
A Study on Awareness, Utilization and Barriers towards E-Banking in East Delhi, India

Komal Kaur¹, Nabin Subedi², Kajal Chaudhary³, Shraddha Parajuli⁴

¹Department of Business Management, Eternal University, Himachal Pradesh, India

²Department of Business Management, Eternal University, Himachal Pradesh, India

³Department of Business Management, Eternal University, Himachal Pradesh, India

⁴Department of Public Health and Hospital Management, Eternal University, Himachal Pradesh, India

Abstract:- E-banking is the electronic banking that provides the financial service for the individual client by means of Internet. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. A cross-sectional descriptive study was conducted with the aim of assessing awareness, level of utilization and explores barriers towards e banking among 200 bank customers in East Delhi, India by using face-to-face interview technique. Data was entered and analyzed with the help of SPSS version 20. Mean age of respondents was 34.46+13.44. Most (93.5%) were aware about the term e-banking whereas 87.2% were about the services of e-banking. 70.1% have utilized e-banking services and most of them have used 4 times per month. The topmost used services were ATM, online shopping, money transfer, credit card and SMS banking. SBI is among the top most choice of customers for using e-banking services. Most (64.1%) customers faced barriers to utilize e-banking services. Age ($p=0.000$) and education ($p<0.000$) of respondents were highly statistically significant with the awareness about the term e banking. Similarly, Age ($p=0.008$), education ($p=0.000$) and occupation were statistically significant with the utilization of e-banking services.

Keywords: Aware, Utilize, E-banking, Services, Barriers.

1. INTRODUCTION

E-banking is the electronic way of doing banking that provides its wide range of financial service for their client by means of Internet. E-banking includes those systems that enable financial institution clients whether individuals or businesses, to access there accounts, business transactions, or obtain various information on financial products and services through private of public network, including the Internet. Customer's access e-banking services using an intelligent electronic device, such as a personal computer (PC) like a (laptop, palmtop and desktop computer), personal digital assistant (PDA), automated teller machine (ATM), or Touch Tone telephone.

Internet banking is the term used for new age banking system. Internet banking is also called as online banking and it is an outgrowth of PC banking. Internet banking uses the internet as the delivery channel to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages and purchasing financial instruments and certificates of deposits (Haque, Ismail and Daraz 2009).

Banking through electronic channels has gained much popularity in recent years. This system, popularly known as 'e-banking', provides faster delivery of banking services to a wide range of customers. Information technology is becoming an important factor in the future development of financial services, and especially in banking industry (Arora and singh 2009).

Studies have also revealed the disparity in adoption of Internet banking between developed and developing countries. (Bughin, 2004) found approximately two-thirds of the variance (64%) explained for Internet banking (IB) adoption is linked to country level Internet utilization. According to (Trudeau, 2009) The state of online banking, Canada is one of the world's leaders in internet banking with 65 percent of its population being internet banking users, followed by the Netherlands (61%). The percentage of Internet banking users in United Kingdom and in the United States was 52% and 45% respectively.

1.1 Rationale or need of the study

Recent advances in electronic service technology have created great opportunities as well as threats to organizations in various business and services sectors. The banking industry has been undergoing changes since the mid 1990s, in the form of innovative use of information technology and development in electronic commerce. The computer networks have helped to automate the funds transfer, contributing to more efficient systems of payments. All these developments in banking sector in recent years have given birth to a new concept called E-Banking (Electronic Banking). In recent time E-banking has spread rapidly all over the globe. General consumers have been significantly affected in a positive manner by E-banking. Customers have started perceiving the services of bank through Internet as a prime attractive feature than any other prime product features of the bank.

Internet banking is a worthwhile topic of study as it is the rapidly emerging and expanding field of banking industry and through such studies the quality of services in Internet banking sector can be enhanced in the future. Also many studies have focused on the specific service components of e banking rather than on the field of overall e banking among the customers.

This study can provide a practical understanding of Internet banking among the bank customers and also will identify the awareness of Internet banking among the customers. From a practical standpoint, the study can provide banks with a better understanding of the determinants of internet banking acceptance and be able to address and review their internet banking strategies, website features, and online security features. This study will also explore the factors, which acts as barriers among customers for accepting and using e banking.

