Chapter – 6

Summary, Major Findings and Suggestions
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6.1 Introduction

Rapid development in the field of technology and telecommunication has made conventional Banks to turn towards modern and high-tech environment and they have made the banking sector stronger to run with the latest developments in the business world.

The present study has shed some light on the introduction and upgradation of ICT technologies both in Commercial Banks and UCBs and also has analyzed opinion as well as the reaction of their customers and employees towards latest technology in their day to day operation.

A detailed study has been made at the national level Banking system in India pertaining to ICT based services and perception of both customers and employees regarding the advanced banking technology has been analysed with the case study of Mysore city. For the collection of primary data scheduled method is applied to customers and employees. Both questionnaire and interview method is used to collect information from Bank managers. The secondary data is collected from RBI bulletins, journals, magazines, noted newspapers and various authenticated web sites.

6.2 Summary

The whole thesis consists of six chapters. The discussion made hitherto in different chapters may be summarized as follows.

Chapter 1 – Introduction

This chapter gives a detail study not only about the whole Banking sector in India, but also an overall view of Commercial Banks compared with UCBs. Types of Banks, role of Banks in the modern economy, history of the Banking sector in India are discussed. This chapter also has given a detailed meaning of ICT and its impact on the Banking business. In this chapter, the importance of the research problems, gap of the study, methodology, objectives of the study, hypotheses and Limitations of the study have been mentioned.
Chapter 2 – Review of Literature

This chapter discusses briefly about Many Research articles and studies which are related to the adoption of the ICT tools in Commercial Banks in comparison with UCBs. Various committee reports related to ICT in the Banking sector in India have been taken care of as the chapter is concerned with the research methodology. This chapter is reviewed with the following segments

a) Reviews related to ICT & Development

b) Reviews related to ICT Adoption in Commercial Banks

c) Reviews related to ICT Adoption in Urban Cooperative Banks

d) Reviews related to Customers and Employees Opinion on ICT Adoption in Banks

e) Committee Reports

A small note about the research gap is also mentioned to explain the effort of the present study.

Chapter 3 – Theoretical Background and Methodology

This chapter consists of two sections, Section – A deals with some important theories which deal with Technology and development as well as Banking and development. Section – A deals with various theories of technology and Banking development and concepts by noted Economists like Adman Smith, Schumpeter, Davis, Neal C Gross etc. have been discussed. Under Banking and development it has been described that the Banking field in recent years has greatly changed the life style of the people as Banks have touched the doors of all sections of the community. Research methodology under Section – B covers research design and data collection. Data analysis, study area and study period.

Chapter 4 – ICT Based Services in the Indian Banking Sector

This chapter consists of three sections. Section – A deals with recent trends in the ICT practices in the Indian Banking sector. RTGS, NEFT, ECS, MICR, POS and Core Banking solutions, trends have been discussed. In addition to this, SMS Alerts, Mobile Banking, Internet Banking, Card Based Transactions. Which are in the wave to tide over
Delay in transactions faced by customers are also explained. The electronic payment system in India accounts 90% of the total value of transactions in Banks. Growth of ATM centers, RTGS, NEFT, ECS, MICR and POS in India has been explained with the help of facts and figures. There are so many problems faced by UCBs for not having a core Banking facility. So UCBs with CBS should become the order of the day if at all, these Banks have to survive and go on the path of development. Section – B deals with the impact of ICT based services on the performance, productivity and profitability on both Commercial Banks and UCBs in India. ICT strategy is in the preliminary stage in UCBs. Among all states, Maharashtra has shown the highest number of Core Banking facility, i.e. 124 UCBs with CBS. The section C – deals with the performance of Banking sector in Karnataka state. T-Test, F-test and trend analysis have been applied to analyze the data.

Chapter 5 – A Comparative Study of Customers and Employees Perception on ICT Usage in Commercial Banks and UCBs Of Mysore City

This chapter consists of four sections. Section – A deals with demographic profile of customers of both Commercial Banks and UCBs of Mysore city. Here Age wise classification, gender wise classification, education wise classification and occupation classification of customers are made. Besides E – Banking services and satisfaction derived out of utilizing E-channels like RTGS, NEFT, MICR and ECS have been discussed in detail. Services rendered by Commercial Banks and UCBs with ATM, SMS Alerts, Internet Banking, Mobile Banking and Card Based transactions have also been analysed. Section – B deals with employees of Commercial Banks and UCBs of Mysore city. Here employees’ perceptions towards RTGS, NEFT, MICR and ECS have been explained and employees were asked to express their opinion on ATM, SMS Alerts, Internet Banking, Mobile Banking and Card Based transaction. Both A and B Sections deal with Overall opinion of both employees and customers of both Commercial Banks and Urban Cooperative Banks on E- Banking services. Here customers and employees have expressed their opinion on the reasons for opting E- Banking services. Primary data has been analyzed with suitable statistical tools. The chi square method has been applied to analyze their perceptions. Till today in the Mysore city majority of UCBs remain traditional in outlook. All Commercial Banks have become successful in adopting advanced technology.
6.3 Major Findings

This section presents the major findings of the study. A study on ICT practices both in Commercial Banks and UCBs in India have been summarized with dummy variable analysis, T-Test, F-test and trend analysis and conclusion are obtained on the basis of research questions. The perception of employees and customers of the study area i.e. Mysore city with reference to advanced technology has also been analysed with chi-square test analysis. Following are the major findings of the present study.

Trends in Electronic Payments in Banks of India

In the chapter four under the section ‘A’ trends in electronic payments in banks in India are discussed.

The total E- Payments made in Banks in India was around 3,05,382 billion in 2007-08. It gradually increased to 3,29,736 billion in 2008-09 then it increased to 5,16,332 in the financial year 2011-12. Paperless transaction is gaining momentum now a days. Indian Banking Sector has taken a leap frog over from paper-based transactions to electronic payment system which include Real Time Gross Settlement (RTGS), National Electronic Fund Transfer (NEFT) and Point on Sale (POS).

ECS debit transactions have increased from 149.3 million in 2009 – 10 to 164.7 million in 2011 – 12 and the ECS credit transaction has also increased from 98.1 million in 2009 – 10 to 121.5 million in 2011 – 12. The ECS payment based transaction is increasing at a faster rate in India. It is noticed that average monthly volumes of ECS are 8.05 million transactions.

Indian Banks have made 226.1 million of electronic fund transfers in the year 2011 – 12. NEFT based clearing has grown from 66.3 million in 2009 – 10 to 226.1 million in 2011 – 12. This service offers settlements on weekdays in 77,821 branches in India.

