ICICI Bank is the first one to have introduced internet banking for a limited range of services. After ICICI, Citi Bank, Indus Ind Bank and HDFC Bank were the early ones to adopt the technology in **1999**. Lately, many nationalized banks and scheduled commercial banks have taken a lead in this area. The technology is gradually spreading to the masses especially at urban and metropolitan cities. These banks providing the basic services are accounted enquiry, details of last few transactions, bill payments etc.<sup>18</sup> Internet banking provides

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<sup>17</sup> *Internet Banking Users*, www.rbi.org retrieved on 6.22.2011

<sup>18</sup> Gurusamy, S. (2010), *Banking Theory Law And Practices*, 2<sup>nd</sup> Edition, Tata Mcgraw-Hill Publishing Company Ltd, New Delhi

Certain benefits to the banker as well as reduced cost of provision of services, saving on manpower, increased productivity and opportunity to the new customers.<sup>19</sup> Access the bank website through the internet browser access the bank account and instigate the banking processes through the core banking.



**CHART 4.8**  
**INTERNET BANKING**

### **c) Electronic Clearing Services**

In **1968**, the **Bankers Automated Clearing Service (BACS)** set up the interbank computer bureau to reduce the hub of clearing transaction. Then MICR, ECS, debit and credit clearing services and national electronic clearing services are now available to bankers and customers both as clearing mechanisms. ECS scheme operated by the RBI since **1996-1997**, a new variant of ECS styled National Electronic Clearing Service was introduced in **September 2008**.

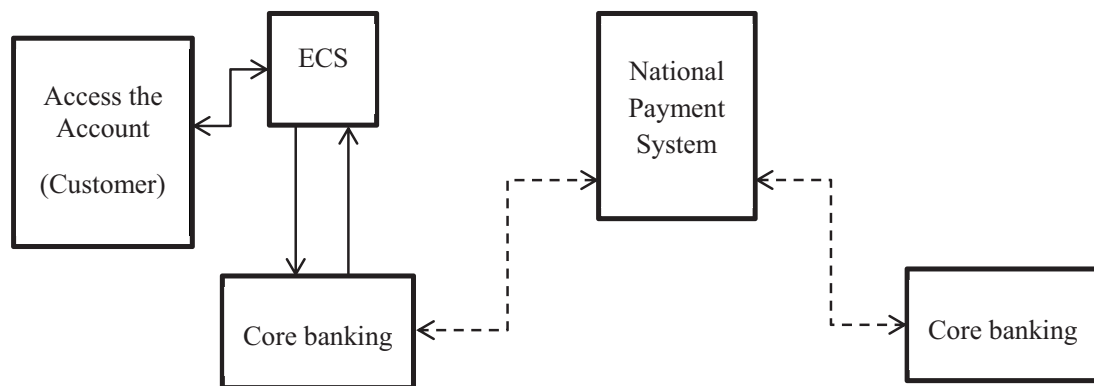
An Electronic Clearing Service scheme is an **electronic mode** of funds transfer from one bank account to another. It is a payment mechanism based on instrument and to facilitate bulk payments through electronic mode.<sup>20</sup> It can be used by institutions for making payments such as distribution of dividend, interest, salary and pension among others. It can also be used to pay bills and other charges such as telephone, electricity, water or for making equated monthly instalment payments on loans as well as SIP

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<sup>19</sup> Natarajan, S. (2010), *Indian Banking*, S. Chand Company Ltd, New Delhi

<sup>20</sup> *ECS Meaning*, [www.pnbindia.in](http://www.pnbindia.in)

investments. ECS can be used for both credit and debit purposes<sup>21</sup>. The RBI has deregulated the charges levied by sponsor banks from user bank on **July 1<sup>st</sup> 2011**. The originating banks are required to pay nominal charges of 25 paise to 50 paise for transaction to a clearing house and destination bank. There are 15 centres were managed clearing house 21 centres where SBI managed ECS on behalf of other centre where public sector banks are ECS on behalf of RBI.



**CHART 4.9**

### **ELECTRONIC CLEARING SERVICE**

Essentially, ECS facilitates bulk transfer of money from one bank account too many bank accounts or vice versa.

There are two variants are

- **ECS Credit**

ECS (credit) used by institution for affording credit to a large number of beneficiaries (for instance, employees, investors etc.) having accounts with bank branches at various locations by raising a single debit to the bank account of the user institution. ECS Credit enables payment of amounts towards distribution of dividend, interest, salary, pension, etc., of the user institution.

<sup>21</sup>*Electronic Clearing Services*, [www.rediff.com](http://www.rediff.com), updated on July 19-2011



- **ECS Debit**

ECS (Debit) is used for raising debits to a large number of accounts maintained with bank branches at various locations within the jurisdiction of an ECS centres by raising a single debit to an account of a bank. ECS (debit) is automated method of periodic or repetitive payment which provides an option to directly through customers' bank account. ECS (debit) transactions like collection of payment for telephone, electricity, water bills, chess or tax collections, loan instalment repayments, periodic investments in mutual funds, insurance premium and so on.<sup>22</sup>.

**TABLE 4.3**  
**ELECTRONIC CLEARING SERVICES (ECS)**  
**(Numbers in Billion)**

<b>Year</b>	<b>Credit</b>	<b>Debit</b>
2006 – 2007	69	75
2007 – 2008	78	127
2008 – 2009	88	160
2009 – 2010	98	149
2010 – 2011	117	157
2011 – 2012	122	165
2012 – 2013	122	177

*Source: RBI Trend and Progress, 2006-2013*

The RBI report shows that there has been significant growth in the ECS transaction in India since its inception. At the end of the March 2006 there is electronic clearing service credit 69 billion is increased from 122 billion in 2012-13. ECS based on debit transaction was increased 75 billion to 177 billion in 2013.

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<sup>22</sup>ECS Credit And Debit, [www.axis bank.com](http://www.axis bank.com)

### a) Dematerialisation

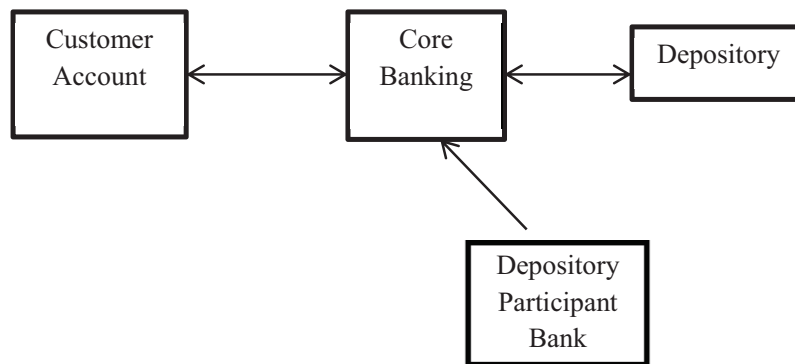
Dematerialisation is the process of converting **physical shares** (share certificates) into an **electronic form**. Shares once converted into dematerialised form are held in a Demat account. The investor takes physical possession of certificates. A Dematerialized account is opened by the investor while registering with an investment broker (or sub-broker). The Dematerialized account number is quoted for all transactions to enable electronic settlements of trades to take place. Every shareholder will have a Dematerialized account for the purpose of transacting shares. At present two Depositories viz. **National Securities Depository Limited** (NSDL) and **Central Depository Services Limited** (CDSL) are registered with **SEBI**. Currently, the National Securities Depository Ltd (NSDL) holds over **10.21 million** Demat accounts while Central Depository Services Ltd (CDSL) holds nearly **8 million** accounts.

Access to the Dematerialized account requires an internet password and a transaction password.<sup>23</sup> The **SEBI** issued by a user will have different **ISINs**.<sup>24</sup> Transfers or purchases of securities can then be initiated. Purchases and sales of securities in the Dematerialized account are automatically made once transactions are confirmed and completed. A depository is a place where the stocks of investors are held in electronic form. The depository has agents who are called **depository participants** (DPs).

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<sup>23</sup> ISIN (International Securities Identification Number) is a unique 12 digit alpha-numeric identification number allotted for a security (E.g. - INE383C01018).

<sup>24</sup> *Meaning of Dematisation*, [www.sebi.org.in](http://www.sebi.org.in)



**CHART 4.10**  
**DEMATERIALISATION**

#### **b) Tele Banking**

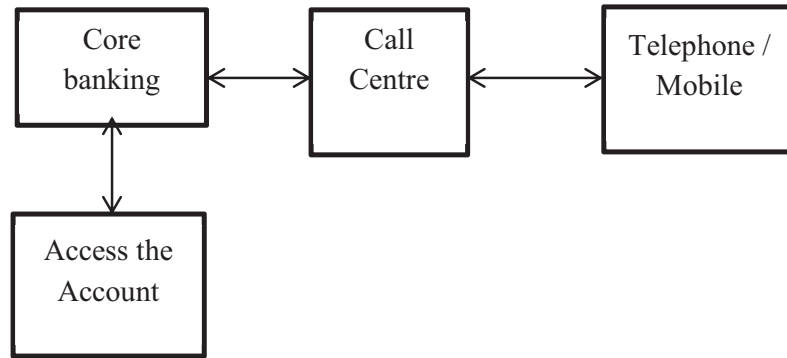
Tele banking is another innovative form of modern banking introduced by banks through which banking services or channels are rendered through telephone to its customers<sup>25</sup>. Telephone banking is otherwise called phone banking. To access telephone banking, the customer would call the **special phone number** set up by the financial institution. The service can be provided using an automated system, using speech recognition and **DTMF** technology or by live customer service representatives. A customer can carry out transactions by accessing account through telephone at any time or from any place throughout the country with the same Telebanking **PIN**. Tele banking is offered by the banks through a technology known as **Interactive Voice Response System (IVRS)**<sup>26</sup>.

Tele Banking facilitates the customer to do entire **non-cash related banking** on the telephone. The software provided in the interactive machine with the computer

<sup>25</sup> Sharma, Abhinav Sharma, M.C. (2011), *Role of Information Technology in Indian Banking Sector*, International Journal in Multidisciplinary and Academic Research (SSIJMAR), Vol-2(1), January-February (ISSN 2278 – 5973), Pp 3.

<sup>26</sup> Joshua, A.J. (2009), *“Adoption of Technology-Enabled Banking Self-Services: Antecedents and consequences”*, A Thesis Submitted to the Degree of doctor of Philosophy under The Faculty of Social Sciences, School of Management Studies, Cochin University of Science And Technology.

asking him to dial the code number of services required by him and suitably answers him. Call centres play a pivotal role in the realm of the telephone banking. Call Centres use interactive conversations with remotely located customers to deliver services to them and ascertain their needs more precisely<sup>27</sup>. This is the only telephone answering system and now Tele-banking.



**CHART 4.11**  
**TELE BANKING**

#### **4.6.4 Bank Based Modern Banking Services**

##### **a) Cheque Truncation System**

Cheque Truncation is the process of stopping the flow of the physical Cheque issued by a drawer at some point with the presenting bank en-route to the drawee bank branch.<sup>28</sup> The Reserve Bank has implemented CTS in the National Capital Region (NCR), **New Delhi, Chennai and Mumbai** with effect from February 1, 2008, September 24, 2011 and April 27, 2013 respectively. After migration of the entire cheque volume from **MICR** system to CTS, the traditional MICR-based cheque

<sup>27</sup> Gurusamy, S. (2010), *Banking Theory Law and Practice*, 2<sup>nd</sup> Edition, Tata MC Graw-Hill Publishing Company Ltd, New Delhi, Pp-119

<sup>28</sup> *Cheque Truncation System*, [www.rbi.org.in](http://www.rbi.org.in), 6.16.2014

processing has been discontinued in these three locations. Accordingly, Grid based CTS clearing has been launched in these three locations.<sup>29</sup>

Based on the advantages realised by the stakeholders and the experience gained from the roll-out in these centres, it has been decided to operationalize CTS across the country. In its place an **electronic image** of the cheque is transmitted to the drawee branch by the clearing house, along with relevant information like data on the MICR band, date of presentation and presenting bank. Cheque truncation thus removes the need to move the physical instruments across branches, other than in exceptional circumstances for clearing purposes.

This effectively eliminates the associated cost of movement of the physical cheque, reduces the time required for their collection and brings elegance to the entire activity of cheque processing. The physical movement of instruments is stopped and no geographical restrictions as to jurisdiction reduction of operational risk and paper clearing risk. Cheque Truncation speeds up the process of collection of cheque resulting in better service to customers and reduces the scope for clearing-related frauds or loss of instruments in transit, lowers the cost of collection of cheque, and removes reconciliation-related and logistics-related problems, thus benefitting the system as a whole.

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<sup>29</sup> *RBI Documents*, <http://rbidocs.rbi.org.in/rdocs/content/pdfs/74751.pdf>

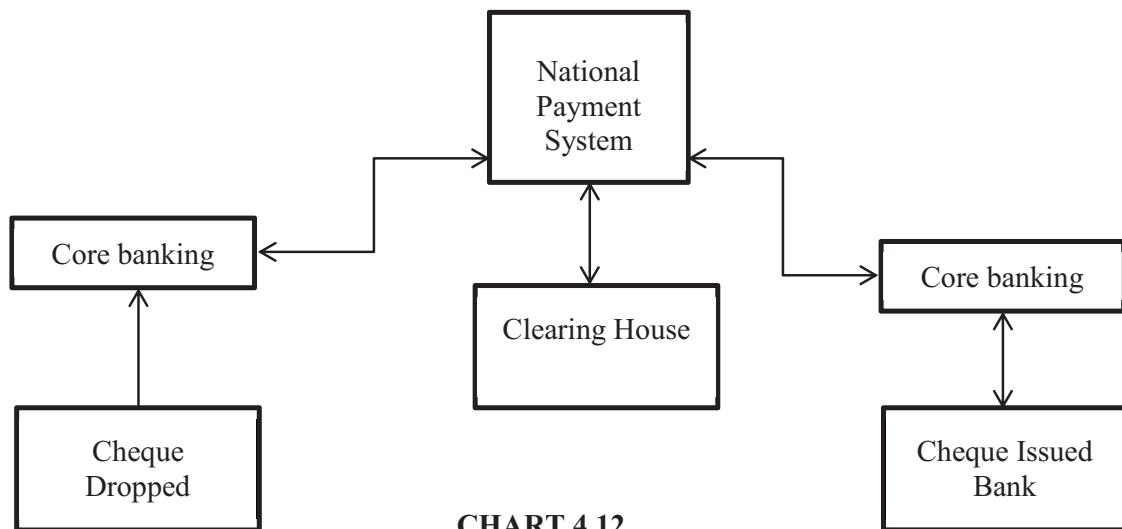


CHART 4.12

### CHEQUE TRUNCATION SYSTEM

#### b) National Electronic Fund Transfer (NEFT)

National Electronic Fund Transfer (NEFT) is introduced in **2005 to 2006**.<sup>30</sup> It is a nationwide payment system facilitating one-to-one funds transfers. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme.<sup>31</sup>

It is a system of transfer between two banks on **net settlement basis**. This means that each individual transfer from one account to another account is not settled or processed at that same moment, it's done in batches. A lot of transactions are settled in one go in each batches.

National Electronic Fund Transfer (NEFT) is an online system for **transferring funds** of Indian Financial Institution. This facility is used mainly to transfer funds

<sup>30</sup> Sawant, B.S. (2011), "Technological Developments in Indian Banking Sector", Vol. (9), Sep, Pp 1-4, ISSN No-2230-7850.

<sup>31</sup> National Electronic Fund Transfer, www.rbi.org.faq

below ₹ 2,00,000.<sup>32</sup> Among the major applications identified for porting on the **INFINET** in the initial phase are e-mail, Electronic Clearing Service - Credit and Debit.

It is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporate can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme. For being part of the NEFT funds transfer network, a bank branch has to be NEFT- enabled.<sup>33</sup> Indian financial service code (IFSC) is used the NEFT system.

**TABLE 4.4**

**NATIONAL ELECTRONIC FUND TRANSFER**

<b>Amount</b>	<b>Charges (Numbers in billion)</b>
Up to 10,000	2.5
Above 10,000 – 1 lacks	5
Above 1 lacks, Up to 2 lacks	15
Above 2 lacks	25

*Source: www.rbi.in (2013-14)*

**c) Real Time Gross Settlement System (RTGS)**

Real Time Gross Settlement is **money transfer** between two banks in **real time basis**, which means the moment one bank account transfer the money to another bank account, it is settled at that time itself on real time basis between the banks, but the beneficiary bank has to make the final settlement to the bank account within two

<sup>32</sup> *Transaction of National Electronic Fund Transfer*, www.indianbank.in

<sup>33</sup> Megha Jain and Popli, G.S. (2011) “*Role of Information Technology in the Development of Banking Sector in India*”, Journal of Technology Science, Pp 12.

hours of getting the money. RTGS is the fastest possible money transfer between two banks in India through a secured channel<sup>34</sup>.

Real Time Gross Settlement system introduced in India since **March 2004**, is a system through which electronic instructions can be given by banks to transfer funds from their account to the account of another bank. The RTGS is primary meant for large value of transaction not less than 2 lakhs.<sup>35</sup> The RTGS system is maintained and operated by the RBI and provides a means of efficient and faster funds transfer among banks facilitating their financial operations. As the name suggests, funds transfer between banks takes place on a 'Real Time' basis. Therefore, money can reach the beneficiary instantaneously and the beneficiary's bank has the responsibility to credit the beneficiary's account within two hours.

**TABLE 4.5**  
**RTGS CHARGES**

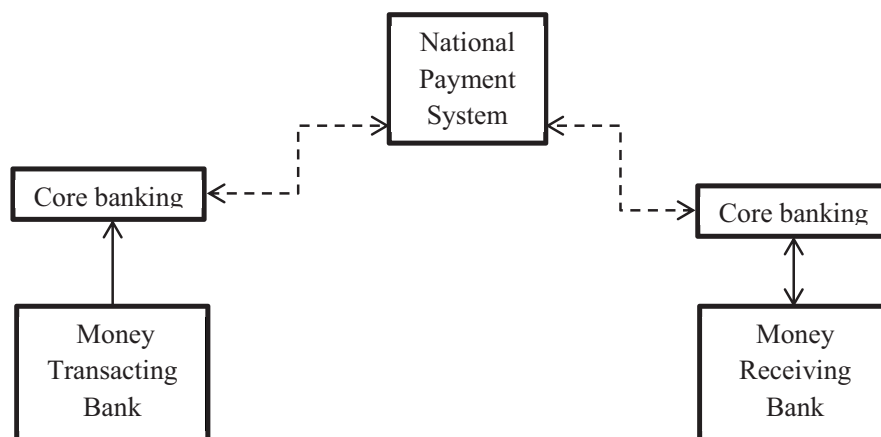
<b>Timings</b>	<b>Amount (lacks)</b>	<b>Charges (Rs)</b>
9 am – 12 noon	2 – 5	25
	Above 5	50
After 12 noon – 3:30 pm (12:30 pm on Saturday)	2 – 5	26
	Above 5	51
After 3:30 pm	2 – 5	30
	Above 5	55

*Source: www.rbi.in retrieved on 2013*

<sup>34</sup> <http://www.differencebetween.net/business/finance-business-2/difference-between-rtgs-and-neft/#ixzz2PWNdyyOF>

<sup>35</sup> *History of RTGS*, rbi.org.in/scripts/faqview.aspx?ig=65





**CHART 4.13**

**NATIONAL ELECTRONIC FUND TRANSFER**

**TABLE 4.6**

**NATIONAL ELECTRONIC FUND TRANSFER AND REAL TIME  
GROSS SETTLEMENT (Numbers in billion)**

Year	NEFT	RTGS
2006 – 2007	5	-
2007 – 2008	13	-
2008 – 2009	32	-
2009 – 2010	66	33
2010 – 2011	132	49
2011 – 2012	226	55
2012 – 2013	394	69

***Source: RBI, Annual Report on 2006-2013***

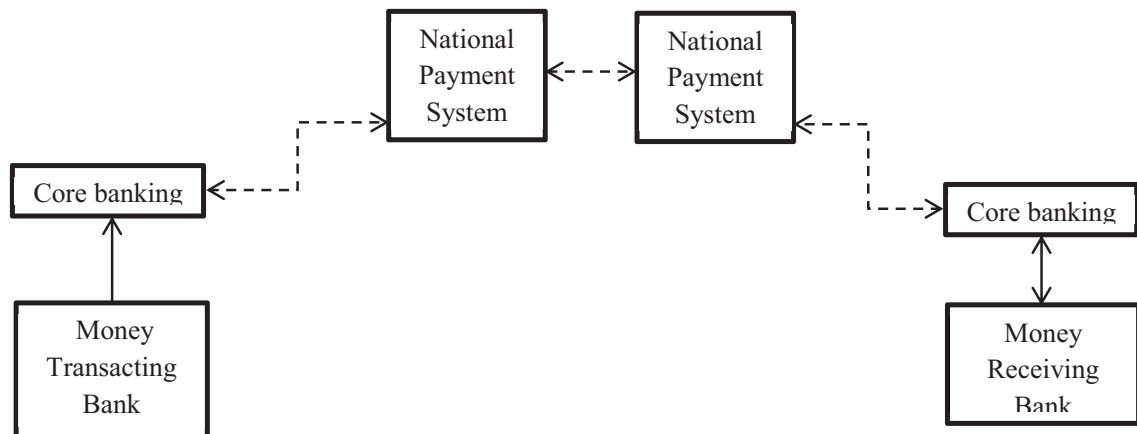
During the year of 2006-2007 amount of transaction have raised from 5 billion. In the year of 2012-13 the transaction has increased to 394 billion in national electronic fund transfer. The real time gross settlement was introduced in the year of 2009-10 on that year the transaction was increased 33 billion. In 2012-13 the amount of transaction has been raised to 69 billion.

- a) **Society for Worldwide Inter-bank Financial Telecommunications (SWIFT):** Society for worldwide inter-bank financial telecommunication (SWIFT), **Brussels** is a co-operative society for inter-bank financing networking established in **May 1973** with **239** participating banks from **15** countries. However it started functioning in **1977**, **Albert Prince** of Belgium (king) sends the first message. Initially, 518 commercial banks in **22** countries member of the SWIFT. SWIFTs regional office is located in **Mumbai**. India is **74<sup>th</sup>** country joined SWIFT network in 2<sup>nd</sup> December 1991. The Reserve Bank of India, 27 public sector banks and 8 foreign banks are initially taken membership of SWIFT now 92 banks are member of SWIFT. SWIFT has transferred Indian user to SWIFT net since July 2004, it is a new service of the SWIFT. Money transfers within the country NEFT/RTGS are used. If we want to receive a foreign payment from banks (dollars/euro) in a foreign country the sender bank had swift code. The swift supplies secure messaging services. Each financial institution has a **swift code** which is commonly used to identify the banks involved in an international wire transfer.<sup>36</sup> SWIFT as a cooperative society formed in 1973 with 239 member banks from 15 countries. RBI and 27 other public sector banks as well as 8 foreign banks in India have obtained the membership of the SWIFT. It provides highly cost effective, reliable, secure and rapid mode of transmitting financial messages worldwide. The network was upgraded in 80s and its revised version is SWIFTII. SWIFT provides 24x7 hour services to the financial institutes and the selected range of its users. SWIFT is a method of the sophisticated message transmission of international repute. It

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<sup>36</sup> S.Natarajan, (2010) *Indian Banking*, Chand and Company Ltd, New Delhi, Pp 316.

ensures its users against any loss of mutilation against transmission.<sup>37</sup> SWIFT enables its customers to automate and standardise financial transactions, thereby lowering costs, reducing operational risk and eliminating inefficiencies from their operations. The pictorial represents the transaction from the SWIFT bank.



**CHART 4.6**

# **SOCIETY FOR WORLDWIDE INTER-BANK FINANCIAL TELECOMMUNICATIONS**

## **Payment Services and linked services**

Services	Linked Services	Linked Objects	Communication Services	
			Vital	Non-Vital
CTS	ECS	Cheque, Clearing house	EFT, NPS	
ECS		Bank's Data Centre	EFT	NPS
NEFT			EFT, NPS	
RTGS			EFT, NPS	
Demat			EFT	
SWIFT			EFT, NPS	

<sup>37</sup> Nishi Sharma (2011), "Applications of Information Technology in Banking Sector", International Journal of Information Dissemination and Technology, April - June, Vol. 1(2), Pp 92.

### Banking Services

Services	Linked Services	Linked Objects	Communication	
			Vital	Non-Vital
Internet Banking	ECS, EFT	Internet Browser	Internet	NPS
Mobile Banking	ECS, EFT	Mobile, Supported Apps	EFT, SMS, Internet	NPS
Tele Banking		Telephone/Mobile, Call Centre	Telephone/mobile network	

### Card Payment

Services	Linked Services	Linked Objects	Communication	
			Vital	Non-Vital
Debit Card	ECS	ATM, POS, Online Payment Gateway	EFT, NPS	
Credit Card	ECS	ATM, POS, Online Payment Gateway	EFT, NPS	
ATM		ATM, Debit / Credit Card	EFT, NPS	
POS		Debit/Credit Card	EFT, NPS, Telephone Line	
Online payment Gateway		Debit/Credit Card, Internet Browser or Software Application	EFT, NPS, Internet	

Modern banking services are not new for developed nation. However, it is new for developing countries like Indian. Most of modern banking delivery channels are available in 1985 to 1990. The study exposed the modern banking delivery channels linked with other banking services.



## CHAPTER - V

### *Analysis and Interpretations*

## **CHAPTER - V**

### **ANALYSIS AND INTERPRETATIONS**

#### **5.0 INTRODUCTION**

#### **5.1 DEMOGRAPHIC PROFILE OF CUSTOMERS**

5.1.1 Age

5.1.2 Gender

5.1.3 Marital Status

5.1.4 Educational Qualification

5.1.5 Religion

5.1.6 Community

5.1.7 Occupation

5.1.8 Income

5.1.9 Type of Family

#### **5.2 MODERN BANKING SERVICES**

5.2.1 Knowledge about Modern Banking Services

5.2.2 Years of Knowledge about the Modern Banking Services

5.2.3 Number of customers having credit card

5.2.4 Type of Credit Cards Used by the Customers

5.2.5 Time Taken for the Modern Banking Services

5.2.6 Number of Account

5.2.7 Type of Accounts

5.2.8 Number of Years the Customers Having Account

5.2.9 Type of Transactions

5.2.10 Awareness of Modern Banking Services

5.2.11 Opinion of Customers towards the Features of ATM

- 5.2.12 Opinion of Customers towards the Features of Debit Card
- 5.2.13 Opinion of Customers towards the Features of Telebanking
- 5.2.14 Opinion of Customers towards the Features of Internet Banking
- 5.2.15 Opinion of Customers towards the Features of Mobile Banking
- 5.2.16 Opinion of Customers towards the Features of Credit Card
- 5.2.17 Opinion of Customers towards the Features of NEFT/RTGS

### **5.3 ASSOCIATION BETWEEN DEMOGRAPHIC PROFILES**

- 5.3.1 Age and Type of Bank
- 5.3.2 Age and Availing Modern Banking Services
- 5.3.3 Age and Type of Credit Card
- 5.3.4 Age and Number of Account
- 5.3.5 Age and Frequency of Transaction
- 5.3.6 Age and Type of Account
- 5.3.7 Age and Awareness About Opening Account
- 5.3.8 Gender and Type of Bank
- 5.3.9 Marital Status and Type of Bank
- 5.3.10 Educational Qualification and Type of Bank
- 5.3.11 Educational Qualification and Type of Credit Card
- 5.3.12 Educational Qualification and Time Taken for Transaction
- 5.3.13 Educational Qualification and Frequency of Visit
- 5.3.14 Educational Qualification and Type of Account
- 5.3.15 Educational Qualification and Awareness in Opening Account
- 5.3.16 Religion and Type of Bank
- 5.3.17 Community and Type of Bank
- 5.3.18 Occupation and Type of Bank

- 5.3.19 Occupation and Time Taken for Transaction
- 5.3.20 Occupation and Type of Credit Card
- 5.3.21 Occupation and Frequency of Visit
- 5.3.22 Occupation and Number of Years Having Account
- 5.3.23 Occupation and Type of Account
- 5.3.24 Occupation and Awareness in Opening Account
- 5.3.25 Income and Type of Bank
- 5.3.26 Income and Type of credit cards
- 5.3.27 Income and Frequency of Transaction
- 5.3.28 Income and Type of Account
- 5.3.29 Income and Awareness of Opening Account
- 5.3.30 Type of Family and Type of Bank
- 5.3.31 Frequency of Visit and Time Taken for Modern Banking

#### **5.4 REASON FOR CHOOSING BANK**

- 5.4.1 Reason for choosing Bank Based on Educational Qualification
- 5.4.2 Reason for Choosing Bank Based on Occupation
- 5.4.3 Reason for Choosing Bank Based on Income

#### **5.5 AWARENESS LEVEL OF MODERN BANKING**

- 5.5.1 Awareness Level of Modern Banking Based on Educational Qualification
- 5.5.2 Awareness Level of Modern Banking Based on Occupation
- 5.5.3 Awareness Level of Modern Banking Based on Income

#### **5.6 PARAMETER FOR SELECTING MODERN BANKING**

- 5.6.1 Parameter for Selecting Modern Banking Based on Educational Qualification



5.6.2 Parameter for Selecting Modern Banking Based on Occupation

5.6.3 Parameter for Selecting Modern Banking Based on Income

## **5.7 PROBLEMS IN THE MODERN BANKING SERVICES**

5.7.1 Problems in the Modern Banking Services Based on Educational Qualification

## **5.8 TYPE OF BANKS**

5.8.1 Reason for Choosing Bank Based on Type of Banks

5.8.2 Parameter for selecting bank based on type of bank

5.8.3 Level of Satisfaction of Modern Banking Based on Type of Bank

5.8.4 Advantages of Modern Banking Based on Type of Bank

5.8.5 Problems in Modern Banking Based on Type of Bank

5.8.6 Satisfaction of Grievances Settlement System Based on Type of Bank

## **5.9 REASON FOR CHOOSING BANKS**

## **5.10 AWARENESS OF MODERN BANKING**

## **5.11 OPINION OF CUSTOMERS**

5.11.1 Opinion of Customers towards the Features of ATM Based on Age

5.11.2 Opinion of Customers Towards the Features of ATM Based on Gender

5.11.3 Opinion of Customers Towards the Features of ATM Based on Marital Status

5.11.4 Opinion of Customers Towards the Features of ATM Based on Educational Qualification

## **CHAPTER - V**

### **ANALYSIS AND INTERPRETATIONS**

#### **5.0 INTRODUCTION**

This chapter presents the modern banking services among customers of private sector banks and public sector banks in Tirunelveli district. This chapter analyses the demographic profile of customers such as age, gender, marital status, educational qualification, religion, community, occupation, monthly income and type of family. The relationship between reason for choosing bank and educational qualification, occupation and income of customers have been analysed with the help of ANOVA and presented in this chapter. This chapter further covers the relationship between awareness level of customers towards modern banking and educational qualification, occupation and income of customers have been analysed with the help of ANOVA. The primary data collected through the questionnaire has been used for the preparation of this chapter.

