

A Study of Internet-Banking in Financial Development in India

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Abstract – Internet banking has attracted the attention of banks, securities trading firms, brokerage houses, insurance companies, regulators and lawmakers in developing nations since the late 1990s. With the rapid and significant growth in electronic commerce, it is obvious that electronic (Internet) banking and payments are likely to advance. Researches show that impact of Internet banking on cost savings, revenue growth and increased customer satisfaction on Industry is tremendous and can be a potential tool for building a sound strategy. However, it has raised many public policy issues before the banking regulators and government agencies. Interestingly, reliable and systematic information on the scope of Internet banking in Indian context is still not sufficient, particularly what it means to the consumers and the bankers. The paper fills significant gaps in knowledge about the consumer's perspective of Internet banking, trace its present growth and project the likely scenario. The paper presents the data, drawn from a survey of Internet banking consumers and the services providers (banks) that offer Internet banking and develops a functional model for maximizing value to the consumers, which the banks may choose to adopt Internet banking strategically. The paper identifies the weaknesses of conventional banking and explores the consumer awareness, use patterns, satisfaction and preferences for Internet banking vis-à-vis conventional form of banking and also highlights the factors that may affect the bank's strategy to adopt Internet banking. It also addresses the regulatory and supervisory concerns of Internet banking.

Keywords: Internet banking, Benefits, Challenges and Opportunities, Information Technology, India, Customer's Awareness, Income Level.

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INTRODUCTION

The objective of this paper is to examine the consumer behavior with respect to Internet banking vis-à-vis conventional banking, and to explore the possibility of blending these banking systems. The paper also suggests strategies to banks to maximize the value of services to consumers. The primary data used in the research consists of survey conducted on a sample of 2000 consumers arrived at using relative precision technique (Taylor, 1997). The survey includes in major cities of India, instrument being questionnaires filled up from the consumers and personal interaction, discussions with the front line executives of online banking divisions of the major players, particularly their marketing and customer servicing departments and the banking experts, personal visits at Automated Teller Machine (ATMs), Point of Sale (POS) counters of major banks. The major assumptions in this research are – (a) online banking is synonymous to Internet banking (b) the behavior of the surveyed population viz. consumers and bankers confirms to a normal distribution. The study limits itself to major cities given the fact that Internet Banking has no geographical boundaries.

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 “conduits towards promoting economic growth” (Prema, 2011). In recent years the world economy has gone through a new phenomenon which is considered as one the most important changes since the industrial revolution, i.e. the birth of “Internet-based Economy” (Singh, 2013). Considering the benefits of using internet the banks have started to invest in this newly created market. At the initial level, banks mainly focus on developing the commercial web- sites, with the purpose of promoting their products and services using the internet (Karimzadeh and Alam, 2012). Gradually, it was realized by banks that the Internet can be an effective distribution channel too. Now with the changing times the traditional approach of banking is being changed and banks are trying to match up with the recent advancement in the field of technology. Revolutionary developments in information and communication technology (ICT) in the past 20 years have changed the way how banks deal with their bank customers. With the rapid development of technology, internet plays a

significant role in changing the banking scenario. It provides an online platform for various banking transactions through which it offers various services like online payment, online fund transfer, online stock trading and online shopping etc. The use of internet as a delivery channel for banking services is increasing widely in banking sector. Internet banking facilities enable financial institution and customers to access their accounts, transactions and getting information on financial products & services (Ingle and Pardeshi, 2012). Now a day's most of the commercial banks have launched various services through internet banking including latest service like opening online saving accounts and demand for these services is increasing rapidly. The concept of e-banking is fairly a new concept in India as compared to its developed counterparts. So the paper deals with defining the concept of Internet banking.

REVIEW OF LITERATURE:

Prema C (2011), in this study majority of the respondents have computer and internet access and they are also mostly proficient in using them. The users of internet banking, tele banking and mobile banking are in general found to be spending more hours using computers and internet than non-users of these services. The hours of computer usage, the frequency of internet usage and hours of internet browsing were found to be significantly higher among users as compared to non-users of technology enabled banking selfservice. It concludes that banks can target those customers whose usage of computers, internet and other technology products are relatively on the higher side.

