

E-banking - Challenges and opportunities

¹Dr. Puneet Bafna, ²Shubham Nahar

¹ Associate Prof., Amity University, Rajasthan, India

² Student, Jaipur National University, Rajasthan, India

Abstract

The progress to electronic commerce at international level enables the swiftly advancing global information infrastructure (indulging information technology and computer networks such as internet and telecommunication systems). Business strategy and a strong jolt for economic development has become more momentous factor for e-commerce. Due to emergence of a knowledge based economy and society as information and communication technology sophisticated banking services have undergone intense changes during the past decades in order to improve the quality of customer service delivery and impoverish transaction cost, banks have invested to a great amplitude in ICT (Information and Communication Technology) and have adopted ICT Networks for delivering a wide range of banking products and services. E-banking offers services like by E-banking they can view their account balances, view recent transaction, downloading bank statements (in pdf format); viewing images of paid cheques, ordering cheque books, download periodic account statements, downloading application for E-banking, m-banking etc. Customers can transact their transactions through debit card, electronic fund transfer, ATM etc. This paper scrutinizes the challenges and opportunities of e-banking for the Indian banking sector, during the e-commerce era. The main verdict demonstrates that banks expand to e-banking services in order to stay competitive. To keep track with technological developments and to benefit from diminish cost of e-banking transactions. The main problem faced from e-banking is people are less cognizant with e-banking in previous days but from now onwards after demonetization citizens of India now captivated towards e-banking.

Keywords: e-banking, sources of e-banking, benefits, data analysis and findings

Introduction

“Lifeline of an economy is banking”. The banks have become an essential component of most of the economies as banking services are described as “Engines for economic growth” or act as a “Conduits towards promoting economic growth” [1]. New business paradigm has been introduced by IT. A revolution of IT i.e. “The birth of internet based economy” [2] help the banking sector to achieve its objectives. Information about its products and services like accessing accounts, transferring funds and buying financial products or services online available on the web page of the bank. The product and services in the banking industry due to rapid development of technology internet play a very crucial role in banking industry. By such an IT revolution in the past 2-3 decades technology have changed the way of banks dealing with their bank customers. Online banking calculate the interest of loans and credit card within the fraction of second at any time at any place. [3]. The future of web based e-banking in developed areas appears bright but customers and merchants in developing countries face in no. of barriers to successful e-banking, less reliable telecommunication infrastructure and power supplies, less access to online mechanism and relatively high cost for personal computers and internet access [4]. Nowadays, the concept of e-banking is not a current concept but most of the citizens of our country doesn't use e-banking.

E-banking: Concept & its benefits

In the late 1990s many banks originate to view web based banking as a strategic obligatory. A way of maintaining their customers and building loyalty banks looked for web based banking. Electronic banking is an umbrella term for the process

by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution [5]. Electronic banking services have actually started to develop only since 1995, when the Maryland Presidential Bank, an American bank, allowed bank accounts to be opened online [6]. Internet banking (e-banking) facilitates customers to avail various small and large value banking products and services through electronic channels [7]. Internet banking comprises banking activities or services which can be avail by the customers at any point of time and from any places with their convenience, it is also called PC banking, online banking, cyber banking, virtual banking, etc. [8].

Benefits of internet banking

Using Internet banking is beneficial for both i.e. emptor as well as banks. The benefits of adopting internet banking are mentioned below:

To Emptor

1. Commodious and ease: Internet banking is considered as more efficient in term of ease of use and access [9]. It is very easy to use internet banking, the customer directly visit to the bank website through which it can easily transact its online transactions like RTGS, NEFT, etc. and by such online transaction he or she can keep an eye on their online transaction. They can perform their activities at their residential place or it may be their official place.
2. 24*7 access: Internet banking helps the bank customers that they can access their banking transactions at any time. This 24*7 access facility help the bank customer sometimes in case of emergency too. Customers directly

visits ATM (Automatic teller machine) and withdraws the money that they are in need.

