

# **SUMMARY OF THESIS**

## **A COMPARATIVE STUDY OF E-BANKING IN PUBLIC AND PRIVATE SECTOR BANKS (WITH SPECIAL REFERENCE TO SBI AND HDFC BANK)**

**Submitted for the Award of the Degree of  
Doctor of Philosophy  
in the Faculty of  
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**THE IIS UNIVERSITY, JAIPUR**

**Submitted by:**

**RASHMI SHARMA**

Enrol No. ICG/2010/11505

**Under the Supervision of:**

**DR. POONAM MADAN**

Associate Professor and Head

Department of Management

The IIS University, Jaipur

**DEPARTMENT OF MANAGEMENT**

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# **Summary of Thesis**

## **Introduction**

Banks play a very important role in the Indian financial market as they are the biggest purveyors of credit and attract most of the savings from the population. Banking is necessary for the economic development of all the nations of the world because a developed banking system holds the key as well as serves as a barometer for the economic health of a country. Banking Industry is one of the most successful and strong industry of our country

Banking structure is effected by the changing environment of an economy. In Indian context, there were two phases of nationalization, introduction of RRBs, entry of private sector banks and foreign banks and now e-banking are some important and major changes that affect the structure as well as functioning of the banks from time to time. On the basis of Reserve Bank of India Act, 1934, Indian banks are of two categorized under two terms, one is the “Schedule Commercial Bank” and another one is “Non-schedule Commercial Bank”. The banks selected for this study are State Bank of India, representing public sector banks and HDFC Bank, representing private sector; as they are the largest banks in their sector, considering their number of branches, customer base and their net worth.

Successful reform of public sector banks is a good example of a dynamic mix of public and private ownership in banks. A noteworthy feature of banking reforms in India is the growth of newly licensed private sector banks, some of which have attained globally best standards in terms of technology, services and sophistication. In many respects related to performance, these domestically promoted banks have surpassed branches of foreign banks in India and could be a role model for other banks.

## **E-Banking**

Bank branches alone are no longer enough to offer services to meet the need of today's high demanding customers. Electronic or online banking is the latest delivery channel to be presented by the retail banks and there is large customer acceptance rate which means delivery of banking services to customers using electronic technology either at their office or home. The e-banking offers huge opportunities in every sphere of business as the competitive advantage, member/client retention, increased revenues and reduced costs. Understanding clients, organizational elasticity, availability of resources, system security, reputable brand name, having multiple integrated channels, e-channel specific marketing, support from top management and good client services are the vital factors for the success of e-banking.

In E-banking system, banks are increasing their customer base with the help of multiple e-delivery channels like ATMs, Credit/Debit/Smart Cards, Internet banking, Mobile banking, Tele banking, EFTs etc. E-banking is offered by many banking institutions due to pressures from global competitions hence, in case of delay in offering transactions based services on the internet; they might lose their market share. To be successful, banks have to offer e-banking facility instead of being pushed into it by others.

The customers can do their banking not only when they want to do but also from the convenience, comfort, confidentiality and security of their homes by using internet or other networks, television, telephone/modems. Due to various aspects of technology, there is a need to monitor efficiency of the banks to best judge their status in global environment. The banks with adequate electronic base are gaining momentum where the others are fighting for their survival.

## **Review of Literature**

For the purpose of this study a lot of literature has been reviewed, that is, books, journals, magazines, newspapers, etc. Some of the reviewed literature has been discussed below:

**“Internet Banking as a tool for Customer Relationship Management – A Study on Customer Perspective”, Krishnamoorthy, V. and R. Srinivasan (2013) <sup>[1]</sup>**

This study intends to throw light on customer perception on internet banking which serves as a tool for Customer Relationship Management. Data was collected from 154 respondents who are exposed to Internet Banking.

This study clearly indicates that banks are finding difficulty in retaining their existing customers, for which either they need to come up with innovating, customized products or they need to develop trust with their customers and maintain the relation with them.

**“Customer Perspective on E-Business Value: Case Study on Internet Banking”, Safeena, Rehmath (2010) <sup>[2]</sup>**

In this research paper she has determined the consumer’s perspective on internet banking adoption. Though customer acceptance is a key driver determining the rate of change in the financial sector. This study aims at examining the impact of perceived usefulness, perceived ease of use, consumer awareness on internet banking and perceived risk on the acceptance of internet banking by the consumers.

