

INTERNET BANKING

Elizabeth Makawa

BBA

Guide: Ms. Nishtha Sharma, Assistant Professor

Faculty of Commerce and Management

Bachelor of Business Administration

Raipur (Chhattisgarh) India

ABSTRACT

The paper describes the current state of Internet banking in India and discusses its implications for the Indian banking industry. Particularly, it seeks to examine the impact of Internet banking on banks' performance and risk. Using information drawn from the survey of 85 scheduled commercial bank's websites, during the period of June 2007, the results show that nearly 57 percent of the Indian commercial banks are providing transactional Internet banking services. The univariate analysis indicates that Internet banks are larger banks and have better operating efficiency ratios and profitability as compared to non-Internet banks. Internet banks rely more heavily on core deposits for funding than non-Internet banks do. However, the multiple regression results reveal that the profitability and offering of Internet banking does not have any significant association, on the other hand, Internet banking has a significant and negative association with risk profile of the banks.

This research work was undertaken to ascertain the impact of Internet banking in Indian banks and evaluation of its effectiveness in the banking system. To put this study on a unique outlook I've designed together information while personal questionnaires interaction was paid purely to areas of customers and cashiers of Indian bank and review of related literatures to the main themes and sub themes. It was ascertained that Internet banking has helped the banks to attain goals and objectives.

KEYWORDS: internet banking, information technology, electronic transfers

INTRODUCTION

Electronic banking is the newest delivery system of banking services. The definition varies amongst researchers partially because electronic banking refers to several types of channels through which a bank's carry out most retail banking services via computer, television or mobile phone. Some researchers described e-banking as an electronic connection between the bank and customer in order to prepare, manage and control finances and transaction.

Electronic banking has changed the way the banking industry considers non- traditional channels of delivering services to customers. No doubt in the future banking environment will be more paperless and will overcome the traditional barriers of distance and geographic boundaries. Channels promises to be more efficient by providing low-cost operations and access, to financial services remotely.

II. ORIGIN OF E-BANKING

The concept of Internet banking has been simultaneously evolving with the development of the World Wide Web. Programmers working on banking data bases came up with ideas for online banking transactions, sometime during the 1980s. The creative processes of development of these services were probably sparked off after many companies started the concept of online shopping. The online shopping promoted the use of credit cards through Internet. Many banking organizations had already started creating data ware housing facilities to ease their working staffs. The development of these databases was widely used during the development of ATM's. Sometime in 1980s, banking and finance organizations in Europe and United States started suggestive researches and programming experiments on the concept of 'home banking'. Initially in the 80's when computers and Internet were not so well-developed, 'home banking' basically made use of fax machines and telephones to facilitate their customers. The widespread of Internet and programming facilities created further opportunities for development of home banking. In 1983, the Nottingham Building Society, commonly abbreviated and referred to as the NBS, launched the first Internet banking service in United Kingdom. This service formed the basis for most of the Internet banking facilities that followed. This facility was not very well-developed and restricted the number of transactions and functions that account holders could execute. the facility introduced by Nottingham Building Society is said to have been derived from a system known as Prestel that is deployed by the postal service department of United Kingdom.

