CHAPTER 6

CONCLUSION

This chapter highlights the summary of major findings of descriptive and inferential analysis results of public and private sector bank’s customers and bank’s employees’ responses. Key findings were based upon questionnaire administered to both customers and employees of PSUs and PSIBs banks. The researcher also made conclusions to compare the impact of information technology on banking services in Public and private sector banks. The chapter segregates the conclusions in two parts that has been derived from key findings and rank analysis of both questionnaires administered to customers and employees. The chapter also highlights the results of descriptive and inferential comparative analysis in between public and private sector bank to evaluate the impact of information technology on e banking services and customer satisfaction. The conclusion of study has significant practical implications for expansion of e banking services and improvement of customer satisfaction with regard to emerging e banking services. Furthermore, the conclusion of current research leads to the recommendations on the possible way forward to improve e banking services and customer satisfaction in public and private sector banks. The chapter also contains limitations of the study and scope for future research.

6.1 Key Findings

6.1.1 Key Findings Based on Customer Responses

The major findings were based on the research objectives and dimensions of study as given below:

- Maximum Utilization of Information Technology Enabled E-Banking Service
The Study reveals that majority of respondents were availing the **ATM Services** since 7-8 years both in public and private sector banks, **Mobile Banking Services** since 3-4 years in private sector banks, **Net- Banking Services** have been used by majority of respondent from last 1-2 years in private sector banks. It has been found that bill payment through online banking services have been utilized more as compare to other e banking services in a month.

- **Online Banking Benefits**

It has been found that customers of PSIB banks preferred **e-banking** services more as compare to PSU bank’s customers. **Online benefits** of e banking services regarding the **Online Investment Advice, Open online account**, which are used by various customers and it has been found that maximum respondents of both the selected public and private sector banks were preferred **online investment advice and opening of online account**. As per descriptive and inferential analysis more than half respondents in private sector bank have their opinion that private sector banks provides **easy and cost saving Credit/Debit Card Services** in comparison with public sector banks. It has been found that maximum respondents of private sector banks were satisfied with **24*7 online technical assistance and user friendly e-banking operations** as compare with public sector banks. In terms of **Secured Firewall and Encrypted E banking services** respondents of private sector banks were more satisfied then the respondents of public sector banks. In comparative analysis it has been found that maximum respondents of both public and private sector banks easily access online banking services.

- **Innovative E-banking Tools and Customer Satisfaction**

It has been found that maximum respondents very often use **Advance IT Banking Tools which have been offered by both** public and private sector banks. It has been analysed that more than half of respondents very often use e banking as **Effective Medium of Promotion** for various banking products both in public and private sector bank. Study reveals that respondents of public and private sector bank were agreed that **e-banking helps to reduce the queues** in bank branches. It has been analysed that maximum respondents of public and private sector banks have **Complaints regarding ATM services**. Study reveals that maximum customers of public and private sector banks don’t have **Complaints about Tele-Banking, Mobile Banking, Internet Banking, RTGS and Credit Card services** of public and private sector banks. It has been found
that respondents of both public and private sector banks agreed that were of the view both the bank very often intimates their customers about New E-Banking Products and any changes in existing services. Study depicts the satisfaction level of customers through online access of accounts. It was found that maximum no. of respondents of both public and private sector banks satisfied with that Online Access of Account improves the customer satisfaction. It has been found that maximum no. of respondents were satisfied with Quick Response of Online Query from the Banks. It has been analysed that maximum respondents of private sector banks either agreed or strongly agreed with bank provide Appropriate Response for their Online Query whereas less no. of respondents in public sector banks either agreed or strongly agreed with the same. It has been found that maximum no. of respondents in private sector banks were disagreed with the Delayed Response Online Query whereas the respondents of public sector banks were neutral with the same. Study reveals that maximum respondents of both the public & private sector banks. It has been studied that majority of the respondent in both public & private sector bank were agreed that bank provide Adequate E-Banking Grievance Settlement Services. It has been exhibited that customers were satisfied with User Friendly Helps on Banks Website. Study also depicts that public sector banks provide more efficient services in the division of Online Technical Support of ATMs, Tele-Banking, Mobile-Banking, Internet-Banking, RTGS, Credit Cards and NEFT services as compare with private sector banks.

