

# A Comparative Study of Customer Perception toward E-banking Services Provided By Selected Private & Public Sector Bank in India

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**Abstract-** The purpose of this paper is to determine the customer's perception toward the e-banking services. A total of number of customer taken for the study is 196. Analysis of variance technique is employed to study the significant relationship between the occupation and customer perception of e-banking services and significant relationship between the age and customer perception of e-banking services. The result of the study clearly shows that different age group of customer and different occupation group of customers have different perception toward the e-banking services. The results also propose that demographic factors impact significantly internet banking behaviour, specifically, occupation and age. Finally, this paper suggests that an understanding about the customer's perception regarding the e-banking services of public and private banks it will help to the banker to understand the customers need in better way.

**Index Terms-** ANOVA, Customer Perception, E- banking, Public and Private Bank

## I. INTRODUCTION

The fast advancing global information infrastructure including information technology and computer networks such as the Internet and telecommunications systems enable the development of electronic commerce at a global level. The nearly universal connectivity which the Internet offers has made it an invaluable business tool. These developments have created a new type of economy, which many call the 'digital economy'. This fast emerging economy is bringing with it rapidly changing technologies, increasing knowledge intensity in all areas of business, and creating virtual supply chains and new forms of businesses and service delivery channels such as E-banking. As a direct consequence of the emergence of the 'digital economy', the balance of power seems to be shifting to the customers. Customers are increasingly demanding more value, with goods customised to their exact needs, at less cost, and as quickly as possible. To meet these demands, businesses need to develop innovative ways of creating value which often require different enterprise architectures, different IT infrastructures and different way of thinking about doing business. (Shah, Mahmood and Clarke ,Steve ,2009). Information technology has been one of the powerful tools in the changes that have occurred in trade and economy. It is the use of computer hardware and computer software to store, convert, and process, retrieve, transmit and protect information. Technology has become more accessible, cheaper and easier to use, which has had a major impact on the world's trade and commerce. With the introduction of the Internet and the World Wide Web companies recognized IT as a tool to do business while consumers acknowledged it as not only an opportunity to purchase goods over the internet and services but also to obtain information. (Aronsohn et al, 2006). It has also changed the way of doing banking transaction. It creates new products, service market opportunities and better service output. Technology adoption by the banks has enabled the use of different technology tools in banking, which enable bank to reduce transaction cost, saving money and also save more time. It categorized as an electronic banking (Wandaogou ,Abdil Mumuni Moro and Jalulah ,Stephen Pambiin ,2011).

E-banking is referring to the deployment of banking services and products over electronic and communication networks directly to customers (Wandaogou ,Abdil Mumuni Moro and Jalulah ,Stephen Pambiin ,2011). It has emerged as a strategic resource for attaining efficiency, control operations, productivity, and profitability. It has changed the traditional way of banking transactions. Through the e-banking customer do not visit to the bank office in order to carry out banking transaction. For instance, customer are using automated teller machines (ATM) in place of cashier tellers, and credit cards and electronic cash in place of bank transactions (Alagheband,Parisa ,2006). It also allow customers to submit their applications for different services, make queries on their account balances and submit instructions to the bank and also electronically transfer funds to their accounts, pay bill, and conduct other banking transaction online (Afrouz, Firouzeh, 2006).It relies greatly on information and communication technology (ICT) to attain its promise for 24 hours availability and faster delivery of financial services.

E-banking is now a global phenomenon. It is a precious and influential tool for heavy development, supporting growth, promoting innovation and enhancing competitiveness. A physically powerful banking industry is an essential in every country and can have a major affect in supporting economic development through competent financial services. It has had huge impact on the banking industry. Banks require developing creative solutions of how to make full use of the new technology and how to provide their customers with high online service quality. When lacking face to face interaction banks must increase the experienced online service quality among customers in order to attain and sustain competitive advantages and customer relationships. (Aronsohn et al, 2006).