The result of this study concludes that majority of customers are accepting online banking because of many favorable factors. Analysis concluded that usefulness, ease of use of the system awareness about online banking and risks related to it

are main perusing factors to accept online banking system. These factors have a strong and positive effect on customers to accept online banking system.

**“User Friendly E-Banking”, Rourke, Chris (2004) <sup>[3]</sup>**

This article discusses the importance of usability within the e-banking sector and identifies common usability problems and ways to resolve them.

Research shows 50% of perspective customers registering for online banking bail out before signing up, mostly due to problems navigating the site, completing online form, security fears, and understanding content and feedback.

It is widely recognized that online banking provides more revenue per customer and costs less per transaction than any other channel, including phone banking. Banks aiming to profit the most from the increase in online banking volumes should consider the usability and accessibility of all aspects of their site to welcome them.

**“Banker’s Perspectives on E-Banking”, Sharma, Himani (2011) <sup>[4]</sup>**

This research paper is about the banker’s perspectives on e-banking activities of respondents, impact of e-banking and promotional measures used by banks to promote e-banking. The survey data used in this research are collected through a questionnaire in Northern region of India by administering to 192 bankers.

The enquiry reveals that customers generally use e-banking services on persuasion of bankers. The bankers are convinced that e-banking helps in improving the relationship between bankers and customers and that it would bring patent improvement in the overall performance of banks.

**“Online Banking Provides Satisfaction and Convenience for Users” Knapp, Ann (2008) <sup>[5]</sup>**

With all attention online banking has received in the last couple of years, it seems there are new online banks popping up everywhere. Users are choosing online banking for its ease and convenience. And while issues of identity theft are

important factors to consider with online banking, it has not stopped people from utilizing the web to streamline their finances.

Recent studies suggest that internet banking does not just make life easier, customers who choose it seem to be more satisfied with their bank.

As a result, banks are seeing tremendous growth in online service. One major commercial bank cited that in 2004, there were 3.4 million customers paying bills online, followed by an increase to 6 million online bill payers just a year later.

**“Online Frauds in Banks and Commerce”, Singh, N. P. (2007) <sup>[6]</sup>**

Hi-tech fraudsters have urbanized a new way of tricking on line banking customers. One such most well known and fast growing technique is *phishing*.

**Phishing:** Phishing is derived from the word fishing. Phishing also called brand spoofing, is a term used for a sort of fraud where phishes send out spoof email to a random database to fool the recipient in to divulging personal information like credit cards details, usernames and passwords, that can be used for identity theft.

Online banking is designed mainly to achieve two objectives. First, increased convenience for the customer and second, reducing the cost of operations to the banks. Numerous benefits such as lower fee to go online, higher interest rates, online viewing of account details and statement information, pay bills, transfer money between applying for accounts, scheduling automatic periodic payments such as rent or loan payments, applying for accounts or loans and managing loyalty points to achieve first objective. In the process banks are able to reduce cost of operations to some extent.

The study opined that there is a sharp rise in phishing statistics as it evident from the values in various tables. May it be number of hosting of phishing sites, or mails received about phishing monetary loss either of the customers or of organizations. The main reason for losses/success of frauds is ignorance on part of

customer as well as service providers (bankers, retailers, etc.). It requires stringent methods of educating customers and regular review of security related information of individual customers.

**“Acceptance of E-Banking among Adult Customers: An Empirical Investigation in India”, Dixit, Neha and S. K. Datta (2010) <sup>[7]</sup>**

Internet banking is a form of self service technology. The numbers of Internet users have increased dramatically, but most of them are reluctant to provide sensitive personal information to websites because they do not trust e-commerce security. This paper investigates the factors which are affecting the acceptance of e-banking services among adult customers and also indicates level of concern regarding security and privacy issues in Indian context. Also a reason, of not accepting online banking by adult customers is no training or guidance from the bank’s side.

The result of this study viewed that adult customers are more reluctant to join new technologies or methods that might contain little risk. It is also important to note that some adult customers are interested in online banking; however, they do not possess the necessary computer literacy to conduct it. In addition banks should design the website to concern security and privacy issues.

## **Methodology**

The word "research" is used to describe a number of similar and often overlapping activities involving a search for fact. A search concerned with information rather than knowledge or analysis and answers can normally be found in a single source.