RBI has introduced RTGS in 2004 and this facility has been extended to 77,093 branches in India. Banks with RTGS method have settled 55.1 million transactions, in 2011 – 12 as compared to 33.2 million in 2009 – 10. The Banks which have opted core Banking solution are operating RTGS E – Payment system. In the year 2012-13 68.5 million RTGS transaction had taken place.
Now with MICR clearing centers both cheque collection and clearing process are at a faster rate. It has increased from 11,497 million in 2009 – 10 to 11,556 million in 2010 – 11 and after the introduction of cheque truncation MICR has slightly increased to 11556 in 2011–12.

The total debit card and credit transaction on point of sale terminal was made with 18 million credit cards and 228 million debit cards. In 2008-09 228.2 million and 127.6 million credit and debit card based transaction took place. 234.2 million Credit based and 170.2 million debit cards based POS transaction took place in the financial year 2009 – 10 and it increased to 320 million credit card based and 327.5 million debit card based transaction all over India in 2011 – 12. It has become a fashion to make payment of goods and services with these cards in the absence of money in hand. In the financial year 2012 – 13 total debit card transaction on POS has increased to 469.1 million and credit card based transaction has also increased by 396.6 million in the same period.

Volume of Mobile Banking has been increasing year by year. During the year 2010 – 11 there were 6.85 million transactions in terms of volume, then it increased to 25.56 million in the year 2011 – 13 it has touched 53.30 million. Customers nowadays with these smart phones are doing their Banking business transaction.

In the year 2008-09 there were 14,796 on sight (in the premises of Bank) and 12,292 off-site (outside the area of Banks) public sector Bank have highest number of ATM Centre, the next place is occupied by private sectors of India. Foreign sector Banks have volatility in the growth of ATM centers and during 2009-10 there were 43,651 ATM centers in India then it increased to 60,153 in 2010-11 and among public sector Banks, State Bank grouped has the highest number of ATM centers in the country. There were 74,505 in 2011 – 12.

**Trends in Financial Indicators, Productivity and Profitability of Commercial Banks and UCBs**

In the chapter four under the section ‘B’ Trends in Financial Indicators, Productivity and Profitability of Commercial Banks and UCBs are discussed.

Different parameters have been selected to evaluate the growth of Commercial Banks and UCBs. Here an analysis has been made by dividing the study period on the basis of ICT
penetration in the banking sector in India. An analysis has been made at the aggregate level for the study period of ten years, i.e. from 2003 – 04 to 2012 – 13.

Trends in Total Deposits of Commercial Banks and UCBs in India

It is found that the average growth of deposits of Commercial Banks is 18.23 and 0.397 for UCBs in India. As per the results of F test the variance between the two is significant. So, equal variance is not assumed. T-test also shows that the mean difference between the two is significant. Therefore, it is concluded that performance of CBs is higher than UCBs in terms of growth of deposits.

Trends in Total Advances of Commercial Banks and UCBs in India

The average growth of advances for Commercial Banks in India is 23.31 and for UCBs it is 9.23. Obtained results from the F test shows that the variance between the two is not significant. Therefore, equal variance is assumed. T-test also shows that the mean difference between the two is significant. So, the performance of CBs is higher than UCBs in terms of growth of advances.

Trends in Total Investment of Commercial Banks and UCBs in India

The average growth of investments in India for Commercial Banks is 11.95 and it is 10.19 for UCBs. It is proved from the results of F test that the variance between the two is not significant. Therefore, equal variance is assumed. It is found from t-test that the mean difference between the two is not significant. Therefore, the performance of Commercial Banks is significantly not different from UCBs in terms of growth of investments. So, performance of Commercial Banks is slightly higher than UCBs in terms of growth of investments.

Trends in Total Business of Commercial Banks and UCBs in India

The average growth of total business for CBs in India is 22.18 and it is 4.61 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is significant. Therefore, the performance of CBs significantly differs from UCBs in terms of growth of total business. Accordingly, the performance of CBs is significantly higher compared to UCBs in terms of total business.
Trends in Total Number of Branches of Commercial Banks and UCBs in India

The average growth of the number of branches for CBs in India is 5.23 and it is 0.78 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is significant. Therefore, the performance of CBs significantly differs from UCBs in terms of growth of the number of branches. Accordingly, the performance of CBs is significantly higher compared to UCBs in terms of number of branches.

Trends in Deposits per Employee of Commercial Banks and UCBs in India

The average growth of deposits per employee for CBs in India is 14.73 and it is -1.15 for UCBs. Unsecured advances and unsecured guarantees have been avoided in UCBs therefore, deposits per employee have been declined. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is significant. Therefore, the performance of CBs is significantly different from UCBs in terms of growth of deposits per employee.

Trends in Advances per Employee of Commercial Banks and UCBs in India

The average growth of advances per employee for CBs in India is 20.08 and it is 7.14 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is not significant. Therefore, the performance of CBs is significantly not differing from UCBs in terms of growth of advances per employee.

Trends in Business per Employee of Commercial Banks and UCBs in India

The average growth of business per employee for CBs in India is 16.16 and it is 3.29 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is significant. Therefore, the performance of CBs significantly differs from UCBs in terms of growth of business per employee.
Trends in Deposits per Branch of Commercial Banks and UCBs in India

The average growth of deposits per branch for CBs in India is 12.45 and it is 1.07 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is significant. Therefore, the performance of CBs significantly differs from UCBs in terms of growth of deposits per branch.

Trends in Advances per Branch of Commercial Banks and UCBs in India

The average growth of advances per branch for CBs in India is 39.71 and it is 17.12 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is significant. Therefore, the performance of CBs significantly differs from UCBs in terms of growth of advances per branch.

Trends in Business per Branch of Commercial Banks and UCBs in India

The average growth of business per branch for CBs in India is 14.31 and it is 7.05 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is not significant. Therefore, the performance of CBs is not significantly differing from UCBs in terms of growth of business per branch.

Trends in Return on Investment of Commercial Banks and UCBs in India

The average growth of returns on investment for CBs in India is 22.06 and it is 33.17 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal variance assumed. It is found from t-test that the mean difference between the two is not significant. Therefore, the performance of CBs is not significantly differing from UCBs in terms of growth of returns on investment. UCBs have maximized their volume of wealth by maximising the return on their investment.
Impact of ICT on Financial Indicators, Productivity and Profitability of Commercial Banks and UCBs

New technology, launched in this sector has made Banks to be stronger and has dug infinite opportunities. The demand for introduction and upgradation of technology in the Banking sector have been growing very fast. In recent years, even in UCBs essentiality of ICT strategy has acquired a great importance and they are also thinking about constructive changes.