3. **Rapid transfer of money:** Internet banking helps the bank customers to perform their transactions rapidly because it takes less time as compared to traditional banking and immediately payment is made. It offers less waiting time and more convenience as compared to the traditional banking system and significantly lowers the cost structure than traditional delivery channels ^[10].
4. **Self service channel:** Internet banking provides their customer a self service channel for various banking services they have not to depend on the bank's staff and other depending process to avail their services. Internet banking is one of the most popular self-service banking technologies. Continued use of self service technology is positively affected by buyers' perceived usefulness ^[11].

To Bank

1. **Increased Profitability:** Adoption of internet helps the banks to increase their profitability. Banks with Internet banking have better operating efficiency ratios and profitability as compared to banks, which are not using internet facilities ^[12]. The banks can provide banking services to the consumers using internet banking at a far lower cost as compared to the traditional banking ^[13].
2. **Grasp non - branch areas:** Internet banking has expanded their geographical reach and may increase customer base through deploying electronic delivery channels at lower cost ^[14]. For gratify their existing customer and fascinate new customers in the vista of suitability and cost effectiveness many financial institutions are using the e-banking as branchless banking.
3. **Cost reduction:** Traditional banks are very expensive to run, high street rental for a branch cost hundreds of thousands of rupees per year. On top of that are staff costs, insurance, heating and lightning costs. It has been estimated that banks can save around 60% on the cost of transactions through the use of online banking.
4. **Environment safely:** It is good for the environment as it cuts down the usage of paper, reduces pollution as people do not have to travel physically and also does not add emissions.

Sources of e-banking

The traditional way of waiting in a queue and filling up all the forms manually, is no hassle now for transacting with any bank. Banks in India are offering wide range of their services and their products through internet banking. Some of the major services and products in India are:

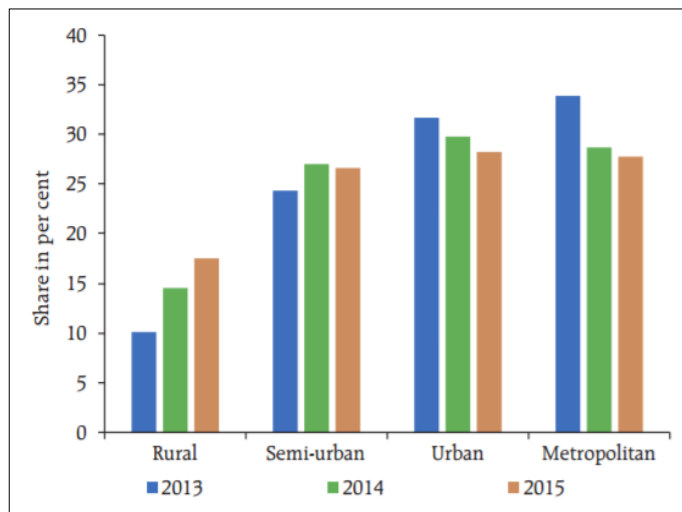
1. **Online Fund Transfer:** Transfer funds between accounts, even if they are in different branches or cities. Customer can also transfer funds to any person having an account with the same bank anytime, anywhere, using third party funds transfer option.
2. **Demat Account and Share Trading Demat Account:** Demat is a process where by securities like share, debentures are converted from the physical securities into electronic data and stored in the computer of an electronic Depository. A depository is a security banks, where dematerialized physical securities are held in custody, and from where they can be traded. This facilitates faster, risk-free and low cost settlement.

Debit Card

1. An electronic card issued by a bank which allows bank clients access to their account to withdraw cash or pay for goods and services. This removes the needs for bank clients to go the bank to remove cash from their accounts they can now just go to an ATM. The card allows instant purchases, removing the correct balance from the user's attached bank account. (Seetapathi K, 2008) ^[15]
2. **Credit Card:** It contains identification that allow you to make purchases and signatures and authorizes the person's named in it to charge purchases to his account charges to which will be billed to him at regular intervals. To purchase goods from merchants who accept credit cards such as process the payments transaction. (Shilpan D. Vyas, Tang. T 2002) ^[16, 17].
3. **Transactions through Retail Electronic Payment Systems:**
 - 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.

