

Level of Availability of E-Banking Facilities in Public and Private Sector Banks in India

Dr. Mahesh Chand Garg
Professor,

Haryana School of Business, Guru Jambheshwar University of Science & Technology, Hisar,
Haryana, India

Email: mc_garg@yahoo.com

Parveen Kumar
Research Scholar,

Haryana School of Business, Guru Jambheshwar University of Science & Technology, Hisar,
Haryana, India

Email: parveenbharat86@gmail.com

Article Info

Volume 83

Page Number: 7903 - 7910

Publication Issue:

May-June 2020

Article History

Article Received: 19 November 2019

Revised: 27 January 2020

Accepted: 24 February 2020

Publication: 18 May 2020

Abstract:

This paper examines the level of availability of e-banking facilities in public and private sector banks in India. It was based on descriptive survey designs. For this study, a sample of top 10 public and top 10 private scheduled commercial banks has been taken from three selected city of NCR. These banks were selected on the basis of maximum profitability in India. One manager from each sample bank in each sample city was selected. A survey has been used to collect primary data and 60 questionnaires were used in final analysis. Data were analysed using SPSS 21 through Descriptive statistics. The study found that electronic-banking facilities are higher in private sector banks than public sector banks. It means that private sector banks have better adoption of electronic banking channels.

Keywords: e-banking, Indian Banking, Informational Technology

1. Introduction:

Information Technology in the form of e-banking plays a significant role in providing better services at lower cost. Several innovative IT based services such as Online Banking, ATM/Debit Cards, Credit Cards, Forex Cards, Electronic Wallets, Prepaid Cards, UPI App., Mobile Banking, SMS Alerts / Email Alerts, Cash Deposit Machine (CDM), Passbook Updating Machine (PUM), Electronic Cheque Deposit Machine, Electronic Fund Transfer (EFT), Electronic Clearing System (ECS), and Real Time Gross Settlement System (RTGS) have provided number of convenient services to the

customer. **Sharma and Kansal (2014)** studied information technology and communication network system adoption in banking system. They concluded that e-banking play dominant role to change the operating environment of banks extremely. The purpose of research is to investigate the level of availability of e-banking facilities and addition to compare the level of availability of e-banking facilities in public and private sector banks in India.

2. Literature Review:

Tan & Teo (1998) explored technology innovation in Asia by examining the

factors influencing the adoption and non-adoption of the Internet in various sectors like finance, banking, insurance, manufacturing and others firms in Singapore. **Agboola (2007)** evaluated the response of Nigerian banks to the adoption of Information and Communication Technology and concluded that technology is the main driving force of competition in the banking industry. Adoption of e-banking facilities has influenced the service quality of banking operations. **Alam et al. (2007)** examined the development and prospects of electronic banking in Bangladesh. They concluded that Bangladesh banks are still unwilling to use internet base banking activities. **Al-Hajri (2008)** studied to know the adoption pattern of e-banking in Oman explored the enablers and inhibitors for the adoption by the banks. **Baloch et al. (2012)** investigated the impact of Information Technology towards the E-Banking Usefulness, Ease of Use and customer satisfaction in Pakistan banking industry. This study suggested to policy makers of Pakistan banking sector for considering information technology usage, ease of usefulness and Ease of Use in E-Banking operations in the context of customer satisfaction. **Kaur (2012)** discussed about adoption of information technology in banks and examined the impact of information technology on operational activities of banks, operational efficiency of employees and explained with the level of satisfaction among the customers and employees. This study concluded that information technology based electronic banking has made a larger impact on the operational activities and services of the banks. **Saraswat and Jadhav (2013)** described the impact of information technology on banking industry. This study described that the information technology enabled banking gives emphasis on virtual banking rather than physical bank branches. **Safari and Yu (2014)** examined various ways of

online banking services with the evolution of e-banking in Iranian banks and made an attempt to measure the technical efficiency levels of Iranian banks and to investigate the degree of factors influence on the efficiency in these banks. Results of the study maintain their position in electronic banking and also, they have shown the technical efficiency average of Iranian can reduce costs, and technical efficiency of privately-owned banks in Iran is higher than publicly- owned banks. **Ringim et al. (2015)** found that relationship between IT capability and organization performance have been established and IT capability is significantly related to organization performance of banks based on resource-based view of organization performance. **Sindwani and Goel (2015)** concluded that e-banking channels-based service quality index will be helpful for bank managers to make decisions related to various aspects of automated banking including future investments which ultimately will result in better quality, higher customer satisfaction, loyalty and profitability.