## 5.1 DEMOGRAPHIC PROFILE OF CUSTOMERS

### 5.1.1 Age

Age is an important factor considered in the demographic profile of the respondents as it is a major factor that decides the users of modern banking services. Thus, the question regarding the age of the respondents are gathered and presented in the table below for both the private and public sector banks.

**TABLE 5.1**

#### **AGE WISE CLASSIFICATION OF SAMPLE RESPONDENTS**

Sl. No.	Age	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Below 20	6(02.31)	18(02.20)	24(02.23)
2	20 to 40	191(73.46)	536(65.61)	727(67.50)
3	40 to 60	63(24.23)	213(26.07)	276(25.63)
4	Above 60	-	50(06.12)	50(04.64)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

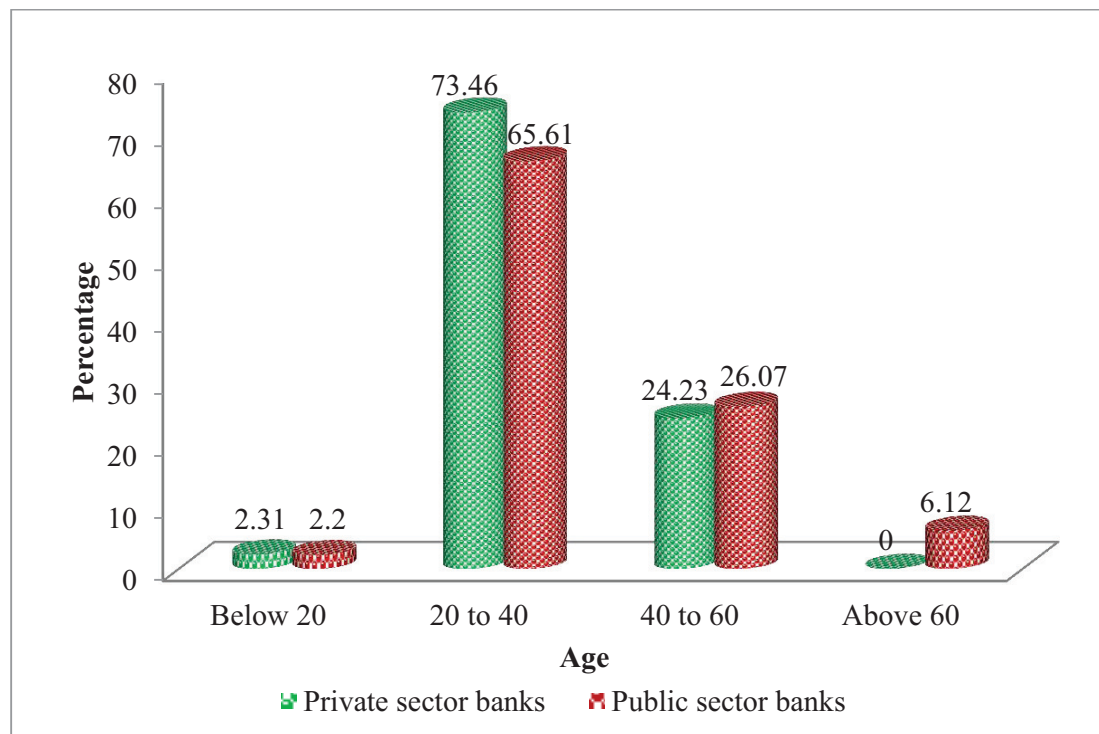
*Source: Primary Data*

The above table 5.1 gives a detailed analysis of both the private sector and public sector banks in the context of modern banking services.

Among the 260 respondents in the private sector banks it is observed that 73.46 per cent are in the age group of 20 to 40, 24.23 per cent of the respondents are in the age between 40 and 60, the remaining 2.31 per cent is in the age group of below 20 years of age. Majority of the medium age group respondents have more knowledge over the modern banking services in private sector banks.

In case of the public sector banks the data have been collected from 817 respondents. It is observed that 65.61 per cent are in the age group of 20 to 40, 26.07 per cent are in the age group of 40 to 60 and the age group below 20 and above 60 have a meagre percentage of the respondents. It is inferred that majority of the medium age group respondents has more knowledge over the modern banking services in private sector banks.

Collectively it is found that the major age representation is in the age group 20 to 40 and 40 to 60 that have bank accounts set-up.



**CHART 5.1**

#### **AGE WISE CLASSIFICATION OF SAMPLE RESPONDENTS**

### 5.1.2 Gender

The gender of the respondents is one of the most important profiles of the customers. Since the gender may play an important role in the performance of the customers. This profile is considered towards the use of modern banking services. The distribution of gender is depicted in the below table 5.2.

**TABLE 5.2**

**GENDER WISE CLASSIFICATION OF SAMPLE RESPONDENTS**

Sl. No.	Gender	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Male	185(71.15)	401(49.08)	586(60.11)
2	Female	75(28.85)	416(50.92)	491(39.89)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

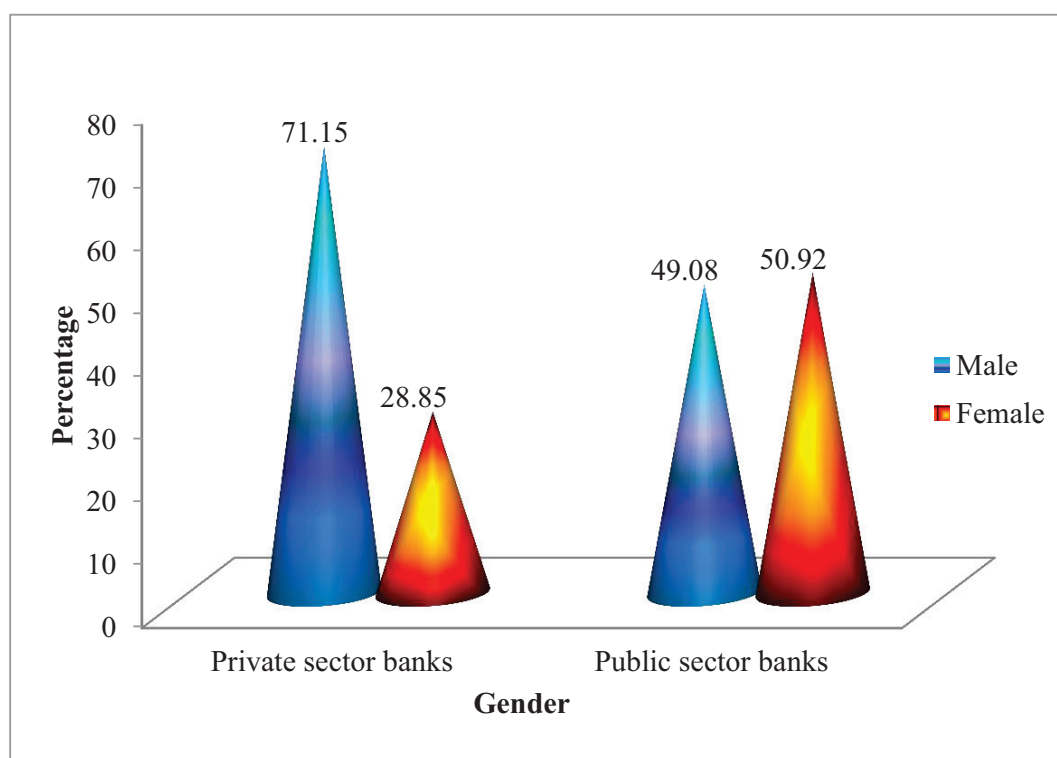
*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

The above table 5.2 gives a detailed outlook about the gender of the respondents. In case of the private sector banks there were total of 260 sample respondents and out of them 71.15 per cent of them are male and the remaining 28.85 per cent of them are female. Majority of the respondents are male.

As far as the public sector banks are concerned the samples were collected from 817 sample respondents and in the process of analysis, it is observed that 50.92 per cent of the respondents are female and the remaining 49.08 per cent of the respondents are male. It is inferred that majority of the respondents are female using modern banking services.

Out of 1077 respondents taken for the study it is found that 586 respondents (60.11 per cent) are male and the remaining 491 respondents (39.89 per cent) are female. A major segment of respondents in private sector banks are males.



**CHART 5.2**

**GENDER WISE CLASSIFICATION OF SAMPLE RESPONDENTS**

### 5.1.3 Marital Status

The marital status is a social status according to the Indian culture and tradition. The distribution of the respondents based on marital status are presented in the below table 5.3.

**TABLE 5.3**  
**MARITAL STATUS OF THE SAMPLE RESPONDENTS**

Sl. No.	Marital Status	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Married	164(63.08)	577(70.62)	741(66.85)
2	Unmarried	96(36.92)	240(29.38)	336(33.15)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

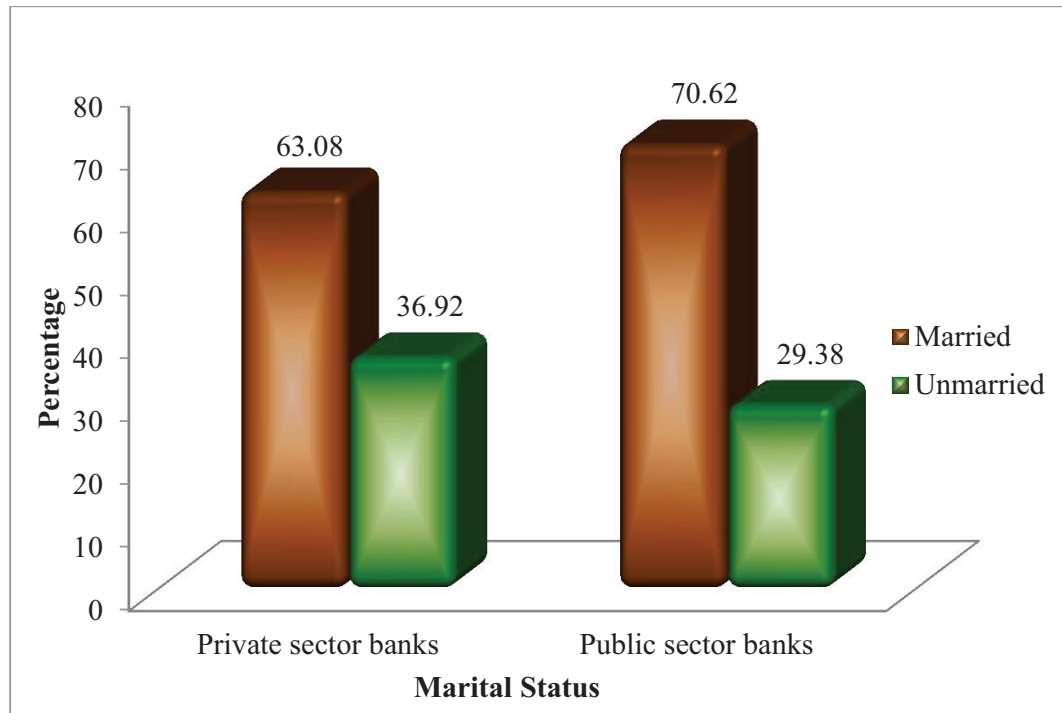
*Source: Primary Data*

Table 5.3 indicates the marital status of the respondents as it is gathered, tabulated and presented in the form of analysis.

In case of the private sector sample of 260 respondents, it is observed that 63.08 per cent of them are married and the remaining 36.92 per cent of them are unmarried. It is inferred that majority of the respondents are married.

In the case of public sector banks the sample was 817 respondents and out of them 70.62 per cent is married and the remaining 29.38 per cent are unmarried. It is found that majority of the respondents are married.

It is identified that out of the total 1077 respondents, 66.85 per cent of the respondents are married and the remaining 33.15 per cent of the respondents are unmarried. It is concluded that majority of the married respondents has been using the modern banking services.



**CHART 5.3**

**MARITAL STATUS OF THE SAMPLE RESPONDENTS**



### 5.1.4 Educational Qualification

Education is a form of learning in which the knowledge, skills and habits of a group of people are transferred from one generation to the next through teaching, training or research. The educational qualification of the respondents of both private and public sector banks are presented in the form of a table 5.4 below.

**TABLE 5.4**

#### **EDUCATIONAL QUALIFICATION OF THE RESPONDENTS**

Sl. No.	Educational qualification	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Illiterate	15(05.77)	84(10.28)	99(09.19)
2	Higher secondary	29(11.15)	120(14.69)	149(13.83)
3	Under graduate	36(13.85)	182(22.28)	218(20.24)
4	Post graduate	78(30.00)	242(29.62)	320(29.71)
5	Professional	69(26.54)	132(16.16)	201(18.67)
6	Technical	33(12.69)	57(06.98)	90(08.36)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

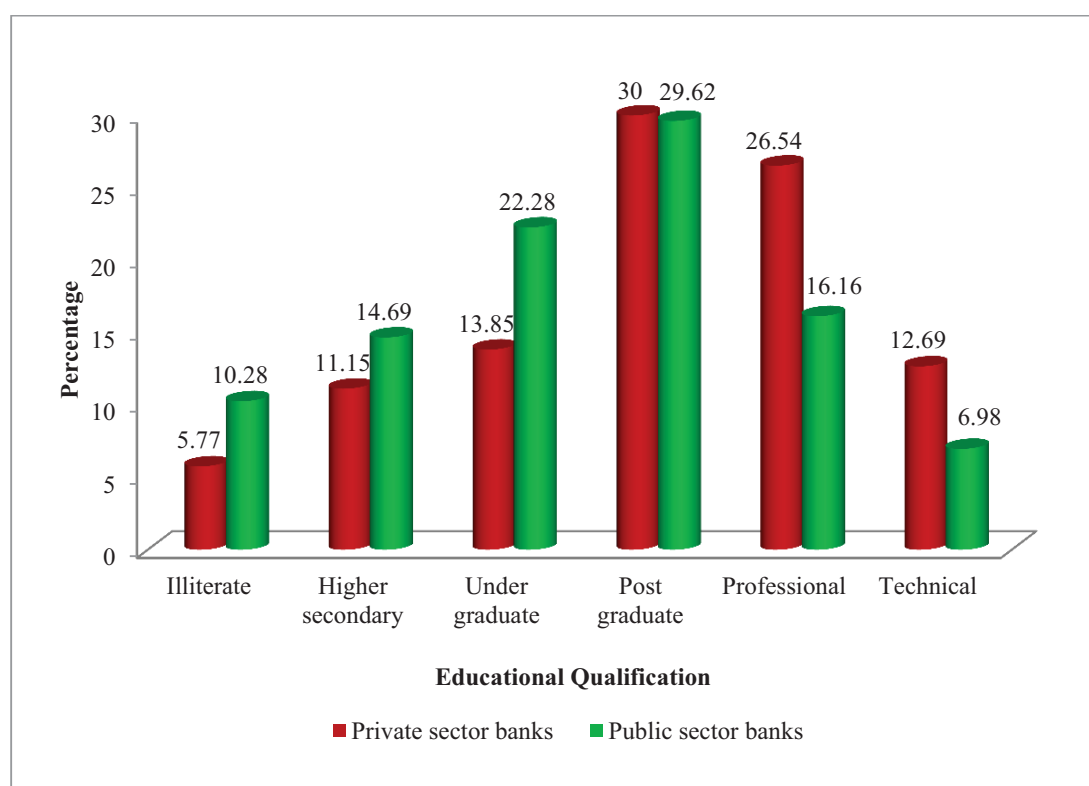
*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

The analysis about the educational qualification of the respondents in the private and public sector banks are made in the above table 5.4 and the results show that out of 260 respondents in private sector banks 30 per cent are post graduates, 26.54 per cent are professionals, 13.85 per cent are undergraduates, 12.69 per cent of them are qualified with technical education, 11.15 per cent are with higher secondary level of education and a meagre per cent of 5.77 per cent are illiterates. It is inferred that majority of the respondents are qualified in one form or the other.

Out of 817 respondents in public sector banks, 29.62 per cent of them are qualified with post-graduation, 22.28 per cent are with under graduation, 16.16 per cent are professionals, 14.69 per cent with higher secondary level of education, 10.28 per cent are illiterates and a meagre 6.98 per cent are with professional level of education. Majority of the respondents are educationally qualified in one form or the other.

It is observed that out of 1077 respondents only a small per cent of the respondents are illiterates and majority of the respondents are qualified in one form or the other.



**CHART 5.4**

### **EDUCATIONAL QUALIFICATION OF THE RESPONDENTS**

### 5.1.5 Religion

Religion is a fundamental set of beliefs and practices generally agreed upon by a group of people. These set of beliefs concern the cause, nature, and purpose of the universe, and involve devotional and ritual observances. They also often contain a moral code governing the conduct of human affairs. The religion of the respondents both in case of public sector banks and private sector banks are listed in the below the table 5.5.

**TABLE 5.5**  
**RELIGION OF THE SAMPLE RESPONDENTS**

Sl. No.	Religion	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Hindu	131(50.38)	401(49.08)	532(49.40)
2	Christian	105(40.38)	401(49.08)	506(46.98)
3	Islam	24(09.24)	15(01.84)	39(03.62)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

From the above table 5.5 it is found that out of 260 respondents in private sector banks, 50.38 per cent are following Hinduism, 40.38 per cent are following Christianity and the remaining 9.24 per cent of the respondents follow Islam. Majority of the respondents followers of Hindu religion.

Out of 817 respondents of the public sector banks it is found that 49.08 per cent of the respondents follow Hinduism and Christianity respectively, and the remaining 1.84 per cent of the respondents follow Islam. Equal percentage the respondents follow both Hinduism and Christianity as their religion.

In case of both the private sector of banks it is found that a majority of the respondents follow Hinduism. Meanwhile in the case of public sector banks equal percentage of respondents follow both Hinduism and Christianity as their religions. Meagre per cent of the respondents follow Islam religion.

### 5.1.6 Community

Community distinguish between human association on the other hand is a group in which the individuals who make up that group are motivated to take part in the group purely by self-interest and followed by India. The different types of community are shown below in table 5.6.

**TABLE 5.6**

**COMMUNITY OF THE SAMPLE RESPONDENTS**

Sl. No.	Community	Type of Banks		Total
		Private sector banks	Public sector banks	
1	SC/ST	43(16.54)	131(16.03)	174(16.16)
2	MBC	28(10.77)	114(13.95)	142(13.18)
3	BC	174(66.92)	527(64.51)	701(65.09)
4	OC	15(05.77)	45(05.51)	60(05.57)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

Out of the 260 respondents in case of private sector banks it is found that 66.92 per cent of the respondents belong to backward community, 16.54 per cent belongs to schedule caste and schedule tribe category, 10.77 per cent belongs to most backward community and the remaining 5.77 per cent belong to other community. Majority of the respondents are from the backward community.

Out of the 817 respondents in the public sector banks it is found that 64.51 per cent of the respondents belong to backward community, 16.03 per cent are from the scheduled caste and scheduled tribe category, 13.95 per cent are from most backward community and the remaining 5.51 per cent are from the other category. Majority of the respondents belong to backward community.

From the both private and public sectors banks it is observed that 65.09 per cent are from backward community, 16.16 per cent are from the scheduled caste and scheduled tribe category, 13.18 per cent are from the most backward community and the remaining 5.57 per cent are from the other category. Majority of the respondents belong to the backward community.

#### 5.1.7 Occupation

Occupation is one of the factors which determine the standard of living of an individual. The following table 5.7 presents the occupation of the sample respondents.

**TABLE 5.7**  
**OCCUPATION OF THE RESPONDENTS**

Sl. No.	Occupation	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Government employee	66(25.38)	253(30.97)	319(29.62)
2	Private employee	102(39.23)	261(31.95)	363(33.70)
3	Self employed	32(12.31)	111(13.59)	143(13.28)
4	Unemployed	57(21.92)	129(15.79)	186(17.27)
5	Retired	3(01.15)	63(07.71)	66(06.13)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

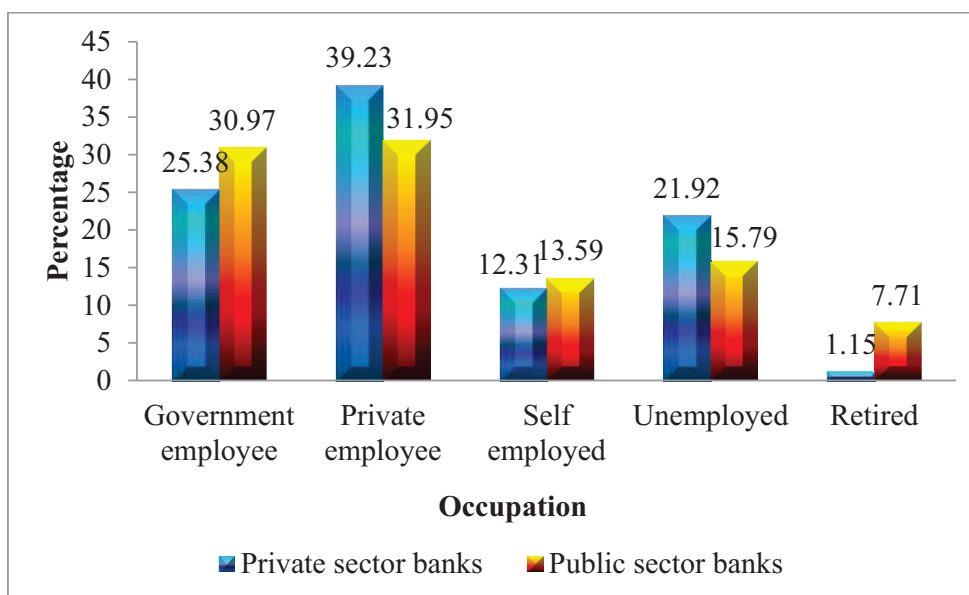
*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

The above table 5.7 classifies the occupation of respondents. The analysed data reveals that out of 260 respondents in private sector banks, it is found that 39.23 per cent of the account holders are private employees, 25.38 per cent are government employees, 21.92 per cent of the account holders are unemployed, 12.31 per cent are self-employed and the remaining 1.15 per cent of the account holders are retired persons. Majority of the respondents are private sector employees.

In case of the public sector bank account holders it is found that 31.95 per cent are private sector employees, 30.97 per cent are government employees, 15.79 per cent are unemployed, 13.59 per cent are self-employed and the remaining 7.71 per cent are retired persons. Majority of the respondents holding account in the public sector banks are employed in private sectors, followed by government sectors.

The general observation relating to the occupation and the type of banks reveal that 33.70 of the account holders per cent are employed in private sector undertakings, 29.62 per cent are employed in government sector undertakings, 17.27 per cent of the account holders are unemployed, 13.28 per cent are self-employed and the remaining 6.13 per cent of the account holders are retired persons. Majority of the respondents are private and government employees respectively.



**CHART 5.5**  
**OCCUPATION OF THE RESPONDENTS**

#### 5.1.8 Income

Income is the yardstick to measure the economic condition of the customers. The need and expectations of higher income class is completely different from the lower income class. The income wise distribution of the respondents is presented in the table 5.8.

**TABLE 5.8**  
**INCOME OF THE SAMPLE RESPONDENTS**

Sl. No.	Income	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Less than ₹10,000	75(28.85)	287(35.13)	362(33.61)
2	₹10,000 – 25,000	95(36.54)	266(32.56)	361(33.52)
3	₹25,000 – 40,000	27(10.38)	165(20.20)	192(17.83)
4	₹40,000 – 60,000	30(11.54)	66(08.08)	96(08.91)
5	More than ₹60,000	33(12.69)	33(04.04)	66(06.13)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

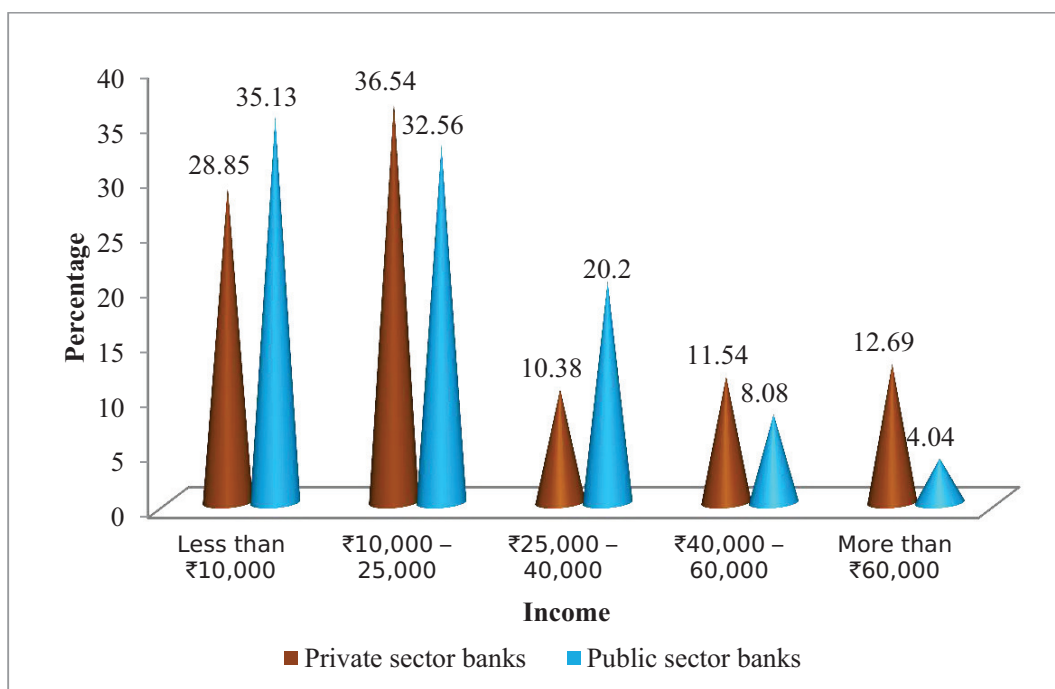
*Source: Primary Data*

In case of 260 respondents holding account in private sector banks it is found that a majority of 36.54 per cent have their monthly income between ₹10,000 and 25,000. 28.85 per cent have their monthly income of less than ₹10,000. 12.69 per cent with monthly income of more than ₹60,000, 11.54 per cent have income between ₹40,000 and ₹60,000 and the remaining 10.38 per cent have their monthly income between ₹25,000 and ₹40,000. Majority of the respondents have income less than ₹25,000.

In case of public sector banks out of 817 respondents, 35.13 per cent of them have monthly income of less than ₹10,000, 33.52 per cent of the respondents have monthly income between ₹10,000 and ₹25,000, 20.20 per cent of them have monthly income between ₹25,000 and ₹40,000, 8.08 per cent have the monthly income between ₹40,000 and ₹60,000 and the remaining 4.04 per cent of the respondents have monthly income of more than ₹60,000. The major segment of the members has their monthly income less than ₹10,000.

It is inferred that out of 1077 respondents, 33.61 per cent have their monthly income of less than ₹10,000 and followed by another 33.52 per cent have their monthly income between ₹10,000 and ₹25,000.





**CHART 5.6**

### INCOME OF THE SAMPLE RESPONDENTS

#### 5.1.9 Type of Family

The above table provides detailed information relating to the type of family and the account holding position in various sectors of banks.

**TABLE 5.9**

### TYPE OF FAMILY OF THE RESPONDENTS

Sl. No.	Type of family	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Nuclear family	194(74.62)	554(67.81)	748(69.45)
2	Joint family	66(25.38)	263(32.19)	329(30.55)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

From the above table 5.9, it is found that out of 260 respondents holding account in the private sector banks, 74.62 per cent of the account holders are from nuclear type of family and the remaining 25.38 per cent of the respondents are from joint family.

In case of public sector banks that out of 817 respondents 67.81 per cent of the respondents are from nuclear family and the remaining 32.19 per cent of them are joint family.

It is observed that 69.45 per cent of the account holders are from nuclear family and 30.55 per cent of the account holders are from joint family.

## 5.2 MODERN BANKING SERVICES

### 5.2.1 Knowledge about Modern Banking Services

The below table provides detailed information about the source of knowledge about modern banking services and the details are tabulated below.

**TABLE 5.10**  
**KNOWLEDGE ABOUT MODERN BANKING SERVICES**

S. No	Sources	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Prospectus / Self-analysis/ Banking	113(43.46)	330(40.39)	443(41.13)
2	News Paper / advertisement / Media	48(18.46)	136(16.65)	184(17.08)
3	Friends / Relatives / Colleagues	57(21.92)	261(31.95)	318(29.53)
4	E-Source-Mail / SMS / Internet	42(16.15)	90(11.02)	132(12.26)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

Table 5.10 indicate that in case of private sector banks the primary source of knowledge about modern banking services are gained through prospectus /

self-analysis / banking, nearly 43.46 per cent of the account holders have this opinion, 21.92 per cent of the respondents have knowledge about the modern banking services through friends / relatives / colleagues, 18.46 per cent have this knowledge through new paper / advertisements or through media and the remaining 16.15 per cent have knowledge about modern banking services through e-sources such as mail / SMS / internet. Majority of the respondents have knowledge about modern banking through the prospectus / self-analysis / banking.

In case of public sector banks it is found that 40.39 per cent have knowledge about modern banking through prospectus / self-analysis / banking, 31.95 per cent of the respondents have this knowledge through friends / relatives / colleagues, 16.65 per cent have knowledge over modern banking services through new paper / advertisements / media and the remaining 11.02 per cent have knowledge over modern banking through e sources of mail / SMS / internet. Majority of the respondents have knowledge about modern banking through the prospectus / self-analysis / banking.

Collectively it is observed that out of 1077 respondents, 41.13 per cent of the respondents have knowledge about the modern banking services through prospectus / self-analysis / banking, 29.53 per cent of the respondents through friends / relatives / colleagues, 17.08 per cent have knowledge through newspaper / advertisements / media and the remaining 12.26 per cent through e sources of mail / SMS / internet. Majority of the respondents have knowledge about modern banking through the prospectus / self-analysis / banking.

### **5.2.2 Years of Knowledge about the Modern Banking Services**

The below table provides information relating to the years of knowledge over the modern banking services.

**TABLE 5.11****YEARS OF KNOWLEDGE ABOUT THE MODERN BANKING SERVICES**

Sl. No.	Number of years	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Less than 1 year	61(23.46)	90(11.02)	151(14.02)
2	1 - 3 years	94(36.15)	343(41.98)	437(40.58)
3	4 - 6 years	48(18.46)	186(22.77)	234(21.73)
4	More than 6 years	57(21.92)	198(24.24)	255(23.67)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

In case of private sector banks it is found that 36.15 per cent of the respondents have knowledge about the modern services between one and three years, 23.46 per cent have knowledge over this ambience for less than a year, 21.92 per cent have more than six years of knowledge towards modern services and the remaining 18.46 per cent in 4 to 6 years of knowledge over the modern services. Majority of the respondents have knowledge about the modern services for less than three years.