Singh P (2013) analysed the problems faced by customers while using e-banking facilities in India. It observed that most of the customers know about the e-banking services offered by their bank. The study found that there is a significant difference amongst different problems identified while using e-banking services. It also found that some problems affect more and some problems affect less in use of banking services. It concluded that all the reasons are not equally responsible for not using e-banking services.

Karimzadeh M (2012) analysed the challenges and opportunities in the Indian Banking sector. The study showed that only 28 per cent banking clients were using internet banking after evaluating the population characteristics. It found that there was no significant relationship in between age and use of cyber banking. It also depicted that there is no relation in between gender and the adoption of internet banking. It observed that qualification in terms of education and income of the respondents were playing the role in the acceptance of online banking. The study suggested that it is the need of time that financial literacy of the users should be increased

through various programs which should be run by banks to increase the awareness of internet banking.

Ingle A and Pardeshi R (2012), has indicate that users were influenced by factors such as quick direct access, ease of use, anytime anywhere banking, status symbol, safety and security. The influence of the factors varied from the type of users. Consumers have different levels of competency in internet banking usage. The higher the consumers felt about their competency in handling internet banking, higher was their frequency in usage of internet banking. Moderate and novice of internet banking users had relatively lesser levels of usage satisfaction.

Isern, Jennifer (2008) pointed out that a positive relationship between the level of financial infrastructure and the level of competition and a negative relationship between the degree of state ownership in a banking sector and the level of competition.

Reynolds, John (2007) said that 2006 e-banking technology services industry customer loyalty survey data results in order to improve marketing resource allocation for corporate e-banking products and services.

Huang, Haibo (2005) reveals that the successful introduction electronic money and e-banking services depends mainly on people acceptance. The major finding is that although e-banking customers more or less have some common characteristics, they differ across different types of e-banking services.

Taft, Jeanette (2007) pointed out that Technology Acceptance Model (TAM) as applied to a specific type of technology: e-banking. They suggested that e-banking – prior training, perceived ease of use of e-banking technology.

Jeon, Kiyong (2014) have said that consumer prefer larger banks in India. Because they has to reduce their transportation cost by way of larger banks have multiple ATM centre's across the country.

Ding, Xin (2007) reveals that consider for research consumer behaviour on internet in the last years. The findings conclude that customer behaviour from self-service, Service quality and experience design perspectives.

Wamalwa, Tom (2006) said that whether internet banking strategies were aligned with the bank's core business based or not identified.

Yee Yen, Yuen (2011) have said that comparison between factors affecting consumer acceptance of

internet banking services between developed and developing countries.

Ubadineke, Francis.N (2009) indicated that advances in information technology and telecommunications are resulting in new delivery channels for bank products and services in the developing countries.

Chen,Lisa (2012) studied that will increase our understanding in financial, accounting, management of information system, business administration and decision making related to the adoption of Internet banking in India.

INTERNET BANKING: THE CONCEPT & ITS BENEFITS

Internet banking (e-banking) facilitates customers to avail various small and large value banking products and services through electronic channels (Isern, 2008). 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. (Reynolds, 2007). Internet banking delivers banking services through the open access computer network i.e. Internet, directly to customers' home that can be used with different electronic devices such as personal computer, mobile phone with a browser or desktop software, digital television (Huang, 2005). So, we can say that Internet banking is about using banking facilities via the internet with the help various electronic devices.

