

Implications of E-Banking in Indian Scenario

G. Kamalam¹ and S. Murugaiyan²

¹PG and Research Department of Commerce, ²Head and Assistant Professor of Commerce,
Ayya Nadar Janaki Ammal college, Sivakasi, Tamil Nadu, India
E-mail : marykamal91@gmail.com

Abstract - Introduction of technology in banking sector has enabled customers to avail the banking services at anytime and anywhere in the form of ATM, Mobile banking, & Internet Banking. Banks today operate in a highly globalized, liberalized, privatized and a competitive environment. In order to survive in this environment banks have to use IT. Indian banking industry has witnessed a tremendous developments due to sweeping changes that are taking place in the information technology. Electronic banking has emerged from such an innovative development. The objective of the present paper is to study and analyze the progress made by Indian banking industry in adoption of technology. The study is secondary based and analytical in nature. The progress in e-banking in Indian banking industry is measured through various parameters such as Computerization of branches, Automated Teller Machines, Transactions through Retail Electronic Payment Methods etc. Statistical and mathematical tools such as simple growth rate, percentages and averages etc are used. The paper also highlights the challenges faced by Indian banks in adoption of technology and recommendations are made to tackle these challenges. The paper concludes that in years to come e-banking will not only be acceptable mode of banking but preferred mode of banking.

Keywords: Automated Teller Machines, E-banking, Information Technology.

I. INTRODUCTION

From last two decades E-commerce has shown tremendous growth in Indian service sector & banking sector is not exception to it where it is known as E-banking. Now a days E-banking is the popular technology used by banks which has been defined in many ways but in a simple terms, E-banking is the provision of banking service through electronic channels and the customer can access the data without any time and geographical limitation. ATM was the first well-known machines to provide electronic access to customers of retail banks but later on in the same line Mobile banking & Internet banking facilities were offered by banks.

Under the edge of Electronic Banking following services are offered by Indian Banks

- a. Accessing Accounts (Mini Statement / Balance Enquiry)
- b. Paying Bills
- c. Cheque book request / status of Cheque payment
- d. Mobile recharging
- e. Fund Transfer

Modern technology is seen as a panacea for most of the ills that the banking sector faces today. Even at present, India is a relative unbanked country as the credit-to-GDP ratio is one of the lowest in the developing economies. So banks are facing the dual challenge of increasing penetration and high growth trajectory. The banking industry can kill two birds with one stone that is with help of technology. Tremendous progress took place in the field of technology which has reduced the world to a global village and it has brought remarkable changes in the banking industry. Branch banking in the brick and mortar mode has been transformed into click and order channel mode.

II. REVIEW OF LITERATURE

Dr. Roshan lal and Dr. Rajni saluja (2012) in their study entitled "E-banking: The Indian Scenario" states that the Employees of banks should be given special technical training for the use of e-banking so that they can further encourage customers to use the same. E-banking services should be customised on basis of age, gender, occupation etc so that needs and requirements of people are met accordingly.

III.OBJECTIVES OF THE STUDY

- a. To identify various e-banking services adopted by Indian banks.
- b. To study and analyze the progress made by Indian banking industry in adoption of technology.
- c. To study the challenges faced by Indian banks in adoption of technology and make recommendations to tackle these challenges.

IV.RESEARCH METHODOLOGY & DATABASE

A.Data Collection

The study is based on secondary sources and it is analytical in nature.

B.Sources Of Data

Report on Trends and Progress of Banking in India published by Reserve Bank of India.

C.Parameters Of The Study

Automated Teller Machines and Transactions through Retail Electronic Payment Methods such as Electronic Clearing services (ECS) - debit and credit, National Electronic Fund Transfer and Electronic Clearing Cards that is debit card and credit card.