Impact of ICT on Deposits of CBs and UCBs

Period of technology up-gradation was considered as a benchmark and the average deposit during the period of technology up-gradation was 1925988 crore rupees for CBs and 93687 crore rupees for UCBs. β1 explains the difference in deposits between benchmark and periods of rapid usage of technology and the difference is 2765259 crore rupees for CBs and 1911 crore rupees for UCBs. The difference is statistically significant at the one percent level. Therefore, ICT has made a significant impact on growth of deposits of both CBs and UCBs.

Impact of ICT on Advances of CBs and UCBs

Period of technology up-gradation was considered as a benchmark and the average advances during the period of technology up-gradation was 1250451 crore rupees for CBs and 66677 crore rupees for UCBs. β1 explains the difference in advances between benchmark and periods of rapid usage of technology and the difference is 2292997 crore rupees for CBs and 35130 crore rupees for UCBs. It is statistically significant at the one percent level. Therefore, ICT has made a significant impact on growth of advances of both CBs and UCBs.

Impact of ICT on Investments of CBs and UCBs

Period of technology up-gradation was considered as a benchmark and the average investment during the period of technology up-gradation was 822126 crore rupees for CBs and 51113 crore rupees for UCBs. β1 explains the difference in investment between benchmark and periods of rapid usage of technology and the difference is 611937 crore rupees for CBs and 35157 crore rupees for UCBs. It is statistically
significant at the one percent level. Therefore, ICT has made a significant impact on growth of investment of both CBs and UCBs in India.

**Impact of ICT on Total Business of CBs and UCBs**

Period of technology up-gradation was considered as a benchmark and the average total business during the period of technology up-gradation was 3176440.2 crore rupees for CBs and 160364.4 crore rupees for UCBs. \( \beta_1 \) explains the difference in total business between benchmark and periods of rapid usage of technology and the difference is 5058256.6 crore rupees for CBs and 37642 crore rupees for UCBs. The difference is statistically significant at the one percent level. Therefore, ICT has made a significant impact on the growth of the total business of both CBs and UCBs in India.

**Impact of ICT on Expansion of Branches of CBs and UCBs**

Period of technology up-gradation was considered as a benchmark and the average number of branches during the period of technology up-gradation was 53938 for CBs and 7552 for UCBs. \( \beta_1 \) explains the difference in the number of branches between benchmark and periods of rapid usage of technology and the difference is 16116 for CBs and 96 for UCBs. The difference is statistically significant at the one percent level. Therefore, ICT has made a significant impact on the growth of the number of branches of CBs but the difference is statistically not significant at the one percent level. Therefore, ICT has not made a significant impact on the growth of the number of branches of UCBs. The main reason for this difference is UCBs have more unit Banks than branch Banks.

**Impact of ICT on Deposits per Employee of CBs and UCBs**

Period of technology up-gradation was considered as a benchmark and the average deposits per employee during the period of technology up-gradation were 2.16 for CBs and 2.070 for UCBs. \( \beta_1 \) explains the difference in deposits per employee between benchmark and periods of rapid usage of technology and the difference is 2.26 for CBs and -0.230 for UCBs. ICT has made a significant impact on growth of deposits per employee of CBs but ICT has made a significantly negative impact on growth of deposits per employee of UCBs. UCBs due to inadequate capital and lack of managerial skill are closing their business. Therefore, deposits per employee are declining. It is indicating deterioration in allocative efficiency in these Banks.
Impact of ICT on Advances per Employee of CBs and UCBs

Period of technology up-gradation was considered as a benchmark and the average advances per employee during the period of technology up-gradation were 1.42 for CBs and 1.46 for UCBs. \( \beta_1 \) explains the difference in advances per employee between benchmark and periods of rapid usage of technology and the difference is 1.90 for CBs and 0.42 for UCBs. The difference is statistically significant at the one percent level. Therefore, ICT has made a significant impact on growth of advances per employee of both CBs and UCBs in India. Because RBI has taken measures to improve UCBs credit management skill and has aimed at avoiding the concentration of credit risk.

Impact of ICT on Total Business per Employee of CBs and UCBs

Period of technology up-gradation was considered as a benchmark and the average business per employee during the period of technology up-gradation were 3.62 for CBs and 3.5 for UCBs. \( \beta_1 \) explains the difference in business per employee between benchmark and periods of rapid usage of technology and the difference is 4.16 for CBs and 0.20 for UCBs. The difference is statistically significant at the one percent level. Therefore, ICT has made a significant impact on the growth of business per employee of CBs but the difference is statistically not significant at the five percent level. Therefore, ICT has not made a significant impact on the growth of business per employee of UCBs.

Impact of ICT on Total Deposits per Branch of CBs and UCBs

Period of technology up-gradation was considered as a benchmark and the average deposits per branch during the period of technology up-gradation were 35.54 for CBs and 12.3 for UCBs. \( \beta_1 \) explains the difference in deposits per branch between benchmark and periods of rapid usage of technology and the difference is 30.74 for CBs and 0.24 for UCBs. The difference is statistically significant at the one percent level. Therefore, ICT has made a significant impact on growth of deposits per branch of CBs but the difference is statistically not significant at the five percent level. Therefore, ICT has not made a significant impact on growth of deposits per branch of UCBs.

Impact of ICT on Total Advances per Branch of CBs and UCBs

Period of technology up-gradation was considered as a benchmark and the average advances per branch during the period of technology up-gradation were 22.92 for
CBs and 8.520 for UCBs. $\beta_1$ explains the difference in advances per branch between benchmark and periods of rapid usage of technology and the difference is 40.60 for CBs and 4.8 for UCBs. The difference is statistically significant at the five percent level. Therefore, ICT has made a significant impact on growth of advances per branch of both CBs and UCBs in India.

**Impact of ICT on Total Business per Branch of CBs and UCBs**

Period of technology up-gradation was considered as a benchmark and the average business per branch during the period of technology up-gradation were 58.38 for CBs and 20.58 for UCBs. $\beta_1$ explains the difference in business per branch between benchmark and period of rapid usage of technology and the difference is 57.86 for CBs and 5.280 for UCBs. The difference is statistically significant at the five percent level. Therefore, ICT has made a significant impact on the growth of business per branch of both CBs and UCBs in India.

**Impact of ICT on Return on Investment in terms of Profitability of CBs and UCBs**

Period of technology up-gradation was considered as benchmark and the average return on investment of CBs during the period of technology up-gradation was 58.88 and for UCBs it is 0.86. $\beta_1$ explains the difference in returns on investment between benchmark and period of rapid usage of technology and the difference is 111.180 for CBs and 1.74 for UCBs. The difference is statistically significant at five percent level. Therefore, ICT has made significant impact on growth of returns on investment of both CBs and UCBs in India.

