

## THE IMPACT OF INTERNET BANKING IN THE INDIAN BANKING SCENARIO

Sangita Agrawal\*

***Abstract:** Information technology has become a necessary tool in today's world of competition. Indian banking industry has witnessed tremendous development due to the changes that are taking place in the information technology. The paper attempts to analyse the current state of internet banking and discusses its implication on the changing face of the Indian banks industry. It discusses the bank's measures to promote and adopt the changes offered by the internet banking.*

***Keywords:** Internet Banking, Public banks, Private bank, Foreign Banks.*

### INTRODUCTION

Government of India has launched the "Digital India" program with a view to transform the country into a digitally empowered economy. Its main purpose is to connect the entire country through broadband within four years. The plan will offer various facilities like digital locker, e-education and e-health. This will help in rapid economic development of India.

Digital India program offers a path for development; it has the potential to create a transformation in economy by providing universal phone connectivity and access to broadband to carry various operations. Mobile telephony is expected to play the lead role in delivering the benefits of information access and digital empowerment to the people of India. The most important pillar of digital revolution is that it can provide parallel banking system with a physical network of banks.

In response to this situation, the government had taken one such scheme called 'Jan Dhan Yojana'. The aim of such scheme is to eradicate financial untouchability by providing bank accounts to the poor. However, the biggest challenge for the banks is, how to provide financial services to the vast population, when they have manpower shortage.

Today, Banks operate in a highly competitive environment and it's difficult to survive with traditional form of technology due to the changes that are taking place in economy.

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\* Assistant Professor, Dept. of Business Economics, M. S. University, Vadodara

Therefore, Information technology has become a necessary tool in today's world of competition. Indian banking industry has witnessed tremendous development due to the changes that are taking place in the information technology. The paper attempts to analyse the current state of internet banking and discusses its implication on the changing face of the Indian banks industry. It discusses the bank's measures to promote and adopt the changes offered by the internet banking. In view of this the paper discusses the level of prevalence of e-banking, its growth and various issues and challenges it faces in the economy.

### **OBJECTIVE OF THE PAPER**

The main objective of the paper is to analyse the impact of internet banking in terms of its status, uses, trends and the progress it has made in both, the banking industry and the economy.

### **RESEARCH METHODOLOGY**

Research Design: Exploratory and empirical research design based on secondary data

Sources of Data: Annual reports of RBI, Reports on Trend and Progress of Banking in India, Reports of Internet and Mobile Association of India, Report of cardbhai.com

Tool of Analysis: The data collected for the study was analyzed logically and meaningfully to arrive at meaningful conclusions. Ratio, Growth rate and average rate, regression for analysis.

Period of Study: Data for a period of 10 years, 2005-2015

### **SURVEY OF LITERATURE**

The internet banking has changed the user friendly banking services at a low cost. It was first used by the 'The Bank of Scotland' in UK in 1980s. In 1984, the Stanford credit union created the first online banking website. In India, ICICI bank was the first to provide internet banking facility. The Government of India enacted the Information Technology act 2000, which provides legal recognition to electronic transactions and other means of electronic media. Recently the Reserve Bank of India constituted a working group on internet banking in July 2014. The committee made various recommendations pertaining to internet banking.

Jamaluddin N(2013), 'E banking: Challenges and Opportunities in India', discusses the development of e-banking in India. This author opined that the declining internet and mobile charges, falling prices of personal computer and mobile phones, broadband with access through cable and digital subscriber lines etc. would definitely encourage the boom in E-banking in India. He opined that the information technology has played a vital role in the advancement of banking system but it will not be sufficient to bring necessary performance improvement and get the competitive edge but intelligent

people are required to use such intelligent tools. Information technology management is a challenge flow in future banking scenario, marketing mix technology is going to be the challenge in India.

Lal, Saluja (2012), 'E-Banking: the Indian Scenario', discusses the challenges faced by Indian banks in adoption of technology and make recommendations to tackle these challenges. They concluded that banks are making sincere efforts to popularise the e-banking services and products. In future e-banking will not only be acceptable mode of banking but will be preferred mode of banking.