D.Tools Used For Study

Statistical and mathematical tools such as simple growth rate, percentages and averages are used. To analyze progress made by Indian banking industry in adoption of technology, averages, percentages and simple growth rate is calculated. (In this study, simple growth rate is indicated by GR. $GR = \frac{Y_t - Y_0}{Y_0} \times 100$ where Y_t indicates value of given parameter in current year and Y_0 indicates value of given parameter in base year).

V.ANALYSIS AND INTERPRETATION

A.Automated Teller Machines (ATMs)

ATM is a modern device introduced by the banks to enable the customers to have access to money day in day out without visiting the bank branches in person. The system is known as “Any Time Money” or “Any Where Money” because it enables the customers to withdraw money from the bank from any of its ATMs round the clock. ATM has become the most popular and convenient delivery channel throughout entire country.

Table I indicates the progress made by ATMs of Scheduled Commercial Banks for the period 2010-2013. In average terms Onsite ATMs are more as compared to Offsite ATMs though the number of both has increased in the period of 4 years. In percentage terms also Offsite ATMs are more than Onsite ATMs. The percentage of Offsite ATMs has increased but percentage of Onsite ATMs has marginally declined from 49.69 percent in 2012 to 48.91 percent in 2013. Growth rate has remarkably increased in 2013 in case of both Onsite and Offsite ATMs taking the year 2010 as base year.

TABLE I AUTOMATED TELLER MACHINES (ATMS) OF SCB (AS AT END OF MARCH)

Year / category	On site ATMs	GR	Off site ATMs	GR	Total no. of ATMs	GR	Off site ATMs as % of total ATMs	On site ATMs as % of total ATMs
2010	32679	--	27474	--	60153	--	45.7	54.3
2011	40729	24.63	33776	22.94	74505	23.86	45.3	54.6
2012	47545	45.49	48141	75.22	95686	59.07	50.31	49.69
2013	55760	70.63	58254	112.03	114014	89.54	51.09	48.91
Average	44178.25		41911.25		86089.5			

Source: Report on Trends and Progress of Banking in India, RBI

Table II indicates Bank Group-wise ATMs of Scheduled Commercial Banks. The highest number of ATMs both Onsite and Offsite is in case of Public sector banks and which is 61.09 percent of total ATMs in the country. In percent terms ATMs in case of Nationalized Banks is 31.01 percent, in case of SBI group is 28.59 percent which is more than that of Private sector banks (37.80). New private sector banks has major share of ATMs (31.17) as compared to Old private sector banks (6.64). Foreign banks have 1,261 ATMs in 2013 which is just 1.11 percent of total ATMs.

The electronic payment systems such as Electronic Clearing Service (ECS) credit and debit and National Electronic Fund Transfer (NEFT) have improved the speed of financial transactions across the country. Electronic Clearing Service (ECS) is one of the new electronic banking services. ECS is a non-paper based movement of funds which is encouraged by the RBI on a wide scale. ECS consists of- Electronic

Credit Clearing Service & Electronic Debit Clearing Service. ECS brings down administration cost and ensures profitability and productivity to the banks. National Electronic Fund Transaction (NEFT) is a deferred net settlement system and is an improvement over other modes in terms of security and processing efficiency. This facility is currently available at over 46,300 bank branches throughout the country.

Table IV shows the volume of electronic transactions of Scheduled Commercial Banks. In average terms volume of ECS Debit (114.78) is greater than ECS Credit (162.03). Growth rate in case of ECS Credit has increased whereas in case of ECS Debit has increased in 2011-12. Volume of NEFT has also increased and on average it has increased at the rate of 204.65 over the period of 4 years. Growth rate in case of NEFT has increased remarkably.