3. Research Methodology:

The objective of study is to examine the level of availability of e-banking facilities among branches of the all selected banks and also compare the level of availability of e-banking facilities in public and private sector banks in India. This study examined the availability of e-banking service with three variables (Ownership, Locality, Experience in e-banking). For this study, a sample of top 10 public and top 10 private scheduled commercial banks has been taken from three selected city of NCR. These banks were selected on the basis of maximum profitability in India. One manager from each sample bank in each sample city was selected. A Descriptive survey has been used to collect primary data and 60 questionnaires were used in final analysis. Data were analysed using SPSS 21 through Descriptive statistics (Mean and S.D.), t-test and F- test.

4. Analysis Results:

Electronic banking services as per level of availability has been examined among branches of the all selected banks in national capital region of India. It ranges from ‘not available’ to ‘available at all branches’. It is assumed that banks have

fully adopted the electronic banking facilities if available at all branches of the bank. Whereas, it is partially adopted the electronic banking facilities if not available at all branches of the bank and the range signifies the level of availability of e-banking services.

Table-1: Level of availability of e-banking services among branches of the banks
Number of selected banks (20)

Services		Not available	Available at some branches	Available at most branches	Available at All branches
Online Banking	Public	-	-	-	10
	Private	-	-	-	10
	Total	-	-	-	20
ATM / Debit Cards	Public	-	-	-	10
	Private	-	-	-	10
	Total	-	-	-	20
Credit Cards	Public	-	-	3	7
	Private	-	-	-	10
	Total	-	-	3	17
Forex Cards	Public	1	6	3	-
	Private	-	2	3	5
	Total	1	8	6	5
E-Wallet	Public	-	-	-	10
	Private	-	-	-	10
	Total	-	-	-	20
Prepaid Cards	Public	-	1	7	2
	Private	-	-	1	9
	Total	-	1	8	11
<i>Linked with UPI App</i>	Public	-	-	-	10
	Private	-	-	-	10
	Total	-	-	-	20
Mobile Banking	Public	-	-	-	10
	Private	-	-	-	10
	Total	-	-	-	20
SMS Alerts / Email Alerts	Public	-	-	-	10
	Private	-	-	-	10
	Total	-	-	-	20
Cash Deposit Machine (CDM)	Public	-	5	3	2
	Private	-	3	6	1
	Total	-	8	9	3
Passbook Updating Machine (PUM)	Public	-	7	3	-
	Private	1	6	3	-

	Total	1	13	6	-
Electronic Cheque Deposit Machine	Public	5	5	-	-
	Private	8	2	-	-
	Total	13	7	-	-
Electronic Fund Transfer (EFT/NEFT)	Public	-	-	1	9
	Private	-	-	-	10
	Total	-	-	1	19
Electronic Clearing System (ECS)	Public	-	-	1	9
	Private	-	-	-	10
	Total	-	-	1	19
Real Time Gross Settlement System (RTGS)	Public	-	-	1	9
	Private	-	-	-	10
	Total	-	-	1	19

Source: Primary Data

Table 1 shows the Level of availability of e-banking services among branches of each of the selected banks. All selected public and private banks are offering online banking, mobile banking and debit cards facilities to their customers. Credit cards facilities are available at all branches of selected private banks. Credit cards facility is higher in selected private sector banks than selected public sector banks. One bank (5% of selected banks) is not offering forex cards. 8 banks (40% of selected banks) offer forex cards at some branches, 6 banks (30% of selected banks) offer at most branches and 5 banks (25% of selected banks) offer at all branches. Forex cards facility also higher in selected private sector banks than selected public sector banks. Electronic wallet is offered by all selected banks. E-wallet plays dominant role for e-commerce transactions. This means that e-commerce is at a growing stage in India. 1 bank (5% of selected banks) offer prepaid cards at some branches, 8 banks (40% of selected banks) offer at most branches and 11 banks (55% of selected banks) offer at all branches. Prepaid cards facility is higher in selected private sector banks than selected public sector banks. All selected banks are

linked with UPI application likeBHIM App. All selected banks provide facilities ofSMS Alerts / Email Alerts. 8 banks (40% of selected banks) are using cash deposit machine (CDM) at some branches, 9 banks (45% of selected banks) are using cash deposit machine at most branches and 3 banks (15% of selected banks) are using cash deposit machine at all branches. The passbook updating machine facility is not yet offered by 1 bank (5% of selected banks). 13 banks (65% of selected banks) are using passbook updating machine (PUM) at some branches and 6 banks (30% of selected banks) are using passbook updating machine at most branches. Passbook updating machine facility is higher in selected public sector banks than selected private sector banks. Electronic Cheque Deposit Machine facility is provided by only 7 banks among the banks under study. NEFT, ECS and RTGS facilities have prevalence for almost all the selected banks. The study shows that electronic banking facility have adequate availability among the selected banks. Now days banks are adopting e-banking facilities strategic as well as operational benefits.