As far as the public sector banks are concerned, 41.98 per cent of the respondents have knowledge about the modern banking services for a period 1 to 3 years, 24.24 per cent have this for more than 6 years, 22.77 per cent have this knowledge for a period between 4 and 6 years and the remaining 11.02 per cent have this knowledge in a time period less than a year. Majority of the respondents have knowledge about this service for a period between 1 and 3 years.

It is found that 40.58 per cent of the respondents state that they have knowledge over the modern banking services in a period between 1 and 3 years, 23.67 per cent have knowledge about the modern banking services for more than 6 years, 21.73 per

cent have knowledge over the modern banking services for a time period between 4 and 6 years and the remaining 14.02 per cent have knowledge about this for a period less than a year. Majority of the respondents have knowledge about the modern services for a period between 1 and 3 years.

### 5.2.3 Number of customers having credit card

The above table brings out the details relating to the number of customers having credit card.

**TABLE 5.12**  
**NUMBER OF CUSTOMERS HAVING CREDIT CARD**

Sl. No.	Number of customers having credit card	Type of Banks		Total
		Private sector banks	Public sector banks	
1	No	206(80.16)	665(81.40)	871(80.78)
2	Yes	54(19.84)	152(18.60)	206(19.22)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

In case of private sector banks it is found that out of 260 respondents 80.16 respondents have credit cards for their use and the remaining 19.84 per cent do not have credit card. Majority of the respondents are using credit card in the modern world.

In case of public sector banks it is found that out of 817 respondents, 81.40 per cent of the respondents have credit card and the remaining 18.60 per cent have no credit card facilities. Majority of the respondents have credit card in the public sector banks.

It is found that out of 1077 respondents, 80.78 per cent of the respondents have credit card and the remaining 19.22 per cent do not have credit card. Majority of the respondents have credit card.

#### 5.2.4 Type of Credit Cards Used by the Customers

The below table provides information relating to the type of credit card used by the customers in the private and public sector banks in the study area.

**TABLE 5.13**  
**TYPE OF CREDIT CARDS USED BY THE CUSTOMERS**

Sl. No.	Type of credit cards	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Low Interest Card	9(16.67)	34(22.37)	43(19.52)
2	Reward Card	6(11.11)	18(11.84)	24(11.48)
3	Secured Credit Cards	21(38.89)	75(49.34)	96(44.12)
4	Speciality Credit Cards	18(33.33)	25(16.45)	43(24.89)
	<b>Total</b>	<b>54(100)</b>	<b>152(100)</b>	<b>206(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

From the above table 5.13 it is observed that out of 54 respondents, in the private sector banks 38.89 per cent of them use secured credit cards, 33.33 per cent use speciality credit cards, 16.67 per cent use low interest cards and the remaining 11.11 per cent use reward card. Majority of the respondents are using secured and speciality credit cards.

As far as the public sector banks are concerned 152 respondents use various credit cards and it is found that 49.34 per cent of them use secured credit cards, 22.37 per cent use low interest credit cards, 16.45 speciality credit cards and the remaining

11.84 per cent use reward card. Majority of the respondents are using secured credit cards and low interest cards.

It is observed that out of 206 respondents, 44.12 per cent of them use secured credit cards, 24.98 per cent of the respondents use speciality credit cards, 19.52 per cent of the respondents use low interest card and 11.48 per cent of the respondents use reward card.

### 5.2.5 Time Taken for the Modern Banking Services

Traditionally, banking services take more time to do the transactions. Now the technology has improved more. Meanwhile, time taken for modern banking services per transaction is shown below table 5.14.

**TABLE 5.14**  
**TIME TAKEN FOR THE MODERN BANKING SERVICES**

Sl. No.	Time taken	Type of Banks		Total
		Private sector banks	Public sector banks	
1	10 - 30 Minutes	176(67.69)	467(57.16)	643(59.70)
2	30 - 60 Minutes	75(28.85)	287(35.13)	362(33.61)
3	More than 60 Minutes	9(03.46)	63(07.71)	72(06.69)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

In case of private sector banks out of 260 respondents, 67.69 per cent state that they take 10-30 minutes, 28.85 per cent feel that it takes 30-60 minutes and the remaining 3.46 per cent feel that it takes more than an hour to avail the modern banking services. Majority of the respondents feel that the time taken for modern banking services is in between 10 and 30 minutes.

In case of public sector banks it is found that out of 817 respondents, 57.16 per cent take 10 to 30 minutes for using modern services, 35.13 per cent feel that it takes 30-60 minutes and the remaining 7.71 per cent feel that it takes more than one hour. Majority of the respondents feels that the use of modern banking service requires 10 to 30 minutes.

It is found that out of 1077 respondents, 59.70 per cent feel that it takes 10 to 30 minutes to enjoy the modern banking services, 33.61 per cent feel that it takes more than 30 minutes but less than one hour and the remaining 6.69 per cent feel that it takes more than one hour. Majority of the respondents feel that it takes 10 to 30 minutes to enjoy the modern banking services.

#### 5.2.6 Number of Account

The below table 5.15 provides information relating to the number of accounts held by the respondents.

**TABLE 5.15**  
**NUMBER OF ACCOUNT HAVING RESPONDENTS**

Sl. No.	Number of account	Type of Banks		Total
		Private sector banks	Public sector banks	
1	One	203(78.08)	651(79.78)	854(79.29)
2	Two	45(17.31)	108(13.24)	153(14.21)
3	Three	9(03.46)	24(02.94)	33(03.06)
4	Four	0	18(02.21)	18(01.67)
5	Five	3(01.15)	15(01.84)	18(01.67)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*



In case of private sector banks it is found that 78.08 per cent of the respondents have only one account, 17.31 per cent have two accounts and followed by 3.46 per cent hold more than three accounts. Majority of the respondents account holders having only one account in private sector banks.

In public sector banks it is found that, out of 817 respondents, 79.78 per cent of them have only one account, 13.24 per cent have two accounts and the remaining 7 per cent have more than two accounts. Majority of the respondents have only one account in public sector bank.

### 5.2.7 Type of Accounts

The below table 5.16 provides information relating to the type of accounts held by the respondents and it is tabulated below.

**TABLE 5.16**  
**TYPE OF ACCOUNTS HAVING CUSTOMERS**

Sl. No.	Type of accounts	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Savings	192(73.85)	637(77.97)	829(76.97)
2	Current	47(18.08)	93(11.38)	140(12.99)
3	Fixed Deposit	12(04.62)	54(06.61)	66(06.14)
4	Recurring Deposit	9(03.46)	33(04.04)	42(03.90)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

Table 5.16 it is found that 73.85 per cent hold savings account, 18.08 per cent hold current account, and 4.62 per cent have fixed deposit account and only 3.46 per cent of the respondents have recurring deposit account in private sector bank. Out of 817 respondents in public sector banks, majority (77.97 per cent) of the

respondents have savings account, 11.38 per cent of the respondents have current account, about 6.61 per cent of the respondents have fixed deposit account and only 4.04 per cent of the respondents have recurring deposit account.

### 5.2.8 Number of Years the Customers Having Account

The below table provides information relating to the number of years of having account and the gathered details are given below.

**TABLE 5.17**

#### **NUMBER OF YEARS THE CUSTOMERS HAVING ACCOUNT**

Sl. No.	Number of years	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Less than 1 year	54(20.77)	111(13.57)	165(15.32)
2	1 - 5 years	123(47.31)	387(47.37)	510(47.35)
3	5 - 10 years	45(17.31)	182(22.28)	227(21.08)
4	More than 10 years	38(14.62)	137(16.77)	175(16.25)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

In private sector it is found that out of 260 respondents 47.31 per cent have the account in the bank for a period between 1 to 5 years, 20.77 per cent have account less than a year, 17.31 per cent have account for 5 to 10 years and the remaining 14.62 per cent have account for more than ten years. Majority of the respondents have their account in the bank for a period between 1 and 5 years.

In public sector banks it is found that out of 817 respondents, 47.37 per cent of the respondents have account for a period between 1 and 5 years, 22.28 per cent have account for 5 to 10 years, 16.77 per cent have more than 10 years, 13.57 per cent have

account for less than a year. Majority of the respondents have account for a period of 1 to 5 years.

It is found that out of 1077 respondents, 47.35 per cent have account for a period of 1 to 5 years, 21.08 per cent have account 5 to 10 years, 16.25 per cent have account for more than 10 years and the remaining 15.32 per cent have account for less than a year. Majority of the respondents have account for a period of 1 to 5 years.

### 5.2.9 Type of Transactions

The following table shows the type of transactions availed by the customers of private sector banks and public sector banks.

**TABLE 5.18**  
**TYPE OF TRANSACTIONS**

Sl. No.	Type of transactions	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Withdrawal	203 (78.08)	662 (81.03)	865 (79.56)
2	Deposit	197 (75.77)	610 (74.66)	807 (75.22)
3	Balance Enquiry	173 (66.54)	548 (67.07)	721 (66.81)
4	Pass book updating	161 (61.92)	505 (61.81)	666 (61.87)
5	Cheque	125 (48.08)	356 (43.57)	481 (45.83)
6	Demand Draft	71 (27.31)	234 (28.64)	305 (27.98)
7	Investment	68 (26.15)	171 (20.93)	239 (23.54)
8	Bill Payment	44 (16.92)	147 (18.01)	191 (17.47)
9	Money Transfer	59 (22.69)	159 (19.46)	218 (21.08)
10	Repayment of Loan	61 (23.46)	173 (21.18)	234 (22.32)

**Note: Figures in Parentheses Indicate Percentages**

**Source: Primary Data**

Table 5.18 clearly discloses that among the customers of private sector banks, majority (78.08 per cent) of the respondents use banks for withdrawal of amount and the next majority (75.77 per cent) of the respondents use banks for deposit.

Table further discloses that among the customers of public sector banks, most of the respondents (81.03 per cent) use banks for withdrawal transactions and the next majority of 74.66 per cent of the respondents use banks for deposit transactions. It may be concluded that the majority of respondents using withdrawal transaction. It is clear from table that among the customers of private sector banks and public sector banks, majority (79.56 per cent) of the respondents use banks for withdrawal transactions and the next majority (75.22 per cent) of the respondents use banks for deposit transactions.

#### **5.2.10 Awareness of Modern Banking Services**

The below table provides information relating to the awareness of the modern banking services by the respondents. The gathered opinions are tabulated and given below.

**TABLE 5.19**

#### **AWARENESS OF MODERN BANKING SERVICES**

Sl. No.	Awareness of Modern Banking Services	Type of Banks		Total
		Private sector banks	Public sector banks	
1	Fully	69 (26.54)	148 (18.12)	217 (20.15)
2	Partially	179 (68.85)	559 (68.42)	738 (68.52)
3	Unaware	12 (04.62)	110 (13.46)	122 (11.33)
	<b>Total</b>	<b>260(100)</b>	<b>817(100)</b>	<b>1077(100)</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

In case of private sector banks it is found 68.85 per cent of the respondents have partial awareness about modern banking services, 26.54 per cent of them are fully aware of the modern banking services and the remaining 4.62 per cent of them are not at all aware of the modern banks services. Majority of the respondents are partially aware of the modern banking services. In case of public sector banks it is found that out of 817 respondents, 68.42 per cent are partially aware of the modern banking services, 18.12 per cent are fully aware of the modern banking services and the remaining 13.46 per cent are not at all aware of the modern banking services. Majority of the respondents are partially aware of the modern banking services.

It is found that out of 1077 respondents it is found that 68.52 per cent are partially aware of the modern banking services, 20.15 per cent are fully aware of the modern banking services and the remaining 11.33 per cent are not at all aware of the modern banking services. Majority of the respondents are partially aware of the modern banking services.

### 5.2.11 Opinion of Customers towards the Features of ATM

The following table shows the opinion of customers towards the features of ATM.

**TABLE 5.20**

#### **OPINION OF CUSTOMERS TOWARDS THE FEATURES OF ATM**

<b>Features</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>No Opinion</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
Debit Card	112 (11.8)	64(6.7)	45 (4.7)	430 (45.3)	299 (31.5)	950 (100)
Credit Card	288(33.1)	206(23.6)	142 (16.3)	194 (22.3)	41 (4.7)	871 (100)
Balance Enquiry	315(43.7)	212(29.4)	57 (7.9)	134 (18.6)	10 (1.4)	721 (100)
Cash withdrawal	348(40.2)	275(31.8)	49(5.7)	164(18.9)	29(3.4)	865(100)
Paying Bills	67(35.1)	53(27.7)	29(15.2)	18(9.4)	24(12.6)	191(100)
Money transfer between Accounts	72(33)	42(19.3)	35(16.1)	40(18.3)	29(13.3)	218(100)

**Note: Figures in Parentheses Indicate Percentages**

**Source: Primary Data**

Table shows that 5.20 per cent of the respondents mentioned that they are strongly agreed ATM is very useful for balance enquiry, 40.2 per cent of the respondents mentioned that they are strongly agreed ATM is useful for cash withdrawal, 45.3 per cent of the respondents are disagreed with the uses of debit card and about 31.5 per cent of the respondents mentioned that they are strongly disagreed with the uses of debit card. Thus 73.1 per cent of the respondents are satisfied with the uses of ATM card.

### 5.2.12 Opinion of Customers towards the Features of Debit Card

The following table shows the opinion of customers towards the features of debit card.

**TABLE 5.21**

#### **OPINION OF CUSTOMERS TOWARDS THE FEATURES OF DEBIT CARD**

<b>Features</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>No Opinion</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
Schedule Recurring Payment	98(10.3)	224(23.6)	215(22.6)	210(22.1)	203(21.4)	950(100)
Cash Back offer or Rewards	102(10.7)	91(9.6)	247(26)	235(24.7)	275(28.9)	950(100)
Transfer money to anyone's bank account	145(15.3)	47(4.9)	120(12.6)	310(32.6)	328(34.5)	950(100)
Cash Back offer or Rewards	85(8.9)	139(14.6)	230(24.2)	216(22.7)	280(29.5)	950(100)

**Note: Figures in Parentheses Indicate Percentages**

**Source: Primary Data**

Table 5.21 clearly reveals that 34.5 per cent of the respondents mentioned that they are strongly disagreed with the debit card is useful for transfer money to anyone's bank account, 24.7 per cent of the respondents mentioned that they are disagreed with the debit card is useful for cash back offer or rewards, 23.6 per cent of the respondents are agreed with the debit card is useful for schedule recurring deposit and 26 per cent of the respondents are neither agreed nor disagreed with the debit card is useful for cash back offer or rewards.

### 5.2.13 Opinion of Customers towards the Features of Telebanking

The following table shows the opinion of customers towards the features of telebanking.

**TABLE 5.22**

#### **OPINION OF CUSTOMERS TOWARDS THE FEATURES OF TELEBANKING**

<b>Features</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>No Opinion</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
Balance Enquiry	245(22.7)	62(5.8)	216(20)	239(22.2)	315(29.2)	1077(100)
Lost ATM / Debit / Credit Card Reporting	54(5)	216(20)	220(20.4)	247(22.9)	340(31.6)	1077(100)
Cheque Book Request	204(18.9)	64(5.9)	201(18.7)	210(19.5)	398(36.9)	1077(100)
Lost Cheque book reporting	83(7.7)	182(16.9)	258(23.9)	264(24.5)	290(26.9)	1077(100)
Statement Request	153(14.2)	59(5.5)	287(26.6)	251(23.3)	327(30.4)	1077(100)
Transfer of funds	176(16.3)	200(18.6)	240(22.3)	125(11.6)	336(31.2)	1077(100)
Loan Status Enquiry	137(12.7)	142(13.2)	194(18)	257(23.9)	347(32.2)	1077(100)
Stop Payment Instructions	64(5.9)	221(20.5)	193(17.9)	230(21.4)	369(34.3)	1077(100)
Obtain Product information	42(3.9)	245(22.7)	190(17.6)	222(20.6)	378(35.1)	1077(100)

**Note: Figures in Parentheses Indicate Percentages**

**Source: Primary Data**

Table 5.22 clearly discloses that 22.7 per cent of the respondents are strongly agreed with the telebanking is useful for balance enquiry, another 22.7 per cent of the respondents mentioned that they are agreed with the telebanking is useful for obtain product information, 36.9 per cent of the respondents are strongly disagreed with the telebanking is useful for cheque book request and about 24 per cent of the respondents mentioned that they are disagreed with the telebanking is useful for loan status enquiry.



### 5.2.14 Opinion of Customers towards the Features of Internet Banking

The following table shows the opinion of customers towards the features of internet banking.

**TABLE 5.23**

#### **OPINION OF CUSTOMERS TOWARDS THE FEATURES OF INTERNET BANKING**

<b>Features</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>No Opinion</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
Balance Enquiry	133(12.3)	37(3.4)	270(25.1)	277(25.7)	360(33.4)	1077(100)
Lost ATM / Debit / Credit Card Reporting	35(3.2)	161(14.9)	240(22.3)	326(30.3)	315(29.2)	1077(100)
Cheque Book Request	93(8.6)	122(11.3)	237(22)	289(26.8)	336(31.2)	1077(100)
Lost Cheque book reporting	33(3.1)	131(12.2)	249(23.1)	296(27.5)	368(34.2)	1077(100)
Statement Request	69(6.4)	98(9.1)	252(23.4)	348(32.3)	310(28.8)	1077(100)
Transfer of funds	89(8.3)	70(6.5)	269(24.9)	352(32.7)	297(27.6)	1077(100)
Loan Status Enquiry	62(5.8)	81(7.5)	294(27.3)	323(29.9)	317(29.4)	1077(100)
Stop Payment Instructions	107(9.9)	34(3.2)	287(26.6)	316(29.3)	333(30.9)	1077(100)
Obtain Product information	240(22.3)	99(9.2)	169(15.7)	227(21.1)	342(31.8)	1077(100)

***Note: Figures in Parentheses Indicate Percentages***

***Source: Primary Data***

Table 5.23 clearly shows that 22.3 per cent of the respondents mentioned that they are strongly agreed with the internet banking is useful for obtain product information, 34.2 per cent of the respondents mentioned that they are strongly disagreed with the internet banking is useful for lost cheque book reporting, 32.7 per cent of the respondents are disagreed with the internet banking is useful for transfer of funds and about 15 per cent of the respondents mentioned that they are agreed with the internet banking is useful for lost ATM/Debit/Credit Card reporting.

### 5.2.15 Opinion of Customers towards the Features of Mobile Banking

The following table shows the opinion of customers towards the features of mobile banking.

**TABLE 5.24**

#### **OPINION OF CUSTOMERS TOWARDS THE FEATURES OF MOBILE BANKING**

<b>Features</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>No Opinion</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
Viewing Account Balance	298(27.7)	105(9.7)	157(14.6)	263(24.4)	254(23.6)	1077(100)
Transfer funds between customer linked accounts	198(18.4)	219(20.3)	151(14)	268(24.9)	241(22.4)	1077(100)
Create Fixed Deposits	71(6.6)	194(18)	179(16.6)	315(29.2)	318(29.5)	1077(100)
Request for Cheque/DD	89(8.3)	207(19.2)	237(22)	310(28.8)	234(21.7)	1077(100)
Bill Payments	97(9)	179(16.6)	174(16.2)	230(21.4)	397(36.9)	1077(100)
Order Stop payment of the cheque	41(3.8)	264(24.5)	169(15.7)	287(26.6)	316(29.3)	1077(100)
Request for Debit card	239(22.2)	134(12.4)	139(12.9)	236(21.9)	329(30.5)	1077(100)
Online Shopping (Ticket booking, Mobile Recharges, etc.)	82(7.6)	218(20.2)	219(20.3)	211(19.6)	347(32.2)	1077(100)
Downloading Bank Statements	78(7.2)	179(16.6)	234(21.7)	218(20.2)	368(34.2)	1077(100)

**Note: Figures in Parentheses Indicate Percentages**

**Source: Primary Data**

Table 5.24 clearly shows that 27.7 per cent of the respondents mentioned that they are strongly agreed with the mobile banking is useful for viewing account balance, 24.5 per cent of the respondents mentioned that they are agreed with the mobile banking is useful for order stop payment of the cheque, 36.9 per cent of the respondents are strongly disagreed with the mobile banking is useful for bill payments and 29.2 per cent of the respondents mentioned that they are disagreed with the mobile banking is useful for create fixed deposits.

### 5.2.16 Opinion of Customers towards the Features of Credit Card

The following table shows the opinion of customers towards the features of Credit Card.

**TABLE 5.25**

#### **OPINION OF CUSTOMERS TOWARDS THE FEATURES OF CREDIT CARD**

<b>Features</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>No Opinion</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Total</b>
Schedule Recurring Payment	113(12.9)	45(5.2)	98(11.3)	238(27.3)	377(43.3)	871(100)
Cash Back offer or Rewards	103(11.8)	51(5.9)	57(6.5)	245(28.1)	415(47.6)	871(100)
Transfer money to anyone's bank account	58(6.7)	20(2.3)	74(8.5)	288(33.1)	431(49.5)	871(100)
Access the Credit Limit	42(4.8)	63(7.2)	68(7.8)	294(33.8)	404(46.4)	871(100)
Cash Back offer or Rewards	32(3.7)	25(2.9)	147(16.9)	277(31.8)	390(44.8)	871(100)

**Note: Figures in Parentheses Indicate Percentages**

**Source: Primary Data**

Table 5.25 clearly reveals that 49.5 per cent of the respondents mentioned that they are strongly disagreed with the credit card is useful for transfer money to anyone's bank account, 33.8 per cent of the respondents mentioned that they are disagreed with the credit card is useful for access the credit limit, 12.9 per cent of the respondents mentioned that they are agreed with the credit card is useful for schedule recurring payment and about 7.2 per cent of the respondents mentioned that they are agreed with the credit card is useful for access the credit limit.

### 5.2.17 Opinion of Customers towards the Features of NEFT/RTGS

The following table shows the opinion of customers towards the features of NEFT/RTGS.

**TABLE 5.26**  
**FEATURES AND USES OF NEFT/RTGS**

Sl. No	Particulars	No. of Respondents	Percentage
1	Strongly Agree	85	7.9
2	Agree	96	8.9
3	No Opinion	196	18.2
4	Disagree	387	35.9
5	Strongly Disagree	313	29.1
	<b>Total</b>	<b>1077</b>	<b>100</b>

*Note: Figures in Parentheses Indicate Percentages*

*Source: Primary Data*

Table 5.26 reveals that 35.9 per cent of the respondents mentioned that they are disagreed with the features and uses of NEFT/RTGS, 29.1 per cent of the respondents are strongly disagreed with the features and uses of NEFT/RTGS, 8.9 per cent of the respondents are agreed with the features and uses of NEFT/RTGS and about 8 per cent of the respondents mentioned that they are strongly agreed with the features and uses of NEFT/RTGS.

## 5.3 ASSOCIATION BETWEEN DEMOGRAPHIC PROFILES

### 5.3.1 Age and Type of Bank

In order to find out the significant relationship between type of bank and age group of customers of banks in Tirunelveli district, Chi-square test is attempted with the null hypothesis

$H_o$  - “There is no significant relationship between type of bank and age group of customers of banks in Tirunelveli district”.

The result of chi-square test for type of bank and age is presented in table 5.27.

**TABLE 5.27**  
**ASSOCATION BETWEEN AGE AND TYPE OF BANK**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	68.548	3	0.000
Likelihood Ratio	113.133	3	0.000
Linear-by-Linear Association	46.637	1	0.000
N of Valid Cases	1077		

*Source: Primary Data*

Table 5.27 shows that the calculated chi square value for type of bank among different age groups of customers in Tirunelveli district is 68.548 which is significant at the ‘p’ value of 0.000. Since the ‘p’ value is less than 0.05, the null hypothesis is rejected. It is concluded that there is a significant relationship between type of bank and age group of customers of banks in Tirunelveli district.

### **5.3.2 Age and Availing Modern Banking Services**

Age depends up on the availing modern banking services of the respondents.. The following hypothesis ( $H_0$ ) is proposed for analysis the age and availing modern banking services.

$H_0$  : *There is no significant association between age and availing modern banking services.*

The result of Chi-square test for age and availing modern banking services is explained in the table 5.28.

**TABLE 5.28**  
**ASSOCATION BETWEEN AGE AND AVAILING MODERN**  
**BANKING SERVICES**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.294	9	0.000
Likelihood Ratio	89.105	9	0.000
Linear-by-Linear Association	13.232	1	0.000
N of Valid Cases	1077		

*Source: Primary Data*

Table 5.28 shows that the calculated chi square value for avail modern banking services among different age groups of customers of banks in Tirunelveli district is 80.294 which are significant at the ‘p’ value of 0.000. Since the ‘p’ value is less than 0.05, the null hypothesis is rejected. It is concluded that there is a significant relationship between availing modern banking services and age group of customers of banks in Tirunelveli district.

### 5.3.3 Age and Type of Credit Card

An age of the customer and type of credit card users in Tirunelveli district. With a view to test the null hypothesis namely,

***H<sub>0</sub>: There is no significant association between age and type of credit card.***

The results of age and type of credit card are displayed in the table 5.29

**TABLE 5.29****ASSOCIATION BETWEEN AGE AND TYPE OF CREDIT CARD**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.149	6	0.000
Likelihood Ratio	44.580	6	0.000
Linear-by-Linear Association	.148	1	0.700
N of Valid Cases	1077		

**Source: Primary Data**

Table 5.29 observed the case of private and public sector banks. The calculated value is 39.149, Degree of Freedom is 6 and 'p' value of 0.000. Since the 'p' value is less than 0.05, the null hypothesis is rejected. There is a significant relationship between type of credit card and age group of customers in private and public sector banks in Tirunelveli district.

**5.3.4 Age and Number of Account**

Age and number of account hold sample customers in private and public sector banks. An attempt was made to know the association between age and number of account. The following null hypothesis ( $H_0$ ) is tested.

**$H_0$ : There is no significant association between age and number of account.**

The result of age of sample customer and number of account is in the table 5.30

**TABLE 5.30****ASSOCIATION BETWEEN AGE AND NUMBER OF ACCOUNT**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.063	12	0.000
Likelihood Ratio	70.108	12	0.000
Linear-by-Linear Association	14.731	1	0.000
N of Valid Cases	1077		

**Source: Primary Data**

Table 5.30 shows that the calculated value for number of account among different age groups of customers of banks in Tirunelveli district is 47.063 which is significant at the 'p' value of 0.000. Since the 'p' value is less than 0.05, the null hypothesis is rejected. It is concluded that there is a significant relationship between number of account and age group of customers of banks in Tirunelveli district.

### 5.3.5 Age and Frequency of Transaction

Frequency of transaction and age of the sample customer. The following hypothesis ( $H_0$ ) are proposed for the analysis

***$H_0$  : There is no significant association between age and frequency of transactions.***

The results of age and frequency of transactions is elucidated in the table 5.31.

**TABLE 5.31**

#### **ASSOCIATION BETWEEN AGE AND FREQUENCY OF TRANSACTION**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	128.347	12	.000
Likelihood Ratio	142.559	12	.000
Linear-by-Linear Association	8.829	1	.003
N of Valid Cases	1077		

***Source: Primary Data***

From Table 5.31 displayed that the calculated value is 128.347, 'p' value of 0.000. Since the 'p' value is less than 0.05, the null hypothesis is rejected. It is concluded that there is a significant relationship between frequency of transaction and age group of customers of banks in Tirunelveli district.



### 5.3.6 Age and Type of Account

Age and type of account of the sample respondents in private and public Sector banks. The following hypothesis ( $H_0$ ) is proposed for study. The table identified the hypothesis.

***H<sub>0</sub>: There is no significant association between age and type of account.***

**TABLE 5.32**

#### **ASSOCIATION BETWEEN AGE AND TYPE OF ACCOUNT**

<b>Particulars</b>	<b>Value</b>	<b>Df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	46.513	9	0.000
Likelihood Ratio	70.540	9	0.000
Linear-by-Linear Association	1.153	1	0.283
N of Valid Cases	1077		

***Source: Primary Data***

It is clearly evidenced from Table 5.32 shows that in case of private and public sector banks, the calculated value is 46.513, 'p' value of 0.000. Since the significance of the p value is less than 0.05. There is a significant association between type of account and age group of customers of banks in private and public sector banks in Tirunelveli district.

### 5.3.7 Age and Awareness About Opening Account

An attempt was made to know the association between age and awareness about opening account. The following hypothesis ( $H_0$ ) shown below.

***H<sub>0</sub> : There is no significant association between age and awareness about opening account.***

**TABLE 5.33**  
**ASSOCIATION BETWEEN AGE AND AWARENESS ABOUT**  
**OPENING ACCOUNT**

Particulars	Value	DF	Asymp. Sig. (2-sided)
Pearson Chi-Square	31.761	6	0.000
Likelihood Ratio	38.438	6	0.000
Linear-by-Linear Association	0.932	1	0.334
N of Valid Cases	1077		

*Source: Primary Data*

It is observed that from table in case of public sector and private sector banks, the calculated Chi-Square values are less than the table values at 5 per cent level. Hence, there is relationship between age and awareness about opening account of the sample respondents among the public and private sector banks in Tirunelveli district.

### 5.3.8 Gender and Type of Bank

Gender of the sample customer may also depend upon type of bank in private and public sector bank. The researcher has made an attempt to study gender of the customers and type of bank. The following hypothesis ( $H_0$ ) is proposed for analysing the gender and type of bank.

**$H_0$  :** *There is no significant association between gender and type of bank.*

**TABLE 5.34**  
**ASSOCIATION BETWEEN GENDER AND TYPE OF BANK**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	58.004	2	.000
Likelihood Ratio	57.038	2	.000
Linear-by-Linear Association	56.448	1	.000
N of Valid Cases	1077		

*Source: Primary Data*

The table 5.34 clearly shows that between gender and type of bank in private and public sector banks, the P value is 58.004, the degree of freedom is 6 and the level of significance is .000. There is a significant association between gender and type of bank in private and public sector banks.

### 5.3.9 Marital Status and Type of Bank

Marital status and depends upon the type of bank in private and public sector banks. The following null hypotheses are formulated below.

***H<sub>0</sub> :*** *There is no significant association between marital status and type of bank.*

**TABLE 5.35**

#### **ASSOCIATION BETWEEN MARITAL STATUS AND TYPE OF BANK**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.753	2	.005
Likelihood Ratio	7.415	2	.006
Linear-by-Linear Association	7.748	1	.005
N of Valid Cases	1077		

***Source: Primary Data***

It is analysed that table 5.35, P value is 7.753, Degree of freedom is 2 and the level of significance is .005. Hence, there is a significant relationship between marital status and type of bank in private and public sector banks.

### 5.3.10 Educational Qualification and Type of Bank

The hypothesis proposed on educational qualification and association between the types of bank follows.