Reliability in Online Banking Transactions

In comparative study it has been identified that public and private sector banks provides Updated E Banking IT Policy for their customers. Hence, customers of both sectors were satisfied with E-banking policy of their banks. Inferential analysis helps to analyze that that majority of the respondents were strongly agree with that e-banking services on the bank website are available in different languages. The Study also described that majority of the customers of public and private sector bank were satisfied with User’s Privacy Policy in e banking transaction. However, this helps to increase the trust of their customers in e banking. The comparative analysis also identified that maximum customers of public and private sector bank were found E-Banking transactions as Accurate as the transactions in Bank Branches. Thus customers of public and private sector bank have identified that Online Responsiveness of banks able to increase Reliability and Trust of Customers in E-banking.
CONCLUSION

➢ Customer Support Services

The Study aims to analyze the impact of information technology on banking services so, the inferential results shows that maximum customers of public and private sector bank were satisfied with an *Adequate Response for the Problems Faced During Internet Banking Transactions*. The Study also reveals the fact that effective and efficient customer support services are the suitable tool to improve customer satisfaction with e banking services. Public and private sector bank’s customers have the same opinion that *Awareness and Training Drives facilitate the use of e banking among customers*. The Study also able to explore that both public and private sector bank offer *Website's Demo Tour and Online Assistance for their New Users* and online customers were utmost satisfied with these IT innovative services.

➢ Online Banking Adoption and Data Security

The research on impact of information technology on banking services able to identified the customer support services through call-center support also increase the adoption of e banking among customers. The customers of public sector bank were more satisfied as compare with private sector banks that PSUs *banks provide call-center support through their skilled IT professionals for their customers*. It has been found that the customers of both public and private sector bank were agreed that bank also offer *updated online communicative services as (e mail, online account inquiry, online loan applications)*. It has been found that maximum customers of public sector banks were more satisfied with the secure *internet banking services through anti-virus to protect customer data from suspicious programs* compare with private sector banks. It has been described through inferential analysis that utmost *ATMs of* public sector bank’s *have been installed Cameras on machine for secure transactions* hence customers of PSUs banks were more satisfied with comparison to private sector banks. Customers of both public and private sector bank were more satisfied with the easy access of E-banking services to perform *Secure RTGS and NEFT Transactions*. It has been found through inferential and descriptive results that customers of public sector bank were more satisfied than private sector banks with using E-banking services banks were able to provide individual attention to the online customer’s query about *Credit/Debit Cards and in their Data/Transactions Privacy*. 
Rank Analysis

- Rank analysis has been performed on the given dimension of study to analyze and compare the impact of Information Technology on Banking Services in PSUs and PSIB banks on the basis of Customers Responses. This also helps to improve the customer satisfaction and customer support with e banking in public and private sector banks. Conclusion drawn from rank analysis:

  - **Reliability** in e banking services offered by private sector banks is the key factor to improve the customer satisfaction and innovative information technology enabled e banking helps to enhance trust of customers in e banking services.

  - Rank analysis, on the basis of customer’s belief depicts that Public Sector Banks were better than Private Sector Banks in terms of Customer Satisfaction, Reliability, Customer Support Services and Data Security.

  - However, on the basis of customer’s opinion rank analysis described that Private Sector Banks offer maximum Online banking Benefits in comparison of Public Sector Banks.

6.1.2 Key Findings Based on Employees Responses

- **Innovative E-banking services & Maximum Utilization**

  Study reveals that customers of PSU banks are using ATMs very often as compare to PSIBs banks. Tele-banking services are not frequently used by the customers of both PSUs and PSIB banks, Mobile –banking services are more frequently used by the customers of both PSUs and PSIBs banks, Net –banking services are frequently used by the customers of both PSUs and PSIBs banks and RTGS services are more frequently used by the customers PSIBs banks as compare to PSUs banks. It has been found that PSIBs banks are very often using advance IT tools for their customers to provide better e banking services. It has been found that PSUs banks are using more e banking as a medium of effective promotion for their customers to provide better e banking services as compare to PSIBs banks. Descriptive and inferential analysis shows that both PSUs and PSIB banks are using OMR based automated form in e banking services.