PROGRESS OF ELECTRONIC BANKING IN INDIA

Internet banking refers to the use of Internet as a remote delivery channel for banking services such as opening a deposit account or transferring funds at different accounts etc. Further, it is a desirable opportunity for banks where the key to success is customer adoption. There is evolution in development of internet banking. At the basic level, Internet banking includes the setting up of a web page by a bank to give information about its product and services. At an advance level, it involves provision of facilities such as accessing accounts, funds transfer, enabling integrated sales of additional process and access to other financial services such as investment and insurance. There is advantage for customers as it provides opportunity to handle their banking transactions without visiting bank tellers. The services through Internet banking are e-tax payment; access the account to check balance, online trading of shares, online remittance of money, electronic bill payment system, railway reservation, transfer of funds from one customer's account to other, application of loan, etc. Internet banking channel is convenient compared to bank branch system because stakeholders can access their account at any time. Banks leveraged the advantage of the Internet by offering online services in recent years. The Internet has revolutionized the way we live, shop, entertain and interact and also the way we save and invest. Internet banking arrived in India in the late 1990s. ICICI was the first bank to champion its usage and introduced internet banking to its customers in 1996. With lower internet costs and increased awareness about electronic media, online banking established itself only in 1999. Other banks followed suit, including HDFC, Citibank, IndusInd and the now redundant Times Bank. Internet banking changed both the banking industry as well as banks' services to its customers. 'Anywhere banking' came to be recognized as an opportunity also for differentiated and competitive services. Ancillary online services like checking account status, fund transfer, ordering demand drafts, loan applications, credit card verifications, shopping portals etc. as

well as not requiring a visit to the branch during office hours were viewed as high-value offerings and increasingly started to become a necessity rather than a service.

LITERATURE REVIEW

E-banking is an innovation when new information technologies merge into traditional banking services. Operating costs minimization and revenue maximization are the major drivers that boost e-banking services (Sannes, 2001; Reibstein, 2002). E-banking service is basically a self-service by customers, so for banks, it requires less resources and lower transaction and production costs (Southard and Siau, 2004; Witman and Poust, 2008). A study about the e-banking over 1999–2006 shows that the application of e-banking can improve banks' performance in terms of the growth in assets, reduction in operating expenses and portfolio enhancement (Dandapani et al., 2008). Even in 1990s, Sraeel (1996) emphasises that creating virtual banking will not only create a new service delivery channel, but also lead to value creation to both banks and customers (Hwang et al., 2007; Murphy, 2007). AmatoMcCoy (2005) further argues that customers will be attracted to e-banking when the advanced e-banking services like e-transfer and e-bill options are available. Through interviewing banks in a small island and examining their e-banking websites from 2004 to 2006, Jenkins (2007) indicates that those banks were using e-banking as an assurance to their customers to maintain a competitive quality of service. To continually improve the

performance of e-banking services, several core-capacities are critical:

Planning new IT infrastructure

Enhancing transaction security

Providing value-added content

Delivering differentiated services

Managing customer relationships

The retention and expansion of relationships with relative older and lower IT

Volume 2, Issue 2 (October, 2015)

ISSN 2350-1316

23

Consumers today are much selective in choosing banking services in terms of their demands and preferences. To be competitive, banks must develop services to satisfy customers as well as delight them at the same time. Liao and Cheung (2002) indicate that the most important quality attributes underlying perceived usefulness of e-banking are expectations of accuracy, security, network speed, user-friendliness, user involvement and convenience. A basic Electronic Service Quality standard is developed with four dimensions: efficiency, fulfilment, system availability and privacy (Parasuraman et al., 2005; Ibrahim et al., 2006). Herington and Weaven (2007) indicate that online service quality has no direct impact on customer delight, e-trust or the development of stronger relationships with customers, but it does have a relationship to e-loyalty. Their research also indirectly explains the change of households of using online banking service. For example, in 2003, 91% of US households held bank accounts and 93% of those used at least one electronic transfer of funds option with their account (Kolodinsky and Hogarth, 2004).

However, Fest (2007) points out that only 40% of US households took advantage of e-banking service, whereas over 50% of households that had not been attracted yet to e-banking because those customers might have had a bad experience on a self-service site (Swann, 2008). The winners in e-banking industry are those banks that are able to successfully enhance their offerings while simultaneously enhancing security measures and getting customers to attitudinal properties and preferences for service delivery channels. For instance, in China, there were only 6000 computers connected to the internet with 40,000 internet users in 1995, but there were 10.2 million internet-connected computers and 26.5 million internet users nationwide by the end of June 2001 (Zhao, 2002). Lu et al. (2005) reveal that one of the key strategic responses of banks in China before joining WTO was to develop e-banking to a more competitive environment, even under the current condition of lack of practical customer credit system. In another research, Laforet and Li (2005) examine the extent of e-banking and banking in China by investigating its market status, identifying the target customers, the demographic characteristics of users and non-user and comparing their attitudes towards e-banking adoption .