Malhotra and Singh (2009), 'The impact of Internet Banking on Bank performance and Risk: The Indian Experience', examined the current state of internet banking in India and discusses its implications for the Indian banking industry. Using data on the financial performance, the study analysed the performance of an internet group in comparison to non-internet banking group and the impact of internet banking on banks' performance and risks. A panel data of 85 banks was taken for the period of 1998-2006. They concluded that there is no significant association between adoption of internet banking by banks and their performance. However, internet banking has a negative and a significant impact on profitability of private sector banks and their performance. On the other hand, internet banking has a negative and significant impact on risk, which shows that, the adoption of internet banking has not increased the risk profile of banks.

Reddy (2011), "*Bank on Rural India way to economic development*" discusses the skewed distribution of bank branches. Structural and operational issues such as infrastructure, distance, costs viability etc. are the main concerns why banks were not able to reach the vast rural population. He suggested the need for e-banking services for these areas as they have high operating costs and low business volume.

Yang, Whitefield, Bocheve (2007), "*New issues and challenges facing e-banking in rural areas-An empirical study*" examined the recent trend of e-banking and its economic impact on local financial institutions. This paper concluded that the lack of financial resources and weak technical expertise are the two major obstacles in developing and maintaining e-banking services in rural cities.

Anitha (2011), Thorat, Pirjada, Potadar (2013), Parmar, Ranpura, Patel (2013) and Sharma (2009) examined the case studies of specific banks and areas, and suggested the need of e-banking facilities and their impact on rural customers.

The paper is divided into two sections. Section -I discusses the use of internet in the digital India and its impact on the banking industry and section -II analyzes the trend in e-banking

## **SECTION -1: INTERNET AND THE BANKING INDUSTRY**

The Indian economy has undergone a significant change in its size and composition. The structural transformation of Indian economy shows a shift of predominate share

of agriculture to manufacturing activities and a moderate to high level increase in the share of service sector both in terms of output and income.

To meet the changes in real economy, the banking system needs to be flexible and competitive. Viewed in this perspective, there is a need to increase size of operation, outreach and capacity of the banking industry. For the expansion of banking industries following things are imperative. They are:

- (a) Enhance its system to cope with multiple demands of the customer.
- (b) Good regulatory and Supervisory environment.
- (c) Instruments and policies which encourage banking activities in term of its uses.
- (d) Good framework to deal with large foreign banks.

Reforms to the Indian financial sector have resulted in significant growth and development of financial industry however, structural and operational issues, weak technical expertise, lack of infrastructure, lack of awareness about e-banking make the banking facilities fail to extend in a proper manner. India's internet economy can play a positive role to unlock the potential of banking industry.

### Internet User in India

Internet and mobile user in India increased two fold due development of its extensive network. However, in comparison to the world India has a long way to go to offer internet service to the vast population.

**Table 1**  
**Internet and mobile user in India as compared to world**

<i>Particular</i>	<i>India</i>	<i>World</i>
Internet users	8.33%	34%
Mobile users	71%	80%

*Source:* The Boston Group, Internet and Mobile Association of India, 2013

Presently, India has more than 700 million mobile users, and out of that only 240 million individuals have bank accounts. According to Mckinsey company survey for 2007 to 2011, only 7% account holders in the country are using internet for banking transactions, while branch banking has fallen by 15%. In case of digital banking the survey pointed, that in Asia region India leads the growth of mobile and internet usage in banking industry.

World Bank, the Boston counselling Group, also pointed out that in 2015, \$ 350 billion in payment and banking transactions could flow through mobile phones compared with about \$ 235 billion of total credit and debit card transactions.

**Table 2**  
**Frequency of internet user in banks(millions)**

<i>Year</i>	<i>Urban Users</i>	<i>Rural Users</i>
2009	60	4
2013	170	31
2014	200	52
2015	260	70
2016	330	102

*Source:* The Boston group, internet and mobile association of India.

The availability of internet is the prime requirement for banks. However, a large gap exists in operation and function of bank mechanisms. Today, also cash transactions regarded as the most convenient means of payment in place of non-cash transactions.

Financial sector reform initiated in early 1990s stressed to adopt the computerization of banking services in order to improve efficiency of banking services. Later on Narasimham committee (1991) recommended the necessity for computerisation in the Indian banks system. It is important to know that 98 percent of public sector banks and 100 percent of private banks are either partially computerised or fully computerised.

## **SECTION II-TRENDS IN E-BANKING AND THE BANKING INDUSTRY**

Internet banking is referred as online banking or virtual banking. It is an electronic payment system that enables people to conduct financial transactions online operated by an institution. The term e-banking includes ATMs, Tele-banking, mobile banking, ECS, Real Gross Settlement System (RTGS), National Electronic Fund Transfer (NEFT), credit cards, debit cards, smart cards and Tele-banking. All these products and services require computerization of banking services. Let's first discuss the growth of computerization in banks.