  - Credibility, Responsiveness, Reliability
Study concluded that both PSUs and PSIBs banks employee’s have their views that **e-banking transactions are as accurate as manual transactions**. It has been found that employees of PSIBs bank finds that very often **customer services of their banks increases the reliability and trust of customers in e-banking** as compare to views of PSUs banks employees. Study reveals that **positive attitudes for e banking operations** have been found very often in employees of PSUs banks as compare to PSIBs banks. It has been observed that employees of PSUs and PSIBs banks were agree that bank’s **web site very often explicitly provide the user privacy policy for e banking operations** which helps to enhance the trust of customers in online banking.

- **Online Transaction Benefits, Information Update Quality and Accessibility**

It has been found that maximum employees of both public and private sector banks were agree that **bank website provides e banking operations in different languages for their customers**. It has been analysed that more than half of respondents in public and private sector banks were satisfied with **Money transaction services through plastic card, credit and debit card are easy & cost saving as compared to manual transactions**. Study reveals that respondents of public & private sector bank agreed that **transfer of fund through E-banking is faster and easier as compared to manual banking system**. It has been analysed that maximum no of employees in public and private sector banks were satisfied with that **the bank provide 24*7 Online technical assistance for downloading of forms with currency update information**. Study reveals that maximum no. of employees of PSUs banks were agree with that the **e-banking helps in reducing queues in branches** as compare to private sector banks. It has been found that employees of both public and private sector banks were agree with that the banks provides **security firewall and encryption techniques as 365 days for online transactions**.

- **Security in E-banking**

Study described that most of the employees of both public and private sector bank were agree with the **updated quality of user’s e- guidelines**. It has been identified that majority of the employees were agree that the **bank offers updated online communicative services as Email, online account inquiry for their customers**. Study analysed that most of the employees of private sector bank have their views that bank provides improved internet security anti-virus program to protect suspicious email address or web site for their customers as compared to
public sector banks. Study shows that employees of both PSU and PSIB bank’s were strongly agree that cameras have been installed on ATMs machines for safe transactions. It has been analysed that employees of both public and private sector banks were found that banks provides **secure transactions of NEFT and RTGS** for their customers. As **it has been describe through the analysis of employees responses that** PSIB banks provides more individualized attention to the customer’s online query **for net banking and credit cards** as compare to public sector banks.

- **Customer Support services and Operational Problem**

The descriptive and inferential study shows that maximum employees stated that PSIB banks very often provides **complaint/Grievance settlement system with regard to E-banking services** as compared to PSUs banks. Study also found that employees of public and private sector bank were agree with that **protection from power failure in e banking services** have been provided in both the sectors. It has been found that both PSUs and PSIBs banks intimate their customers for **new offers, terms and conditions about new e banking product.** Study exhibits that employees of both public and private sector banks have the same opinion about e banking as **user-friendly tools for customers and banks.** It has been observed and stated by the employees of both banks that almost both PSUs and PSIBs banks have been facing sometime **server down problems** only. The banks employees stated that both PSUs and PSIBs banks have strong backup system for power failure. Study revealed that employees of PSUs and PSIBs banks stated that banks sometimes have **non-working of ATMs problems.** It has been found that both PSUs and PSIBs banks provide **easy and secure deposit for bulk cash.** Study revealed that employees of PSUs bank found that now a day’s banks don’t have excess of tell calls enquiry as compare to PSIBs banks.

