

**INFLUENCE OF DEMOGRAPHIC VARIABLES ON CUSTOMER SATISFACTION  
REGARDING E-BANKING: AN EMPIRICAL INVESTIGATION**

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**ABSTRACT**

*Today banking industry has undergone a sea change. Bank employees need to provide quality information at the branch at his/her finger tips. It is also necessary that the information should be consistent with all branches and other direct access channels like ATM's. Phone Banking, Mobile banking and Net banking throughout the country. The banking industry should always adapt to the new technology today and basically make the necessary adjustments to gain competitive advantage with other competing banks. E-banking is one such technology and the bank which implement this technology in their organization can definitely survive in this era of intense competition. The main objective of this study is to identify the overall satisfaction of customer regarding the e-banking transactions. The study also aims at knowing whether demographic variables of the respondents have influence on customer satisfaction on E-banking.*

**Key Words: E-Banking, Customer Satisfaction, E-banking performance, Hypothesis**

**INTRODUCTION**

Today banking industry has undergone a sea change. The main work of Bank employees is to provide quality information (which is consistent with all branches and direct access channels like ATMs., Phone Banking, Mobile Banking and Net Banking) at the branch at his/her finger tips. **Online banking** (or **Internet banking**) allows customers to conduct financial transactions on a secure website operated by their bank. E-banking services are delivered to customers through the Internet and the web using Hypertext Markup Language (HTML). In order to use e-banking services, customers need Internet access and web browser software. One of the main concerns of e-banking is security. Without great confidence in security, customers are unwilling to use a public network, such as the Internet, to view their financial information online and conduct financial transactions. Some of the security threats include invasion of individuals' privacy and theft of confidential information. Banks with e-banking service offer several methods to ensure a high level of security. In India, there are less number of studies being conducted to identify how effectively all these online channels are used by banking industry. This study is an attempt to identify the overall satisfaction of customer regarding the e-banking transactions.

**REVIEW OF LITERATURE**

According to Divya Singhal and V. Padhmanabhan, Private Banks in India were the first to implement internet banking services in the banking industry. Private Banks, due to late entry into the industry, understood that the establishing network in remote corners of the country is a very difficult task. It was clear to them that the only way to stay connected to the customers at any place and at anytime is through internet applications. They took the internet applications as a weapon of competitive advantage to corner the great monoliths like State Bank of India, Indian Bank etc. Private Banks are pioneer in India to explore the versatility of internet applications in delivering services to customers. Joseph et al. (1999) investigated the influence of internet on the delivery of banking services. They found six underlying dimensions of e-banking service quality such as convenience and accuracy, feedback and complaint management, efficiency, queue management, accessibility and customization. According to a research report,( India Research, Kotak Securities, May 2000.) while in 2001, India's Internet user base was an estimated 9 lakhs, while only 1% of these Internet users utilized the Internet banking services in 1998, the Internet banking user base increased to 16.7% by mid- 2000. The current statistics show that hardly 10 per cent of Indian customers use the internet for banking. Among all the facilities provided, the maximum of them uses only for checking balance or requesting for a cheque book. Very few customers use the advance interactive services provided by the banks.

According to statistics provided by banks, 17 per cent of ICICI bank customers use the Internet for banking and 10 per cent of HDFC bank customers prefer it. The perception is formed as a result of interpreting the experience. There is a growing interest in understanding the users' experience (Hiltunen et al., 2002.); as it is observed as a larger concept than user satisfaction. From this perspective, assessing the user experience is essential for many technology products and services (Wilson & Sasse, 2004). TSUNG-HSIEN KUO in his article on *The antecedents of Customer relationship in E-Banking Industry* investigated (1) the effect of the bank customer's personal factors (gender, age, educational background) on their perception of their technology readiness (TR), customer relationship management (CRM) of the financial services and relationship quality (RQ) with the bank, and (2) the relationships among TR, CRM, and RQ. This was an empirical study of customers from 12 local banks (n = 713) in Taiwan. Results of his study showed that personal factors significantly influence TR and CRM. He also showed that TR has a significant impact on CRM and RQ, and CRM has significant influences on RQ.