***H<sub>0</sub> :*** *There is no significant association between educational qualification and type of bank.*

**TABLE 5.36**

**ASSOCIATION BETWEEN EDUCATIONAL QUALIFICATION AND  
TYPE OF BANK**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	130.201	5	.000
Likelihood Ratio	130.090	5	.000
Linear-by-Linear Association	6.734	1	.009
N of Valid Cases	1077		

*Source: Primary Data*

The table 5.36 shows the association was conducted between educational qualification and type of bank. The 'P' value is 130.201, Degree of freedom is 5 and the level of significance is .000. There is a significant association between educational qualification and type of bank in private and public sector banks.

### **5.3.11 Educational Qualification and Type of Credit Card**

Educational qualification also depends upon type of credit card in modern banking services. The following hypothesis ( $H_0$ ) is proposed for analysis the educational qualification and type of credit card.

***$H_0$  : There is no significant association between educational qualification  
and type of credit card.***

Educational qualification and type of credit card customer is listed in the table 5.37.

**TABLE 5.37**  
**ASSOCIATION BETWEEN EDUCATIONAL QUALIFICATION AND**  
**TYPE OF CREDIT CARD**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	290.621	15	.000
Likelihood Ratio	345.415	15	.000
Linear-by-Linear Association	6.882	1	.009
N of Valid Cases	1077		

*Source: Primary Data*

It is clearly evidenced from table 5.37 that there is an association educational qualification and type of credit card. Chi square test value 290.621, degree of freedom is 15, p value is less than. 000 indicate that there is a significant association between educational qualification and type of credit card.

### **5.3.12 Educational Qualification and Time Taken for Transaction**

Educational qualification may depend upon time taken for transaction. The following null hypothesis is proposed for analysis.

***H<sub>0</sub> : There is no significant association between educational qualification  
time taken for transaction in the modern banking service.***

The table 5.38 shows the Chi-square test for frequency of visit and time taken to modern banking.

**TABLE 5.38**  
**ASSOCIATION BETWEEN EDUCATIONAL QUALIFICATION AND**  
**TIME TAKEN FOR TRANSACTION**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	174.432	10	.000
Likelihood Ratio	169.415	10	.000
Linear-by-Linear Association	23.188	1	.000
N of Valid Cases	1077		

*Source: Primary Data*

From table 5.38 it is found that there is association between educational qualification and time taken for transaction. The chi square test is .174.432, degree of freedom is 10, the level of significance is .000. Finally, the table shows that there is a significant relationship between educational qualification and time taken for transaction.

### **5.3.13 Educational Qualification and Frequency of Visit**

Educational qualification depends upon frequency of visit in modern banking services. The following null hypothesis is analysis the table 5.39.

***H<sub>0</sub> : There is no significant association between educational qualification and frequency of visit.***

**TABLE 5.39**  
**ASSOCIATION BETWEEN EDUCATIONAL QUALIFICATION AND**  
**FREQUENCY OF VISIT**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	228.100	20	.000
Likelihood Ratio	229.254	20	.000
Linear-by-Linear Association	98.279	1	.000
N of Valid Cases	1077		

*Source: Primary Data*

Table 5.39 depicts association between educational qualification and frequency of visit in modern banking service. Chi square value is 228.100, and p value is lesser than 05. The table indicates that there is an association between educational qualification and frequency of visit in modern banking service.

#### **5.3.14 Educational Qualification and Type of Account**

The hypothesis ( $H_0$ ) is proposed to analyse the educational qualification and type of account. The result of the educational qualification and type of account is described in the table 5.40.

*$H_0$  : There is no significant association between educational qualification and type of account.*

**TABLE 5.40**  
**ASSOCIATION BETWEEN EDUCATIONAL QUALIFICATION AND**  
**TYPE OF ACCOUNT**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	156.781	15	.000
Likelihood Ratio	186.289	15	.000
Linear-by-Linear Association	0.023	1	.881
N of Valid Cases	1077		

*Source: Primary Data*

It is evident from table 5.40 educational qualification among type of account have significant association. The chi square test 156.781, degree of freedom is 15. Hence, there is a significant association between educational qualification and type of account.

### 5.3.15 Educational Qualification and Awareness in Opening Account

The following null hypothesis is framed to analyse, educational qualification and awareness in opening account.

***H<sub>0</sub> : There is no significant association between educational qualification and awareness in opening account.***

The results of Chi-square test for educational qualification and awareness in opening account is presented in the table 5.41.

**TABLE 5.41**  
**ASSOCIATION BETWEEN EDUCATIONAL QUALIFICATION AND**  
**AWARENESS IN OPENING ACCOUNT**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	65.290	10	.000
Likelihood Ratio	65.351	10	.000
Linear-by-Linear Association	.641	1	.423
N of Valid Cases	1077		

***Source: Primary Data***

The table 5.41 proved that educational qualification and awareness in opening account in the modern banking service. Chi square value is 65.290, p value is 10 and the level of significance is .000. Hence, there is a significance difference between educational qualification and awareness in opening account in the modern banking service.



### 5.3.16 Religion and Type of Bank

The null hypothesis is framed to analyse the relationship between religion and type of bank is presented in table.

***H<sub>0</sub> : There is no significant association between religion and type of bank in the modern banking service.***

The null hypothesis of the Chi-square test for religion and type of bank is shown in the table 5.42.

**TABLE 5.42**

#### **ASSOCIATION BETWEEN RELIGION AND TYPE OF BANK**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	93.414	2	.000
Likelihood Ratio	79.786	2	.000
Linear-by-Linear Association	19.155	1	.000
N of Valid Cases	1077		

***Source: Primary Data***

It is depicted in table 5.42 about the association of religion among type of bank. There was a significant association between religion and type of bank. Chi square value is 93.414, the degree of freedom is 2 p value is .000. The table indicates that there is an association between two variables.

### 5.3.17 Community and Type of Bank

An attempt was made to know the association between community and type of bank. The following null hypothesis is framed for analysis association of the community among type of bank.

***H<sub>0</sub>: There is no significant association between community and type of bank.***

The results of Chi-square test for community between type of bank is elucidate in the table 5.43.

**TABLE 5.43**

**ASSOCIATION BETWEEN COMMUNITY AND TYPE OF BANK**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.631	3	.304
Likelihood Ratio	3.785	3	.286
Linear-by-Linear Association	.825	1	.364
N of Valid Cases	1077		

*Source: Primary Data*

Table 5.43 shows the association of community among the type of bank in Tirunelveli district. Chi square value is 3.631, degree of freedom is 3, and the level of significance is .000. Hence, there is a significance relationship between community among type of bank.

### **5.3.18 Occupation and Type of Bank**

The following null hypothesis is proposed for analysing the occupation and type of bank.

***H<sub>0</sub>: There is no significant association between occupation and type of bank.***

The results of Chi-square test for occupation and type of bank is explained in the table 5.44.

**TABLE 5.44****ASSOCIATION BETWEEN OCCUPATION AND TYPE OF BANK**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	95.968	4	.000
Likelihood Ratio	119.749	4	.000
Linear-by-Linear Association	10.365	1	.001
N of Valid Cases	1077		

***Source: Primary Data***

Table 5.44 explained that the chi-square test for association was conducted between occupation and type of bank. The chi square value is 95.968, degree of freedom is 4, and the p value is 5 the level of significance is .000. Hence, there was a statistically significant association between occupation and type of bank,

### **5.3.19 Occupation and Time Taken for Transaction**

An attempt was made to know the association between occupation and time taken for transaction. The following hypothesis ( $H_0$ ) is proposed for analysis the occupation and time taken for transaction.

***$H_0$  : There is no significant association between occupation and time taken for transaction.***

The results of Chi-square test for occupation and time taken for transaction is explained in the table 5.45.

**TABLE 5.45**  
**ASSOCIATION BETWEEN OCCUPATION AND TIME TAKEN FOR**  
**TRANSACTION**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	54.582	8	.000
Likelihood Ratio	56.698	8	.000
Linear-by-Linear Association	4.907	1	.027
N of Valid Cases	1077		

*Source: Primary Data*

A chi-square test for association was conducted between occupation and time taken for transaction. Chi square test is 54.582, degree of freedom is 8. As the calculated value is less than table value. It is concluded that there is statistically significant association between occupation and time taken for transaction.

### **5.3.20 Occupation and Type of Credit Card**

An attempt was made to know the association between occupation and type of credit card. The following null hypothesis is proposed for analysis of the occupation and type of credit card.

***H<sub>0</sub> : There is no significant association between occupation and type of credit card.***

The result of Chi-square test for occupation among type of credit card is displayed in the table 5.46.

**TABLE 5.46****ASSOCIATION BETWEEN OCCUPATION AND TYPE OF CREDIT CARD**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	148.156	12	.000
Likelihood Ratio	178.344	12	.000
Linear-by-Linear Association	11.862	1	.001
N of Valid Cases	1077		

*Source: Primary Data*

From the table 5.46 it is shown the chi-square test for association was conducted between occupation and type of credit card. Chi square value is 148.156, degree of freedom is 12. The level of significance is less than table value. It is concluded that there is a statistically significant association between occupation among type of credit card.

**5.3.21 Occupation and Frequency of Visit**

The following null hypothesis is framed for analysing the association between occupation and frequency of visit.

***H<sub>0</sub> : There is no significant association between occupation and frequency of visit.***

The Chi-square test for occupation among time taken to frequency of visit is clarified in the table 5.47.

**TABLE 5.47****ASSOCIATION BETWEEN OCCUPATION AND FREQUENCY OF VISIT**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	200.927	16	.000
Likelihood Ratio	218.518	16	.000
Linear-by-Linear Association	.178	1	.673
N of Valid Cases	1077		

***Source: Primary Data***

The table 5.47 shows chi-square test for association between occupation and frequency of visit. Chi square table value is 200.927, while the degree of freedom is 16, the level of significance is less than the table value. It is concluded that there is a significance difference occupation and frequency of visit.

### **5.3.22 Occupation and Number of Years Having Account**

An attempt was made to know the association between occupation and number of years having account. The following null hypothesis is proposed for analysing the association between occupation and number of years having account.

***H<sub>0</sub> : There is no significant association between occupation and number of years having account.***

The association of occupation among number of years having account is explained in the table 5.48.

**TABLE 5.48****ASSOCIATION BETWEEN OCCUPATION AND NUMBER OF YEARS  
HAVING ACCOUNT**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	436.473	12	.000
Likelihood Ratio	418.765	12	.000
Linear-by-Linear Association	62.749	1	.000
N of Valid Cases	1077		

***Source: Primary Data***

Table 5.48 shows that chi-square test for association between occupation and number of years having account. Table value 436.473, while degree of freedom is 12, as calculated value is less than the table value, the null hypothesis is accepted. It is concluded that there is a relationship between occupation and number of years having account.

**5.3.23 Occupation and Type of Account**

The following null hypothesis is proposed for analysing the association between occupation and type of account.

***H<sub>0</sub> : There is no significant association between occupation and type of account.***

The results of Chi-square test for occupation and type of account is analysed in the table 5.49.

**TABLE 5.49****ASSOCIATION BETWEEN OCCUPATION AND TYPE OF ACCOUNT**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	50.199	12	.000
Likelihood Ratio	54.258	12	.000
Linear-by-Linear Association	.030	1	.862
N of Valid Cases	1077		

**Source: Primary Data**

The table 5.49 shows the association between occupations among type of account in the modern banking service. Chi square test value is 50.199, while degree of freedom value is 12 the level of significance is less than the table value, hence the null hypothesis is accepted. It is concluded that there is a relationship between occupation and type of account.

### **5.3.24 Occupation and Awareness in Opening Account**

The following null hypothesis is proposed for analysing the association between occupation and awareness in opening account.

***H<sub>0</sub> : There is no significant association between occupation and awareness in opening account.***

The results of Chi-square test for occupation and awareness in opening account is explained in the table 5.50.



**TABLE 5.50**  
**ASSOCIATION BETWEEN OCCUPATION AND AWARENESS IN**  
**OPENING ACCOUNT**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.339	8	.000
Likelihood Ratio	37.607	8	.000
Linear-by-Linear Association	1.682	1	.195
N of Valid Cases	1077		

*Source: Primary Data*

The table 5.50 highlights the significance between occupation and awareness in opening account. Chi square value is 34.339, while degree of freedom is 8, the level of significance is less than table value. Hence the null hypothesis is accepted. It is concluded that there is a relationship between occupations among awareness of opening an account.

### **5.3.25 Income and Type of Bank**

Null hypothesis is framed for analysing the association between income and type of bank.

***H<sub>0</sub>: There is no significant association between income and type of bank.***

The results of Chi-square test for income and type of bank is elucidate the table 5.51.

**TABLE 5.51****ASSOCIATION BETWEEN INCOME AND TYPE OF BANK**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	149.691	4	.000
Likelihood Ratio	145.341	4	.000
Linear-by-Linear Association	63.286	1	.000
N of Valid Cases	1077		

***Source: Primary Data***

It is clear from above table that, the chi-square value 149.691, degree of freedom is 4, the level of significance is less than table value indicates that there was an association between two variables. Hence, there is statistically significant association between income and type of bank.

**5.3.26 Income and Type of credit cards**

An attempt was made to know the association between income and type of credit cards. The following null hypothesis is proposed for analysis the income and type of credit cards.

***H<sub>0</sub>: There is no significant association between income and type of credit cards.***

The results of Chi-square test for income and type of credit cards is explained in the table 5.52.

**TABLE 5.52****ASSOCIATION BETWEEN INCOME AND TYPE OF CREDIT CARDS**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	129.983	12	.000
Likelihood Ratio	153.329	12	.000
Linear-by-Linear Association	4.299	1	.038
N of Valid Cases	1077		

***Source: Primary Data***

The table 5.52 clearly defines chi-square test for association between income and type of credit cards. The chi-square value is 129.983, degree of freedom is 12, the level of significance is .000 indicates that there was an association between two variables. The table concluded that there is significant association between income and type of credit cards.

### **5.3.27 Income and Frequency of Transaction**

The null hypothesis ( $H_0$ ) is proposed for analysing the association between income and frequency of transaction.

***$H_0$  : There is no significant association between income and frequency of transaction.***

Income among frequency of transaction is explained in the table 5.53.

**TABLE 5.53****INCOME AND FREQUENCY OF TRANSACTION**

Particulars	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	154.154	16	.000
Likelihood Ratio	150.627	16	.000
Linear-by-Linear Association	.107	1	.744
N of Valid Cases	1077		

***Source: Primary Data***

The table 5.53 enlighten the association of income among frequency of transaction. The chi-square value is 154.154, degree of freedom is 16, the level of significance is less than table value indicates that there was an association between two variables. There is statistically significant association between income and frequency of transaction.

**5.3.28 Income and Type of Account**

An attempt was made to know the association between income and type of account. Null hypothesis is proposed for analysis the income and type of account.

***H<sub>0</sub>: There is no significant association between income and type of account.***

The results of Chi-square test for income and type of account is explained in the table 5.54.

**TABLE 5.54**  
**INCOME AND TYPE OF ACCOUNT**

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	334.225	12	.000
Likelihood Ratio	329.353	12	.000
Linear-by-Linear Association	56.236	1	.000
N of Valid Cases	1077		

*Source: Primary Data*

The table explains the association between income among type of account. Chi-square value is 334.225 may indicate that there was an association between two variables. There was a statistically significant association between income and type of account.

### **5.3.29 Income and Awareness of Opening Account**

An attempt was made to know the association between income and awareness in opening account. The following null hypothesis is proposed for analysis the income and awareness in opening account.

***H<sub>0</sub> : There is no significant association between income and awareness in opening account.***

The results of Chi-square test for income and awareness in opening account is explained in the table 5.55.

**TABLE 5.55****INCOME AND AWARENESS IN OPENING ACCOUNT**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	96.572	8	.000
Likelihood Ratio	130.055	8	.000
Linear-by-Linear Association	42.462	1	.000
N of Valid Cases	1077		

*Source: Primary Data*

The table 5.55 shows the chi-square test for association between income and awareness in opening account. The chi-square value is 96.572, degree of freedom is 8 and the level of significance is less than table value that indicates there was an association between two variables. There was a statistically significant association between income among awareness in opening account.

### **5.3.30 Type of Family and Type of Bank**

Null hypothesis is proposed for analysis the type of family and type of bank.

***H<sub>0</sub> : There is no significant association between type of family and type of bank.***

The results of Chi-square test for type of family and type of bank are explained in the table 5.56.

**TABLE 5.56****TYPE OF FAMILY AND TYPE OF BANK**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	6.784	2	0.009
Likelihood Ratio	6.458	2	0.011
Linear-by-Linear Association	6.825	1	0.009
N of Valid Cases	1077		

*Source: Primary Data*

The table 5.56 displays the chi-square test for association was conducted between type of family and type of bank. The chi-square value is 6.784, degree of freedom is 2, the level of significance is .009 indicates that there was an association between two variables. Here, there is significant association between type of family and type of bank.

### **5.3.31 Frequency of Visit and Time Taken for Modern Banking**

The following null hypothesis is proposed for analysing association between frequency of visit and time taken to modern banking.

***H<sub>0</sub> : There is no significant association between frequency of visit and time taken to modern banking.***

The results of Chi-square test for frequency of visit and time taken to modern banking is describe in the table 5.57.

**TABLE 5.57****FREQUENCY OF VISIT AND TIME TAKEN TO MODERN BANKING**

<b>Particulars</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	54.368	8	.000
Likelihood Ratio	54.461	8	.000
Linear-by-Linear Association	.130	1	.719
N of Valid Cases	1077		

***Source: Primary Data***

The table 5.57 explains the association between frequency of visit and time taken for modern banking. The chi-square value is 54.368, degree of freedom is 8, the level of significance is less than table value may indicate that there was an association between two variables. It is concluded that there is significant association between frequency of visit and time taken to modern banking.

## **5.4 REASON FOR CHOOSING BANK**

### **5.4.1 Reason for choosing Bank Based on Educational Qualification**

In order to find out the significant difference in reason for choosing bank based on educational qualification, ‘ANOVA’ test is attempted with the null hypothesis

***H<sub>0</sub> - “There is no significant difference in reason for choosing bank and different educational qualification of customers of banks in Tirunelveli District”.***

The result of ‘ANOVA’ test for the relationship between reason for choosing bank and educational qualification of customers is given in table 5.58.



**TABLE 5.58**

**REASON FOR CHOOSING BANK AMONG DIFFERENT EDUCATIONAL  
QUALIFICATION OF CUSTOMERS-ANOVA**

<b>Reason</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>p Value</b>
Safety For Deposit	Between Groups	32.798	5	6.560	6.023	0.000
	Within Groups	1166.435	1071	1.089		
	Total	1199.233	1076			
Better Interest	Between Groups	58.128	5	11.626	11.101	0.000
	Within Groups	1121.629	1071	1.047		
	Total	1179.757	1076			
Credit Facility	Between Groups	43.595	5	8.719	7.886	0.000
	Within Groups	1182.967	1070	1.106		
	Total	1226.561	1075			
Reputation of the Bank	Between Groups	72.983	5	14.597	14.210	0.000
	Within Groups	1100.136	1071	1.027		
	Total	1173.120	1076			
Fully Automated/ Advanced Technology	Between Groups	61.582	5	12.316	11.146	0.000
	Within Groups	1183.479	1071	1.105		
	Total	1245.060	1076			
Better Money Transfer Facility	Between Groups	40.433	5	8.087	8.376	0.000
	Within Groups	1031.069	1068	.965		
	Total	1071.502	1073			
Accessibility	Between Groups	41.151	5	8.230	8.335	0.000
	Within Groups	1057.514	1071	.987		
	Total	1098.665	1076			
Close Proximity to the Residence	Between Groups	54.581	5	10.916	11.506	0.000
	Within Groups	1013.285	1068	.949		
	Total	1067.866	1073			
Quicker and Better Service	Between Groups	61.493	5	12.299	12.827	0.000
	Within Groups	1026.877	1071	.959		
	Total	1088.370	1076			
Safety Locker Facility	Between Groups	18.623	5	3.725	4.129	0.001
	Within Groups	966.236	1071	.902		
	Total	984.860	1076			
Less Service Charges	Between Groups	31.950	5	6.390	6.155	0.000
	Within Groups	1111.917	1071	1.038		
	Total	1143.866	1076			
Better Infrastructure Facility	Between Groups	53.102	5	10.620	10.888	0.000
	Within Groups	1044.719	1071	.975		
	Total	1097.822	1076			

***Source: Computed Data***

The above table 5.58 shows the analysis results of reason for choosing bank against educational qualification. As the reason for choosing bank such as safety for deposit, better interest, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility showed a value which is significant.

It is revealed that there is a significant difference in the reason for choosing bank such as safety for deposit, better interest, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility with respect to educational qualification of the respondents.

#### **5.4.2 Reason for Choosing Bank Based on Occupation**

In order to find out the significant difference in reason for choosing bank based on occupation, 'ANOVA' test is attempted with the null hypothesis

***H<sub>0</sub> - "There is no significant difference in reason for choosing bank and different occupation of customers of banks in Tirunelveli District".***

The result of 'ANOVA' test for the relationship between reason for choosing bank and occupation of customers is given in table 5.59.

TABLE 5.59

## REASON FOR CHOOSING BANK AMONG DIFFERENT OCCUPATION OF CUSTOMERS

Reason	Particulars	Sum of Squares	Df	Mean Square	F	P Value
Safety For Deposit	Between Groups	15.128	4	3.782	3.424	0.009
	Within Groups	1184.105	1072	1.105		
	Total	1199.233	1076			
Better Interest	Between Groups	8.489	4	2.122	1.942	0.101
	Within Groups	1171.268	1072	1.093		
	Total	1179.757	1076			
Credit Facility	Between Groups	18.725	4	4.681	4.151	0.002
	Within Groups	1207.837	1071	1.128		
	Total	1226.561	1075			
Reputation of the Bank	Between Groups	15.358	4	3.840	3.555	0.007
	Within Groups	1157.762	1072	1.080		
	Total	1173.120	1076			
Fully Automated/ Advanced Technology	Between Groups	20.385	4	5.096	4.461	0.001
	Within Groups	1224.675	1072	1.142		
	Total	1245.060	1076			
Better Money Transfer Facility	Between Groups	11.090	4	2.772	2.795	0.025
	Within Groups	1060.412	1069	.992		
	Total	1071.502	1073			
Accessibility	Between Groups	14.439	4	3.610	3.569	0.007
	Within Groups	1084.225	1072	1.011		
	Total	1098.665	1076			
Close Proximity to the Residence	Between Groups	4.697	4	1.174	1.181	0.318
	Within Groups	1063.169	1069	.995		
	Total	1067.866	1073			
Quicker and Better Service	Between Groups	5.551	4	1.388	1.374	0.241
	Within Groups	1082.819	1072	1.010		
	Total	1088.370	1076			
Safety Locker Facility	Between Groups	3.847	4	.962	1.051	0.380
	Within Groups	981.013	1072	.915		
	Total	984.860	1076			
Less Service Charges	Between Groups	7.060	4	1.765	1.664	0.156
	Within Groups	1136.806	1072	1.060		
	Total	1143.866	1076			
Better Infrastructure Facility	Between Groups	2.910	4	.728	.712	0.584
	Within Groups	1094.911	1072	1.021		
	Total	1097.822	1076			

*Source: Computed Data*

The above table 5.59 shows the analysis results of reason for choosing bank against occupation. As the reason for choosing bank such as safety for deposit, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility and accessibility showed a value which is significant; it is revealed that there is a significant difference in the reason for choosing bank such as safety for deposit, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility and accessibility with respect to occupation of the respondents.

The above table further shows that the reason for choosing bank such as better interest, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility showed a value which is not significant. It is revealed that there is no significant difference in the reason for choosing bank such as better interest, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility with respect to occupation of the respondents.

#### **5.4.3 Reason for Choosing Bank Based on Income**

In order to find out the significant difference in reason for choosing bank based on income, 'ANOVA' test is attempted with the null hypothesis.

***H<sub>0</sub> - "There is no significant difference in reason for choosing bank and different income of customers of banks in Tirunelveli District".***

The result of 'ANOVA' test for the relationship between reason for choosing bank and income of customers is given in the table 5.60.

**TABLE 5.60****REASON FOR CHOOSING BANK AMONG DIFFERENT INCOME OF CUSTOMERS**

<b>Reason</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>p Value</b>
Safety For Deposit	Between Groups	24.681	4	6.170	5.632	0.000
	Within Groups	1174.552	1072	1.096		
	Total	1199.233	1076			
Better Interest	Between Groups	22.407	4	5.602	5.189	0.000
	Within Groups	1157.350	1072	1.080		
	Total	1179.757	1076			
Credit Facility	Between Groups	31.795	4	7.949	7.125	0.000
	Within Groups	1194.767	1071	1.116		
	Total	1226.561	1075			
Reputation of the Bank	Between Groups	21.640	4	5.410	5.037	0.001
	Within Groups	1151.479	1072	1.074		
	Total	1173.120	1076			
Fully Automated/ Advanced Technology	Between Groups	24.381	4	6.095	5.353	0.000
	Within Groups	1220.680	1072	1.139		
	Total	1245.060	1076			
Better Money Transfer Facility	Between Groups	14.457	4	3.614	3.655	0.006
	Within Groups	1057.045	1069	.989		
	Total	1071.502	1073			
Accessibility	Between Groups	19.326	4	4.832	4.799	0.001
	Within Groups	1079.339	1072	1.007		
	Total	1098.665	1076			
Close Proximity to the Residence	Between Groups	23.127	4	5.782	5.916	0.000
	Within Groups	1044.739	1069	.977		
	Total	1067.866	1073			
Quicker and Better Service	Between Groups	50.457	4	12.614	13.029	0.000
	Within Groups	1037.913	1072	.968		
	Total	1088.370	1076			
Safety Locker Facility	Between Groups	15.706	4	3.927	4.343	0.002
	Within Groups	969.153	1072	.904		
	Total	984.860	1076			
Less Service Charges	Between Groups	45.618	4	11.404	11.132	0.000
	Within Groups	1098.249	1072	1.024		
	Total	1143.866	1076			
Better Infrastructure Facility	Between Groups	34.095	4	8.524	8.590	0.000
	Within Groups	1063.726	1072	.992		
	Total	1097.822	1076			

***Source: Computed Data***

The above table 5.60 shows the analysis results of reason for choosing bank against income. As the reason for choosing bank such as safety for deposit, better interest, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility showed a value which is significant.

It is revealed that there is a significant difference in the reason for choosing bank such as safety for deposit, better interest, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility with respect to income of the respondents.

## **5.5 AWARENESS LEVEL OF MODERN BANKING**

### **5.5.1 Awareness Level of Modern Banking Based on Educational Qualification**

An attempt was made to know the awareness level of modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, debit card, ECS, NEFT, RTGS, CTS and Demat based on educational qualification. To test the awareness level of modern banking based on educational qualification, the following null hypothesis was proposed.

***H<sub>0</sub> : There is no significant difference in educational qualification and awareness level of modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, debit card, ECS, NEFT, RTGS, CTS and Demat***

The ANOVA test was used to analyse the awareness level of modern banking services based on educational qualification and test the proposed null hypothesis. The details of the result of ANOVA test is reported in table 5.61.

**TABLE 5.61**  
**AWARENESS LEVEL OF MODERN BANKING AMONG DIFFERENT**  
**EDUCATIONAL QUALIFICATION OF CUSTOMERS**

<b>Awareness level of modern banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>p Value</b>
ATM	Between Groups	54.582	5	10.916	9.638	0.000
	Within Groups	1202.811	1062	1.133		
	Total	1257.393	1067			
Tele Banking	Between Groups	100.749	5	20.150	11.481	0.000
	Within Groups	1879.637	1071	1.755		
	Total	1980.386	1076			
Internet Banking	Between Groups	93.973	5	18.795	10.563	0.000
	Within Groups	1905.578	1071	1.779		
	Total	1999.551	1076			
Mobile Banking	Between Groups	195.155	5	39.031	23.420	0.000
	Within Groups	1784.881	1071	1.667		
	Total	1980.035	1076			
Credit Card	Between Groups	135.904	5	27.181	14.083	0.000
	Within Groups	2067.095	1071	1.930		
	Total	2202.999	1076			
Debit Card	Between Groups	57.204	5	11.441	7.152	0.000
	Within Groups	1713.188	1071	1.600		
	Total	1770.392	1076			
ECS	Between Groups	148.703	5	29.741	18.830	0.000
	Within Groups	1691.600	1071	1.579		
	Total	1840.303	1076			
NEFT	Between Groups	101.920	5	20.384	11.801	0.000
	Within Groups	1849.909	1071	1.727		
	Total	1951.829	1076			

Awareness level of modern banking	Particulars	Sum of Squares	df	Mean Square	F	P Value
RTGS	Between Groups	155.810	5	31.162	19.161	0.000
	Within Groups	1741.840	1071	1.626		
	Total	1897.651	1076			
CTS	Between Groups	172.680	5	34.536	19.966	0.000
	Within Groups	1852.562	1071	1.730		
	Total	2025.242	1076			
Demat	Between Groups	115.745	5	23.149	14.181	0.000
	Within Groups	1748.333	1071	1.632		
	Total	1864.078	1076			

**Source: Computed Data**

The table 5.61 discloses that the level of significance is lesser than 5 percent. It shows that educational qualification wise there is a significant difference in modern banking services such as ATM, Tele Banking, Internet Banking, Mobile Banking, Credit Card, and Debit Card, ECS, NEFT, RTGS, CTS and Demat.

### **5.5.2 Awareness Level of Modern Banking Based on Occupation**

An attempt was made to know the awareness level of modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, debit card, ECS, NEFT, RTGS, CTS and Demat based on occupation. To test the awareness level of modern banking based on occupation, the following null hypothesis was proposed.

**$H_0$  : There is no significant difference in awareness level of modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, debit card, ECS, NEFT, RTGS, CTS and Demat and occupation of customers of banks in Tirunelveli district.**



The ANOVA test was used to analyse the awareness level of modern banking services based on occupation and test the proposed null hypothesis. The details of the result of ANOVA test is reported in table 5.62.