This is a comparative study on the e-banking service of both public and private sector banks and the banks selected for this study are State Bank of India, representing the Public Sector and HDFC Bank, representing the Private Sector, mainly on two criterions, the first being the convenience during the research,

mainly from the same city i.e., Jaipur and second being the diversity of the banks and their prominence in their respective sectors.

### **Problem Identification, Need and Relevance of the Research**

It is evident from the literature reviewed, that E-banking has emerged to be beneficial for both the financial institutes and the customers. Also, for a bank to survive in this cut-throat competition it is important to offer the best products, with quick service, with complete security features and to be up-to-date with the RBI guidelines, therefore a comparison between public and private sector banks was also necessary to understand the market situation of e-banking better from both customers' and the bank employees' perspective.

This forced the researcher to select this as a topic of her research. This research would help both the e-banking customers and the banks, not only selected for the study, but also for the other banks. To the best of knowledge and belief no research work from this angle has been undertaken by anybody till now.

### **Objectives**

1. To study public sector banks v/s private sector banks from the e-banking perspective.
2. To assess the customers' and bank employees' satisfaction level with the current banking facilities.
3. To find the most important factor that is inducing people towards e-banking.
4. To understand the benefits e-banking as compared to traditional banking, in terms of cost, efficiency, time, secrecy, quality of service and complaint resolution, from both the customers' and the employees' perspective.
5. To investigate whether e-banking is cost effective for both the banks and the customers or not.



6. To compare that whether e-banking vis-a-vis traditional banking, which is more secured, from both the bank employees' and the customers' perspective.

## **Hypotheses**

**H<sub>A1</sub>** Private sector banks are providing e-banking services more effectively than public sector banks.

**H<sub>A2</sub>** Private sector banks safeguard customer interest more as compared to the public sector banks.

**H<sub>A3</sub>** E-Banking in comparison to traditional banking is financially advantageous for both the banks and the customers.

## **Scope of the Study**

The universe of the research includes all the banks in India providing e-banking services.

The banks selected for this study are State Bank of India (SBI), representing public sector and HDFC Bank, representing private sector; as they are the largest banks in their respective sector, considering their number of branches, customer base and net worth.

The study is confined to Jaipur city of Rajasthan state, as it has the maximum bank branches and also e-banking users.

For the present research both primary and secondary data have been collected.

For the present research the primary data has been collected through structured questionnaire, administered by the researcher to customers and the employees of both public and private sector banks. On the other hand, sources for the secondary

data have been books, websites, NEWS bulletin, magazines, newspapers, journals and banks' annual reports.

### **Sampling Plan**

The Sample of the present study is 500 respondents, 250 representing Public Sector Banks and 250 representing Private Sector Banks. Further bifurcation of 250 respondents, each of public and private sector bank is 125 employees and 125 customers. The responses were coded and tabulated and results have been presented in the form of bar graphs, pie charts and interpretation corresponding to each chart has also been made.

### **Data Analysis and Interpretation**

Analysis of data is a process of inspecting, cleaning, transforming and modeling data with the goal of highlighting useful information, suggesting conclusions and supporting decision making. Analysis is just one of the many steps that must be completed when conducting a research. This research is an attempt to understand the customer's and bank employee's perspective regarding the e-banking products and services of the public and private sector banks.

Data has been collected and the demographic profile of the respondents, the customers and the bank employees has been studied on various parameters like gender, age, occupation, annual income and qualification. After demographic profile analysis, customers' and bank employees' response for each question has been presented through tabulation, bar-graphs, pie-charts and then inference was drawn for each respectively.

Methodological tests were employed by the analyst to know that whether the framed null hypothesis is accepted or rejected. If rejected, it is in favour of an alternate hypothesis. Statisticians have developed several tests of hypothesis (also known as the tests of significance) for the purpose of testing of hypotheses which can be classified as Parametric tests and Non-parametric tests. For the purpose of this research, Chi-square test ( $\chi^2$ -test), a non-parametric test and parametric tests

like, One-way Analysis of Variance (ANOVA) and Two-way Analysis of Variance (ANOVA) has been employed.

## Comparative Study in SBI and HDFC Bank

During the research period, SBI and HDFC Bank, leading banks in their respective sectors, have been studied on various parameters, as shown in the below mentioned Table.