CURRENT STATUS OF E-BANKING IN INDIA:

Internet Banking has become an integral part of banking system in India. The concept of e-banking is of fairly recent origin in India. Till the early 90's traditional model of banking i.e. branch based banking was prevalent, but after that non-branch banking services were started. The credit of launching internet banking in India goes to ICICI Bank. Citibank and HDFC Bank followed with internet banking services in 1999. The Government of India enacted the IT Act, 2000 with effect from October 17, 2000 which provided legal recognition to electronic transactions and other means of electronic commerce. The Reserve Bank is monitoring and reviewing the legal and other requirements of e-banking on a continuous basis to ensure that e-banking would develop on sound lines and e-banking related challenges would not pose a threat to financial stability. According to report of RBI in jan 2016, there are 196079 ATM and 1337310 point of sale devices in India.

Table no 1, 2 and 3 exhibit a few facts and figures related to internet/electronic banking to present its current scenario. Table 1 shows evidence for ATM,

POS (Point of sale) and electronic cards (credit and debit cards) deployed and issued by the schedule commercial banks (SCBs) in India as on December 2014. It also provides evidence of growing statistics of mobile banking users in India. According to it currently 1,76,410 ATM, 10,58,642 Point of sale devices, 20.36 million credit cards and 500 million debit cards are working in India and 35.5 million bank customers are using mobile banking. Table also shows growth rate of these banking channels and it seems to be great in Indian context. Table no. 2 shows current transaction statistics performed through these banking delivery channels. As high as 6090.98 million transactions are electronically done through ATMs. Table no 3 shows NEFT and RTGS transactions performed in the current financial year 2014-15.

Table 1 Various Internet/Electronic Banking Delivery Channels

Type of internet/electronic channels	No. of channels		Growth in %
	Year		
	2010*	2014**	
No of ATM deployed (In Actual Figure)	60,153	1,76,410	193.27
No of POS deployed (In Actual Figure)	5,95,958	10,58,642	77.64
No of CREDIT CARDS issued (In Millions)	18.33	20.36	11.07
No of DEBIT CARDS issued (In Millions)	181.97	500.08	174.81
No of MOBILE BANKING Users (In Millions)	5.96	35.5	495.64

Table 2 Transactions through Internet/Electronic Banking Delivery Channels

Transaction trough	No. of Transactions (In millions)		Growth in %
	Year*		
	2011-12	2013-14	
ATM	5086.17	6090.98	19.76
POS	645.76	1128.12	74.7
CREDIT CARD	320.42	511.99	59.79
DEBIT CARD	5409.45	6707.1	23.99
MOBILE BANKING	25.55	94.6	270.25

Table 3 NEFT and RTGS Transactions

Transaction type	No. of Transactions (In millions)		Growth in %
	Year*		
	2010-11	2014-15	
NEFT	132	927.55	602.69
RTGS	49	92.75	89.29

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

A. Benefits for costumers

Less waiting time: 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 (Taft, 2007). It also reduces the time and place limitation and it provides various benefits to consumers so that they feel convenient while doing banking activities. Ease and Convenience: Internet banking

is considered as more efficient in term of ease of use and access (Jeon, 2014). It allows the consumers to make transactions on internet provide them comfort of home or office without going outside. It also enables consumers to keep an eye on their transactions or account activities from their home, office or elsewhere so they can feel satisfied and convenient. Even non transactional facilities like ordering check books online, updating accounts, inquiring about interest rates of various financial products etc. have become much simpler on the internet.

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 (Ding, 2007).

Save time and money: Now customers don't have to go to branch to avail banking services it consist various advantages such as: it will save time, save fuel, do away from traffic, save the environment in term of reducing the use of motor vehicles and reduce waiting time.

B. Benefits for banks

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 (Wamalwa, 2006). The banks can provide banking services to the consumers using internet banking at a far lower cost as compared to the traditional banking [12].

Cost effective mechanism: The internet banking provides an opportunity of self-service channel to the consumers. This help the banks to cut their workforce up to a particular extent that results in reducing the administrative costs bear by the banks. Compared to traditional banking system, internet banking is cost-effective as it reduces the administrative costs and paperwork needed for the bank transactions [13]. Many studies show that electronic banking has successfully reduced operating and administrative cost and fees.