**TABLE 5.62**  
**AWARENESS LEVEL OF MODERN BANKING AMONG DIFFERENT**  
**OCCUPATION OF CUSTOMERS**

<b>Awareness level of modern banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P Value</b>
ATM	Between Groups	14.288	4	3.572	3.055	0.016
	Within Groups	1243.105	1063	1.169		
	Total	1257.393	1067			
Tele Banking	Between Groups	79.729	4	19.932	11.242	0.000
	Within Groups	1900.657	1072	1.773		
	Total	1980.386	1076			
Internet Banking	Between Groups	89.667	4	22.417	12.582	0.000
	Within Groups	1909.884	1072	1.782		
	Total	1999.551	1076			
Mobile Banking	Between Groups	114.296	4	28.574	16.418	0.000
	Within Groups	1865.740	1072	1.740		
	Total	1980.035	1076			
Credit Card	Between Groups	46.254	4	11.564	5.748	0.000
	Within Groups	2156.745	1072	2.012		
	Total	2202.999	1076			
Debit Card	Between Groups	27.321	4	6.830	4.201	0.002
	Within Groups	1743.071	1072	1.626		
	Total	1770.392	1076			
ECS	Between Groups	77.006	4	19.251	11.704	0.000
	Within Groups	1763.297	1072	1.645		
	Total	1840.303	1076			
NEFT	Between Groups	36.502	4	9.126	5.108	0.000
	Within Groups	1915.327	1072	1.787		
	Total	1951.829	1076			
RTGS	Between Groups	63.047	4	15.762	9.210	0.000
	Within Groups	1834.604	1072	1.711		
	Total	1897.651	1076			
CTS	Between Groups	70.336	4	17.584	9.642	0.000
	Within Groups	1954.907	1072	1.824		
	Total	2025.242	1076			
Demat	Between Groups	68.026	4	17.007	10.151	0.000
	Within Groups	1796.052	1072	1.675		
	Total	1864.078	1076			

*Source: Computed Data*

The table 5.62 shows that the p value is less than 0.05. Hence, there is a significant difference in occupation and modern banking services such as ATM, Tele Banking, Internet Banking, Mobile Banking, Credit Card, and Debit Card, ECS, NEFT, RTGS, CTS and Demat.

### **5.5.3 Awareness Level of Modern Banking Based on Income**

An attempt was made to know the awareness level of modern banking services such as ATM, Tele banking, Internet banking, Mobile Banking, Credit Card, Debit Card, ECS, NEFT, RTGS, CTS and Demat based on income. To test the awareness level of modern banking based on income, the following null hypothesis was proposed.

***H<sub>0</sub> : There is no significant difference in awareness level of modern banking services such as ATM, Tele banking, Internet Banking, Mobile Banking, Credit Card, Debit Card, ECS, NEFT, RTGS, CTS and Demat and Income of customers of banks in Tirunelveli district.***

The ANOVA test was used to analyse the awareness level of modern banking services based on income and test the proposed null hypothesis. The details of the result of ANOVA test is reported in table 5.63.

**TABLE 5.63**

**AWARENESS LEVEL OF MODERN BANKING AMONG DIFFERENT  
INCOME OF CUSTOMER**

<b>Awareness level of modern banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>P Value</b>
ATM	Between Groups	35.466	4	8.867	7.713	0.000
	Within Groups	1221.927	1063	1.150		
	Total	1257.393	1067			
Tele Banking	Between Groups	58.416	4	14.604	8.146	0.000
	Within Groups	1921.970	1072	1.793		
	Total	1980.386	1076			
Internet Banking	Between Groups	42.084	4	10.521	5.762	0.000
	Within Groups	1957.467	1072	1.826		
	Total	1999.551	1076			
Mobile Banking	Between Groups	39.490	4	9.873	5.454	0.000
	Within Groups	1940.545	1072	1.810		
	Total	1980.035	1076			
Credit Card	Between Groups	62.543	4	15.636	7.831	0.000
	Within Groups	2140.456	1072	1.997		
	Total	2202.999	1076			
Debit Card	Between Groups	42.464	4	10.616	6.586	0.000
	Within Groups	1727.928	1072	1.612		
	Total	1770.392	1076			
ECS	Between Groups	77.638	4	19.409	11.804	0.000
	Within Groups	1762.665	1072	1.644		
	Total	1840.303	1076			
NEFT	Between Groups	53.943	4	13.486	7.617	0.000
	Within Groups	1897.886	1072	1.770		
	Total	1951.829	1076			
RTGS	Between Groups	74.505	4	18.626	10.952	0.000
	Within Groups	1823.145	1072	1.701		
	Total	1897.651	1076			
CTS	Between Groups	92.304	4	23.076	12.798	0.000
	Within Groups	1932.938	1072	1.803		
	Total	2025.242	1076			
Demat	Between Groups	41.368	4	10.342	6.082	0.000
	Within Groups	1822.710	1072	1.700		
	Total	1864.078	1076			

*Source: Computed Data*

The table 5.63 reveals that the null hypothesis ( $H_0$ ) is rejected at the 5 per cent level of significance with regard to modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, debit card, ECS, NEFT, RTGS, CTS and Demat due to the  $p$  value is less than 0.05. It shows that income wise there is a significant difference in ATM, tele banking, internet banking, mobile banking, credit card, and debit card, ECS, NEFT, RTGS, CTS and Demat.

## **5.6 PARAMETER FOR SELECTING MODERN BANKING**

### **5.6.1 Parameter for Selecting Modern Banking Based on Educational Qualification**

An attempt was made to know the parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services, security, transfer of fund, net coverage service, technical efficiency, reputation, facilities provided by I-Banking and less risk based on educational qualification. To test the parameter for selecting modern banking services based on educational qualification, the following null hypothesis was proposed.

**$H_0$  : *There is no significant difference in parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services, security, transfer of fund, net coverage service, technical efficiency, reputation, facilities provided by I-Banking and less risk and educational qualification of customers of banks in Tirunelveli district.***

The ANOVA test was used to analyse the parameter for selecting modern banking based on educational qualification and test the proposed null hypothesis. The details of the result of ANOVA test is reported in table 5.64.

**TABLE 5.64**

**PARAMETER FOR SELECTING MODERN BANKING AMONG DIFFERENT  
EDUCATIONAL QUALIFICATION OF CUSTOMERS**

<b>Parameter for Selecting Modern Banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>p Value</b>
Locational Convenience	Between Groups	7.028	5	1.406	1.033	0.396
	Within Groups	1456.701	1071	1.360		
	Total	1463.729	1076			
Low Hidden Cost of Services	Between Groups	18.750	5	3.750	2.647	0.022
	Within Groups	1517.263	1071	1.417		
	Total	1536.013	1076			
Security	Between Groups	25.921	5	5.184	4.158	0.001
	Within Groups	1335.294	1071	1.247		
	Total	1361.214	1076			
Transfer of Fund	Between Groups	9.868	5	1.974	1.636	0.148
	Within Groups	1291.998	1071	1.206		
	Total	1301.866	1076			
Net Coverage Service	Between Groups	3.473	5	.695	.563	0.729
	Within Groups	1322.460	1071	1.235		
	Total	1325.933	1076			
Technical Efficiency	Between Groups	39.683	5	7.937	6.649	0.000
	Within Groups	1278.395	1071	1.194		
	Total	1318.078	1076			
Reputation	Between Groups	24.784	5	4.957	3.803	0.002
	Within Groups	1395.837	1071	1.303		
	Total	1420.620	1076			
Facilities Provided By I-Banking	Between Groups	24.041	5	4.808	3.647	0.003
	Within Groups	1411.833	1071	1.318		
	Total	1435.874	1076			
Less Risk	Between Groups	26.385	5	5.277	4.604	0.000
	Within Groups	1227.478	1071	1.146		
	Total	1253.863	1076			

***Source: Computed Data***

The above table 5.64 shows the analysis results of parameter for selecting modern banking services against educational qualification. As the parameter for selecting modern banking services such as low hidden cost of services, security, technical efficiency, reputation, facilities provided by I-Banking and less risk showed a value which is significant. It revealed that there is a significant difference in parameter for selecting modern banking services in terms of low hidden cost of services, security, technical efficiency, reputation, facilities provided by I-Banking and less risk with respect to educational qualification of the respondents.

The above table further shows that the parameter for selecting modern banking services in terms of locational convenience, transfer of fund and net coverage service showed a value which is not significant. It is revealed that there is no significant difference in parameter for selecting modern banking services in terms of locational convenience, transfer of fund and net coverage with respect to educational qualification of the respondents.

### **5.6.2 Parameter for Selecting Modern Banking Based on Occupation**

An attempt was made to know the parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services, security, transfer of fund, net coverage service, technical efficiency, reputation, facilities provided by I-Banking and less risk based on occupation. To test the parameter for selecting modern banking services in terms of on occupation, the following null hypothesis was proposed.

$H_0$  : *There is no significant difference in parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services, security, transfer of fund, net coverage service, technical efficiency, reputation, facilities provided by I-Banking and less risk and occupation of customers of banks in Tirunelveli district.*

The ANOVA test was used to analyse the parameter for selecting modern banking services in terms of on occupation and test the proposed null hypothesis. The details of the result of ANOVA test is reported in table 5.65

**TABLE 5.65**  
**PARAMETER WHILE SELECTING MODERN BANKING AMONG**  
**DIFFERENT OCCUPATION OF CUSTOMERS**

<b>Parameter While Selecting Modern Banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P Value</b>
Locational Convenience	Between Groups	15.088	4	3.772	2.791	0.025
	Within Groups	1448.641	1072	1.351		
	Total	1463.729	1076			
Low Hidden Cost of Services	Between Groups	12.822	4	3.205	2.256	0.061
	Within Groups	1523.191	1072	1.421		
	Total	1536.013	1076			
Security	Between Groups	59.170	4	14.792	12.179	0.000
	Within Groups	1302.045	1072	1.215		
	Total	1361.214	1076			
Transfer of Fund	Between Groups	17.301	4	4.325	3.609	0.006
	Within Groups	1284.566	1072	1.198		
	Total	1301.866	1076			
Net Coverage Service	Between Groups	22.390	4	5.597	4.603	0.001
	Within Groups	1303.543	1072	1.216		
	Total	1325.933	1076			
Technical Efficiency	Between Groups	5.683	4	1.421	1.161	0.327
	Within Groups	1312.395	1072	1.224		
	Total	1318.078	1076			

<b>Parameter While Selecting Modern Banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P Value</b>
Reputation	Between Groups	8.513	4	2.128	1.616	0.168
	Within Groups	1412.107	1072	1.317		
	Total	1420.620	1076			
Facilities Provided By I-Banking	Between Groups	20.999	4	5.250	3.978	0.003
	Within Groups	1414.875	1072	1.320		
	Total	1435.874	1076			
Less Risk	Between Groups	16.468	4	4.117	3.567	0.007
	Within Groups	1237.394	1072	1.154		
	Total	1253.863	1076			

**Source: Computed Data**

The above table 5.65 shows the analysis results of parameter for selecting modern banking against occupation. As the parameter for selecting modern banking services in terms of locational convenience, security, transfer of fund, net coverage service, facilities provided by I-Banking and less risk showed a value which is significant. It is revealed that there is a significant difference in parameter for selecting modern banking services in terms of low hidden cost of services, security, technical efficiency, reputation, facilities provided by I-Banking and less risk with respect to occupation of the respondents.

The above table further shows that the parameter for selecting modern banking services in terms of low hidden cost of services, technical efficiency and reputation and showed a value which is not significant; it revealed that there is no significant difference in parameter for selecting modern banking such as low hidden cost of services, technical efficiency and reputation with respect to occupation of the respondents.



### 5.6.3 Parameter for Selecting Modern Banking Based on Income

An attempt was made to know the parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services, security, transfer of fund, net coverage service, technical efficiency, reputation, facilities provided by I-Banking and less risk based on income. To test the parameter for selecting modern banking services based on income, the following null hypothesis was proposed.

$H_0$  : *There is no significant difference in parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services, security, transfer of fund, net coverage service, technical efficiency, reputation, facilities provided by I-Banking and less risk and income of customers in Tirunelveli district.*

The ANOVA test was used to analyse the parameter for selecting modern banking services based on income and test the proposed null hypothesis. The details of the result of ANOVA test is reported in table 5.66.

**TABLE 5.66**

**PARAMETER WHILE SELECTING MODERN BANKING AMONG  
DIFFERENT INCOME OF CUSTOMERS**

<b>Parameter While Selecting Modern Banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P Value</b>
Locational Convenience	Between Groups	28.821	4	7.205	5.383	0.000
	Within Groups	1434.908	1072	1.339		
	Total	1463.729	1076			
Low Hidden Cost of Services	Between Groups	15.738	4	3.934	2.774	0.026
	Within Groups	1520.275	1072	1.418		
	Total	1536.013	1076			
Security	Between Groups	20.445	4	5.111	4.087	0.003
	Within Groups	1340.769	1072	1.251		
	Total	1361.214	1076			
Transfer of Fund	Between Groups	67.033	4	16.758	14.548	0.000
	Within Groups	1234.833	1072	1.152		
	Total	1301.866	1076			
Net Coverage Service	Between Groups	13.581	4	3.395	2.773	0.026
	Within Groups	1312.352	1072	1.224		
	Total	1325.933	1076			
Technical Efficiency	Between Groups	6.974	4	1.744	1.426	0.223
	Within Groups	1311.104	1072	1.223		
	Total	1318.078	1076			
Reputation	Between Groups	9.682	4	2.421	1.839	0.119
	Within Groups	1410.938	1072	1.316		
	Total	1420.620	1076			
Facilities Provided By I-Banking	Between Groups	11.454	4	2.864	2.155	0.072
	Within Groups	1424.420	1072	1.329		
	Total	1435.874	1076			
Less Risk	Between Groups	7.326	4	1.831	1.575	0.179
	Within Groups	1246.537	1072	1.163		
	Total	1253.863	1076			

**Source: Computed Data**

The above table 5.66 shows the analysis results of parameter for selecting modern banking services against income. As the parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services,

security, transfer of fund and net coverage service showed a value which is significant. It is revealed that there is a significant difference in parameter for selecting modern banking services in terms of locational convenience, low hidden cost of services, security, transfer of fund and net coverage service with respect to income of the respondents.

The above table further shows that the parameter for selecting modern banking services in terms of technical efficiency, reputation, facilities provided by I-Banking and less risk and showed a value which is not significant. It is revealed that there is no significant difference in parameter for selecting modern banking services in terms of technical efficiency, reputation, facilities provided by I-Banking and less risk with respect to income of the respondents.

## **5.7 PROBLEMS IN THE MODERN BANKING SERVICES**

### **5.7.1 Problems in the Modern Banking Services Based on Educational Qualification**

In order to find out the significant difference in problems in modern banking services based on educational qualification, ‘ANOVA’ test is attempted with the null hypothesis as,

***H<sub>0</sub> - “There is no significant difference in problems in modern banking services and different educational qualification of customers of banks in Tirunelveli District”.***

The result of ‘ANOVA’ test for the relationship between problems in modern banking and educational qualification of customers of banks is given in table 5.67.

**TABLE 5.67**

**PROBLEMS IN THE MODERN BANKING AMONG DIFFERENT EDUCATIONAL  
QUALIFICATION OF CUSTOMERS**

<b>Problems in the modern banking</b>	<b>Particulars</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>p Value</b>
Insufficient Technical Knowledge	Between Groups	40.914	5	8.183	15.632	0.000
	Within Groups	560.613	1071	.523		
	Total	601.526	1076			
Risky To Use	Between Groups	30.436	5	6.087	12.107	0.000
	Within Groups	538.490	1071	.503		
	Total	568.927	1076			
Unsuitable Location of ATM	Between Groups	17.042	5	3.408	6.733	0.000
	Within Groups	542.158	1071	.506		
	Total	559.200	1076			
Network Connectivity Problem	Between Groups	15.457	5	3.091	6.062	0.000
	Within Groups	546.142	1071	.510		
	Total	561.599	1076			
Time Delay	Between Groups	23.769	5	4.754	10.033	0.000
	Within Groups	507.431	1071	.474		
	Total	531.200	1076			
High Transaction Cost	Between Groups	30.490	5	6.098	12.350	0.000
	Within Groups	528.810	1071	.494		
	Total	559.300	1076			
Machine Complexity	Between Groups	18.360	5	3.672	7.414	0.000
	Within Groups	530.439	1071	.495		
	Total	548.799	1076			
Poor Service Quality	Between Groups	41.052	5	8.210	14.973	0.000
	Within Groups	587.273	1071	.548		
	Total	628.325	1076			

**Source: Computed Data**

The above table 5.67 shows the analysis results of problems in the modern banking services against educational qualification. As the problems in the modern banking services such as insufficient technical knowledge, risky to use, unsuitable location of ATM, network connectivity problem, time delay, high transaction cost,

machine complexity and poor service quality showed a value which is significant. It is revealed that there is a significant difference in problems in the modern banking services such as insufficient technical knowledge, risky to use, unsuitable location of ATM, network connectivity problem, time delay, high transaction cost, machine complexity and poor service quality with respect to educational qualification of the respondents.

## **5.8 TYPE OF BANKS**

### **5.8.1 Reason for Choosing Bank Based on Type of Banks**

In order to find out the significant difference in reason for choosing bank based on type of bank, 't' test is attempted with the null hypothesis as,

***H<sub>0</sub> - "There is no significant difference in reason for choosing bank and different type of banks among customers in Tirunelveli District".***

The result of 't' test for the relationship between reason for choosing bank and type of banks is given in table 5.68.

TABLE 5.68

## REASON FOR CHOOSING BANK BASED ON TYPE OF BANK

Reason	Particulars	Levene's Test for Equality of Variances		t- test for equality of means			
		F	Sig.	t	Df	Sig. (2-tailed)	
Safety for Deposit	Equal variances assumed	.935	.334	.636	1075	.525	
	Equal variances not assumed			.629	428.139	.530	
Better Interest	Equal variances assumed	.883	.348	3.679	1075	.000	
	Equal variances not assumed			3.581	417.885	.000	
Credit Facility	Equal variances assumed	4.877	.027	1.586	1074	.113	
	Equal variances not assumed			1.480	393.086	.140	
Reputation of the Bank	Equal variances assumed	.857	.355	1.374	1075	.170	
	Equal variances not assumed			1.382	440.278	.168	
Fully Automated/ Advanced Technology	Equal variances assumed	.069	.793	.324	1075	.746	
	Equal variances not assumed			.321	430.460	.748	
Better Money Transfer Facility	Equal variances assumed	9.653	.002	2.860	1072	.004	
	Equal variances not assumed			2.704	394.235	.007	
Accessibility	Equal variances assumed	.907	.341	.605	1075	.545	
	Equal variances not assumed			.582	410.511	.561	
Close Proximity to the Residence	Equal variances assumed	4.123	.043	1.780	1072	.075	
	Equal variances not assumed			1.869	474.971	.062	
Quicker and Better Service	Equal variances assumed	1.526	.217	1.358	1075	.175	
	Equal variances not assumed			1.352	432.927	.177	
Safety Locker Facility	Equal variances assumed	2.094	.148	-.914	1075	.361	
	Equal variances not assumed			-.933	451.315	.351	
Less Service Charges	Equal variances assumed	.004	.947	1.721	1075	.086	
	Equal variances not assumed			1.731	440.260	.084	
Better Infrastructure Facility	Equal variances assumed	2.585	.108	-.695	1075	.487	
	Equal variances not assumed			-.724	467.247	.469	

*Source: Computed Data*

Table 5.68 reveals that, since the p value of reason for selecting bank with regard to better interest and better money transfer facility is less than 0.05 hence the null hypothesis is rejected. It shows that there is a significant difference in reason for selecting bank with regard to better interest and better money transfer facility among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is a significant role in reason for selecting bank with regard to better interest and better money transfer facility among customers.

Table further reveals that since the p value of reason for selecting bank with regard to safety for deposit, credit facility, reputation of the bank, fully automated / advanced technology, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility is higher than 0.05 hence the null hypothesis is accepted. It shows that there is no significant difference in reason for selecting bank with regard to safety for deposit, credit facility, reputation of the bank, fully automated/advanced technology, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is not a significant role in reason for selecting bank with regard to safety for deposit, credit facility, reputation of the bank, fully automated/advanced technology, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility among customers.

### 5.8.2 Parameter for selecting bank based on type of bank

In order to find out the significant difference in parameter for selecting bank based on type of bank, 't' test is attempted with the null hypothesis as,

***H<sub>0</sub> - “There is no significant difference in parameter for selecting bank and different type of banks among customers in Tirunelveli District”.***

The result of 't' test for the relationship between parameter for selecting bank and type of banks is given in table 5.69.



**TABLE 5.69**  
**TYPE OF BANK AND PARAMETER FOR SELECTING BANK**

Parameter for selecting bank	Particulars	Levene's Test for Equality of Variances		t- test for equality of means		
		F	Sig.	T	Df	Sig. (2-tailed)
Locational Convenience	Equal variances assumed	14.505	.000	1.278	1075	.201
	Equal variances not assumed			1.156	376.702	.249
Low Hidden Cost of Services	Equal variances assumed	2.906	.089	1.878	1075	.061
	Equal variances not assumed			1.821	415.474	.069
Security	Equal variances assumed	30.799	.000	4.991	1075	.000
	Equal variances not assumed			4.275	352.837	.000
Transfer of Fund	Equal variances assumed	31.738	.000	4.580	1075	.000
	Equal variances not assumed			4.046	365.926	.000
Net Coverage Service	Equal variances assumed	35.524	.000	2.733	1075	.006
	Equal variances not assumed			2.445	371.725	.015
Technical Efficiency	Equal variances assumed	11.660	.001	3.781	1075	.000
	Equal variances not assumed			3.591	403.010	.000
Reputation	Equal variances assumed	38.454	.000	4.761	1075	.000
	Equal variances not assumed			4.282	374.185	.000
Facilities Provided By I-Banking	Equal variances assumed	7.639	.006	2.495	1075	.013
	Equal variances not assumed			2.376	404.492	.018
Less Risk	Equal variances assumed	12.854	.000	1.819	1075	.069
	Equal variances not assumed			1.668	383.619	.096

**Source: Computed Data**

Table 5.69 reveals that since the p value of parameter for selecting bank in terms of security, transfer of fund, net coverage service, technical efficiency, reputation and facilities provided by I-banking is less than 0.05 hence the null hypothesis is rejected. It shows that there is a significant difference in parameter for selecting bank in terms of security, transfer of fund, net coverage service, technical efficiency, reputation and facilities provided by I-banking among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is a significant role in parameter for selecting bank in terms of security, transfer of fund, net coverage service, technical efficiency, reputation and facilities provided by I-banking among customers.

Table further reveals that since the p value of parameter for selecting bank such as locational convenience, low hidden cost of services and less risk is higher than 0.05 hence the null hypothesis is accepted. It shows that there is no significant difference in parameter for selecting bank in terms of locational convenience, low hidden cost of services and less risk among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is not a significant role in parameter for selecting bank in terms of locational convenience, low hidden cost of services and less risk among customers.

### **5.8.3 Level of Satisfaction of Modern Banking Based on Type of Bank**

In order to find out the significant difference in level of satisfaction of modern banking based on type of banks test is attempted with the null hypothesis as,

***H<sub>0</sub> - “There is no significant difference in level of satisfaction of modern banking and different type of banks among customers in Tirunelveli District”.***

The result of ‘t’ test for the relationship between level of satisfaction of modern banking and type of banks is given in table 5.70.

**TABLE 5.70**  
**TYPE OF BANK AND LEVEL OF SATISFACTION OF MODERN BANKING**

Level of satisfaction	Particulars	Levene's Test for Equality of Variances		t- test for equality of means		
		F	Sig.	t	df	Sig. (2-tailed)
ATM	Equal variances assumed	4.737	.030	-.235	1075	.815
	Equal variances not assumed			-.209	368.893	.835
Tele Banking	Equal variances assumed	16.833	.000	-1.299	1075	.194
	Equal variances not assumed			-1.179	378.771	.239
Internet Banking	Equal variances assumed	.879	.349	-1.045	1075	.296
	Equal variances not assumed			-.985	398.465	.325
Modern Banking	Equal variances assumed	9.253	.002	.263	1075	.793
	Equal variances not assumed			.237	375.641	.813
Credit Card	Equal variances assumed	1.229	.268	1.274	1075	.203
	Equal variances not assumed			1.206	401.062	.229
Debit Card	Equal variances assumed	.841	.359	-.162	1075	.871
	Equal variances not assumed			-.149	382.449	.882
ECS	Equal variances assumed	2.489	.115	1.116	1075	.265
	Equal variances not assumed			1.051	397.955	.294
NEFT	Equal variances assumed	4.702	.030	.136	1075	.892
	Equal variances not assumed			.127	396.146	.899
RTGS	Equal variances assumed	11.728	.001	2.198	1075	.028
	Equal variances not assumed			1.934	364.149	.054
CTS	Equal variances assumed	5.499	.019	.763	1075	.446
	Equal variances not assumed			.705	387.875	.481
Demat	Equal variances assumed	10.943	.001	-1.099	1075	.272
	Equal variances not assumed			-1.021	390.716	.308

*Source: Computed Data*

Table 5.70 reveals that since the p value of level of satisfaction in modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, debit card, ECS, NEFT, CTS and Demat is higher than 0.05 hence the null hypothesis is accepted. It shows that there is no significant difference in level of satisfaction in modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, and debit card, ECS, NEFT, CTS and Demat among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is not a significant role in level of satisfaction in modern banking services such as ATM, tele banking, internet banking, mobile banking, credit card, and debit card, ECS, NEFT, CTS and Demat among customers.

Table further reveals that since the p value of level of satisfaction in modern banking services of RTGS is less than 0.05 hence the null hypothesis is rejected. It shows that there is a significant difference in level of satisfaction in modern banking services of RTGS among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is a significant role in level of satisfaction in modern banking of RTGS among customers.

#### **5.8.4 Advantages of Modern Banking Based on Type of Bank**

In order to find out the significant difference in advantages in modern banking based on type of bank, 't' test is attempted with the null hypothesis as,

***H<sub>0</sub> - "There is no significant difference in advantages of modern banking and different type of banks among customers in Tirunelveli District".***

The result of 't' test for the relationship between advantages in modern banking and type of banks is given in table 5.71.

**TABLE 5.71****TYPE OF BANK AND ADVANTAGES IN MODERN BANKING**

<b>Advantages In MB</b>	<b>Particulars</b>	<b>Levene's Test for Equality of Variances</b>		<b>t- test for equality of means</b>		
		<b>F</b>	<b>Sig.</b>	<b>t</b>	<b>df</b>	<b>Sig. (2-tailed)</b>
Convenience	Equal variances assumed	.109	.742	.523	1075	.601
	Equal variances not assumed			.517	426.878	.606
Speedy Transactions	Equal variances assumed	.088	.766	.619	1075	.536
	Equal variances not assumed			.614	430.397	.540
Reduces Waiting Time	Equal variances assumed	.960	.327	-.066	1075	.947
	Equal variances not assumed			-.066	432.982	.948
Anywhere Anytime Service	Equal variances assumed	2.319	.128	.000	1075	1.000
	Equal variances not assumed			.000	449.675	1.000
Self Service	Equal variances assumed	.075	.784	-.937	1075	.349
	Equal variances not assumed			-.928	429.141	.354

Table 5.71 reveals that since the p value of advantages in modern banking services in terms of convenience, speedy transactions, reduces waiting time, anywhere anytime service and self-service is higher than 0.05 hence the null hypothesis is accepted. It shows that there is no significant difference in advantages in modern banking services in terms of convenience, speedy transactions, reduces waiting time, anywhere anytime service and self-service among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is not a significant role in advantages in modern banking services in terms of convenience, speedy transactions, reduces waiting time, anywhere anytime service and self-service among customers.

### 5.8.5 Problems in Modern Banking Based on Type of Bank

In order to find out the significant difference in problems in modern banking based on type of bank, 't' test is attempted with the null hypothesis as,

*H<sub>0</sub> - "There is no significant difference in problems in modern banking and different type of banks among customers in Tirunelveli District".*

The result of 't' test for the relationship between problems in modern banking and type of banks is given in table 5.72.

**TABLE 5.72**  
**TYPE OF BANK AND PROBLEMS IN MODERN BANKING**

Problems in Modern Banking	Particulars	Levene's Test for Equality of Variances		t- test for equality of means		
		F	Sig.	t	df	Sig. (2-tailed)
Insufficient Technical Knowledge	Equal variances assumed	.001	.969	.916	1075	.360
	Equal variances not assumed			.924	442.350	.356
Risky To Use	Equal variances assumed	.082	.774	1.032	1075	.302
	Equal variances not assumed			1.033	436.770	.302
Unsuitable Location of ATM	Equal variances assumed	3.041	.081	.023	1075	.982
	Equal variances not assumed			.022	416.113	.982
Network Connectivity problem	Equal variances assumed	.152	.696	.907	1075	.365
	Equal variances not assumed			.922	448.654	.357
Time Delay	Equal variances assumed	.099	.754	1.261	1075	.208
	Equal variances not assumed			1.260	435.699	.208
High Transaction Cost	Equal variances assumed	.008	.929	3.162	1075	.002
	Equal variances not assumed			3.186	441.415	.002
Machine Complexity	Equal variances assumed	1.775	.183	1.209	1075	.227
	Equal variances not assumed			1.250	460.887	.212
Poor Service Quality	Equal variances assumed	5.783	.016	3.471	1075	.001
	Equal variances not assumed			3.630	470.928	.000

**Source: Computed Data**

Table 5.72 reveals that since the p value of problems in the modern banking such as insufficient technical knowledge, risky to use, unsuitable location of ATM, network connectivity problem, time delay and machine complexity is higher than 0.05 hence the null hypothesis is accepted. It shows that there is no significant difference in problems in the modern banking such as insufficient technical knowledge, risky to use, unsuitable location of ATM, network connectivity problem, time delay and machine complexity among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is not playing significant role in problems in the modern banking such as insufficient technical knowledge, risky to use, unsuitable location of ATM, network connectivity problem, time delay and machine complexity among customers.

Table further reveals that since the p value of problems in the modern banking such as high transaction cost and poor service quality is higher than 0.05 hence the null hypothesis is rejected. It shows that there is significant difference in problems in the modern banking such as high transaction cost and poor service quality among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank plays a significant role in problems in the modern banking such as high transaction cost and poor service quality among customers.

#### **5.8.6 Satisfaction of Grievances Settlement System Based on Type of Bank**

In order to find out the significant difference in satisfaction of grievances settlement system based on type of bank, 't' test is attempted with the null hypothesis

***H<sub>0</sub> - "There is no significant difference in satisfaction of grievances settlement system and different type of banks among customers in Tirunelveli District".***

The result of 't' test for the relationship between satisfaction of grievances settlement system and type of banks is given in table 5.73.