### E-Banking Process and Features: Comparison between SBI and HDFC Bank

S. No.	Parameter	SBI	HDFC
1.	Customer Service - Process and TAT	All type of customer Request, Query, Complain is raised on the “Customer Management System Utility”. Complains are dealt on a maximum TAT of 3 days.  For Request and Query, the TAT is not defined.	All type of customer Request, Query, Complain is raised on the “Customer Relationship Management Utility”, for which the TAT is minimum of 3 days and maximum of 5 days.  It can also be assigned to the respective department authorized person, in specific cases.
2.	TAT for Registration of Net-Banking	The “Net-Banking Kit” with User Name and Password is issued instantly to the user, but its activation takes a day time.	It is immediate, through “One Time Password (OTP) Generation”

3.	Site Address of Bank and for Net-Banking	Bank's site address: www.sbi.co.in For Net-Banking: www.onlinesbi.co.in	For Bank and Net-Banking the site address is: www.hdfcbank.com  For Mobile-Banking, specifically the site is designed with same features of Net-Banking, which is with less pixels, therefore quick service. The site address is: www.m.hdfcbank.com
4	Charges for:		
Net-Banking Registration	Zero	Zero	
Mobile-Banking Registration**	Zero	Zero	
Third Party Transfer	Zero	Rs. 10/- per NEFT Transaction and Rs, 25/- per RTGS Transaction, and Zero Rupees for Fund Transfer in Internal Bank's Account	
Biller Registration	Zero	1/- Rupee per biller	
E-mail Id Registration	Not Applicable	Zero	
Mobile Number Registration	Not Applicable	Not Applicable	

	Fixed Deposit / Recurring Deposit Booking	Zero	Zero
	Cheque Book Request	Zero for the 1 <sup>st</sup> time request in a year, and after that it is Rs. 2/- per leaf.	Zero for 1 <sup>st</sup> Fifty (50) requests for Saving Account and for 1 <sup>st</sup> Hundred (100) requests for Current Account in a Quarter. After this it is Re. 1/- per leaf.*
	Demand Draft	Rs. 1.50/- per 1000 Rs. And Rs. 10/- extra for cash handling	Minimum Rs. 20/-, and then Rs. 5/- addition on increase of 100 rupees after Rs. 1000/-
6.	Contest	Not conducting any such contest	Conducts contests for customers to provoke them for the usage of “Net-Banking” and “Mobile-Banking”.
7.	Other Features of Net-Banking:		
	Account Balance Availability	Yes	Yes
	Account Statement	From 2005 onwards	Last 5 years
	Accessibility to the Existing Loan Account(s)	Yes	Yes
	Application for Other Loans	Yes	Yes
	Application for Credit Card	Yes	Yes

	Application for Insurance	Yes	Yes
	Application for Demat	Yes	Yes
	Application for Mutual Funds	Yes	Yes

\* Depends on the Account Type

\*\* Mobile Banking Registration can also be done through Net-Banking, Tele-Banking, ATM and Branch visit

It is found that HDFC Bank's TAT is more defined, short and in detail compared to that of SBI's. The customer service process is also well designed by the central team of HDFC bank and not by SBI. Also, for mobile banking users, separate website is designed which is quickly and easily accessible on the mobile applications.

But, as far as the charges are concern, SBI is charging less compared to HDFC Bank, for biller registration, SBI is not charging, but HDFC Bank is, similarly for Demand Draft request and Third Party Transfer transaction, HDFC Bank is charging higher than SBI. Same was also identified during survey, when majority of the respondents said that "additional fees, hidden charges, processing fees and transactional fees are higher in private sector banks as compared to public sector banks".

Other product features are same in both the banks, that is, account balance availability, accessibility to the existing loan accounts and applying for other loans, credit cards, insurance, demat and mutual funds; Except that HDFC Bank is only providing the bank statement of last 5 years, whereas, SBI is providing the same from 2005 year onward.

- **Retail Loan Share**

Every bank is strong in market or has a bigger share in the market basis its deposits, which includes, saving account, current account, Fixed Deposits (FD), Recurring Deposits (RD), etc. This deposited money is returned back to the customer with interest by the respective bank and further this money is used by the banks in lending to other customers at a higher rate of interest and then the difference is bank's income.

Recent study has shown that SBI is leading behind in the market of retail loan from HDFC Bank on lending, with the fact that the SBI's rate of lending is lower than that of HDFC Bank's. The problem lies in the delivery channels of SBI or in the marketing of its retail loan products.