- **Initiative, Promotional Strategies of Bank**

Study revealed that employees of public and private sector banks were agree with the **training and awareness drives to promote e banking.** It has been found that most of the employees of public and private sector bank were agree that **banks provide call center support through their IT expert.** The result of study depicts that maximum employees of public and private sector banks have same views about the **demo tour and online assistance to new users will improves the trust of customers in e banking.** It has been found that employees of private sector banks agree that PSIBs
banks provide financial incentives to the employees for promoting usage of e-banking. Private sector bank’s employees were more satisfied with the cash-back incentives offer to their net banking customers as compare to public sector banks. It has been found that maximum employees of PSIBs banks were more satisfied as compare with PSUs banks for “frequent flyer point’s offer of banks to their customers to avail the online services”. It has been found that employees of private sector banks were agree that e-locker services have been provided with no additional cost to the customers as compared to public sector banks. Study reveals that PSIB banks offers mobile van for their customers more frequently as compare to PSU banks.

- Rank Analysis on the basis of banks Employees Responses

Conclusion drawn from rank analysis on the basis of banks employee’s responses was that in PSUs banks Credibility, Responsiveness and Reliability were key factors and Customer Support service and Operational problem were least significant factors to improve customer satisfaction in customers. However, in PSIB banks Security in E-banking was the key factor and Customer Support service, Operational problem were low rank factors whereas in PSIBs banks which have been supported through the impact of information technology. Rank analysis comparison in PSUs and PSIBs banks concludes that Public Sector Banks are effective than Private Sector Banks in terms of Innovative E-banking services and Maximum Utilization, Online Transaction Benefits, Information Update Quality and Accessibility according to the belief of the employees. On the other hand, Private Sector Banks are offering improved Credibility, Responsiveness and Reliability, Security in E-banking, Customer Support services, Operational problem and Initiative, Promotional Strategies of bank in comparison to Public Sector Banks according to employee’s perception.
6.2 Conclusions

Table 6.2.1 Summary Results of Inferential Testing or Customer Based Hypothesis Testing.
6.2.1 Summary and Conclusion of Inferential Testing or Customer Based Hypothesis

- As seen from the above table, the entire hypotheses have been framed and tested for inferential study. The Pearson – Correlation, Multiple regression and Independent t test have been performed to test the above mentioned hypotheses and to accomplish the objectives of study. The foremost objective of the study was “To assess the impact of information Technology on banking services in public and private sector banks”. However, to prove this objective, research framed a hypothesis “There is no significant association among emerging Information Technology tools adopted by banks and customers satisfaction with the e banking services”. The Pearson – Correlation test has been performed by the researcher to identify the association of independent variables with dependent variables of given research. Analysis drawn depicts that “There is an association among Online Banking Benefits, Reliability, Customer Support Service and Data Security with Customer Satisfaction in both PSUs and PSIBs banks.”

- Second objective of the study was “To explore the Customer’s awareness, customers satisfaction and belief about e-banking while using EFT, RTGS, Internet banking, Mobile banking and Credit cards, ATM and to assess the problems faced by the customers during e-banking operations in public and private sector banks” to substantiate this objective research framed a hypothesis “There is no significant association among emerging Information Technology tools adopted by banks and customers satisfaction with the e banking services”. The researcher developed a model through multiple regression analysis and result gave empirical evidence that acceptance of customer satisfaction was significantly influenced in PSUs banks by two factors “Reliability & Data Security” which had positive association with significant effect on “Customer Satisfaction” whereas “Online banking Benefit and Customer Support Services” were the factors had no association with “Customer Satisfaction”. In PSIB Banks result concluded that acceptance of customer satisfaction was significantly influenced in PSIBs banks by one factor “Reliability” which had positive association with significant effect on “Customer Satisfaction” whereas “Online Banking Benefit, Customer Support Services and Data Security” were the factors had no association with “Customer Satisfaction”.