Banking industry is a one which faces heavy competition due to the entry of foreign and private banks. To survive in the competitive world banks have to identify the right strategies by offering maximum satisfaction to customers. Hence, studying the user perspective of online banking may yield important results on what are the factors mainly affect the performance of e-banking and how the satisfaction of customers can be increased and to understand the important strategies that banks can adopt to survive.

## **OBJECTIVES OF THE STUDY**

The study aims at identifying the overall customer satisfaction regarding the e-banking transactions. The study also aims at knowing whether demographic variables of the respondents have influence on customer satisfaction on Internet Banking.

## **HYPOTHESIS**

The study is based on the following hypotheses.

There is no relationship between demographic variables of the respondents like Age, Sex, Educational qualification, Occupation, Type of Account and their satisfaction regarding performance of e-Banking.

## **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 study results revealed that the reliability value was above 0.7. Based on the pilot study changes were made into the questionnaire. The questionnaire includes questions on demographic variable and the respondents were asked to rate their satisfaction level of ebanking performance 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 coimbatore city - Sample respondents are selected using convenient sampling method) through direct method and also through email. About 200 questionnaires are being circulated and responses were received from 153 customers and 33 questionnaires were found to be incomplete. The secondary data is collected from magazines, journals, books and websites.

Using the remaining 120 complete questionnaire the data is edited, coded and analyzed using SPSS 11.5 using the different tests like Simple Percentage analysis, and ANOVA.

## **LIMITATIONS OF THE STUDY**

The study was conducted in Coimbatore city hence the results cannot be generalized.

ANALYSIS AND INTERPRETATION

To analyze the two hypotheses, different demographic variables are considered. They are Age Group of the respondents, Sex, Educational qualification, Occupation and Type of account. The distribution of respondents on the basis of above demographic variables is annexed as Annexure 1.

Cross Tabulation and ANOVA

Hypothesis 1:

There is no relationship between demographic variables of the respondents and their preference towards internet banking.

- 1. Age group and customer satisfaction on E-banking Performance

Hypothesis 1: There is no significant relationship between age group of the respondents and their satisfaction on e-banking performance

Table 1.1. Age Group and Satisfaction on e-banking performance - Cross tabulation

		Total score			Total
		Low (<27)	Medium (27-32)	High >32	
AGE	<25	1	1	3	5
	25-35	21	20	10	51
	35-45	9	20	13	42
	45-55	9	3	2	14
	>55	4	3	1	8
Total		44	47	29	120

Source: Questionnaire

Table 1.2. ANOVA Table

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.742	4	1.185	1.997	.01
Within Groups	68.250	115	.593		
Total	72.992	119			

Table 1.1 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 <25 has high level satisfaction regarding the ebanking operations. Majority of respondents who are between the age group of 25-35 have either low or medium level of satisfaction and majority of them who are between 35-45 have medium level of satisfaction and majority of them who are between 45-55 have low level and majority of who are above 55 years have low level of satisfaction regarding the performance of ebanking. The table 1.2 depicts that the pvalue is .01 which is less than 0.05. So we reject the null hypothesis. So there is significant relationship between age group of the respondents and their satisfaction on e-banking performance.

- 2. Sex and customer satisfaction on E-banking Performance

Hypothesis 2: There is no relationship between Sex of the respondents and their satisfaction on e-banking performance

**Table 2.1. Sex and Satisfaction on e-Banking Performance Cross tabulation**

		Total score			Total
		Low (<27)	Medium (27-32)	High >32	
Sex	Male	20	31	30	81
	Female	17	16	6	39
Total		37	47	36	120

Source: Questionnaire

**Table 2.2. ANOVA Table**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.329	1	4.329	7.439	.007
Within Groups	68.663	118	.582		
Total	72.992	119			

Table 2.1 depicts the relationship between the sex and customer satisfaction on e-banking. Majority of the male respondents have either medium or high level of satisfaction and majority of the female respondents have low or medium level of satisfaction regarding the performance of e-banking. Table 2.2 depicts that the pvalue is .007 which is less than .05. So we reject the null hypothesis. So there is a significant relationship between sex of the respondents and their satisfaction on e-banking performance.