2. REVIEW OF LITERATURE

A literature review is an evaluative report of information found in the literature related to our selected area of our study. The review describes, summarizes, evaluate and clarify the extracted literature. It gives a theoretical base for the research and help us determine the nature of our research. The title of the study was selected after continuous review of related literature along with the discussion between professors, teachers and colleagues. Literature search was done in every step of the thesis. The related information was obtained and extracted from different sources such as the sites of World Bank, World statistics as well as from the national and international journal articles through Google scholar and Google.

M. Esther Krupa & R. Rajasekaran (2015) conducted a Study on *“Customer Awareness Towards E-Banking Services in Coimbatore City to identify the customer level of awareness towards e-banking services”*. This study reveals that the demographic conditions of the customers are very important in creating the awareness level among the customers of the Coimbatore city. The study has shown that people in generally are aware of the concept of Electronic Banking. As e- banking is still relatively new in India, the intention to use e- banking is still very limited. The finding reveals that people know about the services but still many are not aware of all the services and do not use them. Banks should ensure that electronic banking is safe and secure for financial transaction like as traditional banking. Therefore the banks should make some potential strategies to create awareness of all e-banking services.

A study on *“Awareness and Knowledge of Internet Banking Services Among the Customers Of Private and Public Sector Banks in Hubli City”* conducted by **Mahesh Bendigeri (2014)** shows that 21% of customers are fully aware of Internet Banking Services provided by their bank, where as 63% of them are partially aware and 16% are unaware of Internet Banking service. Out of 16 customers being unaware of Internet Banking Services 69% of them says lack of access to the information and 31% says due to education background they are unaware on the usage of Internet banking services.

A study by **Imola Driga and Claudia Isac (2014)** on *“E-banking services – Features, Challenges and Benefits.” According to a Global Consumer Banking Survey (2014)*, the Internet is the preferred banking method for 55% of respondents globally for paying bills or making transfer. Although branch and the Internet still remain the most important channels, the growing importance of the mobile channel is undeniable due to the rise of software solutions that allow users to embrace mobile banking.

The findings by **Neha Dixit (2010)** on *“Acceptance of E-banking among Adult Customers: An Empirical Investigation in India”* depicts that many factors like security & privacy, trust, innovativeness, familiarity,

awareness level increase the acceptance of e-banking services among Indian customers. The finding shows that in spite of their security and privacy concern, adult customers are willing to adopt online banking if banks provided necessary guidance. Based on the results of current study, Banks' managers would segment the market on the basis of age group, take their opinion and will provide them necessary guidance regarding use of online banking.

Jyoti Raj Khatri and Kshitij Upadhyaya Dhungel (2013) conducted a study on "*Internet banking in Nepal: use and challenges*" study was done among 60 respondents. Around 85% of respondents have heard about Internet banking out of which 69% were male respondents. Among those who have not heard about Internet banking most of them were housewives (44.4%). Among the respondents who have heard on e-banking; 47% have heard from media (television, radio, newspaper), 41% were know from the bank itself and 10% got information from other users of internet banking. 65% know that there bank provide the Internet banking facilities. Less than 2% said that their bank does not provide e-banking services. Around 38% were found not using Internet banking. The main reasons for non-utilization were: lack of information on Internet banking (74%), familiarity about the online banking technology (66%), electricity problem (63%) and irregular banking activities.

Al-Smadi (2012) conducted a study entitled "*Factors Affecting Adoption of Electronic Banking: An Analysis of the Perspectives of Banks' Customers*" which was conducted among 387 random banking customers. The private sector employees were more likely to adopt e-banking services than both public employee and students. Although the results show that 270 (69.8%) of the respondents were using electronic banking services. ATM service achieved the highest usage by responders rather than other e-banking services. In addition, the results show that credit cards are used more than other services (95 or 35.2%), such as internet banking (38 or 14%) and phone banking (28 or 10.4%). Perceived risk has the stronger impact on customers' attitude, which in turn influences customers' intention to use electronic banking services.

3. OBJECTIVE OF THE STUDY

- To assess the awareness about e banking among customers.
- To determine the level of utilization of e-banking services among the customers.
- To examine the factors that creates barriers for using e-banking services

4. RESEARCH METHODOLOGY

4.1 Study Design

Descriptive cross sectional study design was used to fulfill the objectives.

4.2 Study Area

Study was conducted in East Delhi India.

4.3 Study Population

Study populations were all those customers who are holding a bank account.

4.4 Sampling Techniques

Bank customers were included with the main motive of collecting information about e- banking. So, this was a convenience sampling.

4.5 Sample Size

200 bank customers were included in this study taking representative 1/3rd of total samples from each subdivisions of East Delhi.