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Third Objective of the study was “To compare the present e-banking scenario concerned with EFT, Internet banking, Tele-banking, Mobile banking and Credit card transactions between public and private sector banks” to confirm this objective research framed a hypothesis “There is no significant difference between the opinion of customers regarding the impact of Information Technology on Banking Services with respect to various selected parameters between PSUs and PSIBs banks”. Thus researcher has performed Independent t-test for this assessment and result drawn shows that “There is a significant difference between the opinion of public and private sector banks customers regarding the “Reliability and Data Security” whereas there is no significant difference between the opinion of public and private sector banks customers regarding the “Online Banking Benefits and Customer Support Services and Customer Satisfaction”.”
Table 6.2.2 Summary Results of Inferential Testing or Employees Based Hypothesis Testing.
6.2.2 Summary and Conclusion of Inferential Testing or Employee’s Based Hypothesis

- As seen from above table the entire hypotheses have been framed and tested for inferential study. The Pearson – Correlation, Multiple regression and Independent t test have been performed to test the above mentioned hypotheses and to accomplish the objectives of study. Prime objective of the study was “To find out the employee’s awareness and perception about the e-banking operations and risk associated with e-transactions in private and public sector bank”. However, to prove this objective research framed a hypothesis “There is no significant association between emerging Information Technology tools adopted by banks and responsiveness of bank’s employees”. The Pearson – Correlation test has been performed by the researcher to identify the association of independent variables with dependent variables of given research. Analysis drawn from correlation analysis depicts that in PSUs Banks “There is no significant association between “Maximum Utilization of E-Banking Services, Data Security with Employee Responsiveness” whereas “Online Banking Benefit, Customer Support Services, Promotional Strategy, dimensions of research were significantly associated with Employee Responsiveness”. In case of PSIBs banks there is no significant association between “Maximum Utilization of E-Banking Services, Online Banking Benefit, Data Security, Customer Support services, Promotional Strategy with Employee Responsiveness”.

- Results drawn from Multiple Regression Model indicate that in PSUs banks “There is an association in between Maximum Utilization of E-banking Services and Employee Responsiveness”. However, “There is no association between Online Banking Benefit, Data Security, Customer Support Services, Promotional Strategies with Employee Responsiveness” in PSUs banks. In case of PSIBs banks study indicates that “There is no association between Maximum Utilization of E-banking Services, Online Banking Benefit, Data Security, Customer Support services, Promotional Strategies with Employee Responsiveness”.

- Another objectives of the study were “To explore the role of employees in the successful implementation of e-banking in public and private sector banks”, “To discover the challenges faced in implementation of information technology in banking operations.
in private and public sector banks” and “To offer suitable suggestions to improve e-banking services and to increase the credibility of public and private sector banks”.

To substantiate these objectives research framed the hypothesis “There is no significant difference between the opinion of bank’s employees regarding the impact of Information Technology on banking services based on selected parameters between PSUs and PSIBs banks”. Results drawn that “There is no significant difference between the opinion of bank’s employees regarding the Maximum Utilization of e-banking services, Employee Responsiveness, Online Transaction benefits, Data Security and Customer Support services between PSUs and PSIBs banks” whereas “There is a significant difference between the opinion of bank’s employees regarding Promotional Strategies between PSU and PSIB banks”.

6.3 Limitations

In spite of best of efforts to minimize the limitations, the researcher has identified few limitations in present study:

- The primary data of current research has been collected from the jaipur city. Though jaipur is the capital of Rajasthan state and commercial center of North India, samples selected from the jaipur city cannot be considered as a proper representation of the population of the India. Thus the sample taken for the study was restricted to a particular region. Hence the obtained results cannot be generalized.

- Though the resources seem sufficient and enough to achieve high standard for this research, but the major limitation of the study was the availability of time for data collection and analysis. So the researcher had to do the needful as quickly as possible.

- Even though the researcher has collected data from the respondents with patience in their good mood there could have been personal bias of the respondents, which is a major limitation to the present study. Bias of the interviewee may also effects the results of the study.

- Primary data has been collected through structured questionnaire. Whereas the researcher has identified lack of knowledge about online banking in selected respondents of study. Therefore, interview technique has been used for some respondents.
• Each employee of the sample banks was contacted personally by the researcher to collect primary data. It was very difficult to get back the filled up questionnaire as the bank’s employees were very busy even after business hours in their bank branches. The researcher had spent a lot of time to complete the process of primary data collection through questionnaire.