**Growth of Computerization in Banks:** Indian banking industry has accepted the advancement in information technology to operate in highly globalized, liberalized and competitive environment. Core banking is a newly developed concept adopted by banks. It is a centralised system, a transaction processing engine and a system for the financial management of the banks. Core banking application provides anywhere, anytime nonstop services. In India, both the public and private banks are moving towards core banking approach.

Banking is now shifted from labour intensive fixed cost industry to more capital intensive fixed cost industry. Many experts believed that the advent of information technology has replaced the traditional brick and mortar bank building to one electronic communication device. This device has dramatically changed the functioning of the banks. The working of banks moved from a distributed to a centralised

automated process by introducing multiple delivery channel system like ATMs, Mobile banking, Telephone banking, Credit cards, Debit cards and Smart cards etc.

At present the E-Banking system provides following services:-

- Inquiry about the information of account.
- Card accounts transfer.
- Bank securities accounts transfer
- The transaction of foreign exchange
- Account management
- Reporting of loss account

Generally computerization of banking industry can be classified into three categories:-

- Banks where all the processes are automated.
- Banks that are in the processes of implementing networking infrastructure.
- Banks that are in the process of identifying the core solutions.

On the basis of above classification table- 3 evinces that 99 percent of public sector banks were fully computerized in 2011 as compared to 48.6 per cent in 2006. It is important to note that 94 percent of the branches are on core banking solution. Table- 3 also shows that the share of the fully computerised branches has increased while partially computerised branches have declined.

**Table 3**  
**Computerization in Public Sector Banks**

<i>Year</i>	<i>2006</i>	<i>2010</i>	<i>2014</i>
Branches fully computerized	48.5%	97%	99.8%
Branches under core banking solutions	28.9%	90%	94%
Partially computerized branches	18.2%	2.2%	0.6%
Non-computerized branches	4.3%	0.2%	0.16%

*Source:* Report on trends and progress of banking in India, RBI, various issues.

The share of non- computerized branches declined from 4.3 percent in 2006 to just 0.16 percent in 2014. Computerization of banking industry affected almost all areas of its functioning. Malhotra and Singh (2009) opined, that on an average, internet banks are more profitable than non-internet banks and are operating with lower cost as compared to non-internet banks, thus representing, the efficiency of the internet banks.

**Growth in Automated Teller Machines (ATMs):** The use of electronic means of payment has increased at the expenses of paper based payment instruments. Automated teller machines are nowadays a very common technology, which allows

the user to withdraw and deposit cash, pay bills, request for a statement and other banking transactions. All types of banks have their ATM outlets to dispense notes to cash holders. Indian banks adopted the Swadhan Shared Payment Network System (SPNS) scheme, where banks can use each other's cards for bank transactions. Swadhan is a registered trademark for electronic banking services, owned by Indian Banker's Association. ATM offers the following services:-

- Cash transaction from the customer account, known as 24x7 services.
- Request of cheque book, deposition of cheques
- Provides the statement of account information.

It has become the most convenient delivery channel called as anytime and anywhere money.

**Table 4**  
**Banks Group -wise Automated Teller Machines (March2011)**

<i>Bank Group</i>	<i>Total No of ATMs (march 2011) (in millions)</i>	<i>Onsite ATMS as % of total</i>	<i>OFFSITE ATMs as % of total</i>	<i>Total No of ATMs- (Nov 2014) Inmillions</i>	<i>Onsite (in %)</i>	<i>Offsite (in %)</i>
Public sector banks	49,487	73.1%	58%	136077	65.7	54%
Private sector banks	23651	26.1%	39%	52695	35	39.8
Foreign banks	1367	0.80%	3.5%	1072	0.90	5.2
Total	74505	100	100	189844	100	100

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

Table 4 shows that the total number of ATMs increased from 74505 in 2011 to 189844 in 2014, this indicates a growth rate of 154.88 percent. The banks increased their penetration further with the total number of ATMs reaching 0.18 million in 2015. Though the total number of ATMs has increased, there was a decline in growth of ATMs of both public and private banks. Public sector banks recorded a growth of 16.7 per cent during 2014-15 maintaining the share of around 70 per cent in the total number of ATMs. During the same period foreign banks recorded a negative growth rate in number of ATMs. The growth rate of year 2013-14 shows maximum increase in number of ATMs in both private and public sector banks.