4.6 Data Collection Tools and Technique

Semi-structured interview schedule form was used for face-to-face interview of the participants

4.7 Validity and Reliability

The questionnaire was constructed by doing extensive review of related literature and by taking reference of various research papers. Experts' opinion was also incorporated in every aspect of the study.

4.8 Statistical Analysis

Data entry and analysis was done in SPSS version 20.0. Descriptive and inferential statistics was used to describe the demographic characteristics of the sample population. In order to test the statistical significance of cross-tabulated data, non-parametric chi-square test was applied.

5. RESULTS AND DISCUSSION

5.1 Socio-demographic information of respondents

Table 5.1: Socio-demographic profile of the respondents

S.N	Socio-demographic characteristics	Frequency (n=200)	Percentage (%)
1.	Age Groups (Years)		
	15-24	51	25.5
	25-34	73	36.5
	35-44	29	14.5
	45-54	25	12.5
	55-64	14	7.0
	65-74	8	4.0
Mean age of respondents= 34.46± 13.44 years			
2.	Gender		
	Male	122	61
	Female	78	39
3.	Educational status		
	Primary	24	12
	Senior primary	44	22
	Secondary	8	4
	Graduation	75	37.5
	Post graduation and above	49	24.5
4.	Marital status		
	Married	108	54
	Unmarried	76	38
	Divorced	4	2
	Widow	12	6
5.	Occupation		
	Business	39	19.5
	Government services	23	11.5
	Private Services	75	37.5
	Housewives	30	15
	Students	27	13.5
	Retired	6	3
6.	Types of Families		
	Nuclear	103	51.5
	Joint	97	48.5
7.	Monthly Family Income		
	<20000	51	35.7
	20000-100000	83	58
	100000-200000	3	2.1
	200000-300000	2	1.4
	300000-400000	1	0.7
	>500000	3	2.1

Source: primary probe

Table 5.1 shows that majority, 36.5% of the respondents were within the age of 25- 34 years. Whereas, majority (61%) of the respondents were male, more than half (54%) of the respondents were married. most (37.5%) of the respondents were graduated, majority of the respondents (38%) are unmarried Above mentioned table also shows

that majority (37.5%) of the respondents were engaged in private services. more than half of the respondents (51.5%) have nuclear family. Majority (58%) of respondents had their monthly income within the range of Rs.20000 to 100000.

5.2 Awareness of respondents regarding e banking

Table 5.2: Awareness of respondents regarding e banking

S.N	Awareness about the term	Frequency (n=200)	Percentage (%)
1.	Yes	187	93.5
2	No	13	6.5

Source: primary probe

Table 5.2 shows that most (93.5%) of the respondents had heard about e banking and 6.5 % hadn't heard about e banking.

Table 5.3: Aware about services provided through e banking

S.N	Awareness about services provided	Frequency (n=187)	Percentage (%)
1.	Yes	163	87.2
2	No	24	12.8

Source: primary probe

Table 5.3 reveals that among those who had heard about e banking, majority (87.2%) were aware about the services provided through e-banking and only 12.8% were not aware.

On the other hand, the study by (kursange and Shende, 2014) shows that 35% customers were not aware of these services that is contrary to this study. Likewise, in the study conducted by Sharma, (2011) awareness in Indian customers regarding use of e-banking services is relatively low. This study was conducted in the capital city of India East Delhi whereas Sharma conducted the study on northern region of India. East Delhi India is ranked ahead in terms of educational status of people and also is far better in the development and adoption of new technology than in northern India.

Similarly, the study Gbadeyan, R.A. &AkinyosoyeGbonda, O.O. (2011) also revealed that 9% are not aware of the e banking services provided by their banks.

Likewise, conducted by Mahesh Bendigeri (2014) shows that 21% of customers were fully aware of Internet Banking Services provided through banks.

Table 5.4: If aware about e-banking services, awareness about different services provided through e banking

S.N.	Services provided	Frequency (n)	*Percentage (%)
1.	ATM	115	71.4
2.	Credit card	92	57.1
3.	Fund transfer	73	45.3
4.	Debit card	64	39.8
5.	Online shopping	54	33.5
6.	Online payroll payment	19	11.8
7.	SMS banking	8	5.0
8.	Smart card	7	4.3
9.	Mobile banking	7	4.3
10.	Interbank e-transaction	4	2.5

*multiple responses

Source: primary probe

Table 5.4 shows that among those who were aware about the services, majority (71.4%) mentioned ATM, 57.1% mentioned credit card followed by 45.3%, 39.8%, 33.5%, 11.8%, 5.0%, 4.3% & 2.5% mentioned fund transfer, debit

card, online shopping, online payroll payment, SMS banking, mobile banking and interbank e-transaction respectively.