**TABLE 5.73**

**TYPE OF BANK AND SATISFACTION OF GRIEVANCES SETTLEMENT SYSTEM**

Satisfaction of Grievances Settlement System	Particulars	Levene's Test for Equality of Variances		t- test for equality of means		
		F	Sig.	t	df	Sig. (2-tailed)
ATM	Equal variances assumed	16.598	.000	4.285	1075	.000
	Equal variances not assumed			5.130	622.893	.000
Tele Banking	Equal variances assumed	.033	.856	2.068	1075	.039
	Equal variances not assumed			2.193	482.647	.029
Internet Banking	Equal variances assumed	1.329	.249	1.360	1075	.174
	Equal variances not assumed			1.321	416.498	.187
Mobile Banking	Equal variances assumed	4.982	.026	.411	1075	.681
	Equal variances not assumed			.442	494.200	.659
Credit Card	Equal variances assumed	1.034	.309	.781	1075	.435
	Equal variances not assumed			.777	432.446	.437
Debit Card	Equal variances assumed	30.020	.000	3.083	1074	.002
	Equal variances not assumed			3.382	515.349	.001
ECS	Equal variances assumed	.003	.954	2.283	1075	.023
	Equal variances not assumed			2.369	463.923	.018
NEFT	Equal variances assumed	1.468	.226	2.603	1075	.009
	Equal variances not assumed			2.679	457.566	.008
RTGS	Equal variances assumed	13.875	.000	1.828	1075	.068
	Equal variances not assumed			1.716	396.352	.087
CTS	Equal variances assumed	.920	.338	1.276	1075	.202
	Equal variances not assumed			1.291	444.603	.198
Demat	Equal variances assumed	.834	.361	2.219	1075	.027
	Equal variances not assumed			2.337	476.903	.020

**Source: Computed Data**

Table 5.73 reveals that since the p value of satisfaction of grievances settlement system in ATM, tele banking, debit card, ECS, NEFT and Demat is less than 0.05 hence the null hypothesis is rejected. It shows that there is significant difference in



satisfaction of grievances settlement system in ATM, tele banking, and debit card, ECS, NEFT and Demat among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank plays a significant role in satisfaction of grievances settlement system in ATM, tele banking, and debit card, ECS, NEFT and Demat among customers.

Table further reveals that, since the p value of satisfaction of grievances settlement system in internet banking, modern banking, credit card, RTGS and CTS is higher than 0.05 hence the null hypothesis is accepted. It shows that there is no significant difference in satisfaction of grievances settlement system in internet banking, mobile banking, credit card, RTGS and CTS among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is not play any significant role in satisfaction of grievances settlement system in internet banking, mobile banking, credit card, RTGS and CTS among customers.

## **5.9 REASON FOR CHOOSING BANKS**

The Kaiser-Meyer-Olkin (KMO) test was used as an assumption test for testing the sampling adequacy of the data for Factor analysis. The Kaiser-Meyer-Olkin statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, indicating diffusion in the pattern of correlations (hence, Factor analysis is likely to be inappropriate). A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors.

KMO-Value is fixed at 0.00 to 0.49 unacceptable, 0.50 to 0.59 miserable, 0.60 to 0.69 mediocre 0.70 to 0.79 middling, 0.80 to 0.89 meritorious and 0.90 to 1.00 marvellous. As a rule of thumb of Kaiser, KMO should be 0.60 or higher in order to

proceed with a factor analysis. Kaiser (1970)<sup>1</sup> suggests 0.50 as a cut off value, and a desirable value of 0.8 or higher. The details of sampling adequacy and sphericity of the collected data of the respondents are shown in table 5.74.

**TABLE 5.74**  
**KMO AND BARTLETT'S TEST**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>	<b>0.929</b>	
<b>Bartlett's Test of Sphericity</b>	<b>Approx. Chi-Square</b>	<b>7398.845</b>
	<b>Df</b>	<b>66</b>
	<b>Sig.</b>	<b>0.000**</b>

\*\*Significant at .05 level of confidence

The above table 5.74 clearly portrays that Kaiser-Meyer-Olkin measure of sampling adequacy value is 0.929, which falls into the range of being great. The correlation matrix was initially examined to determine how appropriate it was for factor analysis. The Kaiser-Meyer-Oklin (KMO) value was 0.929, which is higher than the recommended minimum of 0.6 indicating that the sample size was adequate for applying factor analysis.<sup>2</sup> In addition, the value of the test statistic for sphericity on the basis of a chi-square transformation of the determinant of the correlation matrix was large<sup>3</sup>. Bartlett's test of sphericity ( $Z = 7398.845$ ) was significant, supporting the factorability of the correlation matrix. Bartlett's test of sphericity was statistically significant ( $p < .000$ ), indicating that the data was likely factorable.

<sup>1</sup> Kaiser H., (1970), "*A second generation little jiffy*," Psychometrika, Springer, December, Vol. 35(4), Pp 401-415.

<sup>2</sup> Kaiser H., (1974), "*An index of factorial simplicity*," Psychometrika, Vol. 39(1), Pp 31-36.

<sup>3</sup> Barrick M. and Mount M., (1991), "*The big five personality dimensions and job performance: A meta-analysis*," Personnel Psychology, Vol. 44, Pp 1-26.

The maximum likelihood estimation procedure was used to extract the factors from the variable data. Principal Component analysis was employed primarily for extracting factors which have eigenvalues greater than one as per the Kaiser's rule. Using this rule, four factors were extracted and they are shown in table 5.75.

**TABLE 5.75**  
**PRINCIPAL COMPONENT ANALYSIS (PCA)**

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	per cent of Variance	Cumulative per cent	Total	per cent of Variance	Cumulative per cent
1	4.156	29.251	29.251	3.669	25.826	25.826
2	3.734	26.284	55.535	1.308	9.206	35.032
3	1.493	10.508	66.043	3.366	23.693	58.725
4	.875	6.161	72.204	1.915	13.478	72.204
5	.669	4.706	76.910			
6	.533	3.754	80.663			
7	.457	3.218	83.882			
8	.354	2.490	86.372			
9	.349	2.455	88.827			
10	.332	2.334	91.161			
11	.286	2.011	93.172			
12	.281	1.981	95.152			
13	.239	1.679	96.831			
14	.177	1.243	98.075			
15	.143	1.007	99.081			
16	.131	.800	99.881			
17	.141	0.119	100.00			

**Source: Computed Data**

**Extraction Method: Principal Component Analysis**

The purpose of this investigation was to explore the factor structure underlying the data set of reason for choosing banks. Factor analysis has as its key objective reducing a larger set of variables to a smaller set of factors, less in number than the original variable set, but capable of accounting for a large portion of the total variability in the items.

Principal Component Analysis (PCA) revealed four components that had eigenvalues greater than one and which explained 25.826, 9.206, 23.693, and 13.478 percentages of the total variance, respectively. The analysis yielded four factors explaining a total of 72.204 per cent of the variance for the entire set of variables related to the reason for choosing banks. It is a pretty good extraction because it is able to economize on the number of choice factors (from 17 to 4 underlying factors), it lost 27.796 per cent of information content for choice of variables. In addition, a four-component solution met the interpretability criterion. As such, four components were retained.

A Varimax orthogonal rotation was employed to aid interpretability. The rotated solution exhibited simple structure. Component loadings and communalities of the rotated solution are presented in table 5.76.

**TABLE 5.76**  
**REASON FOR CHOOSING BANKS-FACTOR ANALYSIS**

<b>Factors</b>	<b>F1</b>	<b>F2</b>	<b>F3</b>	<b>F4</b>	<b>h<sup>2</sup></b>
Reputation of the bank	<b>.829</b>	.110	.019	.065	1.023
Close proximity to the residence	<b>.776</b>	.326	.061	.054	1.217
Fully Automatized / Advance Technology	<b>.773</b>	.020	.042	.003	0.838
Accessibility	<b>.765</b>	.026	.038	.047	0.876
Less service charges	<b>.719</b>	.408	.003	.014	1.144

<b>Factors</b>	<b>F1</b>	<b>F2</b>	<b>F3</b>	<b>F4</b>	<b>h<sup>2</sup></b>
Safety Locker facility	<b>.680</b>	.457	.007	.026	1.17
Credit facility	<b>.666</b>	.087	.031	.016	0.800
Better money transfer facility	<b>.652</b>	.228	.015	.089	0.984
Quick and better service	<b>.622</b>	.485	.021	.099	1.227
Better interest	<b>.572</b>	.132	.056	.148	0.908
Better infrastructure facility	<b>.571</b>	.476	.138	.012	1.197
Lowest account fees	.036	<b>.758</b>	.007	.075	0.876
Easy application process	.108	<b>.704</b>	.094	.030	0.936
Excellent portfolio of services	.055	.043	<b>.991</b>	.111	1.200
Work place compulsion	.055	.043	<b>.991</b>	.111	1.200
Recommendation from friends and family	.054	.005	.280	<b>.956</b>	1.295
Safety for deposit	.098	.029	.091	<b>.603</b>	0.321
<b>Eigen Value</b>	8.031	4.337	2.885	1.959	
<b>Per cent of Variation</b>	25.826	9.206	23.693	13.478	
<b>Cumulative Per cent of Variation</b>	25.826	35.032	58.725	72.204	

*Source: Computed Data*

The table 5.76 reveals that all the seventeen variables have been extracted into four factors. The factors have been given appropriate labelled on the basis of variables represented in each case.

Factor 1 was labelled as ‘Reputation and Better service’ due to the high loadings by the following items: reputation of the bank, close proximity to the residence, fully automatized/advance technology, accessibility, less service charges, safety locker facility, credit facility, better money transfer facility, quick and better service, better interest and better infrastructure facility. This first factor explained 25.826 per cent of the variance. The loading of the variables first, second, third, fourth and fifth, sixth, seventh, eighth, ninth and tenth on first Factor is 0.829, 0.776, 0.773,

0.765, 0.719, 0.680, 0.666, 0.652, 0.622, 0.572 and 0.571 respectively. The communality of the factor is 25.826 per cent, which means approximately 25.826 per cent of the variance in any one of the original variable which is being captured by the extracted factors.

Factor II was labelled as 'Low fees and easy application process' due to the high loadings by the following items: low account fees and easy application process. This second factor explained 9.206 per cent of the variance. The loading of the variables first and second Factor is 0.758 and 0.704 respectively. The communality of the factor is 35.032 per cent, which means approximately 35.032 per cent of the variance in any one of the original variable which is being captured by the extracted factors.

Factor III was labelled as 'Workplace compulsion' due to the high loadings by the following items: Excellent portfolio of services and workplace compulsion. This third factor explained 23.693 per cent of the variance. The loading of the variables first, second and third on third Factor is 0.613, 0.602 and 0.564 respectively. The communality of the factor is 58.725 per cent, which means approximately 58.725 per cent of the variance in any one of the original variable which is being captured by the extracted factors.

Factor IV was labelled as 'Recommendation and safety' due to the high loadings by the following items: Recommendation from friends and family and safety for deposit. This fourth factor explained 13.478 per cent of the variance. The loading of the variables first and second on fourth Factor is 0.956 and 0.603 respectively. The communality of the factor is 72.204 per cent, which means approximately 72.204 per cent of the variance in any one of the original variable which is being captured by the extracted factors.

## 5.10 AWARENESS OF MODERN BANKING

The Kaiser-Meyer-Olkin (KMO) test was used as an assumption test for testing the sampling adequacy of the data for Factor analysis. The Kaiser-Meyer-Olkin statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, indicating diffusion in the pattern of correlations (hence, Factor analysis is likely to be inappropriate). A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors.

KMO-Value is fixed at 0.00 to 0.49 unacceptable, 0.50 to 0.59 miserable, 0.60 to 0.69 mediocre 0.70 to 0.79 middling, 0.80 to 0.89 meritorious and 0.90 to 1.00 marvellous. As a rule of thumb of Kaiser, KMO should be 0.60 or higher in order to proceed with a factor analysis. Kaiser (1970)<sup>4</sup> suggests 0.50 as a cut-off value, and a desirable value of 0.8 or higher. The details of sampling adequacy and Sphericity of the collected data of the respondents are shown in table 5.77.

**TABLE 5.77**

### **KMO AND BARTLETT'S TEST**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>	<b>0.926</b>	
Bartlett's Test of Sphericity	<b>Approx. Chi-Square</b>	<b>6884.221</b>
	Df	55
	Sig.	0.000**

**\*\*Significant at .05 Level of Confidence**

The above table 5.77 clearly portrays that Kaiser-Meyer-Olkin measure of sampling adequacy value is 0.926, which falls into the range of being great. The correlation matrix was initially examined to determine how appropriate it was for factor analysis. The Kaiser-Meyer-Oklin (KMO) value was 0.926, which is higher than the

<sup>4</sup> Kaiser, H., (1970) "A second generation little jiffy," Psychometrika, Springer, December, Vol. 35(4), Pp 401-415.

recommended minimum of 0.6 indicating that the sample size was adequate for applying factor analysis.<sup>5</sup> In addition, the value of the test statistic for sphericity on the basis of a chi-squared transformation of the determinant of the correlation matrix was large<sup>6</sup>. Bartlett's test of sphericity ( $Z = 7398.845$ ) was significant, supporting the factorability of the correlation matrix. Bartlett's test of sphericity was statistically significant ( $p < .000$ ), indicating that the data was likely factorizable.

The maximum likelihood estimation procedure was used to extract the factors from the variable data. Principal Component analysis was employed primarily for extracting factors which have eigenvalues greater than one as per the Kaiser's rule. Using this rule, four factors were extracted and they are shown in table 5.78.

**TABLE 5.78**  
**PRINCIPAL COMPONENT ANALYSIS (PCA)**

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	per cent of Variance	Cumulative per cent	Total	per cent of Variance	Cumulative per cent
1	6.025	54.774	54.774	6.025	54.774	54.774
2	1.200	10.910	65.685	1.200	10.910	65.685
3	.745	6.776	72.460			
4	.588	5.346	77.806			
5	.525	4.770	82.576			
6	.422	3.837	86.413			
7	.381	3.467	89.880			
8	.322	2.927	92.807			
9	.303	2.754	95.561			
10	.273	2.478	98.039			
11	.216	1.961	100.000			

**Extraction Method: Principal Component Analysis**

<sup>5</sup> Kaiser, H., (1974), "An index of factorial simplicity," Psychometrika, Vol. 39(1), Pp 31-36.

<sup>6</sup> Barrick, M. and Mount, M., (1991), "The big five personality dimensions and job performance : A meta-analysis." Personnel Psychology, 44, 1-26.



The purpose of this investigation was to explore the factor structure underlying the data set of extent of awareness in modern banking. Factor analysis has as its key objective reducing a larger set of variables to a smaller set of factors, less in number than the original variable set, but capable of accounting for a large portion of the total variability in the items.

Principal Component Analysis (PCA) revealed four components that had eigenvalues greater than one and which explained 54.774 per cent and 10.910 per cent of the total variance, respectively. The analysis yielded two factors explaining a total of 65.685 per cent of the variance for the entire set of variables related to the extent of awareness in modern banking. It is a pretty good extraction because it is able to economize on the number of choice factors (from 12 to 2 underlying factors), it lost 34.315 per cent of information content for choice of variables. In addition, a two-component solution met the interpretability criterion. As such, two components were retained.

A Varimax orthogonal rotation was employed to aid interpretability. The rotated solution exhibited simple structure. Component loadings and communalities of the rotated solution are presented in table 5.79.

**TABLE 5.79****VARIMAX ORTHOGONAL ROTATED COMPONENT MATRIX**

<b>Variables</b>	<b>Component</b>		<b>Communalities</b>
RTGS	<b>.865</b>	.139	1.004
Demat	<b>.832</b>	.125	0.957
NEFT	<b>.824</b>	.133	0.957
ECS	<b>.769</b>	.234	1.003
CTS	<b>.769</b>	.265	1.034
Tele banking	<b>.720</b>	.338	1.058
Credit card	<b>.679</b>	.315	0.994
Internet banking	<b>.657</b>	.481	1.138
ATM	.425	<b>.816</b>	1.241
Debit card	.236	<b>.744</b>	0.980
Mobile banking	.436	<b>.584</b>	1.020
Eigen Values	7.212	4.174	
percentage of Variation	54.774	10.910	
Cumulative percentage of Variation	54.774	65.685	

***Source: Computed Data***

The table 5.79 reveals that all the eleven variables have been extracted into two factors. The factors have been given appropriate labelled on the basis of variables represented in each case.

Factor 1 was labelled as ‘Internet Banking’ due to the high loadings by the following items: RTGs, Demat, NEFT, ECS, CTS, tele banking, credit card and internet banking. This first factor explained 54.774 percent of the variance. The loading of the variables first and second on first Factor is 0.865, 0.832, 0.824, 0.769, 0.769, 0.720, 0.679 and 0.657 respectively. The communality of the factor is 54.774 per cent, which means approximately 54.774 percent of the variance in any one of the original variable which is being captured by the extracted factors.

Factor II was labelled as ‘Mobile banking’ due to the high loadings by the following items: ATM, Debit card and Mobile banking. This second factor explained 10.910 per cent of the variance. The loading of the variables first and second on second Factor is 0.816, 0.744 and 0.584 respectively. The communality of the factor is 10.910 per cent, which means approximately 10.910 per cent of the variance in any one of the original variable which is being captured by the extracted factors.

### **5.111 OPINION OF CUSTOMERS**

#### **5.11.1 Opinion of Customers towards the Features of ATM Based on Age**

An attempt was made to know the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on age group of customers of banks in Tirunelveli District. The age of the customers was classified as less than 20, 20-40, 40-60 and above 60. To test the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on age group of customers of banks in Tirunelveli District, the following null hypothesis was proposed.

***H<sub>0</sub> - There is no significant difference in opinion towards the features of ATM among different age group of customers of banks in Tirunelveli District.***

The non-parametric statistics of Kruskal-Wallis test was used to analyse the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on age group of customers of banks in Tirunelveli District and test the proposed null hypothesis. The details of the result of Kruskal-Wallis test is reported in table 6.80.

**TABLE 5.80**

**KRUSKAL-WALLIS TEST: OPINION OF CUSTOMERS TOWARDS THE  
FEATURES OF ATM BASED ON AGE**

Features	Chi-Square $\chi^2$	p value	Mean Rank			
			Less than 20	20-40	40-60	Above 60
Debit Card	0.222	0.974	54.00	51.15	53.26	48.07
Credit Card	2.584	0.460	61.67	50.34	47.74	64.57
Balance Enquiry	7.403	0.060	20.75	53.39	55.39	48.36
Cash withdrawal	2.661	0.447	38.50	54.30	48.39	43.07
Paying Bills	1.266	0.737	100.63	121.87	120.36	106.88
Money transfer between Accounts	4.489	0.213	78.38	119.71	129.59	108.73

**Source: Computed Data**

The Table 5.80 discloses that the null hypothesis ( $H_0$ ) are retained at the 5 per cent level of significance with regard to the opinion of customers towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts due to the  $p$  value is more than 0.05. It shows that age wise there is no significant difference in features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts.

#### **5.11.2 Opinion of Customers Towards the Features of ATM Based on Gender**

An attempt was made to know the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on gender group of customers of banks in Tirunelveli District. The gender of the customers was classified as male and female. To test the

opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on gender of customers of banks, the following null hypothesis was proposed.

***H<sub>0</sub> - There is no significant difference in opinion towards the features of ATM among different gender group of customers of banks in Tirunelveli District.***

The non parametric statistics of Mann-Whitney U test was used to analyse the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on gender of customers of banks in Tirunelveli District and test the proposed null hypothesis. The details of the result of Mann-Whitney U test is reported in Table 5.81.

**TABLE 5.81**  
**MANN-WHITNEY U TEST: OPINION OF CUSTOMERS TOWARDS THE**  
**FEATURES OF ATM BASED ON GENDER**

Features	U-value	Z-value	p-value	Mean rank	
				Male	Female
Debit Card	1185.000	-0.384	0.701	50.61	52.88
Credit Card	1089.000	-1.054	0.292	53.94	47.72
Balance Enquiry	1136.000	-0.724	0.469	53.18	48.90
Cash withdrawal	1215.000	-0.175	0.861	51.10	52.13
Paying Bills	6959.000	-0.173	0.863	119.32	120.85
Money transfer between Accounts	6591.000	-0.881	0.379	123.44	115.68

***Source: Computed Data***

Table 5.81 reveals that the null hypothesis (H<sub>0</sub>) is retained at the 5 per cent level of significance with regard to opinion of customers towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money

transfer between accounts due to the  $p$  value is more than 0.05. It shows that gender wise there is no significant difference in opinion of customers towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts.

### **5.11.3 Opinion of Customers Towards the Features of ATM Based on Marital Status**

An attempt was made to know the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on marital status of customers of banks in Tirunelveli District. The marital status of the customers was classified as married and unmarried. To test the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on marital status of customers of banks, the following null hypothesis was proposed.

***$H_0$  - There is no significant difference in opinion towards the features of ATM among different marital status of customers of banks in Tirunelveli District.***

The non-parametric statistics of Mann-Whitney U test was used to analyse the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on marital status of customers of banks in Tirunelveli District and test the proposed null hypothesis. The details of the result of Mann-Whitney U test is reported in table 5.82.

**TABLE 5.82**

**MANN-WHITNEY U TEST: OPINION OF CUSTOMERS TOWARDS THE  
FEATURES OF ATM BASED ON MARITAL STATUS**

Features	U-value	Z-value	p-value	Mean rank	
				Married	Unmarried
Debit Card	1180.500	-0.607	0.544	52.99	49.45
Credit Card	1109.500	-1.043	0.297	54.01	47.92
Balance Enquiry	1001.500	-1.785	0.074	55.81	45.35
Cash withdrawal	961.500	-2.069	0.039	56.47	44.39
Paying Bills	5740.000	-1.176	0.239	123.63	112.66
Money transfer between Accounts	5476.500	-1.713	0.087	125.27	109.32

*Source: Computed Data*

Table 5.82 shows that the null hypothesis ( $H_0$ ) is retained at the 5 per cent level of significance with regard to opinion of customers towards the features of ATM such as debit card, credit card, balance enquiry, paying bills and money transfer between accounts due to the  $p$  value is more than 0.05. It shows that marital status wise there is no significant difference in opinion of customers towards the features of ATM such as debit card, credit card, balance enquiry, paying bills and money transfer between accounts.

Table further shows that the null hypothesis ( $H_0$ ) is rejected at the 5 per cent level of significance with regard to opinion of customers towards the features of ATM such as cash withdrawal due to the  $p$  value is less than 0.05. It shows that marital status wise there is a significant difference in opinion of customers towards the features of ATM such as cash withdrawal.

#### **5.11.4 Opinion of Customers Towards the Features of ATM Based on Educational Qualification**

An attempt was made to know the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on educational qualification of customers of banks in Tirunelveli District. The educational qualification of the customers was classified as Illiterate, Higher secondary, Undergraduate, Postgraduate, Professional and Technical. To test the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on educational qualification of customers of banks in Tirunelveli District, the following null hypothesis were proposed.

***H<sub>0</sub> - There is no significant difference in opinion towards the features of ATM among different educational qualification of customers of banks in Tirunelveli District.***

The non-parametric statistics of Kruskal-Wallis test was used to analyse the opinion towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal, paying bills and money transfer between accounts based on educational qualification of customers of banks in Tirunelveli District and test the proposed null hypothesis. The details of the result of Kruskal-Wallis test is reported in Table 5.83.



TABLE 5.83

**KRUSKAL-WALLIS TEST: OPINION OF CUSTOMERS TOWARDS THE  
FEATURES OF ATM BASED ON EDUCATIONAL QUALIFICATION**

Features	Chi-Square $\chi^2$	p value	Mean Rank					
			Illiterate	HSC	UG	PG	Professional	Technical
Debit Card	7.166	0.209	57.75	43.60	66.19	54.38	55.79	50.00
Credit Card	7.363	0.195	70.25	52.23	61.92	43.16	43.21	66.21
Balance Enquiry	1.907	0.056	67.75	52.74	51.04	46.72	54.17	43.00
Cash withdrawal	10.756	0.266	75.75	53.69	40.96	60.09	53.57	24.86
Paying Bills	8.260	0.142	114.40	133.26	101.17	111.89	122.42	111.70
Money transfer between Accounts	12.443	0.029	103.80	140.36	108.07	106.41	115.88	103.20

**Source: Computed Data**

Table 5.83 shows that the null hypothesis ( $H_0$ ) is retained at the 5 per cent level of significance with regard to opinion of customers towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal and paying bills due to the  $p$  value is more than 0.05. It shows that educational qualification wise there is no significant difference in opinion of customers towards the features of ATM such as debit card, credit card, balance enquiry, cash withdrawal and paying bills.

Table further shows that the null hypothesis ( $H_0$ ) is rejected at the 5 per cent level of significance with regard to opinion of customers towards the features of ATM such as money transfer between accounts due to the  $p$  value is less than 0.05. It shows that educational qualification wise there is a significant difference in opinion of customers towards the features of ATM such as money transfer between accounts.



## CHAPTER - VI

### *Summary of Findings, Suggestions and Conclusion*

## **CHAPTER - VI**

### **SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION**

#### **6.0 INTRODUCTION**

#### **6.1 FINDINGS**

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- 6.1.2 Findings Related to Association between Demographic Profile
- 6.1.3 Findings Related to Reason for Choosing Bank
- 6.1.4 Findings Related to Awareness Level of Modern Banking
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#### **6.2 SUGGESTIONS**

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#### **6.3 CONCLUSION**

## **CHAPTER - VI**

### **SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION**

#### **6.0 INTRODUCTION**

This chapter sums up all the findings of the study, suggestions and recommendation to the banks (both private and public sector banks), government and stakeholders. It also highlights the final conclusion arrived at by the researcher from the study. The suggestions for the future research are also given to help and encourage the future researchers in carrying out research in different dimensions on the same research area.

In the light of the objectives framed for the study a questionnaire was framed, analysis was made and the results are presented. The respondents availing the modern banking services have been selected in both private and public sector banks. 260 customers were selected from private sector banks and 817 customers from public sector banks. The demographic breakdown of the sample presents the frequency distribution and percentage analysis of the respondents divided according to the age, gender, marital status, educational qualification, religion, community, occupation, monthly income and type of family.

In the previous chapter, the demographic profile of the customers of private sector banks and public sector banks and their satisfaction towards modern banking services were discussed which gives an insight to the researcher to come out with the following findings, suggestions and conclusion.

## **6.1 FINDINGS**

### **6.1.1 Finding Related to Demographic Profile**

The findings of the research study is presented here with proper classification

1. A majority of 73.46 per cent of the customers are in the age group of the 20-40 years in private sector banks. 65.61 per cent of customers are in the age group of 20 to 40 years in public sector banks.
2. A majority of 60.11 per cent of the respondents are male. In public sector banks, the percentage of male customers is 49.08 whereas in private sector banks, it is 71.15 per cent.
3. A majority of 63.08 per cent married respondents have availed more modern banking services from the banks than the unmarried customers in private sector banks, whereas public sector banks 70.62 per cent of the respondents avail modern banking services.
4. A majority of 29.62 per cent are post graduates in the public sector. In private sector banks, 30.2 per cent are post graduate customers. The analysis reveals that the post-graduation customers have availed more modern banking services from the banks than the customers of other educational level.
5. A majority of 49.08 per cent of the respondents are Hindus and Christian respectively in both the private and public sector banks in Tirunelveli district.
6. A majority of 66.92 per cent the respondents belong to a backward community in private sector banks, in public sector banks, 64.51 per cent availed more modern banking services from the banks than the other community customers.

7. A majority of 31.95 per cent of the respondents are private employees in public sector banks whereas in private sector banks, private employees and government employees constitute 39.23 per cent and 25.38 per cent respectively.
8. A majority of 33.56 per cent of the respondents' monthly income is less than ₹10,000. 36.54 per cent have their monthly income between that ₹10000 – ₹25000, in private sector banks. In public sector banks collectively 35.13 and 32.56 percentages have their income less than ₹10000 and ₹10000 – ₹25000 in private sector banks.
9. A majority of 67.81 per cent of the respondents are from nuclear family and the remaining 32.19 per cent of them living in joint family. In the private sector banks 74.62 per cent of the account holders, live in nuclear family and the remaining 25.38 per cent of the respondents live in joint family.
10. In public sector banks a majority of 40.39 per cent of the respondents have knowledge about modern banking through prospectus/ self-analysis/ banking. In case of private sector banks the primary source of knowledge about modern banking services are gained through prospectus/self-analysis/banking and 43.46 per cent of the account holders have this opinion.
11. A majority of 36.15 per cent of the respondents have knowledge about the modern banking services for up to 3 years of private sector banks. As far as the public sector banks are concerned, 41.98 per cent of the respondents have knowledge about the modern services for a period from 1 to 3 years.
12. **Number of customers having a credit card:** Among the customers of private sector banks 80.16 per cent of the respondents have credit cards and 19.84 per

cent do not have a credit card. In public sector banks, 81.40 per cent of the respondents have a credit card and the remaining 18.60 per cent do not have credit card facilities.

13. **Time taken for the modern banking services:** 57.16 per cent of the customers feel that it is 10-30 minutes in private sector banks, in public sector banks 67.69 per cent of the respondents stated that they take 10–30 minutes. The majority of the respondents feel that the use of modern banking service requires 10 to 30 minutes on an average.
14. **Number of accounts:** In private sector banks 78.08 per cent of the respondents have only one account. In public sector banks 79.78 per cent of them have only one account. Majority of the respondents have only one account.
15. **Type of accounts:** In case of private sector banks 73.85 per cent of the respondents hold savings account. In public sector banks, 77.97 per cent of the respondents have a savings account. Majority of the respondents have only savings bank account.
16. **Number of years the customers having an account:** In private sector banks, 47.31 per cent of the respondents have the account in the bank for a period between 1 to 5 years using the modern banking services. Among the customers of public sector banks, 47.37 per cent of the respondents have account for a period between 1 and 5 years.
17. **Type of transactions:** 78.08 per cent of the respondents use the bank for withdrawal transactions and the next majority of 75.77 per cent of the respondents use the bank for deposit transactions in private sector banks. It is further found that among the customers of public sector banks, 81.03 per cent

use bank for withdrawal transactions and the next majority of 74.66 per cent of the respondents use the banks for deposit transactions.

18. **Awareness of Modern Banking Services:** Majority of the respondents in private sector banks 68.85 per cent are partially aware of the modern banking services, 26.54 per cent are fully aware of the modern banking services. In public sector banks, 68.42 per cent are partially aware of the modern banking services, 18.12 per cent are fully aware of the modern banking services.

#### **6.1.2 Findings Related to Association between Demographic Profile**

19. There is a significant relationship between the type of bank and age group of customers of banks in Tirunelveli district.
20. There is a significant relationship between time taken from transactions and age group of customers of banks in Tirunelveli district.
21. There is a significant relationship between availing of modern banking services and age group of customers of banks in Tirunelveli district.
22. There is a significant relationship between number of years using modern banking and age group of customers of banks in Tirunelveli district.
23. There is a significant relationship between type of credit card and age group of customers of banks in Tirunelveli district.
24. There is a significant relationship between number of account and age group of customers of banks in Tirunelveli district.
25. There is a significant relationship between the frequency of transaction and age group of customers of banks in Tirunelveli district.



26. There is a significant relationship between the type of account and age group of customers of banks in Tirunelveli district
27. There is a significant relationship between age and number of years having the account.
28. There is a significant relationship between age and awareness about opening accounts.