### A. Basics of Electronic Banking:

Electronic banking is a high-order construct, which consists of several distribution channels. It should be noted that electronic banking is a bigger platform than just banking via the Internet. The term electronic banking can be described in many ways. In a very simple form, it can mean the provision of information or services by a bank to its customers, via a computer, television, telephone, or mobile phone (Daniel, 1999). Electronic banking has different types of delivery channels: telephone, PC, mobile and the Internet. Moreover, Personal Computer allow customer to use all e-banking facility at home without go to the bank. It gives consumers a variety of services so they can move money between accounts, pay bills, check balances, and buy and sell mutual funds, securities and also submit electronic loan applications through PC Banking. A mobile banking service is the newest service in electronic banking Customers can check their balance and make adjustments between accounts, account transactions, payments etc. Internet is the interconnection of computer communication networks which enable the customer to perform all the banking activities over the internet. It is the latest wave in the information technology. The NET is changing everything, from the way of conduct commerce and the way of distribution of information. Several benefits of strong electronic service have also been identified as including satisfied and retained customers, attraction of new customers, development of customer relationships, increased sales and market shares, enhanced corporate image, reduced costs and increased profit margins and business performance (Parasuraman et al., 2005; Bauer et al., 2005). These benefits may explain the observed increase in the level of technology adoption in the delivery of banking services (Kalakota and Whinston, 1997; Bauer et al., 2005).

### *B. Conception of Internet Banking:*

The most general type of electronic banking in our times is banking via the Internet, in other words Internet banking. This type of banking allows consumers to check the balances in their accounts, transfer funds and order electronic bill payments. Internet banking systems allowing customers to apply for loans, trade stocks or mutual funds, and even view actual images of their checks or deposit slips. The services available for Internet banking vary from bank to bank. Nowadays the Internet is the main channel for electronic banking. Internet banking offers many benefits to banks and their customers (Karjaluto, 2002). The main benefits to banks are cost savings, reaching new segments of the population, efficiency, enhancement of the bank's reputation and better customer service and satisfaction (Jayawardhena and Foley, 2000). To customers Internet banking offers also new value. With the help of the Internet, banking is no longer bound to time or geography. Consumers all over the world have relatively easy access to their accounts 24 hours per day, seven days a week. It makes available to customers a full range of services including some services not offered at branches. Internet banking has the advantage that the customer avoids travelling to and from a bank branch. In this way, Internet banking saves time and money provides convenience and accessibility (Karjaluto, 2003). Customers can manage their banking affairs when they want, and they can enjoy more privacy while interacting with their bank. It has been claimed that Internet banking offers the customer more benefits at lower costs (Mols, 1998). Turban et al. (2000) indicated that Internet banking is extremely beneficial to customers because of the savings in costs, time and space it offers, its quick response to complaints, and its delivery of improved services, all of which benefits make for easier banking.

## II. LITERATURE REVIEW

Safeena et al (2010) determines the consumer's perspective on internet banking adoption. Finding shows that perceived usefulness, perceived ease of use, consumer awareness and perceived risk are the important determinants of online banking adoption and have strong and positive effect on customers to accept online banking system.

Uppal, R.K (2011) threw light on growth of information technology in various banks. The objective of this research is to analyze the extent of technological developments in various bank groups. Findings shows as compared to new private sector banks and foreign banks, in public sector banks very less IT has taken place. The maximum technology is taking place in new generation private sector banks and foreign.

Rao, K. Rama Mohana and Lakew, Tekeste Berhanu (2011) examines the service quality perceptions of customers of public sector and private sector banks in the city of Visakhapatnam, India. The author reveals that the Reliability and Assurance dimensions of service quality scored the highest ratings while the Tangibles dimension got the lowest score. Moreover, the study found a strong dissimilarity in service quality perceptions between customers of private sector and public sector banks.