The rise of Internet Banking is also due to its number of benefits for both the provider and the customer as well. From the bank's perspective these are mainly related to cost savings (Sathye, 1999; Robinson, 2000) and internet banking remain one of the cheapest and more efficient delivery channels (see Pikkarainen et al, 2004). Other rationales for the adoption of such services are also related to competition as internet banking strategy has been an interesting way to retain existing customers and attract new ones (Robinson, 2000) and to the numerous advantages to banks for instance, mass customization, more effective marketing and communication at lower costs amongst others (Tuchila, 2000). Benefits for the end users are numerous as well and include mainly convenience of the service (time saved and globally accessible service), lower cost of transaction and more frequent monitoring of accounts among others (Pikkarainen et al, 2004).

However, it should also be noted that there are still customers who fear to make use of Internet banking, as they are concerned with security aspects of such a system. Centeno (2004) argues that speed, the convenience of remote access, 24/7 availability and price incentives are the main motivation factors for the consumers to use internet banking. Durkin et al. (2008) notes that the simplicity of the products offered via internet banking facilitates the adoption of internet banking by consumers. Calisir and Gumussoy (2008) compare the consumer perception of internet banking and other banking channels and report that internet banking, ATM and phone banking substitute each other. Maenpaa et.al. (2008) examine the consumer perceptions of internet banking in Finland and their findings indicate that familiarity has a moderating role in the perception. Guerrero et al. (2007) examine the usage of internet banking by Europeans and their results indicate that ownership of diverse financial products and services, attitude towards finances and trust in the internet as a banking channel influence clients' usage of internet banking. Confirming other papers, Sohail and Shanmugham (2003) document accessibility of internet, awareness of e-banking and resistance to change are found to be influencing Malaysians use of internet banking. Another factor that promotes clients usage of internet banking is seller

RESEARCH METHODOLOGY

NEED FOR STUDY

The present study is explanatory in nature and is based on secondary data. The data used for the study has been collected from annual reports of RBI (Reserve Bank of India), Report on trends and progress of banking in India, websites of RBI, reputed journals and newspapers.

Functions of E - Banking

Electronic Banking provides following services

☐ **Bill Payment:** Every bank has a tie up with insurance companies, service providers, utility companies and the like. Banks use this tie up to offer online payment of electricity bill, telephone bill, mobile bill etc., and Banks charge a very minimal fee for providing these services.

☐ **Fund Transfer:** A customer can transfer funds from his account to another with the same bank or even a different bank, anywhere in India.

Investment: Through electronic banking, a customer can open a fixed deposit with the bank online through funds transfer. A customer can buy and sell shares if he has a demat account and trading account. Banks also allow customers to buy and redeem mutual funds through online platforms.

☐ **Shopping:** With digital banking service, a customer can purchase goods or services through online platforms and pay for them using his account.

☐ **Checking account balances:** The customer can check his account balance and detail records of transaction history and can download the report.

☐ **Mobile banking:** Mobile banking is a facility provided by banks which permits its customers to do monetary transactions using a mobile device such as smartphone or tablet.

☐ **Unified Payment Interface (UPI):** Unified Payment Interface is an immediate real time payment system which is established by National Payment Corporation of India. Customers can make transactions through their mobile phones from anyplace and at any time.

☐ **Rewards and Loyalty points:** These virtually integrated packages test conventional methods of customer attainment and retention by familiarizing cost effective and computable, rewards and incentives.

☐ **Message Alert:** The most important features of E-banking are that the customer can receive notifications real time.