TABLE II BANK GROUP-WISE ATM OF SCHEDULED COMMERCIAL BANKS (AS AT END MARCH 2013)

Bank group/ category	On site ATMs	% of total	Off site ATMs	% of total	Total no. of ATMs	% of total	On site ATMs as % of total ATMs	Off site ATMs as % of total ATMs
Public sector banks	40,241	72.17	29,411	50.49	69,652	61.09	57.78	42.23
Nationalized banks	20,658	37.05	14,701	25.24	35,359	31.01	58.42	41.58
SBI groups	18,708	33.55	13,883	23.83	32,591	28.59	57.40	42.60
Private sector banks	15,236	27.32	27,865	47.84	43,101	37.80	35.35	64.65
Old private sector banks	4,054	7.27	3,512	6.03	7,566	6.64	53.58	46.42
New private sector banks	11,182	20.05	24,353	41.80	35,535	31.17	31.47	68.53
Foreign banks	283	0.51	978	1.68	1,261	1.11	22.44	77.56
All banks	55,760	100.00	58,254	100.00	1,14,014	100.00	48.91	51.09

Source: Report on Trends and Progress of Banking in India, RBI

TABLE III VOLUME OF ELECTRONIC TRANSACTIONS OF SCHEDULED COMMERCIAL BANKS (VOLUME IN MILLIONS)

Year / transaction	ECS Credit		ECS Debit		NEFT	
	Volume	GR	Volume	GR	Volume	GR
2009-10	98.1	--	149.3	--	66.3	--
2010-11	117.3	19.57	156.8	5.02	132.3	99.55
2011-12	121.5	23.85	165.0	10.52	226.0	240.87
2012-13	122.2	24.57	177.0	18.55	394.0	494.27
Average	114.78		162.03		204.65	

Source: Report on Trends and Progress of Banking in India, RBI

Table 1.5.4 shows value of electronic transactions of scheduled commercial banks. In average terms the value of ECS Credit is greater than ECS Debit though in value terms is reverse. Growth rate in case of ECS Credit in 2010-11 is

higher and in later years it declined. Growth rate in 2011-12 has increased. NEFT has also increased in value terms. Growth rate in case of NEFT has also increased remarkably as compared to base year 2010.

TABLE IV VALUE OF ELECTRONIC TRANSACTIONS OF SCB (VALUE IN RS. CR)

Year / transaction	ECS Credit		ECS Debit		NEFT		RTGS	
	Value	GR	Value	GR	Value	GR	Value	GR
2009-10	117613	--	69524	--	409507	--	---	---
2010-11	181686	54.48	73646	5.93	939149	129.34	48487234	--
2011-12	183820	56.29	83400	19.96	179040	-56.28	53930800	11.23
2012-13	177102	50.58	10830	-84.42	290220	-29.13	67684100	39.59
Average	165055.25		59350		454479		56700711	

Source: Report on Trends and Progress of Banking in India, RBI

Now-days Electronic Cash is being used in place of hard cash. Electronic Clearing Cards such as debit and credit cards. Debit card allows „anywhere any time accesses“ to the customers with their savings or current account. A customer possessing a Debit Card need not carry cash. Credit card also serves as convenient medium of exchange.

It enables a customer to purchase goods or services within prescribed limits from certain authorized retail and service establishments without making immediate cash payments. It is also called plastic money. The most important difference between a Credit card and a Debit card is that while credit card is a post- paid and debit card is pre-paid.

Table V shows Bank Group-wise outstanding number of debit cards issued by scheduled commercial banks as at end March 2013. In 2012-13, Public sector banks have highest number of debit cards issued (260.6) which is 78.68 percent of total debit cards issued by the industry. Nationalized

Banks (118.6) and SBI group (41.18) have high percent of cards issued as compared to Private sector banks (20.32). The share of new private sector banks is higher as compared to old private sector banks. Foreign banks have 0.99 percent of total debit cards issued.