ATMs are classified as off-site ATMs and On-site ATMs. Public sector bank has the highest number of ATMs both on-site and Off-site which is more than 60 per cent in the country. However the share of off-site ATMs declined from 58 percent 2011 to 54 percent in 2013. Again in March 2015 the share increased from 40.3 percent to 45.7 percent. The share of private banks and foreign banks has increased in the period of 2011 and 2014.

**Electronic Clearance System (ECS):** Electronic cash can be in the form of credit card or debit card. The basic difference between a credit and debit card is that credit card is post-paid while debit card is pre-paid.

ECS (credit) is a new method of payment introduced by the RBI, which served as a convenient system of exchange. It is also called plastic money. The share of private and foreign banks is less as compared to public banks.

ECS(Debit):- After successful implementation of ECS(credit) scheme, RBI initiated the ECS(Debit) which allows anywhere access to the customers to pay bills like telephone, electricity loan instalments, etc. through their bank accounts. Public sector banks have the highest number of debit cards issued which is 75 percent of the total bank industry in March 2015. While the private sector banks has a share of 26 percent in the same year. Foreign banks share is 2 percent of total debit card issued.

**Growth of Debit Cards:** Debit card is a prepaid card with some stored value. Every time a person uses this card, banks get the money transferred to its account from the bank of the buyer. The buyers account is debited with the exact amount of purchases.

**Table 5**  
**Banks Group wise Outstanding Number of Debit Cards issued by Schedule Banks**

<i>Banks group</i>	2006	2011	2014
Public sector banks	44.09	170.34	267.99
Private sector banks	27.19	53.58	90.10
Foreign banks	3.70	3.92	30.06
Total all banks	74.98	227.84	387

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

Public sector banks maintained a lead over private and foreign banks in issuing debit cards. Till March 2015, 83 percent of debit cards were issued by public sector banks. Table -5 indicates that the total number of debit cards has increased from Rs.74.98 million to Rs.387 million from 2006 to 2014. The highest growth rate of debit card issues is observed in the case of foreign banks.

**Growth of Credit Cards:** The credit card is post-paid card and its holder can spend wherever, whenever and on whatever he wants, within the limits fixed by banks.

**Table 6**  
**Banks Group wise outstanding no of credit cards issued by schedule banks as on March (in millions)**

<i>Banks group</i>	2006	2011	2014
Public sector banks	3.92	3.08	4.92
Private sector banks	12.56	9.32	11.57
Foreign banks	8.23	5.64	4.69
Total All banks	24.71	18.04	21.18

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



Table 6 shows that there is a decline in credit of banks from RS.24.71 million to 21.18 million in 2014. However, private banks lead with 11.57 million credit card issued in the 2014. Till March 2015, around 80 percent of the credit cards were issued by the private banks (57.2 per cent) and foreignbanks (22.4 per cent). The share of public banks is only 16 percent.

**Mobile Banking:** Mobile banking is another form of internet banking, where bank customers do banking transactions and make enquiries while traveling using mobile phones. The customer can use the mobile banking services 'request facility' and 'alert facility' for any transaction and enquiry. In today's business environment the use of mobile telephony is increasing which is available to customer on the SMS rate.

**Telephone Banking:** It is a service provided by a bank to account holders. Account holders can perform transactions over the phone which is connected with an automated phone answering system. Except cash withdrawals and deposits, this system offers all features of an automated teller machine. Almost all the public, private and foreign banks use this mode of service.

## CONCLUSION

1. Internet banking is an integral part of Indian financial system. All internet banking products and services hold a strong position in terms of acceptance by the consumers during the year 2005-2015.
2. The study shows that the public banks performed well in comparison to private and foreign banks with respect to growth of internet banking.-
3. Banking industry is poised to enter another phase of reforms due to improvement in its service, better quality of products, efficient delivery of products, speed in transactions, better quality management and the positive change the internet banking has offered to customer satisfaction.
4. The impact of internet banking on Indian banking industry seems to be positive as more than 30 per cent of bank transaction are done through internet banking services.

The banking industry will play a major role in internet application in the future. RBI and the government should address the key issues associated with its security, risk, and the cost of offering these services.

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