**Trends in Banking Sector in Karnataka**

Under section ‘C’ of fourth chapter Trends in Banking Sector in Karnataka are analysed with T-test and F-test.

The analysis shows that the average growth of deposits for CBs in Karnataka is 18.32 and for UCBs it is 19.53. The F test proves that the variance between the two is not significant. So, equal variance is assumed. T-test shows that the mean difference between the two is not significant. Therefore, the performance of CBs is not significantly differing from UCBs in terms of growth of deposits.
The average growth of advances for CBs in Karnataka is 15.41 and it is 16.67 for UCBs. It is found from the F test that the variance between the two is not significant. Therefore, equal is variance assumed. It is found from t-test that the mean difference between the two is not significant. Therefore, the performance of CBs is not significantly differing from UCBs in terms of growth of advances.

It is found from the analysis that the average growth of branches for CBs in Karnataka is 9.59 and it is 1.08 for UCBs. F test shows that the variance between the two is not significant. Therefore, equal variance is also assumed. It is understood from the t-test that the mean difference between the two is significant. Therefore, the performance of CBs is significantly different from UCBs in terms of growth of branches.

**Perceptions of Customers regarding ICT based Services**

In the fifth chapter has made an attempt to analyse the satisfaction level of 300 customers of commercial Banks and UCBs with regard to the E-Payment and E-Banking services provided by their respective Banks. Respondents were requested to answer the schedule to give their opinion about E-payment services such as NEFT, MICR, ECS and RTGS and E-Banking services such as SMS alert service, ATM, Internet Banking, Mobile Banking and Card Based Transactions on a Five-Point Likert scale.

The chi-square test has been computed to find the significant difference between Commercial Banks and UCBs and opinion of customers on satisfaction about E-Payments and E-Banking services. The satisfaction level of customers of CBs is significantly higher as compared to customers of UCBs in terms of utilizing NEFT, MICR, ECS and RTGS facility. It shows that customers of Commercial Banks are highly satisfied with the E-Payment facilities than the customers of UCBs. Analysis on E-Banking facility and type of Bank also shows that SMS alert service, ATM, Internet Banking, Mobile Banking and Card Based Transactions have been highly opted by the customers of Commercial Banks than UCBs.
Reasons for Opting ICT based services by Customers in Bank Transactions

Customers were asked to answer these Six questions such as, Is ICT Banking services easy to use? Is it trendy? Is it time saver? Is it prestigious? Is it convenient? Does it increase Quality of service? to analyse the relationship between customers’ reasons for opting and type of Bank. Customers of Commercial Banks are feeling more prestigious, convenient and trendy to use technology based services than customers of UCBs.

Changing Perception of Customers from Conventional Banks to Technically Advanced Banks

The study also shows that there is a high rate of changing perception of customers of Commercial Banks than the customers of towards advanced Banking services. Only 30 percent of customers of UCBs are ready to accept the new trend in their Banking transactions and 52 percent of customers of Commercial Banks are highly interested in E-Banking service respectively. Though the customers are interested to accept advanced Banking transactions they hesitate to follow it in their daily life due to lack security and safety involved in this.

Customers Fear towards Advanced Technology in Banking Sector

Customers expect their banking transactions very secured and safe in this context they were asked the reasons for the fear of adopting new technology. But 61.3 percent of customers of UCBs lack basic English language skill and only 30 percent customers of Commercial Banks have this same problem. Therefore, Customers hesitate to adopt them and have fear of committing mistakes during transactions. 160 (53.3%) customers feel that E- Banking services, lack security and safety. 82 percent of customers of UCBs and 78 percent of customers of Commercial Banks hesitate to use E- Banking services to avoid future damages. 75 percent of customers of Commercial Banks and 60 percent of customers of UCBs have faced instantaneous blockage of cards or unavailability of cash in the ATM machine. From July 2013, both SBI and Punjab National Bank started charging Rs 15/- per quarter for SMS alerts. So it is Rs 5/- per month. But SBI is providing various services like mobile Banking and SMS Banking free of cost. Private Sector Banks started increasing annual fees for debit or ATM cards. SBI charges Rs 102/- annual fees on all debit cards. Banks are transferring their financial burden on final consumers. Customers
have become tired of paying this much of amount and they are not happy with these heavy charges. Therefore RBI has directed all Banks to not to increase the cost burden on customers. But the Banks have argued that the high cost of technology implementation and maintenance are making each transaction very expensive. It is found from the results of the chi square test that there is no significant relationship between Bank type and opinion towards high cost transaction while operating E-Banking services by customers of both types of Banks five percent level of significance. 78.0 percent of customers of UCBs and 30.7 percent of customers Commercial Banks have the opinion that they do not have proper knowledge about E-Banking services.

It is clear from the findings that the success of any Bank depends on the efficient way of managing funds, increasing profit, enhancing the productivity of its working labourers, raising more capital more than to that providing quick and attractive services to its customers to deposit their money in that Bank. As compared to Commercial Banks Urban Cooperative Banks have lagged behind in attracting more customers especially youth by implementing innovative and technology based services.

**Employees’ Perception on ICT based Transactions in Banks**

Employees are considered as an asset of any Bank when employees are happy with their work and accept the change then the productivity as well as production increases in any organization. The banking sector is not exception to this. In this context 200 employees were selected from the selected Banks of Mysore city.

**Satisfaction of Employees towards ICT based Services in Selected Banks**

An attempt has been made to analyse the satisfaction level of selected employees of Commercial Banks and UCBs with regard to the ICT based technology. Respondents were requested to give their opinion about E-payment services such as NEFT, MICR, ECS and RTGS. It is found from the cross tabulation that the satisfaction level of employees of Commercial Banks is higher than the satisfaction of the employees of UCBs in terms of using E-payment services and also an attempt has been made to analyse the satisfaction of employees and Bank type with regard to E-Banking services such as SMS alert service, ATM, Internet Banking, Mobile Banking and card based transactions.
Reasons for Accepting Technology by Employees

Employees were asked to answer these five questions such as, Is ICT Banking services flexible? Does it give fast response? Does it improve the efficiency? Is it convenient? Does it reduce errors? To analyse the difference between employees’ reasons for opting ICT based Banking services and type of Bank. Employees of Commercial Banks feel more flexible than employees of UCBs.

78 percent of employees of Commercial Banks and 37 percent of employees Urban Cooperative Banks have opined that E-Banking services are easy to use and they are flexible. Chi square test that there is no significant difference between the type of Bank chosen for the present study and reasons for opting E-Banking facilities by employees. 85 percent of employees of Commercial Banks and 86 percent of employees Urban Cooperative Banks have opined that E-Banking services have reduced work stress. There is no significant difference between Bank type and reasons for opting E-Banking facilities. 91 percent of employees of Commercial Banks and 86 percent of employees of Urban Cooperative Banks have opined that E-Banking services have made Banking transactions very fast. 80 percent of employees of Commercial Banks and 49 percent of employees of Urban Cooperative Banks have opined that E-Banking services are one of the major factors in improving their efficiency.