- **HDFC Bank Leads in E-Transactions and SBI in Value**

The Indian active online audience is growing at the rate of approximately 30 percent annually. In addition, there has been a consistent rise in the number of visitors on banking websites in the past twelve months. However, a remarkable fact revealed by the research reports is that the online banking category has grown more rapidly than the growth of the active internet users in India. The online banking category has grown by 35 % in 2010 year over 2009 year. A significant percentage of these users are from the non-metros.

According to Bank Statistics monthly report released by RBI in the FY 2009-10, HDFC Bank stands at number one position when it comes to number of e-transactions taking place in India, while SBI is ahead in terms of value of transactions.

- **Most Popular Banking Service on Mobile**

Mobile banking is popular among the Rs. 1 to 5 lakhs per annum income group with almost 60% of mobile banking users falling in this income bracket and majorly preferred by younger generation. Mobile banking in India is set to

explode approximately millions of urban Indians, who use their mobile phones to access banking services. The number of transactions using mobile banking in India has gone up by 68.86% while the amount has increased by 102.65% taking into consideration the period from August 2011 to May 2012.

The most popular banking service availed through mobile banking is “Account Balance Availability”, followed by “Transaction History” and “Cheque Book Request”.

ICICI bank maintains its position as country’s biggest private lender on mobile screen with 17.75 million users. HDFC bank accounts for second with 9.1 million subscribers followed by State Bank of India with 6.13 million.

- **RBI’s Role in facilitating E-Commerce and Online Transactions in India**

Internet businesses would be sustainable in India only when the volumes of online transactions in India go up, which in turn happens only when internet banking, Debit Card usage and proliferation of Credit Card happens. It is important as it not just would direct e-commerce websites, but also Internet Industry would grow along with that, as both are inter-dependent.

The volume of online transactions would determine how mature the internet user base in country is. And therefore the destiny of internet industry lies in the hands of Reserve Bank of India by ensuring facilitation of usage credit/debit cards & internet banking facilities by all scheduled banks in India.



# **Findings, Conclusion and Recommendations**

## **Key Findings**

The key findings of the researcher during the study on e-banking between public and private sector banks, both customer's and bank employee's perspective has been mentioned below:

### **1. Comparison of E-Banking Adoption Frequency by Customers on Bankers' Persuasion or by Own Initiative between Public and Private Sector Banks**

On comparing the e-banking adoption frequency by customers on persuasion of bankers or on their own between public and private sector banks, it has been found that there is not enough of awareness among the customers regarding the use of e-banking services and the guidance and persuasion by bankers help promote the use of such services amongst the customers. More private sector banks are working towards it compared to that of public sector bankers.

### **2. Age-wise Preference of E-banking Services**

Different age groups of customers availing e-banking services, in the banker's perspective, middle age men (26 to 50 years of age) make the greatest use, followed by the young age men (up to 26 years of age). Also it is found that women customers use such services relatively less frequently.

### **3. Occupation-wise Preference of E-banking Services**

In the bankers' view regarding preference in the use of e-banking services on the basis of occupation, this study revealed that professionals are at the top and then it is the business class who makes the greatest use. And in the end it is the service class and students.

### **4. Impact of E-banking on Overall Performance of Banks**

It has been analysed that the majority of the bankers believed that e-banking services have brought about some improvement in the overall performance of banks, in both public and private sector banks.

## **5. E-banking Marketing Effectiveness**

Promotion of e-banking products is not effective in public sector banks compared to that of the private sector banks.

## **6. Customer Orientation**

Private sector banks safeguard customer's interest more as compared to the public sector banks. As per the statistics of 2010, it has been found that the average time spent on internet by an e-banking user of HDFC Bank is highest, followed by SBI. HDFC Bank also sees the highest incidence of repeat visits by a user in a month (7 visits) and also sees the maximum average time spent by a user followed by the State Bank of India (5 visits). In the mobile screen lending, HDFC Bank is the most popular bank with 9.1 million subscribers, followed by SBI with 6.13 million subscribers.

E-Banking services are better of private sector banks compared to public sector banks.

As per customers' feedback on the charges charged by the banks, it has been found that additional fees, hidden charges, processing fees and transactional fees are high in private sector banks as compared to public sector banks. However, private sector banks have a higher growth rate than the public sector banks because of the quality of service rendered by private sector people.