Reach where there is no branch: Internet banking has expanded their geographical reach and may increase customer base through deploying electronic delivery channels at lower cost [14]. Actually, some banks are doing in that way, they are providing banking services exclusively via the Internet in some areas because they do not have bank branches in these areas. whereas many financial institutions are using the Internet banking as a branchless banking to satisfy their existing customers and attract new

customers in the perspective of convenience and cost effectiveness.

Improve Customer relationship: - Maintaining the relationship with consumers has become a strategic priority for most of the banks. Using the internet banking technology and facilities can provide a means for banks to develop and maintain a good relationship with their customers by offering easy access to a wide range of products and services [15]. Managing a good relationship with the customers may help to make customer loyalty, customer retention and improve cross-selling. Internet banking facilities have become a useful tool for improving customer satisfaction and increasing cross-selling opportunities [16].

Eco-friendly image: Another important benefit of internet banking is that it is eco-friendly is nature. Internet banking cuts down the paper usage and reduces pollution as people do not have to travel physically and also does not add carbon emissions. Implementing the e-banking facilities in the banks show the concern of the bank towards the environment [17], this further, will help the banks to create an eco-friendly image.

CHALLENGES IN E-BANKING

- **Security Risk:** The problem related to the security has become one of the major concerns for banks. A large group of customers refuses to opt for e-banking facilities due to uncertainty and security concerns. According to the IMAI Report (2006), 43% of internet users are not using internet banking in India because of security concerns. So it's a big challenge for marketers and makes consumers satisfied regarding their security concerns, which may further increase the online banking use.
- **The Trust Factor:** Trust is the biggest hurdle to online banking for most of the customers. Conventional banking is preferred by the customers because of lack of trust on the online security. They have a perception that online transaction is risky due to which frauds can take place. While using e-banking facilities lot of questions arises in the mind of customers such as: Did transaction go through? Did I push the transfer button once or twice? Trust is among the significant factors which influence the customers' willingness to engage in a transaction with web merchants.
- **Customer Awareness:** Awareness among consumers about the e-banking facilities and procedures is still at lower side in Indian scenario. Banks are not able to

disseminate proper information about the use, benefits and facility of internet banking. Less awareness of new technologies and their benefits is among one of the most ranked barrier in the development of e-banking.

- ▶ **Privacy risk:** The risk of disclosing private information & fear of identity theft is one of the major factors that inhibit the consumers while opting for internet banking services. Most of the consumers believe that using online banking services make them vulnerable to identity theft. According to the study consumers" worry about their privacy and feel that bank may invade their privacy by utilizing their information for marketing and other secondary purposes without consent of consumers.
- ▶ **Strengthening the public support:** In developing countries, in the past, most e-finance initiatives have been the result of joint efforts between the private and public sectors. If the public sector does not have the necessary resources to implement the projects it is important that joint efforts between public and private sectors along with the multilateral agencies like the World Bank, be developed to enable public support for e-finance related initiatives.
- ▶ **Availability of Personnel services:** In present times, banks are to provide several services like social banking with financial possibilities, selective up gradation, computerization and innovative mechanization, better customer services, effective managerial culture, internal supervision and control, adequate profitability, strong organization culture etc. Therefore, banks must be able to provide complete personnel service to the customers who come with expectations.
- ▶ **Implementation of global technology:** There is a need to have an adequate level of infrastructure and human capacity building before the developing countries can adopt global technology for their local requirements. In developing countries, many consumers either do not trust or do not access to the necessary infrastructure to be able to process e-payments.
- ▶ **Handling Technology:** Developing or acquiring the right technology, deploying it optimally and then leveraging it to the maximum extent is essential to achieve and maintain high service and efficiency standards while remaining cost effective and delivering sustainable return to shareholders. Early adopters of technology acquire

significant competitive advances Managing technology is therefore, a key challenge for the Indian banking sector.