Changing Perception of Employees

Findings show that more number of employees of Commercial Banks are towards advanced Banking technology than the employees UCBs. 27 percent employees of UCBs and 38 percent of employees of commercial Banks are highly interested towards click and mouse Banking service than brick and mortar Banking environment. It is found from the chi-square test that there is a significant difference between type of Bank selected for the study and opinion about the changing perception towards a modern banking system at one percent of significance level. Employees of Commercial Banks are more interested in digital Banking than the employees of UCBs.

Employees Fear towards ICT Application in Banks

Hacking, phishing and virus attack have become a great menace in E-Banking method. Therefore, employees have some fear and confusion regarding advanced technology in their working place. In this background the present study has analysed
employees hesitation and confusion towards ICT application in the banks by finding five parameters such as, Lack of security, Lack of Training, Poor network, Health hazards and Language problem. 86 percent of employees of UCBs and 88 percent of employees of Commercial Banks are of the opinion that E-Banking services involve lots of security and safety issues. There is no any significant difference between Lack of security and UCBs and Commercial Banks. 87 percent of employees of UCBs said they have not undergone any ICT training programme which would increase their self confidence level of using new technology. It is found from the chi square test that the factor i.e. Training programme attended by customers and type of Bank have significant difference. 90 percent of employees of UCBs and 86 percent of employees of Commercial Banks have experienced server problem. 84 percent of employees of UCBs and 82 percent of employees of Commercial Banks have experienced back pain, eye-related problems, wrist pain and headache due to the continues operation of computers. Language problem and type of Bank have significant difference at one percent level of significance because the majority of employees, i.e. 85 percent of UCBs and only 30 percent of employees of Commercial Banks have experienced language barriers to operate computers.

ICT channels are providing wonderful services at a faster rate to a good number of customers. These E-Banking services are also gaining a wide range of popularity and they are alluring customers and attracting employees. In this background, perceptions of customers and employees were analysed and also found their reasons for opting this new technology. The study also examined the difference between type of Bank selected for the study and satisfaction or opinion of customers and employees. It analysed both advantages and risks associated with ICT based services in the banking sector.

6.4 Verification of Hypotheses

The present study has analysed trends in E-Payment and E-Banking services and performance of Banks with the help of graphical method. As compared the AAGR (average annual growth rate) of parameters selected for the study between Commercial Banks and UCBs in India, there is a significant difference in variance between the period of technology up gradation and Period of rapid usage of technology and the significant difference in mean value between the period of technology up gradation and Period of rapid usage of technology. The study has also estimated the impact of ‘time period’ i.e. Period of technology up gradation and period of rapid usage of technology on the
performance, productivity and profitability of Banks with Dummy variable analysis found the significant difference between Bank type (Commercial Banks and UCBs) and satisfaction level of customers as well as employees on E-Payment and E-Banking services in Mysore city with the help of Chi-square test. The study is based on four hypotheses. The present study has analysed with suitable statistical tools by using both primary and secondary data.

**Hypothesis -1**

**H1: There is a significant difference between Commercial Banks and UCBs in terms of their performance in India.**

In the first step, with the help of annual average growth rate, the study has observed the graphical method of selected 12 parameters. Secondly, t-test and F-tests have been used for mean comparison of growth rates between all parameters of CBs and UCBs.

**Table. No -6.1 Verification of Hypothesis -1**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>The difference between Commercial Banks and UCBs in terms of their performance in India on Selected Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Deposits</td>
<td>Significant</td>
</tr>
<tr>
<td>Total Advances</td>
<td>Significant</td>
</tr>
<tr>
<td>Total Investments</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Total Business</td>
<td>Significant</td>
</tr>
<tr>
<td>Number Of Branches</td>
<td>Significant</td>
</tr>
<tr>
<td>Deposits Per Employee</td>
<td>Significant</td>
</tr>
<tr>
<td>Advances Per Employee</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Business Per Employee</td>
<td>Significant</td>
</tr>
<tr>
<td>Deposits Per Branch</td>
<td>Significant</td>
</tr>
<tr>
<td>Advances Per Branch</td>
<td>Significant</td>
</tr>
<tr>
<td>Business Per Branch</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Returns on Investment</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

The above table clearly shows that hypothesis is accepted. It is found from the present study that, out of twelve parameters such as deposits, advances, investment, total Business, number of branches, deposits per employee, advances per employee, total business per
employee, deposits per branch, advances per branch, total business per branch and returns on investment only four parameters viz, total investments, advances per employee, business per branch and returns on investment have shown that there is no significant difference between the type of bank selected for the study such as Commercial Banks and UCBs and trends in their performance in India. Performance of Commercial Banks is better than UCBs due to its loan recovery process, deposit mobilization, diversification of activities. Rapid expansion of branches of Commercial Banks in both rural and urban areas have contributed to the increase in productivity of these banks.

But, UCBs are not showing overall improvement in their performance. The study period from 2003-04 to 2007-08 i.e. period of technology up-gradation and period from 2008-09 to 2012-13 i.e. periods of rapid usage of technology show that there is a positive trend in total investments, advances per employee, business per branch and returns on investment in case of both Commercial Banks and UCBs due to the sharp increase in SLR investments in UCBs. But there is a significant difference between Commercial Banks and UCBs in remaining eight parameters.

As compared to Commercial Banks UCBs need to make use of technology based services to intensify cut throat competition have to increase customer base and have to achieve better performance. Therefore, there is an urgent need to increase productivity and financial performance of UCBs. This sector should give priority to human resource development through training and should start E- Banking services to a maximum extent.

Hypothesis -2

H2: There is a significant difference between Commercial Banks and UCBs in terms of the impact of ICT based services on their performance in India.

Impact of ICT on 12 parameters which were selected for the study of Commercial Banks and UCBs in India. It has been estimated with the help of a dummy variable regression model.
The above table shows that the second hypothesis is rejected. Because, out of twelve parameters eight parameters such as impact of ICT on Total deposits, advances, investment, total business, advances per employee, advances per branch, business Per branch and Return on Investment has made significantly a positive effect on both Commercial Banks and UCBs in India. Majority of parameters of UCBs is positively affected in a Period of technology upgradation and period of rapid usage of technology have shown positive picture in case of UCBs also. Because the impact of ICT has brought positive improvements in above mentioned eight parameters of UCBs. ICT has made positive changes in UCBs in India. Till 2008 there was no any committee to suggest ICT based services in UCBs but under the Chairmanship of Sri. R. Gandhi RBI appointed a working group on IT support for UCBs in Jan 2008. After the formation of this committee UCBs started to insert ICT applications in their banking transaction.