3. Educational Qualification and customer satisfaction on E-banking Performance

Hypothesis 3: There is no relationship between Education qualification of the respondents and their satisfaction on e-banking performance

**Table 3.1. Educational Qualification and Satisfaction on e-Banking Performance Cross tabulation**

		Total score			Total
		Low (<27)	Medium (27-32)	High >32	
Educational Qualification	Graduation	15	20	17	52
	Post Graduation	12	21	12	45
	Professionals	7	2	3	12
	Others	3	4	4	11
	Total	37	47	36	120

Source: Questionnaire

**Table 3.2 ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.559	4	.890	1.474	.215
Within Groups	69.433	115	.604		
Total	72.992	119			

The table 3.1 depicts the relationship between the education and customer satisfaction on e-banking. Majority of the respondents who are graduates are having medium level of satisfaction, majority of respondents who are post graduates have medium level of satisfaction, majority of respondents who are professionals are having low level of satisfaction and majority of respondents who belong to others qualification have medium or high level of satisfaction regarding the performance of e-banking.

The table 3.2 depicts that the pvalue is .215 which is greater than .05. So we accept the null hypothesis. So there is no significant relationship between Educational Qualification of the respondents and their satisfaction on e-banking performance.

4. Occupation and customer satisfaction on E-banking Performance

Hypothesis 4: There is no relationship between Occupation of the respondents and their satisfaction on e-banking performance

**Table 4.1. Occupation and Satisfaction on e-Banking Performance  
Cross tabulation**

		Total score			Total
		Low (<27)	Medium (27-32)	High >32	
Occupation	Government Employee	4	3	0	7
	Private	3	1	2	6
	Business	13	13	19	45
	Professional	7	15	8	30
	Student	10	15	7	32
	Total	37	47	36	120

Source: Questionnaire

**Table 4.2 ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.559	4	.890	1.474	.215
Within Groups	69.433	115	.604		
Total	72.992	119			

Table 4.1 depicts the relationship between the Occupation and customer satisfaction on e-banking. Majority of the respondents who are government employees have low level of satisfaction, majority of private employees are also having low satisfaction, majority of business people are having high level of satisfaction and majority of students are having medium level of satisfaction regarding the performance of e-banking.

Table 4.2 depicts that the pvalue is .215 which is greater than .05. So we accept the null hypothesis. So there is no significant relationship between occupation of the respondents and their satisfaction on e-banking performance.

5. Type of account and customer satisfaction on E-banking Performance

Hypothesis 5: There is no relationship between Type of account of the respondents and their satisfaction on e-banking performance

**Table 5.1 Type of account \* Satisfaction on e-Banking Performance**  
**Cross tabulation**

		totalscore			Total
		Low (<27)	Medium (27-32)	High >32	
Account	Savings bank a/c	20	22	20	62
	Recurring deposit a/c	0	2	9	11
	Current account	17	23	7	47
	Total	37	47	36	120

Source: Questionnaire

**Table 5.2 ANOVA**

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9.483	2	4.741	8.735	.000
Within Groups	63.509	117	.543		
Total	72.992	119			

Source: Questionnaire

Table 5.1 depicts the relationship between the Type of account and customer satisfaction on e-banking. Majority of the respondents who are having savings account have medium level of satisfaction and majority of respondents who are having recurring deposit account have high level of satisfaction and majority of respondents who are having current account have medium level of satisfaction regarding the performance of e-banking.

Table 5.2 depicts that the pvalue is .000 which is less than .05. So we reject the null hypothesis. So there is significant relationship between type of account of the respondents and their satisfaction on e-banking performance.

**Percentage analysis**

**Table 6 showing respondents' opinion on Reasons for preferring Internet banking**

Opinion	No.of respondents	Percentage of Respondents
Convenience	15	12.5
Easy Accessibility	30	25.0
Quickness	40	33.3
Availability of information	23	19.2
Faster Response	12	10.0
<b>Total</b>	120	100

Source: Questionnaire

The above table shows that 33.3% of the respondents prefer E-Banking for Quickness, 25% prefer it for easy accessibility, 12.5% for Convenience, 19.2% for availability of information and 10% for faster response.