Data analysis and findings

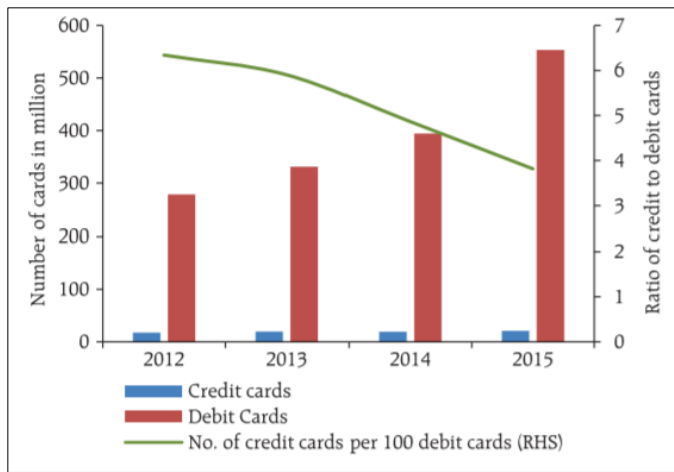
1. In recent years, the shares of ATMs in rural and semi-urban area have been rising, though urban and metropolitan centres still dominate. In 2015, about 44 per cent of the ATMs were located in rural and semi-urban centres.



Source: RBI.

Fig 1: Geographical distribution of ATMs.

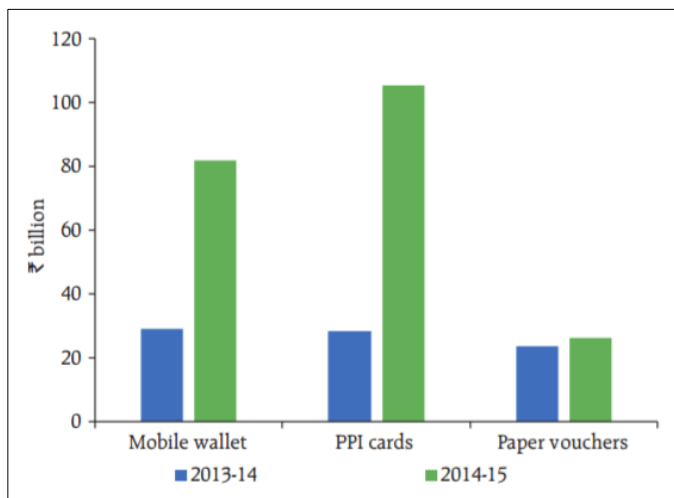
2. Issuance of debit cards is much higher as compared to credit cards and they remain a preferred mode of transactions. In 2012, there were 6.3 credit cards for every 100 debit cards, which declined to 3.8 in 2015. PSBs maintained a lead over PVBs and FBs in issuing debit cards. As on March 31, 2015 approximately 83 per cent of the debit cards were issued by PSBs, while around 80 per cent of the credit cards were issued by the PVBs (57.2 per cent) and FBs (22.4 per cent).



Source: RBI.

Fig 2: Issuance of Debit and Credit cards.

3. Pre-paid payment instruments (PPIs) are payment instruments that facilitate purchase of goods and services, including funds transfer, against the value stored on such instruments. The value stored on such instruments represents the value paid for by the holders by cash, by debit to a bank account, or by credit card. In the past few years, PPIs have emerged as an easy alternative to cash for performing day to day small value payment transactions. Value of PPIs has increased from ₹79.2 billion in 2012-13 to ₹213.4 billion in 2014-15. Among the PPI instruments, PPI card has been the most popular one, with non-bank PPIs having fuelled most of this growth.