Santhiyavalli, G. (2011) determined the customer's perception of service quality of the select branches of State Bank of India and study the major factors responsible for their satisfaction. In this research SERQUAL Model has been used and study indicates that among five dimensions 'Reliability', 'Responsiveness', 'Empathy' and 'Tangibility' are the major factors responsible for customer satisfaction.

Dharmalingam, S. And Kannan, K. V. (2011) evaluate the service quality in retail banking in the Tamil Nadu, based on different levels of customers' perception regarding service quality. Data are collected from Three Private Banks, ie. ICICI, AXIS and HDFC Bank. Sample size of this research is 240. The result indicates that customers' perception is highest in the tangibles area and lowest in the Product Variety area.

Bahl, Sarita, (2012) determined that security and privacy issues are the big issue in e-banking. If security and privacy issues resolved, the future of electronic banking can be very prosperous.

Rahman., et al (2012) determined that e-banking is still a new technology in Bangladesh.

Chibueze., et al (2013) shows that electronic banking has improved returns on the equity of Nigeria banks.

Kaur ,Jasveen and Kaur ,Baljit ,(2013) shows that there is no significant difference in facilities determining the customers’ usage of internet banking services of Public-sector, Private-sector and Foreign Banks in India.

### III. OBJECTIVES OF THE STUDY

The study aims at identifying the overall customer perception towards the e-banking services. The study also aims at knowing whether demographic variables of the customer have influence on customer satisfaction on e- Banking.

### IV. HYPOTHESES

The study is based on the following hypotheses.

There is no relationship between demographic variables of the respondents like Age, Occupation, and their perception regarding services of e-Banking.

**A. Hypothesis<sub>1</sub>:** There is no significant difference between Age of the customer and their perception toward the services of E-banking.

**B. Hypothesis<sub>2</sub>:** There is no significant difference between occupation of the customer and their perception toward the services of E-banking.

### V. RESEARCH METHODOLOGY

In a view to precede the research in a systematic way the following research methodology has been used. By means of obtaining detailed opinion of the customers, this research falls under the category of descriptive research. Both primary and secondary data collection was made. To collect the primary data Questionnaire is prepared. A pilot study was conducted to validate the reliability of the questionnaire. The questionnaire includes questions on demographic variable and the respondents were asked to rate their perception level of e-banking services on a five point Likert scale. The questionnaires were widely circulated to the customers of different banks (any customer who uses the e-banking services of any bank in Aligarh city - Sample respondents are selected using convenient sampling method) through direct method and also through email. About 250 questionnaires are being circulated and responses were received from 196 customers and 54 questionnaires were found to be incomplete. The secondary data is collected from magazines, journals, books and websites. Using the remaining 196 complete questionnaire the data is edited, coded and analyzed using SPSS 11.5 using the tests like ANOVA.

### V. LIMITATIONS OF THE STUDY

The study was conducted in Aligarh city and sample is very small hence the results cannot be generalized.

### VI. ANALYSIS AND INTERPRETATION

To analyze the two hypotheses, different demographic variables are considered. They are Age Group of the respondents and Occupation.

**A. Hypothesis<sub>1</sub>:** There is no significant difference between Age of the customer and their perception toward the services of E-banking.

**Table 1.1. Age Group and Perception of customer on e-banking services - Cross tabulation**

TOTAL	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Lower Bound
19	20	2.50	.607	.136	2.22	2.78
20-29	70	2.73	.635	.076	2.58	2.88
30-39	50	2.10	.763	.108	1.88	2.32
40-49	45	2.00	.739	.110	1.78	2.22
50-59	11	1.91	.831	.251	1.35	2.47

<b>Total</b>	196	2.33	.769	.055	2.22	2.44
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The above table depicts the relationship between the age and customer satisfaction on e-banking at 5% level of significance. Majority of the respondents belong to the age group of 20-29 have high level of perception regarding the e-banking services. Majority of respondents who are between the age group of 30-39 have medium level of perception regarding the e-banking services and majority of them who are between 40-49 have low level of perception and majority of them who are between 50-59 have very low level of perception regarding the services of e-banking

**Table:1.2 ANOVA Table**

TOTAL	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	21.192	4	5.298	10.736	.000
<b>Within Groups</b>	94.252	191	.493		
<b>Total</b>	115.444	195			

The above table depicts that the p value is .000 which is less than 0.05. So we reject the null hypothesis and accepted the alternative hypothesis. So there is significant relationship between age of the customers and their perception towards the services of e-banking performance.