### **6.1.3 Findings Related to Reason for Choosing Bank**

29. **Reason for choosing bank based on educational qualification:** There is a significant difference in the reason for choosing bank such as safety for deposit, better interest, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility with respect to educational qualification of the respondents.

#### **Reason for choosing banks based on occupation:**

30.
  - a) There is a significant difference in reason for choosing banks namely safety for deposit, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility and accessibility and occupation.
  - b) There is no significant difference in the reason for choosing bank such as better interest, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility with respect to the occupation of the respondents.

31. **Reason for choosing bank based on Income:** There is a significant difference in reason for choosing bank such as safety for deposit, better interest, credit facility, reputation of the bank, fully automated/advanced technology, better money transfer facility, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility and income.
32. **Reason for choosing banks based on the type of bank:**
- a) There is a significant difference in reason for selecting bank such as better interest and better money transfer facility among customers of different type of banks in Tirunelveli district. Hence, it is concluded that type of bank is a significant role in reason for selecting bank such as better interest and better money transfer facility among customers.
  - b) There is no significant difference in reason for selecting bank such as safety for deposit, credit facility, reputation of the bank, fully automated/advanced technology, accessibility, close proximity to the residence, quicker and better service, safety locker facility, less service charges and better infrastructure facility among customers of different type of banks in Tirunelveli district.
33. **Reason for Choosing Banks:**
- a) It is found that the first factor was named as ‘Reputation and Better service’. This factor includes the reputation of the bank, close proximity to the residence, fully automated /advance technology, accessibility, less service charges, safety locker facility, credit facility, better money

transfer facility, quick and better service, better interest and better infrastructure facility.

- b) It is further found that second factor was labelled as 'Low fees and easiest application processes. This factor includes low account fees and easy application process. It is identified third factor was labelled as 'Workplace compulsion'. This factor includes an excellent portfolio of services and workplace compulsion. It is observed that fourth factor was named as 'Recommendation and safety'. This factor includes recommendations from friends and family and safety for deposit.

#### **6.1.4 Findings Related to Awareness Level of Modern Banking**

**34. The awareness level of modern banking based on educational qualification:**

There is a significant difference in the awareness level of customers towards modern banking namely Automatic Teller Machine (ATM), Tele banking, Internet banking, Mobile banking, Credit card, Debit card, Electronic Clearing Service, National Electronic Fund Transfer, Real Time Gross Settlement, Cheque Truncation System and Demat and the Educational qualification.

- 35. The awareness level of modern banking based on occupation:** There is a significant difference in the awareness level of customers towards modern banking namely Automatic Teller Machine (ATM), Tele Banking, Internet Banking, Mobile Banking, Credit Card, Debit Card, Electronic Clearing Service, National Electronic Fund Transfer, Real Time Gross Settlement, Cheque Truncation System and Demat and the Occupation.

36. **The awareness level of modern banking based on income:** There is a significant difference in the awareness level of customers towards modern banking namely Automatic Teller Machine (ATM), Tele Banking, Internet Banking, Mobile Banking, Credit Card, Debit Card, Electronic Clearing Service, National Electronic Fund Transfer, Real Time Gross Settlement CTS and Demat and Income of the respondents.
37. **Aware of Modern Banking services:** It is found that the first factor was labelled as 'Internet Banking'. This factor includes Real Time Gross Settlement, Demat, National Electronic Fund Transfer (NEFT), and Electronic Clearing Service (ECS), Tele banking, credit card and Internet banking. It is further found that second factor was named as 'Mobile banking'. This factor includes Automatic Teller Machine (ATM), Debit card and Mobile banking.

#### **6.1.5 Findings Related to Parameter for Selecting Modern Banking**

38. **Parameter for selecting modern banking based on educational qualification:**
- a) There is a significant difference in parameter for selecting modern banking namely low hidden cost of services, security, technical efficiency, reputation, facilities provided by I-Banking and less risk and the Educational qualification.
  - b) There is no significant difference in parameter for selecting modern banking such as locational convenience, transfer of funds and net coverage with respect to the educational qualification of the respondents.

**39. Parameter for selecting modern banking based on occupation:**

- a) There is a significant difference in parameter for selecting modern banking namely low hidden cost of services, security, technical efficiency, reputation, facilities provided by Internet banking and less risk with respect to the occupation of the respondents.
- b) There is no significant difference in parameter for selecting modern banking such as low hidden cost of services, technical efficiency and reputation with respect to the occupation of the respondents.

**40. Parameter for selecting modern banking based on income:**

- a) There is a significant difference in parameter for selecting modern banking such as locational convenience, low hidden cost of services, security, transfer of funds and net coverage service with respect to the income of the respondents.
- b) There is no significant difference in parameter for selecting modern banking such as technical efficiency, reputation, facilities provided by I-Banking and less risk with respect to the income of the respondents.

**41. Parameter for selecting bank based on the type of bank:**

- a) There is a significant role in parameter for selecting bank such as security, transfer of fund, net coverage service, technical efficiency, reputation and facilities provided by I-banking among customers.
- b) There is no significant difference in parameter for selecting bank such as locational convenience, low hidden cost of services and less risk among the customers of different type of banks in Tirunelveli district and the type of bank.

#### **6.1.6 Findings Related to Problems in Modern Banking Services**

- 42. Problems in the modern banking Based on Educational qualification:** There is a significant difference in problems in the modern banking such as insufficient technical knowledge, risky to use, unsuitable location of the Automatic Teller Machine (ATM), network connectivity problem, time delay, high transaction cost, machine complexity and poor service quality and Educational qualification.
- 43. Problems in modern banking services based on type of bank:**
- a) Type of bank is not playing a significant role in problems in the modern banking services, namely Insufficient Technical Knowledge, Risky to Use, Unsuitable Location of Automatic Teller Machine (ATM), Network Connectivity Problem, Time Delay and Machine Complexity among customers.
  - b) There is a significant difference in problems in the modern banking such as high transaction cost and poor service quality among customers of different type of banks in Tirunelveli district.

#### **6.1.7 Findings Related to Level of Satisfaction of Modern Banking Service**

- 44. Level of satisfaction of modern banking based on the type of bank:**
- a) There is no significant difference in the level of satisfaction with modern banking namely Automatic Teller Machine (ATM), Tele Banking, Internet Banking, Mobile Banking, Credit Card, Debit Card, Electronic Clearing Service, National Electronic Fund transfer, Cheque truncation

system, Demat among customers of different type of banks in Tirunelveli district.

- b) There is a significant difference in the level of satisfaction with modern banking of Real Time Gross Settlement (RTGS) among customers of different type of banks in Tirunelveli district.

#### **6.1.8 Findings Related to Advantages of Modern Banking Service**

- 45. Advantages of modern banking based on the type of bank:** There is no significant difference in advantages of modern banking such as convenience, speedy transactions, reduces waiting time, anywhere anytime service and self-service among customers of different type of banks in Tirunelveli district.

#### **6.1.9 Findings Related to Satisfaction of Grievance and Settlement**

- 46. Satisfaction of a grievance settlement system based on the type of bank:**

- a) There is a significant difference in satisfaction of the grievance settlement system in Automatic Teller Machine (ATM), Tele Banking, Debit Card, ECS, NEFT and Demat among customers of different type of banks in Tirunelveli district.
- b) There is no significant difference in satisfaction of the grievance settlement system in Internet banking, Mobile banking, credit card, Real Time Gross Settlement (RTGS) and CTS among customers of different type of banks in Tirunelveli district.

## **6.2 SUGGESTIONS**

### **6.2.1 Suggestions to the Public Sector Banks**

1. The public sector banks must aim at attracting customers from all age groups to open and operate the account.
2. The public sector banks must aim at providing modern banking service to a larger extent invariably of the age, gender, income, marital status and educational qualification, locality (rural and urban), community and the nature of employment.
3. It is suggested to the public sector banks to cover the low income, middle and high income groups for availing modern banking services.
4. The public sector banks must float the modern banking service aspects to all customers through awareness and other means of selling as a very less number of customer share knowledge about modern banking customers even though the concept has been floated in India for more than 2 years
5. It is observed that the public sector banks have given credit card to a major portion of customers. It is important to the bank to create awareness about the use and other regulation on the use of credit card to customers which may help them to avoid the unwanted use and other problems that may arise due to the use credit card.
6. A maximum of 30 minutes is required to avail the modern banking services of any type. It is suggested that with the help of the available technology the banks must ensure less time and quick service to customers as the main purpose of modern banking services is quick and timely delivery of the financial products and services.



7. With the help of modern banking service concept the public sector banks must make the customers to be aware of online account opening, online payment methods and paying for other utility services through online. This awareness creation may help customers to open two or more accounts like recurring deposit, fixed deposit and other online saving schemes which may help the bank to increase the number of accounts and encourage saving and investment scheme among the customers. This may mutually benefit both banks and the customers.
8. It is suggested to the public sector banks to create awareness about the modern banking services to customers to various methods and means to increase the number of customers to avail the modern banking services and other financial products introduced by the bank.

#### **6.2.2 Suggestions to the Private Sector Banks**

9. The private sector banks must aim at attracting customers from all age groups to open and operate the account.
10. The private sector banks must aim at providing modern banking service to a larger extent invariably of the age, gender, income, marital status and educational qualification, locality (rural and urban), community and the nature of employment.
11. It is suggested to the private sector banks to cover the low income, middle and high income group for availing modern banking services.
12. The private sector banks must float the modern banking services aspects to all customers through awareness and other means of selling as a very less number

of customer share knowledge about modern banking customers even though the concept has been floated in India for more than 2 years

13. It is observed that the private sector banks have given credit card to a major portion of customers. It is important to the bank to create awareness about the use and other regulation on the use of credit card to customers which may help them to avoid the unwanted use and other problems that may arise due to the use credit card.
14. A maximum of 30 minutes is required to avail the modern banking services of any type. It is suggested that with the help of the available technology the banks must ensure less time and quick service to customers as the main purpose of modern banking services is quick and timely delivery of the financial products and services.
15. With the help of modern banking service concept the private sector banks must make the customers to be aware of online account opening, online payment methods and paying for other utility services through online. This awareness creation may help customers to open two or more accounts like recurring deposit, fixed deposit and other online saving schemes which may help the bank to increase the number of accounts and encourage saving and investment scheme among the customers. This may mutually benefit both banks and the customers.
16. It is suggested to the private sector bank to create awareness about the modern banking services to customers to various methods and means to increase the number of customers to avail the modern banking services and other financial products introduced by the bank.

### **6.2.3 Suggestions to the Government**

17. It is suggested to the government to cover the low income, middle and high income group for availing modern banking services.
18. The government must float the modern banking service aspects to all customers through awareness and other means of selling as a very less number of customer share knowledge about modern banking customers even though the concept has been floated in India for more than a decade.
19. As ATMs are floated in many places and the utility is made convenient and easy, it is advisable to the government to make arrangements for more number of accounts and utility by the customers towards fulfilling the national objective of financial inclusion.
20. Government must frame policies towards creation of account from every segment of the society by floating the need and importance of opening and operating accounts and the convenience of its utility to large masses. It must direct every departments of the society and institutions like schools, colleges, employees of private sectors, unorganised labour force and the like must open and operate an account by focusing on the modern bank facilities.
21. Online payment of the utility bills must be made compulsory with all the account holders to avoid unnecessary delay and waiting hours for payment of utility bills like EB, Phone bills, tax payments, dues on loans and the like.
22. Government must suggest to the banks to help customers by keeping the minimum balance to nil level (no frills account) which will encourage for more account creation and other transactions through modern banking services.

#### **6.2.4 Suggestion to the Stake Holders**

23. It is suggested to the stakeholders to keep in touch with the banks frequently understanding the modern banking service concepts and other innovative financial products to enhance the updated knowledge in the use of modern banking services.

### **6.3 CONCLUSION**

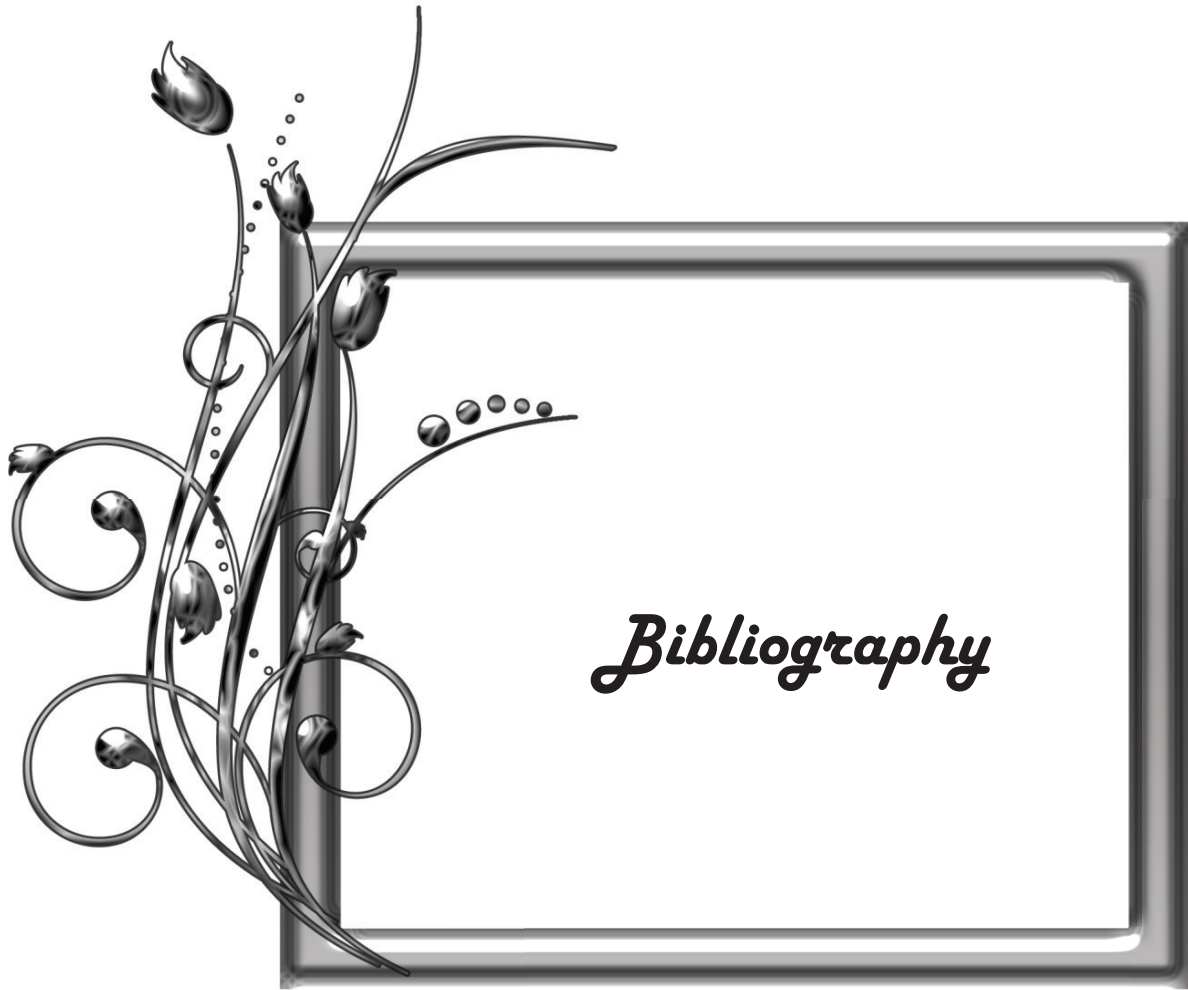
The modern banking service is one of the most important shifts in the banking operation at the global level. In India this concept has gained momentum in the last one decade with the introduction of various modern banking services invariably to all the customer segments. In the light of this understanding the researcher has made an attempt to study the modern banking services provided by both the private and public sector banks in Tirunelveli district of Tamil Nadu state with the objective of tracing the historical development of the modern banking services in the study area and the availability of the same for the betterment of the customers. This exhaustive research study provides information relating to the uses of modern banking services that provide convenience and benefit to large segment of the consumers. In banking industry the modern banking services are considered to be the new phenomenon which explores the new horizons of success and development to facilitate customers to enjoy better services to enhance business operations effectively. But the evidence of the research shows that most of the services are not available in Tirunelveli district as it is a traditional district with less literacy and business avenues. This study also reveals that the major issues in the modern banking services are security, safety and the lack of trust especially on ATM machines. Fraudulent transactions, robbery, bad and unreliable ATM services (e.g. Stuck-up the ATM card, incorrect Debit or Credit amount in the

account etc.) are the reasons for reducing the trust in customers on modern banking services. The results also show that reliability, convenience, speed, safety and security are the major aspects to retain and attract customers. Finally the services which are not available in Tirunelveli district by private sector banks and public sector banks Eg. Cash depositing facility through ATM machines, “SMS/E-mail Alert” Service and Payment of utility bills through internet, are the most desirable services by the customers. From this study the researcher feels that the modern banking services must be very fast in reaching out the customers in line with the high tech cities as the growth of technology has to reach-out every nook and corner in no time for making a technology bound society.

#### **SCOPE FOR FURTHER RESEARCH**

The following lines of research are suggested for the future researcher

- An Analysis of service quality towards modern banking services: A Case Study of Selected Commercial Banks in Tirunelveli district.
- A Comparative Study on problems faced by employees towards Modern banking Services in Public and Private Sector Banks.
- An analysis of payment gateway services in nationalised banks in India



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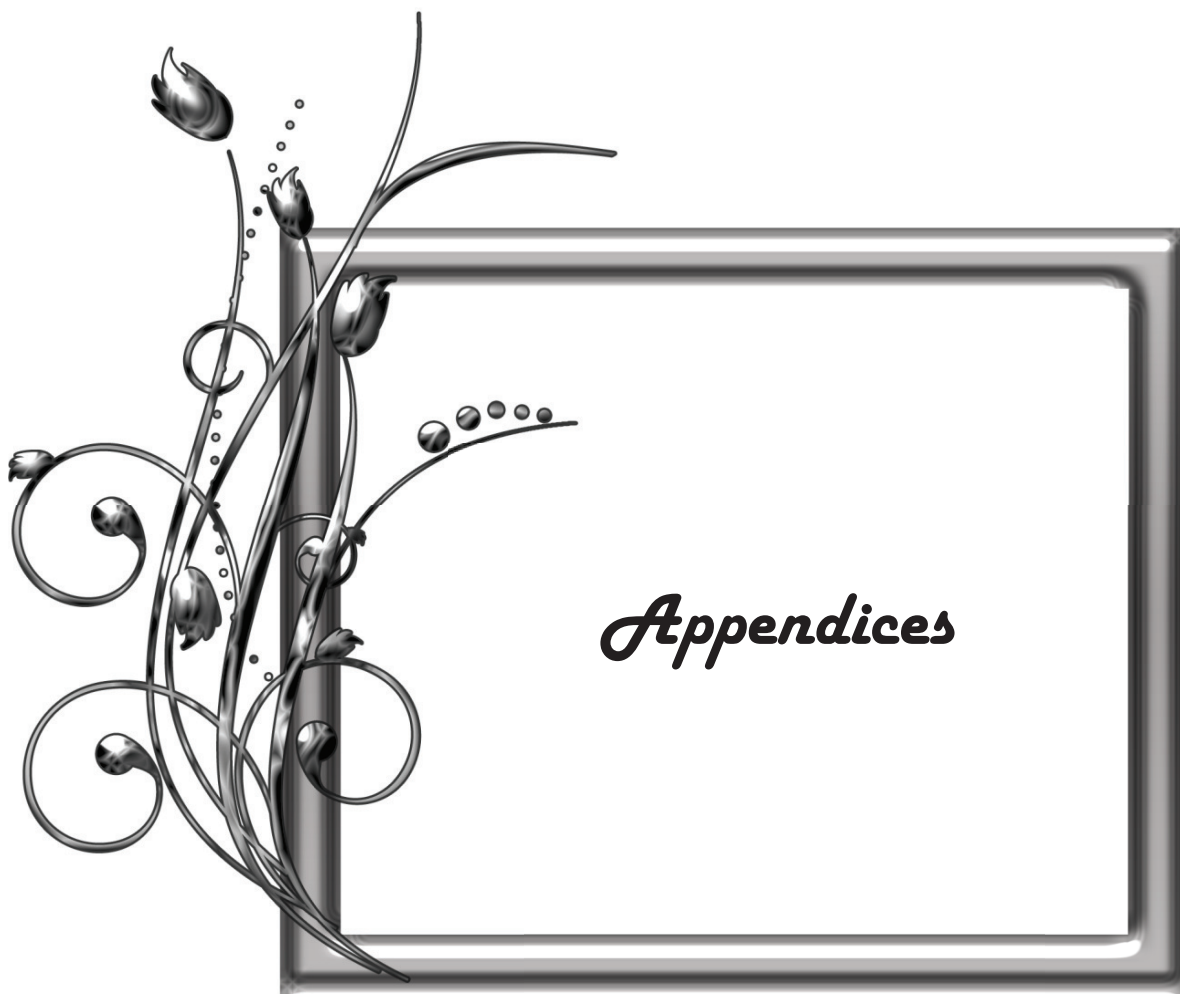
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## *Appendices*

**A COMPARATIVE ANALYSIS OF MODERN BANKING SERVICES EXTENDED BY  
PRIVATE AND PUBLIC SECTOR BANK IN TIRUNELVELI DISTRICT**

**I. Responds Relating To Customers**

1. Name : Mr/Mrs. \_\_\_\_\_
2. Age : \_\_\_\_\_
3. Gender :
 

Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
------	--------------------------	--------	--------------------------
4. Marital Status
 

Married	<input type="checkbox"/>	Unmarried	<input type="checkbox"/>
---------	--------------------------	-----------	--------------------------
5. Educational Qualification :
 

Illiterate	<input type="checkbox"/>	Postgraduate	<input type="checkbox"/>
Higher Secondary	<input type="checkbox"/>	Professional	<input type="checkbox"/>
Undergraduate	<input type="checkbox"/>	Technical	<input type="checkbox"/>
6. Religion :
 

Hindu	<input type="checkbox"/>	Christian	<input type="checkbox"/>
Muslim	<input type="checkbox"/>	Other (Specify) _____	
7. Location :
 

Urban	<input type="checkbox"/>	Semi-Urban	<input type="checkbox"/>
Rural	<input type="checkbox"/>		
8. Community :
 

SC/ST	<input type="checkbox"/>	MBC	<input type="checkbox"/>
BC	<input type="checkbox"/>	Other (Specify).....	
9. Occupation :
 

Government Employee	<input type="checkbox"/>	Private Employee	<input type="checkbox"/>
Self-Employee	<input type="checkbox"/>	Unemployed	<input type="checkbox"/>
Retired	<input type="checkbox"/>		

10. Income :
- |                   |                          |               |                          |
|-------------------|--------------------------|---------------|--------------------------|
| Less than – 10000 | <input type="checkbox"/> | 10000 – 25000 | <input type="checkbox"/> |
| 25000 – 40000     | <input type="checkbox"/> | 40000 – 60000 | <input type="checkbox"/> |
| More than – 60000 | <input type="checkbox"/> |               |                          |
11. Type of the family :
- |         |                          |              |                          |
|---------|--------------------------|--------------|--------------------------|
| Nuclear | <input type="checkbox"/> | Joint Family | <input type="checkbox"/> |
|---------|--------------------------|--------------|--------------------------|

## II. Responds Relating To Customers Bank

12. Type of bank :
- |              |                          |             |                          |
|--------------|--------------------------|-------------|--------------------------|
| Private bank | <input type="checkbox"/> | Public bank | <input type="checkbox"/> |
|--------------|--------------------------|-------------|--------------------------|
13. Name of the bank where you are a customer List out the Bank Name.
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  5. \_\_\_\_\_
14. Frequency of visiting the bank
- |               |                          |         |                          |
|---------------|--------------------------|---------|--------------------------|
| Daily         | <input type="checkbox"/> | Weekly  | <input type="checkbox"/> |
| Monthly Twice | <input type="checkbox"/> | Monthly | <input type="checkbox"/> |
| Occasionally  | <input type="checkbox"/> |         |                          |
15. Type of accounts you have
- |                       |                          |                           |                          |
|-----------------------|--------------------------|---------------------------|--------------------------|
| Saving                | <input type="checkbox"/> | Current                   | <input type="checkbox"/> |
| Fixed Deposit Account | <input type="checkbox"/> | Recurring Deposit Account | <input type="checkbox"/> |
16. Number of years you have the account/accounts
- |                    |                          |                    |                          |
|--------------------|--------------------------|--------------------|--------------------------|
| Less than – 1 year | <input type="checkbox"/> | 1 – 5 years        | <input type="checkbox"/> |
| 5-10 years         | <input type="checkbox"/> | More than 10 years | <input type="checkbox"/> |
17. No. of bank Accounts you have in the bank
- |   |                          |   |                          |
|---|--------------------------|---|--------------------------|
| 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> |
| 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> |
| 5 | <input type="checkbox"/> |   |                          |

18. Type of transactions you are using on regular days, (Tick below)
- |                       |                          |                        |                          |
|-----------------------|--------------------------|------------------------|--------------------------|
| (i) Withdrawal        | <input type="checkbox"/> | (ii) Deposit           | <input type="checkbox"/> |
| (iii) Balance Enquiry | <input type="checkbox"/> | (iv) Passbook Updation | <input type="checkbox"/> |
| (v) Cheque            | <input type="checkbox"/> | (vi) Demand Draft      | <input type="checkbox"/> |
| (vii) Investment      | <input type="checkbox"/> | (viii) Bill Payment    | <input type="checkbox"/> |
| (ix) Money Transfer   | <input type="checkbox"/> | (x) Repayment of Loan  | <input type="checkbox"/> |
| (xi) Other (Specify)  | _____.                   |                        |                          |
19. Reason for choosing banks

S. No.	Reasons	Poor	Fair	Good	Very good	Excellent
1	Safety for deposit					
2	Better interest					
3	Credit facility					
4	Reputation of the bank					
5	Fully Automatized / Advance Technology					
6	Better money transfer facility					
7	Accessibility					
8	Close proximity to the residence					
9	Quicker and better service					
10	Safety Locker facility					
11	Less service charges					
12	Better infrastructure facility					
13	Workplace compulsion					

### III. Availability of Modern Banking Services

20. How do you aware the modern banking services provided by bank?
- |   |                          |
|---|--------------------------|
| (i) Prospectus / Self-analysis/ Banking | <input type="checkbox"/> |
| (ii) News Paper / advertisement / Media | <input type="checkbox"/> |
| (iii) Friends / Relatives / Colleagues  | <input type="checkbox"/> |
| (iv) E-Source/Mail / SMS / Interest     | <input type="checkbox"/> |
21. How long you have been known the Modern services? (In years)
- |                   |                          |                  |                          |
|-------------------|--------------------------|------------------|--------------------------|
| (i) Less than – 1 | <input type="checkbox"/> | (ii) 1 – 3       | <input type="checkbox"/> |
| (iii) 4 – 6       | <input type="checkbox"/> | (iv) More than 6 | <input type="checkbox"/> |

22. To what extent are you aware of the following modern banking service channels?

S. No	Channels	Very little extent	A little extent	Undecided	To some extent	To large extent
1	ATM					
2	Tele Banking					
3	Internet Banking					
4	Mobile Banking					
5	Credit card					
6	Debit card					
7	Electronic Clearing Service(ECS)					
8	National Electronic Fund transfer(NEFT)					
9	Real Time gross Settlement(RTGS)					
10	Cheque Truncation System (CTS)					
11	Demat					

23. What kind of Parameter while selecting modern banking services?

S. No	Parameter	Most Important	Important	Undecided	Un important	Most Important
1	Locational Convenience					
2	Low hidden cost on services					
3	Security					
4	Transfer of fund					
5	Net coverage service					
6	Technical Efficiency					
7	Reputation					
8	No. of facilities provided by I-Banking					
9	Less Risk					

24. Time taken to do the modern banking services.

- a) 10-30 minutes ☐      b) 30 – 60 Minutes ☐  
c) More than 60 minutes ☐

25. Level of satisfaction with the following modern banking service.

S. No	Channels	To Large Extent	To Some extent	Undecided	A little extent	Very Little extent
1	ATM					
2	Tele Banking					
3	Internet Banking					
4	Mobile Banking					
5	Credit card					
6	Debit card					
7	Electronic Clearing Service					
8	National Electronic Fund transfer					
9	Real Time gross Settlement(RTGS)					
10	Cheque Truncation System					
11	Demat					

26. Advantages in the modern banking services.

1. Convenience ☐ 2. Speedy Transactions ☐  
 3. Reduces waiting time ☐ 4. Anywhere and anytime service ☐  
 5. Self Service ☐ 6. Other (Specify) \_\_\_\_\_

#### IV. Problems and Challenges of the Modern Banking Services

27. What are the problems in the modern banking services?

S.No.	Problems / Challenges	Often	Some times	Never
1	Insufficient technical knowledge			
2	Risky to use			
3	Unsuitable location of ATM			
4	Network or connectivity Problem			
5	Time Delay			
6	High Transaction Cost			
7	Machine Complexity			
8	Poor Service Quality			



**V. Customers Perception towards Modern Banking Services**

28. How do you perceive in adapting to modern banking service?  
 Easy ☐ Moderate ☐  
 Difficult ☐
29. Whether the modern banking has reduced the time of operation?  
 Yes ☐ No ☐
30. Do you have any credit card?  
 Yes ☐ No ☐  
 If, yes, which type of credit cards you are using?  
 Low interest card ☐ Reward card ☐  
 Secured Credit Cards ☐ Specialty Credit Cards ☐
31. Rank the following features and their uses.(Please shade on the box)

**ATM**

Features	1	2	3	4	5
Debit Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credit Card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Balance Enquiry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash withdrawal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paying Bills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Money transfer between Accounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**DEBIT CARD**

Features	1	2	3	4	5
Schedule Recurring Payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash Back offer or Rewrads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer money to anyone's bank account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash Back offer or Rewrads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## TELE BANKING

Features	1	2	3	4	5
Balance Enquiry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lost ATM/Debit/Credit Card Reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheque Book Request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lost Cheque book reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Statement Request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer of funds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loan Status Enquiry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stop Payment Instructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obtain Product information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## INTERNET BANKING

Features	1	2	3	4	5
Balance Enquiry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lost ATM/Debit/Credit Card Reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheque Book Request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lost Cheque book reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Statement Request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer of funds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loan Status Enquiry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stop Payment Instructions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obtain Product information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## MOBILE BANKING

Features	1	2	3	4	5
Viewing Account Balance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer funds between customer linked accounts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create Fixed Deposits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Request for Cheque/DD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bill Payments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Order Stop payment of the cheque	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Request for Debit card	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Online Shopping (Ticket booking, Mobile Recharges, etc....)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Downloading Bank Statements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## CREDIT CARD

Features	1	2	3	4	5
Schedule Recurring Payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash Back offer or Rewrads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transfer money to anyone's bank account	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access the Credit Limit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cash Back offer or Rewrads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## NEFT/RTGS

Features	1	2	3	4	5
NEFT/RTGS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## DEMAT

Features	1	2	3	4	5
Demat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SWIFT

Features	1	2	3	4	5
Swift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

32. How satisfactory are the complaint / Grievances Settlement System regard to following modern banking service in this bank?