Benefits of E-Banking

The advantages of E –banking are: ☐ Saves a lot of working cost ☐ It provides banking services 365 days a year and 24/7 a day

☐ It saves time spent in a bank by customers as they need not go to bank, to get banking services. ☐ Electronic banking provides way for international banking

☐ Banks can offer customized services to customers

☐ Banking integration allows the banks to compete in new market, build strong customer base, get new customers and increase their market share.

Challenges in E-Banking

Below are some of the challenges handled by the banks due to digitalization

- ☐ **Privacy:** One of the important factors that customers are afraid when selecting E-banking services are, the risk of disclosing private information.
- ☐ **Security:** Customers want their transaction to be confidential. But there is constantly a chance of someone retrieving the information.
- ☐ **Competition:** Nationalized banks and commercial banks have to contest with private sector banks and international banks. The competition brings various challenges before the banks such as innovative ideas, creative concepts, consumer patterns and the like.
- ☐ **Unskilled Professional:** Skilled and specialized manpower has to be appointed to perform E- banking activities.
- ☐ **Technological Changes:** Technology keeps on changing. As technology changes more banking services are getting digitized. It becomes difficult for end users to learn all these technological changes.
- ☐ **Cybercrime:** Cybercrime is the use of digital instruments for illegal purposes. One can do such crime sitting comfortably in front of a computer or mobile screen. The risk has increased to both the bank and the customer

Future of E-Banking in India

The future banking industry will look different from what it is today due to its dynamic changes. The pandemic has completely changed the way from how people shop, travel, work, to even how we bank, and has also brought a change in consumer behavior. The Financial Technology (Fin Tech) startups have revolutionized this transformation with innovative products and services to suit the diverse customer base. In India, banks often ensure to incorporate new technologies in their business and operations. ATMs, virtual banking, mobile banking, point-of-sale (POS) machines were initial technologies that banks implemented. Now, FinTech companies have appeared as disruptors in the financial service sector by including a number of leading-edge technologies in their products and service offerings. Dr. C.Nithya: A Study of Electronic Banking in India 167

The term Fintech (Financial Technology) denotes to program and other current technologies used by industries that offer computerized and enhanced financial services. The advent of current technologies such as Artificial Intelligence-Machine Language (AI – ML), big data, blockchain, cloud computing, robotic process computerization and others allow the banking companies to provide customer-centric assistances to varied clusters of people.

The new-age technologies are explained below:

- **Artificial Intelligence and Machine Language:** The use of AI and ML will offer predictive data analysis as banks and financial institutions will look to offer better services.
- **Big – data:** Big data allows banks to create useful insights from unstructured financial and personal data composed from various sources in order to launch more customer-friendly products and services as well as expand banking operations.
- **Block Chain:** Block chain, sometimes referred to as Distributed Ledger Technology (DLT), makes the history of any digital asset unalterable and transparent through the use of decentralization and cryptographic hashing.
- **Cloud Computing:** Cloud computing can support banks and financial services companies with enlarged data security, error tolerance, and tragedy retrieval for financial companies. It offers a high level of redundancy and back-up at a reasonably lesser price than conventionally accomplished solutions.
- **Robotics Process Automation:** Robotic Process Automation (RPA) is used by banks and other financial organizations to mechanize labor-intensive business methods so the banks can continue modest. It is the use of grouping of robots and Artificial Intelligence (AI) to change and supplement human processes in banking.