The Analyses have been done at the aggregate level for the study period of 10 years, i.e. from 2003 – 04 to 2012 – 13. Though ICT services were encouraged during the 90’s in the Indian Banking Sector the big step was taken to introduce E – Banking services at a maximum level only after the year 2002 – 03. Out of twelve parameters only eight parameters such as impact of ICT on Total deposits, advances, investment, total business,
advances per employee, advances per branch, business per branch and return on investment has made significantly a positive effect on both Commercial Banks and UCBs in India. Because the impact of ICT has brought positive improvements in above mentioned eight parameters of UCBs. Period of technology up gradation and period of rapid usage of technology have shown positive picture in case of UCBs also.

The study has analysed the impact of ICT on the performance of both Commercial Banks and UCBs. Though the technology is the most effective tool in Commercial Banks UCBs are also influenced by this advanced tool. Therefore, out of twelve parameters eight parameters are positively influenced by ICT tools. ICT has a positive impact on performance and branch productivity these UCBs. But remaining four parameters are not positively affected by ICT in UCBs because these banks are not 100 percent computerized like Commercial Banks. Therefore, to bring greater changes in performance, it is also suggested that some strategies need to be designed to improve the performance of UCBs with advanced technology tools. Greater emphasis should be given to strengthen the Banking Sector.

**Hypothesis -3**

H3: There is a significant difference between Commercial Banks and UCBs in terms of satisfaction of their Customers in Mysore city.

The present study focuses on ICT related services and the perception of customers on E-Banking service offered by both Commercial Banks and UCBs. Nine parameters were selected to analyse the satisfaction of customers towards E-payments and E-Banking services by adopting the Likert method.
Table No - 6.3
Verification of Hypothesis - 3

<table>
<thead>
<tr>
<th>Parameters</th>
<th>The difference between Type of Bank and Satisfaction of Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEFT</td>
<td>Significant</td>
</tr>
<tr>
<td>MICR</td>
<td>Significant</td>
</tr>
<tr>
<td>ECS</td>
<td>Significant</td>
</tr>
<tr>
<td>RTGS</td>
<td>Significant</td>
</tr>
<tr>
<td>SMS alert</td>
<td>Significant</td>
</tr>
<tr>
<td>ATM service</td>
<td>Significant</td>
</tr>
<tr>
<td>Internet Banking</td>
<td>Significant</td>
</tr>
<tr>
<td>Mobile Banking</td>
<td>Significant</td>
</tr>
<tr>
<td>Card Based Transactions</td>
<td>Significant</td>
</tr>
</tbody>
</table>

There is a significant difference between the satisfactions of customers of both Commercial Banks and UCBs. Therefore, the third hypothesis is accepted. Customers of Commercial Banks are highly satisfied with advanced technology in the banking sector than UCBs in Mysore city.

The hypothesis verification clearly shows that now a days cut throat competition in the banking environment is forcing UCBs to deploy ICT tools. Compared to Commercial Banks, UCBs are lagging behind in updating their technological issues. ICT strategy is in its preliminary stage in UCBs. Most of them to face new competitors and business threats are entering in to ICT world. Customers in these banks, especially young minds expect quick, efficient and transparent services from their banks but challenges in implementing ICT tools have become a big issue in Urban Cooperative Sector.

Most of the customers in UCBs are not youth and young generation due to the lack of technological advancement in these banks. ICT tools can be successful when customers are happy and interested in using them. Compared to the customers of Commercial Banks, customers in UCBs are not technically forward.

**Hypothesis - 4**

**H4: There is a significant difference between Commercial Banks and UCBs in terms of satisfaction of their employees in Mysore city.**
The present study focuses on ICT related services and the perception of employees on E-Banking service offered by both commercial and UCBs. Nine parameters were selected to analyse the satisfaction of employees towards E-payments and E-Banking services by adopting the Likert method.

Table.No -6.4
Verification of Hypothesis -4

<table>
<thead>
<tr>
<th>Parameters</th>
<th>The difference between Type of Bank and Satisfaction of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEFT</td>
<td>Significant</td>
</tr>
<tr>
<td>MICR</td>
<td>Significant</td>
</tr>
<tr>
<td>ECS</td>
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</tr>
<tr>
<td>RTGS</td>
<td>Significant</td>
</tr>
<tr>
<td>SMS alert</td>
<td>Significant</td>
</tr>
<tr>
<td>ATM service</td>
<td>Significant</td>
</tr>
<tr>
<td>Internet Banking</td>
<td>Significant</td>
</tr>
<tr>
<td>Mobile Banking</td>
<td>Significant</td>
</tr>
<tr>
<td>Card Based Transactions</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The fourth hypothesis is also accepted. Because, there is a significant difference between the satisfactions of employees of both Commercial Banks and UCBs. Employees of Commercial Banks are highly satisfied with advanced technology in the banking sector than UCBs in Mysore city.

ICT strategy in Banks needs competent and skilled employees to transact business. In most of the UCBs employees do not have computer based skill and they are not interested to operate computerised services. They are not properly trained up under any ICT programmes. Most of the UCBs have no computers at their working place or some UCBs have a single computer in the bank.

In some UCBs, they have computerised the basic operations but they have not updated further. Loans sanctions, account opening / closing, etc. do not come under computerization process. They largely depend on manual processes. Software applications, database and instructions which are part and parcel of E-Banking services are provided in English language. But most of the employees in UCBs do not have a hold of the English language. Therefore, they hesitate to use E-Banking services. There is a need to use business intelligence strategies to get out of these challenges and to attract customers by offering new financial products / services.
6.5 Suggestions

This section includes suggestions based on key findings of the present study. This would be useful for policy makers, IT service managers and designers, stakeholders and Bank officials. Therefore, E – Banking services are becoming popular and bringing a sweeping change in this sector. Commercial Banks are fully computerized and have launched E-Banking services successfully, but they should give priorities to secured E-Banking transactions. On the other hand, UCBs must adopt their ICT service strategy to bring responsiveness, reliability in their Banking sector.

Technology based innovation in this business environment has led to a paradigm shift. In this background the present study is going to recommend an ICT strategy to boost up performance of employees, to reap optimum satisfaction of customers, to enhance profitability and financial performance in the Banking sector of India.

It is recommended that the government of India and the RBI should take major initiatives to tackle the problems faced by both Commercial Banks and UCBs in India. IT should provide the timely financial help and other facilities. Otherwise the future of Banking sector, especially of UCBs may not be bright. The growth of India’s ICT depends much on the policy measures and proper decisions taken by the RBI, ICT heads and management of UCBs and broad based growth depends much on improving the telecom infrastructure and giving proper training to the employees of the Indian Banking Sector.