OPPORTUNITIES IN E-BANKING-

- ▶ **Untapped Rural Markets:** Contributing to 70% of the total population in India is a largely untapped market for banking sector. In all urban areas banking services entered but only few big villages have the banks entered. So that the banks must reach in remaining all villages because majority of Indian still living in rural areas.
- ▶ **Multiple Channels:** Banks can offer so many channels to access their banking and other services such as ATM, Local branches, Telephone/mobile banking, video banking etc. to increase the banking business.
- ▶ **Competitive Advantage:** The benefit of adopting e-banking provides a competitive advantage to the banks over other players. The implementation of e-banking is beneficial for bank in many ways as it reduces cost to banks, improves customer relation , increases the geographical reach of the bank , etc. The benefits of e-banking have become opportunities for the banks to manage their banking business in a better way.
- ▶ **Increasing Internet Users & Computer Literacy:** To use internet banking it is very important or initial requirement that people should have knowledge about internet technology so that they can easily adopt the internet banking services. The fast increasing internet users in India can be a very big opportunity and banking industry should encase this opportunity to attract more internet users to adopt internet banking services.
- ▶ **Worthy Customer Service:** Worthy customer services are the best brand ambassador for any bank for growing its business. Every engagement with customer is an opportunity to develop a customer faith in the bank. While increasing competition customer services has become the backbone for judging the performance of banks.

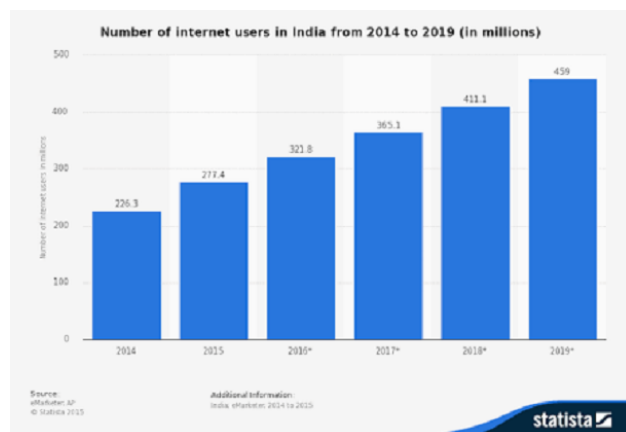


Figure-1 shows evidence of increasing number of internet users in India

- **Internet Banking:** It is clear that online finance will pick up and there will be increasing convergence in terms of product offerings banking services, share trading, insurance, loans, based on the data warehousing and data mining technologies. Anytime anywhere banking will become common and will have to upscale, such up scaling could include banks launching separate internet banking services apart from traditional banking services.
- **Retail Lending:** Recently banks have adopted customer segmentation which has helped in customizing their product folios well. Thus retail lending has become a focus area particularly in respect of financing of consumer durables, housing, automobiles etc., Retail lending has also helped in risks dispersal and in enhancing the earnings of banks with better recovery rates.

CONCLUSION:

It can be concluded that Internet banking in India is only at its primitive stage dominated by the Indian private and foreign banks. The use of Internet banking is confined to a few consumer segments. The risks associated with Internet banking are many, which the banks have to model using sophisticated systems and extensive use of technology. The legal framework as its exits requires an updating to streamline and handle the issues associated with Internet banking. The functional model can be used to prioritize perceptual variable concerning consumer behavior so that value to the consumer can be maximized. The banks can focus on strategic consumer groups to maximize its revenues from Internet banking. The experiences of the global economies suggest that banks cannot avoid the Internet banking phenomenon, but to gain a competitive advantage, they must structure their business models to suit to Indian conditions. According to the study, the researcher concludes that the most of the bank customers are aware about

all the banking services in India. The banks further have to take necessary steps to educate the customers regarding the new technology and other services offered by the banks. Banks may extend customer meeting time with bank officials and also friendly approach is necessary. Definitely it will help to retain the existing customers and to attract new customers. It will automatically improve the banking service and development of banks in India and also in abroad. The research report is useful to know the consumer awareness of e-banking system and what types of risk involved in e-banking system.

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