## **7. Comparison of E-Banking with Traditional Banking**

The start-up cost of an e-bank is high, establishing a trusted brand is also very costly as it requires significant advertising expenditure in addition to the purchase of expensive technology (as security and privacy are very important to gain customer approval).

The most significant contribution of e-banking for customers of both the sectors out of time saving, efficient, convenient and secure is convenience. Convenience is followed by time and then it is efficiency and security in the end.

## **8. Future of Banking is E-Banking**

All the customers and employees of both public and private sector banks were of the view that in future e-banking would play a more dominant role viz-a-viz traditional banking.

## **9. Trend is towards Mobile-banking now from the PC banking**

Customer's interest in using mobile-banking service is keen compared to PC banking and is substantially greater among young customers of 26 to 35 age group. But, from the banker's view the most user-friendly mode of banking is PC-banking and not mobile-banking.

## **Conclusion**

Present research is based on empirical data collected through the customers' and bank employees' survey regarding the market situation of e-banking products and services provided by public and private sector banks in Jaipur. It is an effort to examine the relationship between the demographics and customers' satisfaction in e-banking, relationship between the bank's customer service quality and customers' satisfaction, promotional measures banks are adopting or they should adopt in order to make it more effective, as well as comparison of the quality of e-banking service between public and private sector banks.

There is greater incidence of e-banking usage among the middle age men (26 to 50 years of age); and women customers use such services much less frequently. Occupation-wise, the professionals, followed by business class, make more use of e-banking services.

In order to make e-banking more popular, banks must separate their customers based on demographic priority (i.e., age, gender, occupation etc.) and customise e-banking services as per their needs and requirements. It is seen that banks are heavily dependent on message alerts to promote their e-banking products and services; it is felt that they should supplement this with other modes like print media, hoardings, e-mail, etc. to stimulate e-banking usage and create greater

awareness. There is a need for the bankers to guide and train their customers; additionally they can also resort to video presentations at bank branches. There should be seminars/workshops/talks on the healthy usage of e-banking, especially for those who are ATM or computer illiterates. Given the increased competition and pressures to cut expenses, banks need to attract and retain their customers by creating, maintaining and highlighting attractive features of e-banking.

Results also show that there is a significant difference between the customers' perception about e-banking products and services provided by the public and private sector banks, they are dissatisfied by the services offered by public sector banks in terms of quality and by private sector banks in terms of cost. Therefore, public sector banks need to gear up and improve in terms of latest technology adoption and offering variety of e-banking products with high quality of customer service, as per the expectations of their customers. And private sector banks need to bring down their cost and inform their customer in advance at the time of offering the product(s) or service(s).

E-Banking is the future of banking, going online for banking has become a trend among the customers and also it helps in improving the relationship between bankers and customers. Customers are inclined towards mobile banking now in particular from PC banking. As the popularity of e-banking is increasing and banks are adopting the latest technology, they are prone towards cyber crimes and greater is the potential for reputational risks also, therefore, there is a need to have sound security controls and strong cyber laws in India.

## **Recommendations**

Recommendations for the e-banks basis key findings for the betterment of public and private sector banks and their respective customers in Jaipur has been mentioned below:

### **1. Security Control Practices**

E-banking data and systems should be classified according to their sensitivity and importance and protected accordingly. Appropriate mechanisms, such as encryption, access control and data recovery plans should be used to protect all sensitive and high-risk e-banking systems, servers, databases and applications.

### **2. Practices for Managing Outsourced E-Banking Systems and Services**

Banks should adopt appropriate processes for evaluating decisions to outsource e-banking systems or services. Bank management should clearly identify the strategic purposes, benefits and costs associated with entering into outsourcing arrangements for e-banking with third parties.

Banks should conduct appropriate risk analysis and due diligence prior to selecting an e-banking service provider and at appropriate intervals thereafter.

### **3. Sound Practices to Help Maintain the Privacy of Customer E-Banking Information**

Banks should take appropriate steps to inform e-banking customers about the confidentiality and privacy of their information.

### **4. Proper Training to the Customers about E-Banking**

Banks should give proper training to their customers about e-banking facilities, for their customers' better understanding, especially the public sector bank employees. Also because it has been found that the customers are more influenced by the banker and less by the print media.