I - Adopting Strong Security Measures and Strong Legal Framework for E-Banking

Technology based services provided by banks must be tagged with a minimum level of security measures. Customers should not log in any pop up window and Banks should verify the security issues. Only few banks in India are given a demo for mobile Banking and internet Banking to customers. Therefore, to make transactions, secured and safe all Banks must conduct demo programs. It is also noticed that as compared to UCBs Commercial Banks are offering high quality ICT services. To improve the business transaction of UCBs in India, there is a need to expand and strengthen their branches and they have to become a strong financial institution. For this they have to use IT
professionals and appropriate technology initiatives to canvas new customers, especially youth because India has a younger population and they are always connected with new technology. There should be a strong legal framework to avoid operational and transactional risks involved in ICT based Banking services. Data Protection needs strong legal and regulatory framework. The IT Act of 2000 was amended in the year 2008 to allow digital signatures to avoid frauds. The Section 66 D of the amended IT Act considers phishing as an offense, but the attempt to involve in the act of phishing is not punishable. Therefore, severe punishment should be given to cyber criminals. Cyber criminals must be imprisoned for at least 10 years and must give compensation to the innocent customers. In this way cyber frauds could be successfully avoided.

II - Conducting Training Programme for Bank Employees

Banks should encourage their employees and senior officers to understand security measures to make them to protect their Bank’s assets. They should also arrange periodic training programmes and rarely professional classroom teachings to get updated with latest technology and relevant policies. Bank employees must be trained up to enter data with accuracy to avoid data entry error and regular training programmes should be conducted for them to get updated with their work.

- Banks should adopt risk free ICT strategies to make employees comfortable with their work and answerable to the customers.
- When employees are well trained and their confidence level boosts up, then the customer’s trust would be honored and employees give required information and make their customers to feel free to use advanced technology.
- Banks should organise workshops to educate their customers regarding security & safety measures.

UCBs should employ competent young employees in their branches to computerize their business operation. At present the collected information shows that more than half of the total employees are above 45 years of age. So management should make the criteria for employing the staff. The employees at entry level must have computer skill and Basic English knowledge.
III - Establishing IT Cell in Banks in India

Banks have to train up their staff members. Adequate training and awareness programmes are expected to perform secured business transactions. A separate cell should be created in each branch based on the number of staff and their level of skills. There should be a separate senior level officer who looks after and coordinates security related issues in a Bank. That IT coordinator should organize an awareness programme to all employees and officers to increase the efficiency and accountability for security. IT coordinator should plan a document which concentrates on fraud prevention, monitoring, enquiry. This fraud risk management should consist of both senior officers and employees who are below the rank of General Manager or DGM. UCBs should hire IT professionals from IT department at headquarters to design ICT frameworks which are conclusive to the implementation of ICT strategy in Banking activities. Banks need to establish an IT department to manage their IT functions regularly and they should maintain well designed plan documents to implement IT policies in their branches. These strategic plans need to be reviewed frequently for the best implementation. That department should be having trained sufficient, competent and capable human resource. The Risk Management Committee should be formed to avoid operational risks involved in E-Banking services. Banks by keeping financial aspects, customer satisfaction and retention, employee’s satisfaction and adaptability, future capability have to frame IT policies in their Banking business.

IV - Technology Initiatives in UCBs

UCBs need to provide caution and awareness regarding the frauds, hacking, theft and other fraudulent transactions to their customers to avoid them being the victims for uninterrupted provision of technology services. UCBs should come out of traditional banking transactions. Some initiatives need to be taken

- They should install more desktops and related hardware items in branches
- They should communicate with customers by email and SMS
- They should introduce Bank Web Sites
- They should use database to communicate with suppliers
- They should Find best software vendors

UCBs in the Mysore city do not have ATM centres except three Banks. Therefore, UCBs should plan to set up ATM centres in important locations in the city for the benefit
of customers to utilise anywhere and anytime Banking transactions. Customers’ awareness programmes must be conducted twice in a year by Banks to limit frauds regarding pin number, maintenance of debit and credit cards and username. Banks should provide authenticated service to identify customers to avoid web spoofing problems. UCBs need to understand the reality of the present Banking environment and also have to target young population. Indian Banks need to catch up more rural area people. Today’s ultra-modern technology services are not being digested by them. Therefore, there is a need to

- Simplify the technology services
- Cut the cost of using these modern technological tools
- Give priority to regional languages

UCBs need to be well equipped with ICT tools. For this they need a suitable legal policy and favorable business environment. UCBs should organise ICT training programmes to their staff. Gathered information shows that none of the selected UCBs staff have gone under any training programmes regarding ICT – based services. In case of UCBs there is a need to design well-known IT control frameworks in a phased manner. UCBs need to climb the E- Banking platform step by step. On the other hand effective IT strategies and monitoring are inevitable to enhance efficiency, productivity and profitability in their sector. Banks should set up transaction monitoring cell to detect frauds quickly. That cell should give importance to fraud detection and redressal mechanisms. In the present study it is noticed that most of the customers in UCBs are not technically educated and they are computer illiterates. Therefore, ICT awareness programme should be conducted to bring their customers on ICT platform and also UCBs must educate its customers to use E- Banking services. UCBs need to formulate specific business to have appropriate ICT delivery mechanisms to automate their branches to come out of the traditional banking environment. Most of the UCBs are finding hard to use E – Banking services due to implementation and maintenance cost. Therefore, RBI has to provide them loan facilities at lower interest to afford ICT tools in their Banks. Banks also need to enter doorstep of customer at a lower cost so it has to bridge between the two.
The RBI has already listed out some software vendors to UCBs such as Polaris, Prizm - payment, C-edge, infra-soft, TCS etc. Software vendors have to be provided at reasonable fees and RBI has to fix the fees for them.

The English language has also become one of the obstacles in using computerised services in UCBs. Therefore, RBI should think about to start E-Banking services in regional languages.

Small UCBs which cannot afford high cost ICT based services can be merged with larger UCBs to have economies of scale over technology usage.

The Banks should form effective action plans regarding these initiatives with a definite time framework and should form a Review Committee to keep an eye on these action plans to get implemented without any drags.