5.3 Utilization related information of respondents

Table 5.5: *Use of e banking*

S.N	Use of e banking	Frequency (n=187)	Percentage (%)
1.	Yes	131	70.1
2	No	56	29.9

Source: *primary probe*

Table 5.5 shows that maximum (70.1%) used e banking whereas 29.9% did not. The study by Divya Singhal and V. Padhmanabhan (2008) states that (72%) respondents were Internet banking users' whereas 28% were non-users. Another similar study by Al-Smadi (2012) show that 270 (69.8%) of the respondents were using electronic banking services. A survey by Rajesh K Srivastava (2007) found that 57% didn't use Internet banking services.

Table 5.6: *Frequency of e banking use per month*

S.N	Frequency of e banking use per month	Percentage (%)
1.	Once	6.1
2.	Twice	16
3.	Thrice	26.7
4.	Fourth	49.6
5.	More than four	1.5

Source: *primary probe*

Table 5.6 shows that almost half (49.6%) respondents used e-banking four times a month followed by 26.7%, 16%, 6.1% used three times, two times and only once in a month respectively. Only few (1.5%) used the services more than four times a month.

This contrast with the findings by P.K. Gupta and Jamia Millia Islamia (2008) which states that 56.5% use Internet banking 1-5 times a month whereas 31.5% are using e-banking 6-10 times a month.

5.4 Barriers faced while using e-banking

Table 5.7: *Barriers faced while using e-banking*

S.N	Barriers faced while using e-banking	Frequency (n=131)	Percentage (%)
1.	Yes	84	64.1
2	No	47	35.9

Source: *primary probe*

Table 5.7 shows that among those who used e-banking facilities, most (64.1%) faced some difficulties or barriers whereas 35.9% did not felt any barriers till date.

Table 5.8: *Different barriers while utilizing e-banking facilities*

S.N.	Barriers	Frequency (n)	*Percentage (%)
1.	Server down	43	50.6
2.	Privacy concern	20	23.5
3.	Non-reliability	16	18.8
4.	Cost	13	15.3
5.	ATM dysfunctional	11	12.9
6.	No ATM booths everywhere	8	9.4
7.	Account hacking	5	5.9
8.	Long formalities	4	4.7

*multiple responses

Source: *primary probe*

Table 5.8 shows that among those who faced barriers, maximum (50.6%) reported server down followed by 23.5%, 18.8%, 15.3%, 12.9%, 9.4%, 5.9% and 4.7% reported privacy concern, non-reliability of services, cost of use, ATM dysfunctional, non-availability of ATM booths, account hacking and long formalities respectively.

The study by Gbadeyan, R.A. & Akinyosoye Gbonda, O.O. (2011) identified the expected associated risks of e-banking identified by the respondents from the study are: cyber fraud (25%); cyber theft (20%); security concerns (12.5%); risk of hackers (9%); leaked customer information (6.5%); making closed system open up (5%); third party intervention (4.7%); transaction process (4.3%) and wrong information/code from sender (4%) and others such as card retrieval problem, delay due to wrong codes, unreliable power supply, slow Internet connectivity, system failure/error and lack of knowledge (9%).

5.5 Association of utilization and awareness with socio-demographic variables

Table 5.9: Association of Socio-demographic variables with aware about term e-banking

Variables		Aware about term e-banking				Test of significance (χ^2)	Fishers value	p-value
		Yes n=187 (93.5%)		No n=13 (6.5%)				
		n	%	n	%			
Age groups	15-24	51	100	0	0.0	-	23.357	0.000**
	25-34	72	98.6	1	1.4			
	35-44	26	89.7	3	10.3			
	45-54	21	84.0	4	16.0			
	55-64	9	64.3	5	35.7			
	65-74	8	100	0	0.0			
Gender	Female	117	95.9	5	4.1	2.969	-	0.085
	Male	70	89.7	8	10.3			
Education	Upto secondary	65	85.5	11	14.5	-	12.824	0.000**
	Above secondary	122	98.4	2	1.6			
Occupation	Employed	130	94.9	7	5.1	1.384	-	0.239
	Unemployed	57	90.5	6	9.5			
Religion	Sikh	64	94.1	4	5.9	-	2.349	0.444
	Hindu	90	90.9	9	9.1			
	Christian	8	100	0	0.0			
	Muslim	25	100	0	0.0			
Type of Family	Nuclear	94	91.3	9	8.7	-	1.750	0.254
	Joint	93	95.9	4	4.1			