Source: RBI.

Fig 3: Progress of prepaid instruments (values)

Challenges of e-banking

1. System architecture and design: Pertinent system architecture and control is managing various kinds of operational and security risks. Banks face the risk of unfair choice of technology, improper system design and inadequate control processes. Numerous protocols are used for communication across Internet. Each protocol is designed for specific types of data transfer. A system allowing communication with all protocols, i.e., HTTP (Hyper Text Transfer Protocol), FTP (File Transfer

Protocol), telnet etc. is more prostrate assault than one designed to authorise i.e., only HTTP.

- Operational risk: Operational risk also termed as transactional risk which is associated with internet banking. It takes the form of erroneous processing of transactions, non-enforceability of contracts, comprehend in data rectitude, data concealment and data confidentiality, unauthorised access / encroachment to bank's information system.
- Security risk: The problem related to the security has become one of the major concerns for banks [18]. A large group of customers refuses to opt for e-banking facilities due to uncertainty and security concerns [19, 20]. Internet is a public network of computers which facilitates flow of data and to which there is unrestricted access. Banks using this medium for financial transactions must, therefore, have proper technology and systems in place to build a secure environment for such transactions. This risk arises on account of unauthorised access to a banks critical information stores like accounting system, risk management system, portfolio management system, etc. A breach of security could result in direct financial loss to the bank.
- Less Internet Penetration in Indian Context: The years have developed over the internet banking channel. In 2011, 60% of the times basic transactions in banks were conducted in North America through online channels, whereas internet banking usage in India increased from 1 percent in 2006 to 7 percent in 2011 [21]. So the knowledge and availability of internet is still a one of the biggest challenges that prevails in Indian context. According to the report of IAMAI 2006 [22] around 22% of internet users do not have knowledge about transferring online. So the penetration of internet and knowledge related to internet are major hurdles.

Opportunities of e-banking

- Increasingly, more and more people are switching to electronic platforms for executing financial transactions. The wider usage of cell phone and internet certainly seems to be playing a role in blurring physical boundaries, and unlocking a whole new world of opportunities for banks in tapping newer customer segments and in recording greater volume of transactions.
- According to the Com Score Report, 2013 India is now world's third largest Internet user after U.S. and China [23]. The computer literacy has gone upward in the last decade. Those with higher IT literacy may have a more positive perception towards e-banking in general and may thus, be more likely to accept e-banking services [24].
- Financial literacy and education play a crucial role in financial inclusion, and inclusive growth. A study reported that there is significant impact of financial literacy on use of internet banking, If customers are not financially educated they will simply avoid using new online services and not change their traditional way of banking, thus banks will not be able to convert users into their new online banking strategies [25].

Conclusion

The general abstract of e-banking has got attention in Indian context due to demonetisation. It is electronic channel through

which bank delivers their banking services through e-banking. Mostly all the banks has already implemented the e-banking concept and provide the facilities related to e-banking to its customers. A step towards e-banking by the consumers is still at the early stage due to various challenges. The challenges like system architecture and design, operational risk, security risk, less Internet penetration in Indian Context about e-banking are acting as barrier in the adapting e-banking facilities. Government of India along with various government agencies is making an effort to make e-banking more safe, secure and reliable with the convenience of digital channels, customers are visiting branches less often and they use online and mobile technology for their banking needs more often. Online and mobile banking are growing fast while branch importance decline rapidly. This paper only present the overview of internet banking in Indian context. Nowadays most of the citizens of India using e-banking for their transactions and make them stand with the current scenario of the country.