V - Organizing Customers’ Awareness Programmes in Banks

Customers in Banks are facing problems at different stages. Complexity is another face of modern banking transactions. ICT related services are providing convenient and quick services, but it also involves risks and maintenance cost. ICT based services need to be user friendly to include low income group and illiterate sections of the economy in the process of financial inclusion. Banks charge for every E-T Transactions for customers and some charges are also hidden, but customers expect their banks to be more transparent and clear. So, there is an urgent need to maintain transparency of fees and there is a need to avoid inconveniences and unexpected losses. Technology adoption has created various challenges like multiplicity and complexity in transactions, legal requirements, vendor related risks, cyber crime, hesitation of employees, etc. Therefore, there is a need to enact stronger cyber laws to ensure safer and secured transactions. The RBI has already set up a Working Group on Technology Risk Management and Tackling Cyber Fraud in April, 2010 to provide security to E-Banking under the Chairmanship of Shri. G.Gopalakrishna. But still there is an urgent need to address various issues such as ICT tool, Operations and its risks, Customer Awareness programs, Cybercrime and its legal issues. The following are the suggestions given to customers to take care while using E-Banking services.
Customers should not answer spam E-Mails and unknown calls which ask information about their account number, Bank balance and other related information.

Usually hackers create their own websites and they make them to resemble to original Banks’ website. To trap customers they send email randomly to unknown customers and convince them to give their personal information and account number. Therefore, Customers should make sure of using official websites of concerned Banks.

While using internet Banking or mobile Banking, customers should not forget to sign-out when their transaction gets over. Otherwise, their PIN, account information and other details may be misutilised by strangers.

Customers must be careful when they open an Internet Banking on public computers. They should not get connected with proxy server or unknown and unsecured Wi-Fi network otherwise their account can be easily hacked.

Customers should not leave password in the ATM card pouch or not written in any dairy, which is easily accessible outside and ATM cards should also not been left unsigned because if they lose their cards it can be easily used by the snatchers.

In shopping malls shopkeepers may apply wireless skimmers to gather the card information of customers. Without the notice of others, these fraudsters insert a skimming device to the slot of POS machine when the customer’s card inserted his information easily gets stored on the skimmer. Therefore, customers should do cash on delivery or cash and carry transactions with traders.

The Banking sector is getting redefined and re-engineered with technology upgradation to face the forces of competition. Banks have to be flexible in accepting changes to face the threat of new entrants.

6.6 Scope for Future Research

In this present study an attempt has been made to understand the impact of ICT practices in the banking sector in India. A comparative study has been made to analyse the impact of advanced technology on both Commercial Banks and UCBs at national level and also perception of employees and customers regarding ICT practices in selected Banks of the study area, i.e. Mysore city has been analyzed. But still there is a scope for future research.
Perception of customers and employees regarding ICT practices is confined to Mysore city only. Therefore, it could be extended further to other cities of Karnataka state or comparison can be made between neighboring states.

ICT impact on Commercial Banks and UCBs is analysed but future research can consider RRBs, PACS etc for analysis.

In this study Karnataka State’s Banking growth is analysed with accurate statistical tools, but ICT impact on the Karnataka Banking sector has not been taken into account due to unavailability of data. In future, it can be considered for the further study.

6.7 Conclusion

Standing in a long queue, holding cash and pass book in hands, filling applications manually, waiting for simple transactions for hours together have become the features of the past. Now a single click on mouse transfers money from one Bank to another, a single press on a keypad shows the bank statement and a tip of finger on buttons of machine showers money. The use of technology has made Banking services easy, speedy and cost effective. This has led a win–win situation to Banks and provided multiple services to customers. Technology has become one-size-fits-all solution model for Indian Banks.

Banks play a significant role in the process of economic development of any country. Innovative tools in this sector have changed the Bank’s operation. Today all major Banks use ICT strategy in many ways to become successful in their business. ICT has helped Banks to store their customers’ account details with a good number of software packages on a computer and also provides credit cards, debit cards and other smart cards for them to provide 24x7 services. Customers can also withdraw their money from the ATM and get anywhere their account balance information. The today ICT strategy has reduced traditional and manual operational based business. UCBs are considered to be the important element of the Indian Financial Sector. Rapid development in the field of technology is also slowly getting inserted into the operational environment of UCBs. ICT in the banking sector has the strength to provide greater scope and superior performance. This sector has found new roads of success. Those days are gone when Banks were following the traditional way of transactions and the current trends in ICT are providing an opportunity to push ahead Banks to update its business activities.
Updated technological tools launched in this sector have made Banks to be stronger and have created infinite opportunities. The demand for the introduction and upgradation of technology in the banking sector has been growing very fast. In recent years, even in UCBs the essentiality of ICT strategy has acquired a great importance and they are also thinking about constructive changes. Today waves of globalization have led to technological revolution. These technological sparks are entering into all sectors of the economy. Cooperative Sector is also not an exception to it. ICT tools in the banking sector are playing very efficient role in achieving maximum level of benefits.

Banks have achieved a considerable progress in the field of communication and technology after the Introduction of globalization, Privatization and Liberalization in India. This new trend has inspired and influenced Banking sector to get shifted from their traditional Banking activities to technological platform. Even preferences and acceptance of banking transactions have been under a great influence of technological services. UCBs have also realized that they can achieve success and survive in the banking galaxy as the brightest stars to stand on par with Commercial Banks by implementing ICT tools effectively. They are gradually coming forward to spend the money for automation in their Banking transaction services.

Urban Cooperative Banking sector is an important segment seen in semi urban and urban areas of India. It plays a significant role in giving Banking facilities to the less privileged and needy sections of the economy. At present, new technologies have created a new wave in the Banking sector. There is no doubt that this most appropriate technology model would become a grand opportunity to UCBs. ICT penetration has become a recent chant for this sector.

In spite of UCBs achievements, they are still struggling to establish strong links in the Banking environment. The customer’s perception towards modern business transaction has made UCBs to have a pale face on banking platform. Banks must keep racing with the latest happenings in the present Banking scenario. Employees of these Banks need to be well trained and advanced with the changing trends in the Banking sector.

High speed technology adoption has become an essential step especially for financial institutions to assure maximum performance with minimum cost in their business activities. It is stated that innovative ICT solutions eliminate many of the
traditional challenges of this sector. Schumpeter (1883 – 1950) in his Theory of Innovation states that stationary state does not assure any profit but when technological change blooms, it explores new way of growth .This brings high growth with low volatility. ICT has made India to log on to the wonder world and has created ‘hubs of success’ and assured unprecedented productivity gains. ICT has been merged into a lifestyle and livelihood of both rural and urban masses.

Era of technological revolution has given wonderful opportunities to activate Banking transactions by putting a tip of the finger on the keypad of computers or mobile phones. This facility needs to be extended to Urban Cooperative Banking transactions. To support the ICT related applications in UCBs RBI has taken many initiatives as have already mentioned in the previous chapters RBI has warned as well as suggested all Cooperative Banks to get equipped with new technological tools.