** Statistically significant

Source: *primary probe*

Table 5.9 reveals that there was no statistically significant relationship among aware about the term e banking with the gender, occupation, religion and type of family of respondents (p value >0.05). However statistical significance was observed with age groups and educational status of respondents (p value <0.05). This signifies that with the increasing age the likelihood of respondents to hear about the term e banking decreased. And those who were highly educated that is educated above secondary level had heard about term e banking than those educated only up to secondary level.

Table 5.10: Association of Socio-demographic variables with use of e banking

Variables		Use e-banking				Test of significance (χ^2)	Fishers value	p-value
		Yes n=131 (70.1%)		No n=56 (29.9%)				
		n	%	n	%			
Age groups	15-24	38	74.5	13	25.5	-	15.001	0.008**
	25-34	57	79.2	15	20.8			

	35-44	19	73.1	7	26.9			
	45-54	9	42.9	12	57.1			
	55-64	5	55.6	4	44.4			
	65-74	3	37.5	5	62.5			
Gender	Female	86	73.5	31	26.5	1.77	-	0.183
	Male	45	64.3	25	35.7			
Education	Up to secondary	26	40	39	60	42.89	-	0.000**
	Above secondary	105	86.1	17	13.9			
Occupation	Employed	97	74.6	33	25.4	4.231	-	0.04**
	Unemployed	34	59.6	23	40.4			
Religion	Sikh	48	75.0	16	25.0	-	2.632	0.446
	Hindu	60	66.7	30	33.3			
	Christian	7	87.5	1	12.5			
	Muslim	16	64.0	9	36.0			
Type of Family	Nuclear	62	66.0	32	34.0	1.512	-	0.219
	Joint	69	74.2	24	25.8			

** statistically significant

Source: *primary probe*

Table 5.10 shows that utilization of e banking was statistically significant with age groups, education and occupation of respondents ($p < 0.05$). This signifies that with the increasing age of respondents, utilization of e banking decreased and those who were highly educated utilized e-banking services than those who were less educated. The respondents who were employed in some sectors were utilizing the services than those who were not employed in any sectors. However, no statistical association was observed with gender, religion and type of family of respondents ($p > 0.05$).

6. CONCLUSION AND SUGGESTIONS

6.1 Conclusion

Customers were aware about the term e banking although they were not known about the specific services provided under e banking. Satisfactory evidence was obtained regarding the utilization of e-banking services. ATM was the most popular as well as preferred e-banking transaction among the customers followed by online shopping, money transfer, credit card, SMS banking etc. SBI, ICICI and HDFC were the leading banks providing e-banking services to the clients. Most of the customers faced the problem of server down while using e-banking facilities. Awareness about the term e banking and utilization of e banking were statistically significant with the age and educational status of respondents ($p < 0.05$).

6.2 Suggestions

On the basis of findings it is recommended that-

- E-banking services should try to launch more cost-effective schemes through better marketing and innovative measures.
- E-banking system should be made more flexible regarding the formalities so that users feel convenience in regular use of e-banking services.
- Need to establish more ATM booths with sufficient fund.
- E-banking service should be resolve the network problem very quickly that the customer face during transaction.

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AUTHORS' BIOGRAPHY

Ms. Komal Kaur had received BSc economics degree from Eternal University, Baru Sahib, Himachal Pradesh, India. Presently a MBA scholar at Eternal University, Baru Sahib, Himachal Pradesh, India. Area of specialization is finance.

Mr. Nabin Subedi had received BBA degree from Janapriya Multiple Campus Pokhara, Nepal. Presently a MBA scholar at Eternal University, Baru Sahib, Himachal Pradesh, India. Area of specialization is finance.

Dr. Kajal Chaudhary had received (Ph.D) from Chaudhary Charan Singh University, Meerut, Uttar Pradesh, India. Presently working as an Assistant Professor at Eternal University, Baru Sahib, Himachal Pradesh, India. she has 12 years of academic experience. Her area of interest is finance.

Ms. Shraddha parajuli had received BPH degree from la grandee collage, pokhara, Nepal. Presently a student of MPH (Masters of Public Health) at Eternal University, Baru Sahib, Himachal Pradesh, India.