References

1. Sathye M. Adoption of internet banking by Australian consumers: An empirical investigation, *International Journal of Bank Marketing*. 1999; 17(7):324-334.
2. Voiculescu A. Competitive advantage in the International Internet Services, Diploma Thesis, Bucharest Academy of Economic Studies -Faculty of Commerce, Tourism and Services. 2000.
3. Kaur M. E-Commerce Kalyani Publictaion, Delhi. 2012.
4. Navpreet Kaur *et al.* *Int. Journal of Engineering Research and Applications*. 2015; 5(4):39-49. www.ijera.com ISSN: 2248-9622.
5. Keivani FS, Jouzbarkand M, Khodadadi M, Sourkouhi ZK. A General View on the E-banking, *International Proceedings of Economics Development & Research*. 2012, 43.
6. *Annals of the University of Petroşani, Economics*, 49 E-Banking Services – Features, Challenges and Benefits Imola Drigă, Claudia ISAC. 2014; 14(1):49-58.
7. BIS Report Management and Supervision of Cross-border Electronic Banking Activities. 2003-2015. <http://www.bis.org/publ/bcbs99.pdf>.
8. Dheenadhayalan V. Automation of banking sector in India”, *Yojana*, February. 2010, 32-40.
9. Calisir F, Gumussoy CA. Internet banking versus other banking channels: Young consumers’ view” *International Journal of Information Management*. 2008; 28(3):215-221.
10. Mols NP. The internet and banks strategic distribution channel decision, *International Journal of Bank Marketing*. 1999; 17(6):295-300.
11. Eriksson K, Nilsson D. Determinants of the continued use of self-service technology: The case of Internet banking, *Technovation*. 2007; 27(4):159-167.
12. Malhotra P, Singh B. The impact of internet banking on bank performance and risk: The Indian experience, *Eurasian Journal of Business and Economics*. 2009; 2(4):43-62.
13. D'Silva B, D'Silva S, Bhuptai RS. Behavioral Aspect of Teenagers towards Internet Banking: An Empirical Study”, *Indian Journal of Marketing*. 2010; 40(10):44-53.
14. D'Silva B, D'Silva S, Bhuptai RS. Behavioral Aspect of Teenagers towards Internet Banking: An Empirical Study, *Indian Journal of Marketing*. 2010; 40(10):44-53.
15. Seethapathi K. E-Payment System. 2008.
16. Vyas DS. E-banking and E- commerce in India and USA. 2009.
17. Tang T. Roadmap for success in the banking Industry. 2002.
18. Prema C. A framework for understanding consumer perceived characteristics of internet banking as predictors of its adoption, *Indian Journal of Marketing*. 2011; 41(2):46-53.
19. Kuisma T, Laukkanen T, Hiltunen M. Mapping the reasons for resistance to internet banking: A means-end approach, *International Journal of Information Management*. 2007; 27(2):75-85.
20. Littler D, Melanthiou D. Consumer perceptions of risk and uncertainty and the implications for behaviour towards innovative retail services: The case of internet banking”, *Journal of Retailing and Consumer Services*. 2006; 13(6):431-43.
21. Infosys Report. Consumer Internet Banking- Arise, Accessed. 2012-2015. <http://www.infosys.com/industries/financialservices/whit e-papers/Documents/consumer internet-banking.pdf>
22. IAMAI Report. IAMAI’s Report-Online banking ‘2006’, Accessed. 2006-2015. http://customerworld.typepad.com/swami_weblog/files/I AMAI_Report_on_Online_Banking_2006.pdf.
23. The Hindu. India is now world’s third largest Internet user after U.S., China, Accessed. 2013-2015. <http://www.thehindu.com/sci-tech/technology/internet/india-isnow-worlds-third-argest-internet-user-after-us-china/article5053115.ece>
24. Saraswathy Amma KP, Panicker MS. Senior citizens’ acceptance of information communication technology: A study of e-banking in India, *Journal of Information Technology and Economic Development*. 2013; 4(1):1-8.
25. Servon LJ, Kaestner R. Consumer financial literacy and the impact of online banking on the financial behavior of Lower-Income bank customers, *The Journal of Consumer Affairs*. 2008; 42(2):271-305.