**B. Hypothesis<sub>2</sub>:** There is no significant difference between occupation of the customer and their perception toward the services of E-banking.

**Table 2.1. Occupation and perception of customer on e-Banking services-Cross tabulation**

TOTAL	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Lower Bound
<b>SERVICE CLASS</b>	40	2.32	.829	.131	2.06	2.59
<b>BUSINESS CLASS</b>	49	2.14	.764	.109	1.92	2.36
<b>PROFESSIONAL</b>	55	2.13	.771	.104	1.92	2.34
<b>STUDENTS</b>	52	2.73	.564	.078	2.57	2.89
<b>Total</b>	196	2.33	.769	.055	2.22	2.44

The above table depicts the significant difference between the Occupation of the customer and customer perception on e-banking services. Majority of the respondents who are students have high level of perception, majority of service class customer have medium level of perception towards the services of e-banking and business class and professional customer have very low level of perception regarding the e-banking services.

**Table: 2.2 ANOVA Table**

TOTAL	Sum of Squares	Df	Mean Square	F	Sig.
<b>Between Groups</b>	12.329	3	4.110	7.652	.000
<b>Within Groups</b>	103.115	192	.537		
<b>Total</b>	115.444	195			

The above table depicts that the p value is .000 which is less than .05. So we reject the null hypothesis and accepted the alternative hypothesis. So there is significant difference between occupation of the customer and their perception on e-banking services.

## VII. RECOMMENDATIONS

Above analysis reveals that in private banks customers are happier as compare to public banks about the services of e-Banking. Different age group customers have different perception towards the e-banking services, Mainly the old age people are having the reluctance for using e-banking facilities, so importance to be given to those people and proper training on the usage of e-banking should be given to them and bankers have to adopt the right strategies to attract different age group and give more information about the e-banking services. Most of the customers prefer e-banking for quickness. So banks should try in all the ways that e-banking is working 24 hour round the clock and service is available to customers without any hassles. Online Customers are mainly concerned on safety issues so the banks should educate their customers on the safety use of their passwords and pin numbers and it should insist the customers that they should change the passwords and pin numbers frequently so no unauthorized fraudulent practices happen in the online banking.

## VIII. CONCLUSION

Thus, this study has analyzed the overall perception of customers regarding the services of e-banking. Age and occupation are the important demographic factors in the banks which have used to measure the perception of the customers on e-banking services. E-Banking will be successful for banks only when they have Commitment to e-Banking along with a deeper understanding of customer needs. This can come only when the bank has a very big base of customers, best people, and a service attitude. Banks should concentrate on above lines in order to have effective e-banking practices. The study concluded that different age group of customers have different perception toward the e-banking services and the usage level of these banks' customer is different so bank should concentrate on all the age group of customers for betterment of e-banking banks. It has also seen that different occupation group of customers have different perception toward the e-banking services. There are good number of customer in every group like student, service class, business class and professionals, it shows that they all are keen interesting in using the e-banking services.