### **5. TAT for E-Banking Products and Services should be short and well defined**

Public sector banks should have a short and well defined TAT, same as it is in private sector banks for customers' convenience. Public sector banks should work towards reducing their TAT and then customers should also be well informed about the same by the bank.

## **6. Effective Promotional Strategies for the E-Banking Products and Services**

Public sector banks should have more effective promotional strategies for the e-banking products and services, same as private sector banks are doing, in order to create more awareness among the customers, which may result into an increase in bank's market share or business. Accordingly then the customers should also be informed about the same.

## **7. Better Customer Service**

A bank should pay due attention to the customer and treat him like a king only, customer's convenience, high quality of service, secured e-banking features should be the key of success, especially for the public sector banks. Even the customer complaint resolution process should be faster of a public sector bank.

## **8. No Hidden/Additional Charges Deduction**

A bank should not deduct any hidden or additional charges from the customer, that too without informing him/her, especially for the private sector banks.

## **9. Bank's Policies and Procedures should be Transparent and detailed**

Banks' policies and procedures should be transparent and any updation or revision in the same should also be then informed to the customer.

## **10. User-friendly Modes of Banking**

Apart from the promotion of e-banking, modes of e-banking should also be made more user-friendly, mobile-banking is new and most user-unfriendly mode and there is a need for the banks to work on the same on priority.

## **Limitations of the Research**

Like any other research study, this research also has some limitations. The findings of this research, however, must be considered in light of its limitations.

Firstly, time was the biggest constraint.

Secondly, the analysis and study was largely based on the secondary data of the articles, research papers published from time to time in various journals, reports by various agencies. This at times does not depict the true picture. So, the conclusions reached may not be fully correct.

Thirdly, primary data is collected through questionnaire and where questionnaires are not filled by the respondent, the technique of interviewer was utilized. So, the respondent might have not given a genuine response and therefore, the response cannot be trusted more.

Fourthly, the study is subject to general human limitations of an individual in a society.

Fifthly, limited sample size (500 respondents of public sector bank and private sector bank) did not permit the use of many statistical econometric/multivariate analysis techniques that require larger data sets. Moreover, the research being more descriptive than explanatory, did not attempt to investigate the causality of any phenomenon.

However, the study has made an earnest attempt to carry out the research in its true perspective. It has attempted to have a critical appraisal of some of the marketing factors of the e-banking products and services by both public and private sector banks and thereby drawing certain important conclusions for future improvement. Further, the findings may lead to certain positive suggestion which may be useful for the Indian banks.

## **Scope for the Future Research**

The present study has made an attempt to understand the impact of e-banking of selected public and private sector banks, to assess the comparative service quality of e-banking between them and to analyze the impact of e-banking on customers. There still remains a viable prospect for future research.

- The service quality of Indian banking sector has been assessed in Jaipur only. So service quality could be studied for other cities of Rajasthan or other states.

- The present research focused only on comparative performance of public and private sector banks in e-banking. Future research can be done to analyze the performance of foreign banks also as they are the early adopters of e-banking.
- The present study has assessed the performance of the banks on the basis of customer's and bank employee's perspective related to the marketing of e-banking and customer satisfaction level. However to study the operational performance-return on asset, return on equity, etc. can also be the area for research under this aspect.
- The study has been focused only on the performance and service quality aspect of e-banking. The impact of e-banking on profitability and financial aspect of the same on them has been ignored which can give a good platform for future research.

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## List of Published Papers

S. No.	Title of the Paper	Detail(s) about Journal
1.	E-Banking Scenario in India: A Study of RBI's Role as Promoter	International Journal: Proficient International Refereed Journal of Management; <b>ISSN 0975-475X</b> (Volume-III; Issue-VII; July-2011; pp 80-91)
2.	A Study on Popularity and Usage Pattern of E-Banking Facilities Between Old and New Generation	International School of Informatics and Management: Oorja – International Journal of Management and IT; <b>ISSN 0974-7869</b> (Volume-9; No.-3; September-December-2011; pp 75-83)
3.	Job Stress Among Employees: An Empirical Study on Indian Banks	Department of Business Administration, University of Rajasthan: Journal of Business and Management <b>ISSN 2277-8012</b> (Volume-6; No.-1; December-2011; pp 167-178)
4.	A Study on Occupational Stress: With Special Reference to Private Sector Bank Employees of Jaipur	International Journal: Proficient International Refereed Journal of Management; <b>ISSN 0975-475X</b> (Volume-IV; Issue-II; February-2012; pp 79-87)
5.	Microfinance as a tool for Women Empowerment with some Challenges	HDFC Bank's Internal Magazine: Learning and Development Konnect; (Volume-12; July-Sept.-2012; pp 9-9)
6.	Employee Retention: A Study on Public and Private Sector Banks*	The IIS University's: Journal of Commerce and Management; <b>ISSN 2320-4907</b> (Volume-1; November-2012; pp 13-22)