Services	Highly Dissatisfied	Dissatisfied	In different / undecided	Satisfied	Highly Satisfied
ATM					
Tele Banking					
Internet Banking					
Mobile Banking					
Credit card					
Debit card					
Electronic Clearing Service (ECS)					
National Electronic Fund transfer (NEFT)					
Real Time gross Settlement (RTGS)					
Cheque Truncation System (CTS)					
Demat					

33. What are the suggestions to the bank should do to make the future modern banking services?

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**MODERN BANKING SERVICES IN TIRUNELVELI DISTRICT****Dr. M. JULIAS CEASAR<sup>1</sup> B. SHEEBA PEARLINE<sup>2</sup>**

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**ABSTRACT**

Modern banking services have enabled sophisticated development in the computerization in technology innovation. The innovation derives to the economy to grow, prosper and transform in synchronies with the changes in the environment. The pervasive influence of technology has revolutionaries in banking. The use of progressive and advanced method of services in banking industry is called "Modern Banking". The modern banking is another option for process banking transactions other than traditional. It is also known as E-banking, Electronic banking, Online banking, Virtual banking, Direct banking, Cyber banking and Technology banking. The Modern technology have made it possible that one can do most banking transaction from any situation to even without stepping in to a physical financial structure through modern banking services. The modern banking services including Automatic Teller Machine, Debit Card, Credit Card, Electronic Clearing service, Core Banking these services are controlled by RBI. These service transaction costs have crumbled and handling of astronomical brick & mortar structure has been rapidly yielding ground to click and order electronic banking with a plethora of new products.

**Keywords:** Modern banking services, technology, Awareness

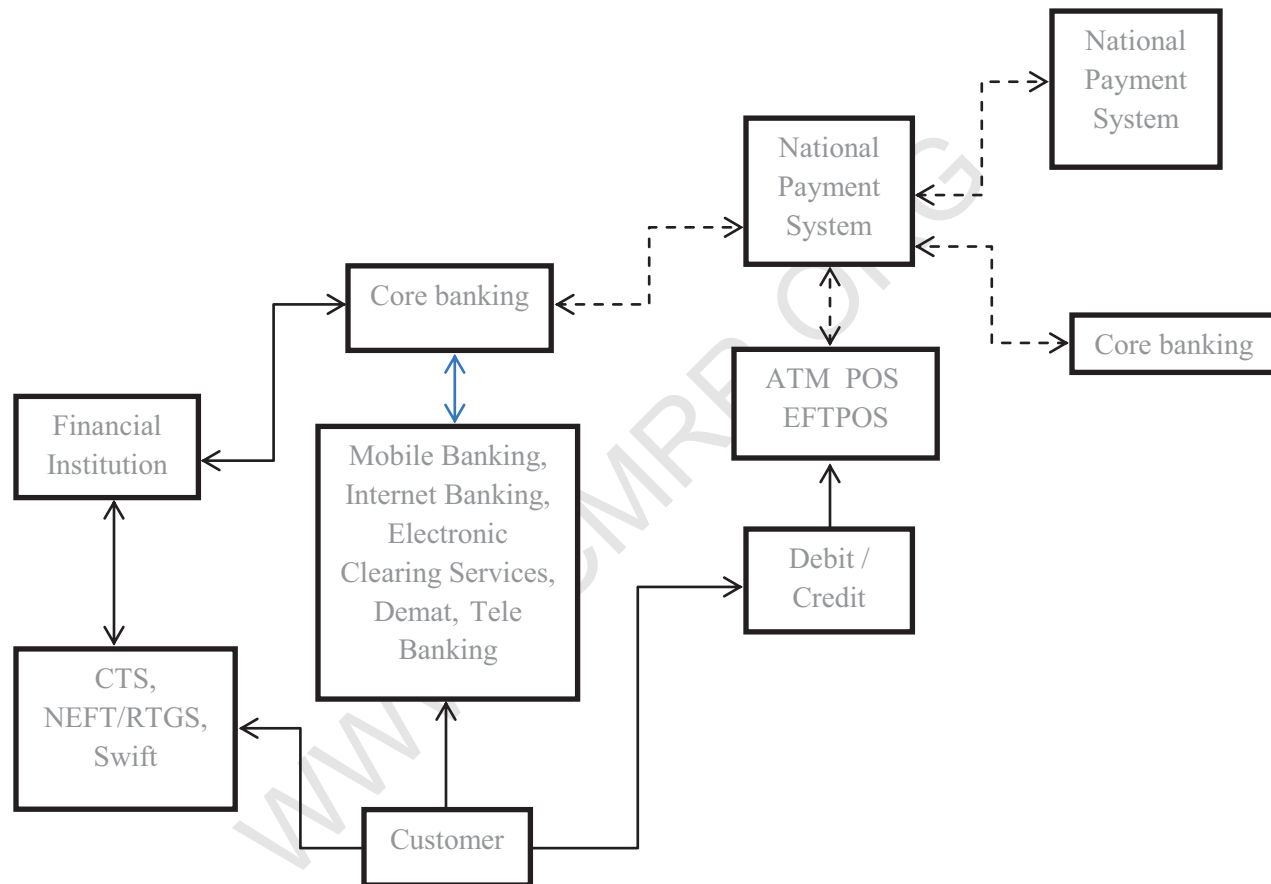
**Introduction**

The rapid growth of the Indian economy has garnered across the globe, and India has emerged as a favorable innovation in modern banking sector over the last few years. Modern banking services have enabled sophisticated development in the computerization in technology innovation. The innovation derives to the economy to grow, prosper and transform in synchronies with the changes in the environment. The pervasive influence of technology has revolutionaries in banking. The use of progressive and advanced method of services in banking industry is called "Modern Banking". The modern banking is another option for process banking transactions other than traditional. It is also known as E-banking, Electronic banking, Online banking, Virtual banking, Direct banking, Cyber banking and Technology banking. The Modern technology have made it possible that one can do most banking transaction from any situation to even without stepping in to a physical financial structure through modern banking services. The modern banking services including Automatic Teller Machine, Debit Card, Credit Card, Electronic Clearing service, Core Banking these services are controlled by RBI. These service transaction costs have crumbled and handling of astronomical brick & mortar structure has been rapidly yielding ground to click and order electronic banking with a plethora of new products. Banking has become boundary less and virtual with a day and night model. Modern banking services are supported to the customers. Such as automatic teller machine, It is help us to withdraw cash at any time, Internet banking has support to speedy transaction, mobile banking is a cheapest but latest technology,



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plastic cards are easy to pay bills ,and NEFT,RTGS,SWIFT.The modern banking services are working belongs to the Core banking. Core banks are controlled by the National payment system. Where the diagram customer trying to access the core banking services like Mobile banking, Internet Banking, Electronic Clearing services, Demat, Tele banking, ATM, POS, EFTPOS, Debit card and Credit card are anytime Anywhere services, Cheque truncation system, NEFT/RTGS, SWIFT services can be used by the customer when the financial institution available timings only. On modern banking services transactions are processing between banks, ATM, POS and EFTPOS through national payment system with electronic fund transfer.The mechanism of modern banking services can be explained with the help of the following diagram.



### OBJECTIVES OF THE STUDY

- To know the awareness of the modern banking services in tirunelveli district
- To analyse the modern banking services in private and public sector banks in tirunelveli district
- To offer a suitable suggestions to improve the modern banking services



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## RESEARCH GAP

Year	Title	Objectives	Methodology	Findings/ Suggestions
2003	self-service Technologies: Understanding customer satisfaction with Technology based services encounter	To know the self-service technologies and understanding the customers satisfaction	Cross tabulation were used	The uses of technology in banking are actually reducing the cost per transaction. The need for the hour is that, public sector banks should adopt technology and caution approach in order to fight effectively with the new-generation private sector banks.
2007	Customer's perception on usage of internet banking", Innovative Marketing	To analyse the customer perception in the internet banking	Qualitative exploratory research using questionnaire was applied. 500 respondents were selected for study after initial screening. They were all bank customers.	The study revealed that education, gender, income plays an important role in the usage of internet banking
2008	Customer Perception of E-Banking Services of Indian Banks: Some Survey Evidence	The researcher investigates internet banking services	Weighted average method and ranking,	Most of the customers of e-banks are satisfied with the different e-channels and their services, but the lack of awareness is a major obstacle to the spread of e-banking services. The paper also suggests some measures to make e-banking services more effective in the future.



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2010	Technologies in Indian banks and customers' perception: an empirical study in Maharashtra	To examine that technologies in Indian banks and customers perception.	The study is based on primary data, which is collected through the issue of the questionnaire to the bank customers. 22 per cent banks are selected from both private and public banks. The area of the study in Maharashtra	Almost 92.1 percent of the respondents agree the electronic banking is more convenient and suitable in present life on the other hand 7.9 percent of the respondents are disagreed. The main reason is less education.
2011	customer perception on service quality of new private sector banks in tamilnadu - an empirical study	To study the customer perception on new private sector banks	Primary data collected through a scientifically developed questionnaire. The questionnaire have been personally administered on a sample size of 240, chosen on a convenient basis from Three Private Banks, ie. ICICI, AXIS and HDFC Bank.	Banks have to understand the changing needs of customers, their aspirations and expectations to create value. Banks should have a strong customer relationship management system that would indicate the worth of the customer and able to understand his needs

### Scope of the study

Tirunelveli is one of the developing districts in the southern India and there is more purpose to enhance modern banking or technology banking in the district. The government is launching many services with a lot of investment in order to meet the objectives of the customers and bank development. As a result the modern banking services have started flourishing in the district in the past few years, while, there is a need to examine modern services with positive effects on customer satisfaction. Hence, we have selected this district to examine the modern banking on customer satisfaction. Therefore, the attempt is made by the researcher to compare the modern banking services in Tirunelveli district.

### Methodology and analysis

The study is intended to cover modern banking services in tirunelveli district. Data for this investigation were collected from primary as well as secondary sources. The list of respondents was obtained from the private and public sector bank. Due to time constraint and owing to non-response from the sample respondents, convenience sampling technique was used to select 100 sample respondents from that obtained list. The data collected from the primary source were analysed with the help of various statistical measures such as simple percentage and ANOVA were used. The use of all these techniques at different places is made in the light of data available and requirements of analysis.

### Hypothesis

H<sub>0</sub>-there is a relationship between awareness level of modern banking and different occupation of the customers.





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One way ANOVA is used for comparing two or more averages. Here, the one way ANOVA is used for comparing the awareness of the modern banking services among different occupation of customers.

### Awareness level of modern banking among different occupation of customers-ANOVA

Awareness level of modern banking	Particulars	Sum of Squares	df	Mean Square	F	p Value
ATM	Between Groups	14.288	4	3.572	3.055	.016
	Within Groups	1243.105	1063	1.169		
	Total	1257.393	1067			
Tele Banking	Between Groups	79.729	4	19.932	11.242	.000
	Within Groups	1900.657	1072	1.773		
	Total	1980.386	1076			
Internet Banking	Between Groups	89.667	4	22.417	12.582	.000
	Within Groups	1909.884	1072	1.782		
	Total	1999.551	1076			
Mobile Banking	Between Groups	114.296	4	28.574	16.418	.000
	Within Groups	1865.740	1072	1.740		
	Total	1980.035	1076			
Credit Card	Between Groups	46.254	4	11.564	5.748	.000
	Within Groups	2156.745	1072	2.012		
	Total	2202.999	1076			
Debit Card	Between Groups	27.321	4	6.830	4.201	.002
	Within Groups	1743.071	1072	1.626		
	Total	1770.392	1076			
ECS	Between Groups	77.006	4	19.251	11.704	.000
	Within Groups	1763.297	1072	1.645		
	Total	1840.303	1076			
NEFT	Between Groups	36.502	4	9.126	5.108	.000
	Within Groups	1915.327	1072	1.787		
	Total	1951.829	1076			
RTGS	Between Groups	63.047	4	15.762	9.210	.000
	Within Groups	1834.604	1072	1.711		
	Total	1897.651	1076			
CTS	Between Groups	70.336	4	17.584	9.642	.000
	Within Groups	1954.907	1072	1.824		
	Total	2025.242	1076			
Demat	Between Groups	68.026	4	17.007	10.151	.000
	Within Groups	1796.052	1072	1.675		
	Total	1864.078	1076			



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From the above anova table observed values of F are ATM is 3.055, Tele Banking is 11.242, Internet Banking is 12.582, Mobile Banking is 16.418, Credit Card is 5.748, Debit Card is 4.20, ECS is 11.704, NEFT is 5.108, RTGS is 9.210, and CTS is 9.642. The P value are less than 0.005. So there is significant relationship between awareness level and occupation in modern banking services.

### SUGGESTIONS

- Bank should design web pages attractively and interactive customer care services installed particular websites.
- Bank should frame minimum limit of cash withdrawal for all banks. Because it was changed bank to bank
- Develop unique mobile banking application which can be used in all mobile handsets. Presently, some applications were not supported to all handsets.

### CONCLUSION

Modern banking service has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. Customer service is the primary end of any bank. With the liberalization banks of all types are on race to increase their customer base with new innovative technological products and services. It can be said that public sector banks are at their highest level of hard work to give competition to the private sector banks. It is seen that to retain the existing customers and attracting new customers the public sector banks is providing up to date services to its valued customers as they are primary input to the profitability of the bank.

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**A COMPARATIVE ANALYSIS OF MODERN BANKING SERVICES EXTENDED BY  
PRIVATE AND PUBLIC SECTOR BANKS IN TIRUNELVELI DISTRICT**

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**ABSTRACT**

The tremendous advances in technology and the aggressive infusion of information technology had brought in a paradigm shift in banking operations. For the banks, technology has emerged as a strategic resource for achieving higher efficiency, control of operations, productivity and profitability. This has instigated the banks to take-up technology to meet the increasing customer satisfaction and to face stiff competition. Today, growing competition in the banking sector has moved towards customers' centric banking. The competition has forced into a new marketing policy in the banking sector. One of the major determinants of banking services is the customer satisfaction, which can be enhanced by using modern banking services. Therefore, Indian banks should try to satisfy all types of customers by providing good services. There is a need to know the level of satisfaction of modern banking customers. In this study, the researcher has made a modest attempt to explore the practice and understanding of the modern banking services extended by private and public sector banks to their customers.

**Keywords:** banking operation, paradigm shift, modern banking, customer centric.

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**INTRODUCTION**

At the beginning of the 21<sup>st</sup> century, banks across the world have become complex financial organizations that offered a wide variety of services to international markets. Supported by the technology, banks are working to identify new business places, to develop customized services, to implement innovative strategies and to capture new market opportunities. The tremendous advances in technology and the aggressive infusion of information technology had brought in a paradigm shift in banking operations. For the banks, technology has emerged as a strategic resource for achieving higher efficiency, control of operations, productivity and profitability. This has instigated the banks to take-up technology to meet the increasing customer satisfaction and to face stiff competition. Therefore, Indian banks now have to develop modern banking services with world class service standards for satisfying their customers. Banks have witnessed an amazing change in the Indian banking sector as a part of the financial sector reforms. Today, growing competition in the banking sector has moved towards customers' centric banking. The competition has forced into a new marketing policy in the banking sector. One of the major determinants of banking services is the customer satisfaction, which can be enhanced by using modern banking services. Therefore, Indian banks should try to satisfy all types of customers by providing good services. There is a need to know the level of satisfaction of modern banking customers. In this study, the researcher has made a modest attempt to explore the practice and understanding of the modern banking services extended by private and public sector banks to their customers.

**OBJECTIVES OF THE STUDY**

The main objectives are as follows



1. To identify the modern banking services provided by private and public sector banks in Tirunelveli district.
2. To compare the problems and prospects of the modern banking services in private and public sector banks.
3. To analyse the customer satisfaction towards the modern banking services in Tirunelveli district.

### **SCOPE OF THE STUDY**

The present study is confined to a precise modern banking services which have been mostly used by the customers' i.e. Automatic Teller Machine(ATM), Tele Banking, Internet Banking, Mobile Banking, Credit card, Debit card, Electronic Clearing Service (ECS), National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Cheque Truncation System (CTS), Demat. The research is based on data collected from customers of selected private and public sector banks in Tirunelveli district. Other aspects of bank and banking services are not connected with this study. This study examines the satisfaction of customers in private and public sector banks in Tirunelveli.

### **REVIEW OF LITERATURE**

Hasanbanu and Jeya Shree (2003)<sup>1</sup> the objective of study the various factors which influence the people who take housing loans for availing of such loans from public sector banks. It was found out that there is vital scope for housing promotion in India. Banks need to introduce more dynamic and innovative housing loan schemes and also need to focus on mass customization versus mass market.

Al-Hawari et.al (2005)<sup>2</sup> developed a comprehensive model of banking automated service quality taking into consideration the unique attributes of various delivery channels including ATM, Internet Banking, Telephone Banking and other dimensions tested for unidimensionally, reliability and validity using confirmatory factor analysis. They compiled a list of major dimensions of ATM service quality based on previous studies. The dimensions include secure locations, user – friendliness of the ATM system, convenient location and function of ATM. These dimensions were also tested by conducting an empirical study.

Mohamad Rizal Abdul Hamid, Hanudin Amin, Suddin Lada (2007) The study analysing the availability of the internet banking basic services and the differences of the features. Further, the researchers can concentrate the problems that facing the institution in both countries. The data were collected from 9 local banks and 4 foreign banks in Thailand and Malaysia. Finally, the empirical study concluded that the government should step-in enforcing laws on protecting consumer rights. The government, as the statutory body should provide guidelines for internet banking services and monitoring over banks operation to ensure their operation are legitimate.

Ritu Sehgal and Sonia Chawla (2011)<sup>3</sup> highlight the Indian banking sector is developing at an astounding rate. As per Prathima Rajan, an analyst in the Client's banking group, "Indian banking

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<sup>1</sup> Hasanbanu and Jeya shree(2003), "A comparative study on factors influencing housing loan Borrowers of public and private sector banks in Uthamapalayam Taluk", Indian Journal of Marketing, Vol 20, No 2-4, Pp 13-15.

<sup>2</sup> Al-hawari M., Hartely N.and Ward T.(2005), "Measuring banks' automated service quality: a confirmatory factor analysis approach", Marketing bulletin, Vol 16 No 1.

<sup>3</sup>Ritu Sehgal, Sonia Chawla(2011),"Impact of internet banking on customer satisfaction: a comparative study of public sector banks, private sector banks and foreign sector banks", International Journal Of Research In Commerce, It & Management, vol 1(2), Pp 156-163, www.ijrcm.org.in.



industry assets are expected to reach US \$ 1 trillion by 2010". On the other side, development of technology is uplifting the functioning and services of the banking sector. With the development and adoption of technology in banking sector, banking customers are also expecting more day by day. Therefore, the service providers are becoming further customer centric in their approach of providing services in order to provide customer satisfaction. The paper presents the analysis of 225 Internet banking customers of three sectors of banks that is public sector, private sector and foreign sector banks of Jalandhar City. In case of a public sector bank, State Bank of India (SBI), for private sector banks, Industrial Credit and Investment Corporation of India (ICICI) bank and for foreign sector banks, Standard Chartered banks (SCB) have been taken for study. The percentages, frequencies and chi-square test have been applied for analysis to explore the results of the survey. The major findings are 72% respondents of SBI, 76.6% respondents of ICICI bank 80% respondents of SCB are satisfied with Internet banking of their respective banks. Hence, there is no significant relation between occupation and choice of bank of customers of SBI, ICICI bank and SCB. Hence, Null hypothesis have been accepted. The study reveals that the majority of the respondents of all the three sectors of banks is satisfied with Internet banking of their respective banks.

Richard (2011)<sup>4</sup> studied the "perception towards e-banking: a comparative study of India and Kenya" this study examines the perspectives of customers as well as bankers has towards the use of electronic devices in the provision of banking services. It focuses on some vital aspects like challenges experienced by customers and bankers, value attribution to e-banking adaptation and some factors attracting them to adopt and use e-banking systems. It also analyses the current status and trends of e-banking indicators in both India and Kenya. In this study, theoretical framework on emergence and challenges facing electronic banking has been outlined to give a clear conceptualization as regards to perception of e-banking. The objectives of the study required the study of both customers and bankers in order to make a comparative study between India and Kenya.

Puja Khatri and Yukti Ahuja (2011)<sup>5</sup> the purpose of the study is to compared the public and private sector banks in terms of customer satisfaction and to study the variables of service quality. Hypotheses are framed that is significant difference between respondents' of public and private sector banks as regard s different variables of quality. The total number of respondents surveyed were 122 and judgmental sampling technique used in Delhi and NCR. Analysis of the information has been done by using the statistical package SPSS. Different tools like Mean, Standard deviation and T-test have been used.

Poonam Sawant, Tandale, R.V. Kulkarni, (2012)<sup>6</sup> conducted a review on information communication technology and service quality in banking industry. In this study the number of researches carried out in the area of e-banking in terms of customer's perception towards e-services, technology, service quality, privacy and security. Information and Communication Technology (ICT) is important in e-banking to improve the performance and efficiency of banking transactions and to bring new quality to services as it re-organizes knowledge and effectively incorporates intelligent access to and use of the data in e-banking. The purpose of this study is to offer insights into the e-banking adoption and its implications for e-banking growth in public and private sector banks in India.

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<sup>4</sup>Richard(2011), "Perception towards E-Banking: A Comparative study of India and Kenya", Guru Nanak Dev University, Amritsar.

<sup>5</sup> Puja Khatri and Yukti Ahuja(2011), "Comparative Study Of Customer Satisfaction In Indian Public Sector And Private Sector Banks", International journal of engineering and management sciences, Vol 1(1), Pp 42-51.

<sup>6</sup>Poonam Sawant, Tandale, R.V.Kulkarni(2012), "Information And Communication Technology And Service Quality In Banking Industry".





Robert Raja Singh (2014)<sup>7</sup> The thesis highlight the challenge of each bank is to work towards ensuring that customers prefer its products and services to those of other competing banks. The key to develop and nurture a close relationship with customers is the appreciation of their needs and preferences and fulfilment of their requirements. Employment of Information Technology to appropriately analyse and understand the needs of existing customers better, to ensure that customers get their benefits and to explore the possibility of cross-selling products to gain a competitive advantage is the other issue, drawing their attention. Thus, in this current competitive scenario, both private and public sector banks are to survive on competition, succeed and make profit. Further, it is observed that some banks lose their good clients to competitors due to a variety of reasons. In Kanyakumari District, with the increased number of both private and public sector banks, the problem increases. Banks in this district find it very difficult in getting new customers as well as in retaining the existing customers.

### **METHODOLOGY**

The study is an empirical study based on interview method. Both primary and secondary data are used in this study. The researcher has selected both public and private sector banks which have a maximum level of branch automation and providing most of the modern banking services in the Tirunelveli District. The non-probability sampling methods were used for selection of samples and more particularly the purposive sampling method is used. The purposive sampling method (Mishra, 2013, Pp 21) (Vijay et.al, 2010, Pp43) provides a range of alternatives and options in selecting the sample. Hence, purposive sampling technique was adopted to collect details on customers' satisfaction regarding the modern banking services in Tirunelveli district.

### **FINDINGS OF THE STUDY**

The findings of the research study in presented here with proper classification

- A majority of 73.46 per cent of the customers are in the age group of the 20-40 years in private sector banks. 65.61 per cent of customers are in the age group of 20 to 40 years in public sector banks.
- A majority of 60.11 per cent of the respondents are male. In public sector banks, the per cent age of male customers is 49.08 whereas in private sector banks, it is 71.15 per cent.
- A majority of 63.08 per cent married respondents have availed more modern banking services from the banks than the unmarried customers in private sector banks, whereas public sector banks 70.62 per cent of the respondents avail modern banking services.
- A majority of 29.62 per cent are post graduates in the public sector. In private sector banks, 30.2 per cent are post graduate customers. The analysis reveals that the post-graduation customers have availed more modern banking services from the banks than the customers of other educational level.
- A majority of 49.08 per cent of the respondents are Hindus and Christian respectively in both the private and public sector banks in Tirunelveli district.
- A majority of 66.92 per cent the respondents belong to a backward community in private sector banks, In public sector banks, 64.51 per cent availed more modern banking services from the banks than the other community customers.

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<sup>7</sup> Robert Raja Singh(2014), "A comparative study on customer benefits with special reference to public and private sector banks in kanyakumari district", Ph.D thesis, M.S university.



- A majority of 31.95 per cent of the respondents are private employees in public sector banks whereas in private sector banks, private employees and government employees constitute 39.23 per cent and 25.38 per cent respectively.
- A majority of 33.56 per cent of the respondents' monthly income is less than 10,000. 36.54 per cent have their monthly income between that Rs.10000 – 25000. In private sector banks. In public sector banks collectively 35.13 and 32.56 per cent ages have their income less than 10000, and Rs.10000 – 25000 in private sector banks.
- A majority of 67.81 per cent of the respondents are from nuclear family and the remaining 32.19 per cent of them living in joint family. In the private sector banks 74.62 per cent of the account holders, live in nuclear family and the remaining 25.38 per cent of the respondents live in joint family.
- In public sector banks a majority of 40.39 per cent of the respondents has knowledge about modern banking through prospectus/ self-analysis/ banking. In case of private sector banks the primary source of knowledge about modern banking services are gained through prospectus/self-analysis/banking and 43.46 per cent of the account holders have this opinion.
- A majority of 36.15 per cent of the respondents have knowledge about the modern banking services for up to 3 years of private sector banks. As far as the public sector banks are concerned, 41.98 per cent of the respondents have knowledge about the modern services for a period from 1 to 3 years.
- **Number of customers having a credit card:** Among the customers of private sector banks 80.16 per cent of the respondents have credit cards and 19.84 per cent do not have a credit card. In public sector banks, 81.40 per cent of the respondents have a credit card and the remaining 18.60 per cent do not have credit card facilities.
- **Time taken for the modern banking services:** 57.16percent of the customers feel that it is 10-30 minutes in private sector banks, In public sector banks 67.69 per cent of the respondents stated that they take 10–30 minutes. The majority of the respondents feel that the use of modern banking service requires 10 to 30 minutes on an average.
- **Number of accounts:** In private sector banks 78.08 per cent of the respondents have only one account. In public sector banks 79.78 per cent of them have only one account. Majority of the respondents have only one account.
- **Type of accounts:** In case of private sector banks 73.85 per cent of the respondents hold savings account. In public sector banks, 77.97 per cent of the respondents have a savings account. Majority of the respondents have only savings bank account.
- **Number of years the customers having an account:** In private sector banks, 47.31 per cent of the respondents have the account in the bank for a period between 1 to 5 years using the modern banking services. Among the customers of public sector banks, 47.37 per cent of the respondents have account for a period between 1 and 5 years.
- **Type of transactions:** 78.08 per cent of the respondents use the bank for withdrawal transactions and the next majority of 75.77 per cent of the respondents use the bank for deposit transactions in private sector banks. It is further found that among the customers of public sector banks, 81.03 per cent use bank for withdrawal transactions and the next majority of 74.66 per cent of the respondents use the banks for deposit transactions.
- **Awareness of Modern Banking Services:** Majority of the respondents in private sector banks 68.85 per cent are partially aware of the modern banking services, 26.54 per cent are fully aware of the modern banking services. In public sector banks, 68.42 per cent are partially aware of the modern banking services, 18.12 per cent are fully aware of the modern banking services.



#### **SUGGESTION TO THE PUBLIC SECTOR BANKS**

- The public sector bank must aimed at providing modern banking service to a larger extent invariable of the age, gender, income, marital status and educational qualification, locality (rural and urban), community and the nature of employment.
- It is suggested to the public sector banks to cover the low income, middle and high income group for availing modern banking services.
- The public sector banks must float the modern banking services aspects to all customers through awareness and other means of selling as a very less number of customer knowledge about modern banking customers. Even though, the concept has been floated in India for more than 2 years
- It is observed that the public sector banks have given credit card to a major position of customers. It is important to the bank to create awareness about the use and other regulation on the use of credit card to customers which may help them to avoid the unwanted use and other problems that may arise due to the use credit card.

#### **SUGGESTION TO THE PRIVATE SECTOR BANKS**

- A maximum of 30 minutes is required to avail the modern banking services of any type. It is suggested that with the help of the available technology the bank must ensure less time and quick service to customers as the main purpose of modern banking services is quick and timely delivery of the financial products and services.
- With the help of modern banking service concept the private sector banks must make the customers to be aware of online account opening, online payment methods and paying for other utility services through online. This awareness creation may help customers to open two or more accounts like recurring deposit, fixed deposit and other online saving schemes which may help the bank to increase the number of accounts and encourage saving and investment scheme among the customers. This may mutually benefit both banks and the customers.
- It is suggested to the private sector bank to create awareness about the modern banking services to customers to various methods and means to increase the number of customers to avail the modern banking services and other financial product introduced by the bank.

#### **SUGGESTION TO THE GOVERNMENT**

- It is suggested to the private sector banks to cover the low income, middle and high income group for availing modern banking services.
- The private sector banks must float the modern banking services aspects to all customers through awareness and other means of selling as a very less number of customer knowledge about modern banking customers. Even though, the concept has been floated in India for more than 2 years

#### **SUGGESTION TO THE STAKE HOLDERS**

It is suggested to the stakeholders to keep in touch with the banks frequently understanding the modern banking service concept and other innovative financial products to enhance the updated knowledge in the use of modern banking services.

#### **CONCLUSION**

The uses of modern banking services provide convenience and benefit to large segment of the consumers. In banking industry the modern banking services are considered to be the new phenomenon which explores the new horizons of success and development to facilitate customers to enjoy better services enhance business operations effectively. But the evidence of the research shows





that most of the services are not available in Tirunelveli district as it is a traditional district with less literacy and business avenues. This study also reveals that the major issues in the modern banking services are security, safety and the lack of trust especially on ATM machines. Fraudulent transactions, robbery, bad and unreliable ATM services (e.g. Stuck-up the ATM card, incorrect Dr or Cr amount in the account etc.) are the reasons for reducing the trust in customers on modern banking services. The results also show that reliability, convenience, speed, safety and security are the major aspects to retain and attract customers. Finally the services which are not available in Tirunelveli district by private sector banks and public sector banks e.g. Cash depositing facility through ATM machines, "SMS/E-mail Alert" Service, Payment of utility bills through internet etc., are the most desirable services by the customers. From this study, the researcher feels that the modern banking services must be very fast in reaching out the customers in line with the high tech cities as the growth of technology reach-out every nook and corner in no time.

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