**Table 7 showing the respondents opinion on Easy Accessibility of online banking**

Opinion	No.of respondents	Percentage of Respondents
Highly Satisfied	29	24.2
Satisfied	48	40.0
Neutral	23	19.2
Dissatisfied	9	7.5
Highly Dissatisfied	11	9.2
Total	120	100

Source: Questionnaire

The above analysis reveals that 24.2% are highly satisfied, 40% are satisfied, 19.2% have a neutral opinion, 7.5% are dissatisfied and 9.2% are highly dissatisfied with regard to easy accessibility of online banking.

**Table 8 showing the respondents opinion on the Availability of information through online banking**

Opinion	No.of respondents	Percentage of Respondents
Highly Satisfied	16	13.3
Satisfied	28	23.3
Neutral	35	29.2
Dissatisfied	30	25.0
Highly Dissatisfied	11	9.2
Total	120	100

Source: Questionnaire

The analysis shows that 13.3% of the respondents are highly satisfied, 23.3% of them are satisfied, 29.2% have a neutral opinion, 25% are dissatisfied, 9.2% are highly dissatisfied with regard to the availability of information through online banking.

**Table 9 showing the respondents opinion on the performance of the online banking**

Opinion	No.of respondents	Percentage of Respondents
Highly Satisfied	16	13.3
Satisfied	28	23.3
Neutral	53	44.2
Dissatisfied	16	13.3
Highly Dissatisfied	7	5.8
Total	120	100

Source: Questionnaire

The analysis shows that 13.3% of respondents are highly satisfied, 23.3% are satisfied, 44.2% have a neutral opinion, 13.3% are dissatisfied and 5.8% are highly dissatisfied regarding the performance of online banking.

**Table 10 showing the opinion on user friendliness of online banking**

Opinion	No.of respondents	Percentage of Respondents
Highly Satisfied	21	17.5
Satisfied	28	23.3
Neutral	53	44.2
Dissatisfied	18	15.0
Highly Dissatisfied	0	0
Total	120	100

Source: Questionnaire

The analysis shows that the 17.5% of them are highly satisfied, 23.3% are satisfied, 44.2% are having neutral opinion, 15% are dissatisfied, and 0% are highly dissatisfied regarding user friendliness of e-banking products.

**Table 11 showing the customer preference in banking activists through internet**

Opinion	No.of respondents	Percentage of Respondents
Withdrawal of cash	16	13.3
Depositing cash	29	24.2
Transfer of Funds	57	47.5
Utility Services	13	10.8
Balance enquiry	5	4.2
Total	120	100

Source: Questionnaire

The analysis shows that 13.3% of the respondents prefer e-banking for withdrawal of cash, 24.2% for depositing cash, 47.5% for transfer of funds, 10.8% of utility services, 4.2% for balance enquiry.

**Table 12 showing the opinion regarding the security factors available in e-banking**

Opinion	No.of respondents	Percentage of Respondents
Highly Satisfied	29	24.2
Satisfied	33	27.5
Neutral	41	34.2
Dissatisfied	14	11.7
Highly Dissatisfied	3	2.5
Total	120	100

Source: Questionnaire

The above table shows the satisfaction level in the security provided in online banking transactions. 24.2% of them are highly satisfied, 27.5% of them are satisfied, 34.2% are having a neutral opinion, 11.7% of them are dissatisfied and 2.5% of them are highly dissatisfied regarding the same.

**Table 13 showing respondents opinion on promptness of banking services**

Option	No. of respondent	Percentage
Yes	107	89.2
No	13	10.8
Total	120	100

Source: Questionnaire

Table 13 shows that 89.2% of respondents are accepted that bank offers promptness in their services and 10.8% have a negative opinion on this.

### **RECOMMENDATIONS**

Above analysis reveals that in general bank customers are happy about the performance of e-Banking. Age and sex is having main relationship with the satisfaction of customers on online banking. So bankers have to adopt the right strategies to attract and different age group and different sex customers. 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. The current account holders have less satisfaction regarding the e-banking,



these are the people who use banking services daily, so banks have to concentrate on these people in order to satisfy them and to offer the fullest services to them. 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.

### CONCLUSION

Thus, this study has analyzed the overall satisfaction of customers regarding the performance of e-banking. Age, Sex, Type of account and amount they maintain in the bank are the important demographic factors which have major impact on the satisfaction of the customers on e-banking. Bankers have to adopt the right strategies to attract and different age group and different sex customers so as to retain the customers and to offer better services to them. 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

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