## REFERENCES

1. Afrouz. Firouzeh, "Banks employees' perception toward implementation of e-banking in Iran :a comparative study among governmental and private banks", Ph.D thesis, Lulea University of Technology,2006
2. Alagheband. Parisa, "Adoption of electronic banking services by Iranian customers", PhD thesis ,Lulea University of Technology,2006
3. Aronsohn. et al, "E-banking and Service Quality Online", Ph.D thesis, Lunds universitet, Campus Helsingborg, 2006
4. Bahl.Sarita, "Emerging Challenges in E-Banking Upheavals in Global Scenario", RIJEB Volume 1, Issue 7(July) ISSN: 2277 – 1018, 2012
5. Bauer. et al, "Measuring the quality of e-banking portals. International Journal of Bank Marketing", Vol. 23 No. 2, 2005, pp. 153-75.
6. Chibueze. et al, "Electronic Banking and Bank Performance in Nigeria", West African Journal of Industrial & Academic Research Vol.est 6 No.1 March, 2013.
7. Daniel. E, "Provision of electronic banking in the UK and the Republic of Ireland", International Journal of Bank Marketing, Vol. 17 No. 2, 1999, pp. 72-82.
8. Dharmalingam. S. and Kannan. K. V, "Customer Perception on Service Quality of New Private Sector Banks in Tamilnadu - an Empirical Study", JBFSIR Volume 1, Issue 5, 2011.
9. Jayawardhena. C. and Foley. P, "Changes in the banking sector: the case of internet banking in the UK", Internet Research: Electronic Networking Applications and Policy, Vol. 10 No. 1, 2000, pp. 19-30.
10. Kalakota. R. and Winston. A.B, "Electronic Commerce: A Manager's Guide",Addison Wesley, 1997.
11. Karjaluoto. H. Mattila. M. and Pentto. T, "Factors underlying attitude formation towards online banking in Finland", International Journal of Bank Marketing, Vol. 20 No. 6, 2002, pp. 261-72.
12. Kaur. Jasveen and KaurBaljit, "Determining Internet Banking Service Quality & Customer Satisfaction in India shows", Tenth AIMS International Conference on Management, 2013.
13. Kavitha. S, "Influence of Demographic Variables on Customer Satisfaction Regarding E-Banking: An Empirical Investigation", Issues in Information Systems, Volume XII, No. 1, 2011, pp. 436-444.
14. Mols. Niels, "The Behavioural Consequences of PC banking. International Journal of Bank Marketing", 16, 5, 1998, pp. 195–201.
15. Nasri. Wadie, "Factors Influencing the Adoption of Internet Banking in Tunisia, International Journal of Business and Management", Vol. 6, No. 8; August 2011, www.ccsenet.org/ijbm
16. Rahman. et al, "Problems and Prospects of E-Banking in Bangladesh, International Journal of Scientific and Research Publications", Volume 2, Issue 7, July 2012 1 ISSN 2250-3153
17. Rao. K. Rama. Mohana and Lakew. Tekeste Berhanu, "Service Quality Perceptions of Customers: A Study of The Customers' of Public Sector and Private Sector Commercial Banks in India", International Journal of Research in Commerce & Management, Volume No. 2 (2011), Issue No. 11 (November)
18. Safeena. et al , "Customer Perspectives on E-business Value: Case Study on Internet Banking", JIBC, Vol. 15, No.1, April 2010
19. Santhiyavalli. G, "Customer's perception of service quality of State Bank of India - A Factor Analysis", IJMBS Vol. 1, Issue 3, September 2011
20. Shah. Mahmood and Clarke, Steve., E-Banking Management: Issues, Solutions, and Strategies, UK, IGI Global, 2009.
21. Turban, E., Lee, J., King, D., and Chung, H.M. Electronic Commerce: A Managerial Perspective. Prentice-Hall, Upper Saddle River, NJ,2000
22. Uppal, R.K, E-delivery channels in banks-A fresh outlook, Journal of Arts Science & Commerce ISSN 2229-4686, www.researchersworld.com Vol.– II, Issue –1,January 2011
23. Wandaogou ,Abdil Mumuni Moro and Jalulah ,Stephen Pambiin, Evaluation of Customer Satisfaction with Internet Banking Service Quality in the banking Industry in Ghana:A case study of Ghana Commercial Bank Ltd and Merchant Bank of Ghana Ltd, Master Thesis, Lulea University of Technology, pure.ltu.se/portal/files/33883934/LTUEX-33771234.pdf, 2011

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