Table-2: Descriptive Statistics (Availability of Electronic-banking facility)

Variable	Category	Mean	S. D	Std Error
Ownership	Public	3.327	0.190	0.034
	Private	3.513	0.117	0.021
Locality	Rural	3.345	0.215	0.065
	Urban	3.436	0.172	0.024
Experience in e-banking	Less than 5 years	3.388	0.114	0.046
	5 – 10 years	3.470	0.000	0.000
	10 – 15 years	3.411	0.143	0.027
	More than 15 years	3.433	0.240	0.049

Source: Primary Data

Table 2 reported that electronic-banking facility was higher in private sector banks (mean=3.513) than public sector banks (mean=3.327). It means that private sector banks have better adoption of electronic banking channels. Also, availability of e-banking facilities was greater in urban bank branches (mean=3.436) than rural bank branches (mean=3.345), which is quite understandable given the fact that urban people are more acquainted with

technology and internet. As far as, availability of e-banking facilities on the basis of experience in e-banking is concerned, branches having an experience of e-banking for 5 to 10 years showed highest availability (mean=3.470). Branches with less than 5 years of e-banking experience reported least availability of e-banking facilities (mean=3.388). As such no definite pattern is observed.

Table-3: Descriptive Statistics- Experience in e-banking (Availability of Electronic-banking facility)

Variable	Category	Mean	S. D	Std Error
Public	Less than 5 years	0	0.000	0.000
	5 – 10 years	0	0.000	0.000
	10 – 15 years	3.364	0.141	0.032
	More than 15 years	3.261	0.247	0.074
Private	Less than 5 years	3.388	0.114	0.046
	5 – 10 years	3.470	0.000	0.000
	10 – 15 years	3.511	0.088	0.029
	More than 15 years	3.578	0.099	0.027

Source: Primary Data

Table 3 showed availability of electronic banking facilities in public and private sector banks on the basis of experience in e-banking. Interestingly, it was observed that public sector banks are using electronic banking facilities for more than

10 years. As far as, private banks are concerned, availability of e-banking facilities increase with experience in e-banking (mean values, less than 5 years= 3.388, 5-10 years= 3.470, 10-15 years= 3.511, and more than 15 years= 3.578).

Table-4: Descriptive Statistics- Locality (Availability of Electronic-banking facility)

Variable	Category	Mean	S. D	Std Error
Public	Rural	3.283	0.224	0.079
	Urban	3.342	0.179	0.038

Private	Rural	3.510	0.034	0.020
	Urban	3.513	0.123	0.023

Source: Primary Data

Table 4 showed availability of electronic banking facilities in public and private sector banks on the basis of locality of banks branch. It was observed that availability of e-banking facility is higher in urban bank branches in both public sector banks (mean=3.342) and private sector banks (mean=3.513) than rural bank

branches. It was also reported that availability of e-banking facility was higher in both urban (mean=3.513) and rural branch (mean=3.510) of private sector bank than those of public sector banks (mean rural=3.283 and mean urban=3.342).

Table-5: Variations in Availability of Electronic-banking facility

Variable	Category	t or F-value	Df	Sig.
Ownership	Public	4.555	58	0.000*
	Private			
Locality	Rural	1.514	58	0.136
	Urban			
Experience in e-banking	Less than 5 years	0.164	59	0.920
	5 – 10 years			
	10 – 15 years			
	More than 15 years			

Source: Primary Data, df- degree of freedom, * Significant at .05

Table 5 investigated statistical significance of variation in availability of e-banking facility across three variable, ownership, locality and experience in e-banking. It was reported that availability of e-banking facility varies significantly among public and private sector banks. Also, as table 2 reported that mean value was greater for

private sector bank than public sector bank. Thus, finding concludes that availability of e-banking facility is statistically significantly higher for private sector banks. For other two variable i.e. locality and experience in e-banking facilities, no statistically significant variation was observed.

Table-6: Variations in Availability of Electronic-banking facility (Experience in e-banking)

Variable	Category	F-value	Df	Sig.
Public	Less than 5 years	2.224	29	0.157
	5 – 10 years			
	10 – 15 years			
	More than 15 years			
Private	Less than 5 years	5.354	29	0.005*
	5 – 10 years			
	10 – 15 years			
	More than 15 years			

Source: Primary Data, df- degree of freedom, * Significant at .05

Table 6 investigated statistical significance of variation in availability of e-banking facility in public and private sector banks across experience in e-banking. It was reported that availability of e-banking facility varies significantly across experience in e-banking for private sector banks only. Also, as table 3 reported that mean value of availability of e-banking

facility increases with experience of e-banking for private sector bank. Thus, finding concludes that availability of e-banking facility is statistically significantly higher for more experienced private sector banks. For public sector bank, no statistically significant variation was observed.