TABLE V BANK GROUP-WISE OUTSTANDING NUMBER OF DEBIT CARDS ISSUED BY SCHEDULED COMMERCIAL BANKS (IN MILLIONS) (AS AT END MARCH, 2013)

Bank group/ Year	2009-10		2010-11		2011-12		2012-13	
	No.	% of total						
Public sector banks	129.69	71.27	170.34	74.76	215	77.34	260.6	78.68
Nationalized banks	58.82	32.32	80.27	35.23	103	37.05	118.6	35.81
SBI groups	70.87	38.95	90.07	39.53	112	40.29	136.4	41.18
Private sector banks	47.85	26.29	53.58	23.52	60	21.58	67.3	20.32
Old private sector banks	9.81	5.39	12.44	5.46	14	5.03	15.4	4.65
New private sector banks	38.04	20.90	41.14	18.06	46	16.55	51.9	15.67
Foreign banks	4.43	2.43	3.92	1.72	3.8	1.37	3.3	0.99
All banks	181.97	100.00	227.84	100.00	278	100.00	331.2	100.00

Source: Report on Trends and Progress of Banking in India, RBI

Table VI shows Bank Group-wise outstanding number of credit cards issued by scheduled commercial banks as at end March 2013. The number of credit cards issued has increased from 3.26 million in 2009-10 to 3.50 in 2012-13.

The number of credit cards by private sector banks has increased from 9.5 in the year 2009-10 to 11.10 per cent in the year 2012-13. In case of foreign banks it has declined from 5.57 to 5.00 per cent in 2013.

TABLE VI BANK GROUP-WISE OUTSTANDING NUMBER OF CREDIT CARDS ISSUED BY SCHEDULED COMMERCIAL BANKS (IN MILLIONS) (AS AT END MARCH, 2013)

Bank group/ Year	2009-10		2010-11		2011-12		2012-13	
	No.	% of total						
Public sector banks	3.26	17.79	3.08	17.07	3.06	17.34	3.5	17.95
Nationalized banks	0.73	3.98	0.78	4.32	0.84	4.76	0.9	4.62
SBI groups	2.53	13.80	2.30	12.75	2.22	12.58	2.6	13.33
Private sector banks	9.5	51.83	9.32	51.66	9.67	54.79	11.1	56.92
Old private sector banks	0.06	0.33	0.04	0.22	0.04	0.23	0.04	0.20
New private sector banks	9.44	51.50	9.28	51.44	9.63	54.56	11.1	56.92
Foreign banks	5.57	30.39	5.64	31.26	4.92	27.87	5.0	25.64
All banks	18.33	100.00	18.04	100.00	17.65	100.00	19.5	100.00

VI. CHALLENGES IN ADOPTION OF E-BANKING

E-banking is facing following challenges in Indian banking industry:

1. The most serious threat faced by e-banking is that it is not safe and secure all the time. There may be loss of data due to technical defaults.
2. E-banks are facing business challenges. For the transactions made through internet, the service charges

are very low. Unless a large number of transactions are routed over the Web the e-banks cannot think of profit.

3. There is lack of preparedness both on part of banks and customers in the adoption of new technological changes.
4. There is lack of proper infrastructure for the installation of e-delivery channels.

VII.RECOMMENDATIONS

1. E-banks should create awareness among people about e-banking products and services. Customers should be made literate about the use of e-banking products and services.
2. Special arrangements should be made by banks to ensure full security of customer funds. Technical defaults should be avoided by employing well trained and expert technicians in field of computers, so that loss of data can be avoided.
3. Employees of banks should be given special technical training for the use of e-banking so that they can further encourage customers to use the same.
4. Seminars and workshops should be organised on the healthy usage of e-banking especially for those who are ATM or computer illiterate.
5. E-banking services should be customised on basis of age, gender, occupation etc so that needs and requirements of people are met accordingly.
6. Government should make huge investments for building the infrastructure.

VII.CONCLUSION

In India, E-banking is in a nascent stage. No doubt Indian banks are making sincere efforts for the adoption of advanced technology and installation of e-delivery channels but still masses are vary of the concept. Banks are making sincere efforts to popularize the e-banking services and products. Younger generation is beginning to see the convenience and benefits if e-banking. In years to come, e-banking will not only be acceptable mode of banking but will be preferred mode of banking.

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