• The use of various statistical eco-metric analysis tools based on larger data sets. Yet in present study was limited to sample size (600 respondents of public sector banks and private sector banks) did not allow the use these tools. Moreover, the research did not attempt to investigate the causality of any phenomenon.

Despite these limitations, the research has solid evidence based on the responses of the customers, bank’s employees and Reserve bank of India’s guidelines. However, the study has made an earnest endeavors to complete the research in its true perspective. It has attempted to perform a critical evaluation of promotional strategies of various e-banking products and services offered by both public and private sector banks and thereby drawing certain significant conclusions for future improvement. Further, the findings may lead to some positive suggestions that can be implemented by banking sector.

6.4 Suggestions
In order to emphasize the growing trends of Information and Communication Technology (ICT) “A vision in the right direction”, the banks must be focus on their needs along with the right technology to achieve more satisfied and retained customers, rather than acquiring technology in competitive scenario of banking sector. To protect the user from an online threat various security measures in net banking and EFT must be established by banks. Thus, this will enhance the customer’s trust in online transactions. The following strategies have been recommended for the banks to follow up.

6.4.1 PUSH STRATEGY

➢ Influence the Customer Satisfaction Through Web Page Design
PSUs Bank’ websites must be user friendly, interactive and quick response using 24*7 effective delivery channels must be provided to reduce the complaints of their customers.

Awareness about e banking services among customers plays significant role for successful implementation of e banking services. To increase trust in online transactions among customers’ banks must intimate, promote and sustains viral marketing strategies. Hence, this online assistance must improve the creditability of internet banking among prospective online and offline customers.

Reliability, Data security are the key components to encourage the customers towards online banking. To enhance the level of satisfaction among customers regarding e banking services opinion and feedback of customers must be taken in public and private sector banks.

Focus on Customer Satisfaction for Online Banking Services Offered on Banking Portal

Since the study shows that customer satisfaction was high in few dimensions of comparative research in online banking service of PSUs and PSIBs banks, hence the banks must pay more attention towards emerging e banking services. In this regard, public and private sector banks should focus and prioritized the data security, customer support services to provide secure and quick online banking services to their customers.

6.4.2 PULL STRATEGY

Reduce Customer Dissatisfaction Through Improved Customer Support and Innovative Online Portal Design

Banks requires to setup appropriate balance in between needs of customers and online banking services offered by public and private sector banks.

The comparative study of impact of information technology on banking services and customers satisfaction between PSUs and PSIBs banks has significant implication. Innovative information technology in banking services can be used as a competitive tool
to attract potential customers towards specific banks. Thus banks must focus on their training drives and effective promotional strategies for customers and banks’ employees both. forthcoming e banking product and services

- It is recommended that banks must confer their efforts in improving the quality of e banking services. Bank must offer high speed or bandwidth for effective browsing and net banking.

➢ Swift Responses for Customer Online Query and Direct the Customer to Resolve Their Complaints

- It has been recommended that bank online help must be provided by skilled technical employees to handle customer query in quick response time. It is the liability of banks to ensure that all assorted online banking complaints of customers must be solved through their technical experts.

6.5 Scope for Future Study

The issues discussed in the limitations could be taken as a pointer for continuing research in this area. The study intended to explore the impact of information technology on banking services and customer satisfaction in PSUs and PSIBs banks. The study make use of self-administered questionnaire to collect the data wherein descriptive and quantitative methods have been used to analyze the customer satisfaction with e banking services among PSUs and PSIBs banks. However, it could not exhaust all the researchable aspects concerning the above issue. It is recommended that future research could use different methodology to focus on technological innovation in rural banks with customer perspectives. Thus, further research should be carried out in given following areas:

i. “Innovation in wireless technologies and challenges in Mobile banking services and customer satisfaction.”

ii. “Study of e-commerce application in business and security measures.”

iii. “Role of emerging issues in MIS Development and Data Warehouse in banking System.”
iv. “Impact of innovative banking tools on the **perception of bank’s employees** with a comparison of **public sector and rural banks.**”

v. “Study on comparative measure of online services provided by various **Insurance companies.**”

vi. “The growth of Electronic Payment System in banking technology with security issues.”