Table-7: Variations in Availability of Electronic-banking facility (Locality)

Variable	Category	t-value	Df	Sig.
Public	Rural	0.746	28	0.463
	Urban			
Private	Rural	0460	28	0.946
	Urban			

Source: Primary Data

Table 7 investigated statistical significance of variation in availability of e-banking facility in public and private sector banks across locality of branch. No statistically significant variation was observed across public and private sector banks. It signifies that rural and urban branches of both public and private sector banks have similar status of availability of e-banking facility.

5. Conclusions

This study examined the level of availability of e-banking facilities among branches of the all selected banks and also compare the level of availability of e-banking facilities in public and private sector banks in India. Availability of E-Banking services such as Online Banking, ATM/Debit Cards, Credit Cards, Forex Cards, Electronic Wallets, Prepaid Cards, UPI App., Mobile Banking, SMS Alerts / Email Alerts, Cash Deposit Machine (CDM), Passbook Updating Machine (PUM), Electronic Cheque Deposit Machine, Electronic Fund Transfer (EFT), Electronic Clearing System (ECS), and Real Time Gross Settlement System (RTGS) have checked through this research paper. According to the results, all selected public and private banks are

offering online banking, mobile banking and debit cards facilities to their customers. Credit Cards, forex cards and prepaid cards facilities are higher in selected private sector banks than selected public sector banks. E-wallet and UPI app plays dominant role for e-commerce transactions. All selected banks provide facilities of SMS alerts / email alerts. Availability of cash deposit machine and passbook updating machine facilities was lower in all selected public and private banks. Passbook updating machine facility is higher in selected public sector banks than selected private sector banks. Electronic cheque deposit machine facility is provided by only 7 banks among the banks under study. NEFT, ECS and RTGS facilities have prevalence for almost all the selected banks. The study shows that electronic-banking facility was higher in private sector banks than public sector banks. It means that private sector banks have better adoption of electronic banking channels. Availability of e-banking facility varies significantly among public and private sector banks. Also, availability of e-banking facilities was greater in urban bank branches than rural bank branches, which is quite understandable given the fact that urban people are more acquainted

with technology and internet. As far as, availability of e-banking facilities on the basis of experience in e-banking is concerned, branches having an experience of e-banking for 5 to 10 years showed highest availability. This study suggests that cash deposit machine, electronic cheque deposit machine and passbook updating machine facilities should improve by all selected public and private banks.

References:

1. Agboola, A. (2007) “Information and Communication Technology (ICT) in Banking Operations in Nigeria – An Evaluation of Recent Experiences”, *African Journal of Public Administration and management*, Vol. 18, No. 1, pp. 1-21.
2. Alam, S.S., Khatibi, A., Santhapparaj, A.A. and Talha, M. (2007) “Development and prospects of internet banking in Bangladesh”, *An International Business Journal*, Vol. 17, No. 1/2, pp. 56-66
3. Al-Hajri, S. (2008) “The Adoption of e-Banking: The Case of Omani Banks”, *International Review of Business Research Papers*, Vol. 4, No. 5, pp. 120-128.
4. Baloch, Q.B., Zahid, M. and Naveed, (2012) “Impact of Information Technology on E-Banking: Evidence from Pakistan’s Banking Industry”, *Abasyn Journal of Social Sciences*, Vol.4, No.2, pp. 241-263.
5. Kaur, R. (2012) “Impact of Information Technology on Customer Services with reference to selected Banks in Chandigarh”, *International Journal of Engineering and Management Science*, Vol. 3, No. 4, pp. 444-449.
6. Ringim, K.J., Razalli, M.R. and Hasnan, N. (2015) “The Relationship between Information Technology Capability and Organizational Performance in Nigerian Banks”, *International Journal of Business Research and Development*, Vol. 4, No. 2, pp. 1-10.
7. Safari, M.R. and Yu, L.Z. (2014) “Impact of Information and Communication Technology (ICT) on Efficiency: Evidence from the Iranian Banking Industry”, *World Applied Sciences Journal*, Vol. 29, NO. 2, pp. 208-218.
8. Saraswat, V. and Jadhav, P. (2013) “Impact of Information technology on banking Industry”, *Abhinav International Monthly Refereed Journal of Research in Management & Technology*, Vol. 2, pp. 10-13.
9. Sharma, A. and Kansal, A. (2014) “Technological Infovations in Banking Sector: Impact, Behavior and Services”, *International Journal of Information & Computation Technology*, Vol. 4, No. 9, pp. 885-890.
10. Sindwani, R. and Goel, M. (2015) “Technology Based Self Service Banking Service Quality Evaluation: A Graph Theoretic Approach”, *International Journal of Advanced Science and Technology*, Vol.80, pp. 1-18.
11. Tan, M. & Teo, T.S.H. (1998) “Factors Influencing the Adoption of the Internet”, *International Journal of Electronic Commerce*, Vol.2, No.3, pp. 5-18.