**\*First Prize winner in the Poster Presentation, on HR Conclave, 2011, titled:  
“Employee Retention: A Study on Public and Private Sector Banks”.**

# CONTENTS OF THE THESIS

S. No.	Page No.
<b>Acknowledgement</b>	<b>i</b>
<b>Preface</b>	<b>iii</b>
<b>List of Tables</b>	<b>v</b>
<b>List of Figures</b>	<b>viii</b>
<b>List of Charts</b>	<b>ix</b>
<b>List of Abbreviations</b>	<b>xi</b>
<b>1. E-Banking: A Conceptual Framework</b>	<b>1-35</b>
1.1 Indian Banking: An Overview	
1.2 Structure of Indian Banking Industry	
1.3 E-Banking	
1.3.1 The Internet: A Distribution Channel	
1.3.2 Internet Usage in India	
1.3.3 Phases of Transformation of Banking Industry	
1.4 Evolution of E-Banking	
1.5 E-Banking Scenario in Indian Perspective	
1.5.1 Traditional Approach	
1.5.2 Modern Approach	
1.5.3 Impact of E-Banking on Traditional Banking	
1.5.4 E-Banking Scenario in India	
1.6 Products and Services of E-Banks	
1.7 E-Banking Support Services	
1.8 Risks Associated with E-Banking	
1.9 Risk Management of E-Banking Activities	
1.10 Banking Regulatory Framework at a Glance	
1.10.1 Laws Formed	
1.11 Information Security Program and Control Issues	
1.12 E-Banking Strategy	
References	

## **2. Methodology** **36-45**

- 2.1 Research: A Prologue
- 2.2 Types of Research
- 2.3 Review of Literature
- 2.4 Problem Identification, Need and Relevance of the Research
- 2.5 Objectives of the Research
- 2.6 Hypothesis
- 2.7 Scope of Study
- 2.8 Research Design
  - 2.8.1 Data Sources
  - 2.8.2 Sampling Plan
- 2.9 Limitations of the Research
- References

## **3. Data Analysis and Interpretation** **46-88**

- 3.1 Introduction to Data Analysis
  - 3.1.1 Demographic Profiles of the Respondents
  - 3.1.2 Customer's Perspective
  - 3.1.3 Bank Employee's Perspective
- 3.2 Hypothesis Testing
  - 3.2.1 Analysis of Variance (ANOVA) Test
    - 3.2.1.1 One-way Analysis of Variance (ANOVA) Test
    - 3.2.1.2 Two-way Analysis of Variance (ANOVA) Test
  - 3.2.2 Chi-Square ( $\chi^2$ ) Test
- References

## **4. Comparative Study in Public and Private Sector Banks**

**89-120**

- 4.1 Introduction to Public and Private Sector Banks
- 4.2 Comparative Study in SBI and HDFC Bank
  - 4.2.1 E-Banking Process and Features Comparison

4.2.2	HDFC Leads in E-Transactions and SBI in Value	
4.2.3	Mobile-Banking: Most Popular Bank and Service	
4.3	RBI's Role in Facilitating E-Commerce and Online Transactions in India	
	References	

**5. Conclusion 121-131**

5.1	Key Findings	
5.2	Conclusion	
5.3	Recommendations	
5.4	Scope for Future Study	

**• Bibliography and Webligraphy xiii**

**• Appendices**

A:	Questionnaire: A <sub>1</sub> Questionnaire for Customers	<b>xxx</b>
	A <sub>2</sub> Questionnaire for Bank Employees	<b>xxxv</b>
B:	Research Papers Published/Presented	<b>xxxix</b>
	B <sub>1</sub> List	
	B <sub>2</sub> Copy of Manuscripts	
C:	A Personal Profile of the Researcher	<b>xxxxi</b>