CONCLUSION

gives a new insight to the e-banking users and beneficiaries. Online banking is just like normal banking, with one big exception. You don't have to go to the bank for transactions. Instead, you can access your account any time and from any part of the world, and do so when we have the time, and not when the bank is open. Based on the above findings, it can be concluded that technology has greatly influenced the bank customers' encouraging them to conduct banking in an innovative manner. They have good awareness regarding ATMs and internet banking whereas it is low in others service like mobile banking, credit cards, smart cards etc., Adoption of ATMs was highest followed by internet banking, credit card and mobile banking, whereas as drop page rate is high in the case of credit cards followed by mobile banking, and smart cards. Variability of adoption of ATMs and internet banking is high among the different age groups; here youngsters are leading; whereas it is low for credit cards and mobile banking. It is further found that adoption of ATMs and internet banking is dependent on education where highly educated have high rate of adoption. Income is closely associated with the adoption of ATMs, internet banking and credit cards where the high income groups are ahead of others but the picture is different in mobile banking proving that it is the cheapest e-banking delivery channel.

The study reveals that users of e-banking delivery channels have strong positive perception towards technology used in banking which is reflected in their adoption and usage of the same whereas non users clearly exhibited their disinterest and ignorance in using various technologies driven banking channels. This study also identifies factors convenience, speed, content, privacy, fee & charges, security, design and accessibility which influence the adoption of ATMs wherein convenience, speed, design, content and accessibility are positively associated with the adoption of ATMs whereas fee & charges, security, privacy has negative influence. In the case of internet banking also identifies factors convenience, speed, content, privacy, fee & charges, security, design and accessibility which influence the adoption of internet banking wherein convenience, speed, security, privacy and accessibility are positively associated with the adoption of internet banking whereas fee & charges, design and content has negative influence on internet banking adoption. It is further revealed that users' different experiences with e-banking delivery channels and their satisfaction go hand in hand in the sense that those who have less difficulties exhibited high level of satisfaction and vice versa. In the case of all the selected e-banking delivery channels except credit cards, users do not have many difficulties and they are fairly satisfied with the same. In the case of credit cards,

most of the users frequently experience high interest rates, hidden charges and charges on late payments which lead to low level of satisfaction of credit cards.

It is important to note that this study shows that e-banking technologies cannot be aggregated into a single category and thus a "one size fits all" marketing approach will not work across various e-banking products and services. Seeing an advantage in using a new technology would lead to an increase in the likelihood of adopting it. This was the case for all e-banking technologies examined.

The research findings clearly suggest that the drive towards ease of banking and convenience is favored by the customer and therefore banks should find alternative strategic routes designed to improve service delivery either human based or technology based. It is important to understand that no technology can replace human interface. Computers cannot be made to work smarter than human beings in the foreseeable future.

Personal choices, intuitions, likes, dislikes etc. will keep playing a dominant role in the way people interact with their service providers, customers and other counter parts. Technology will facilitate the transactions but it will be the man or woman behind the technology that will matter the most and have the last word.

REFERENCE

uality online services. *Managing Service Quality*, 17(4), 404–414.

Hwang, H.G., Chen, R.F. and Lee, J.M. (2007). Measuring customer satisfaction with internet banking: an exploratory study. *International Journal of Electronic Finance*, 1(3), 321–335.

Jenkins, H. (2007). Adopting internet banking services in a small island state: assurance of bank service quality. *Managing Service Quality*, 17(5), 523–534.

Joseph, M. and Stone, George (2003). An Empirical Evaluation of US Bank Customer Perceptions of the Impact of Technology on service Delivery in The Banking Sector. *International Journal of Retail and Distribution Management*, 31(4), 190-202.

Laforet, S. and Li, X.Y. (2005). Consumers' attitudes towards online and mobile banking in China. *The International Journal of Bank Marketing*, 23(4–5), 362–381.

Lang, Bodo and Colgate, Mark (2003), Relationship Quality , On-Line Banking and The Information Technology Gap. *International Journal of Bank Marketing*, 21(1) , 29-37.

Levesque, T. and McDougall, G.H. (1996). Determinants of customer satisfaction in retail Banking. *International Journal of Bank Marketing*, 14(7), 12–20.

Liao, Z.Q. and Cheung, M.T. (2002). Internet-based e-banking and consumer attitudes: An empirical study', *Information and Management*, 39(4), 283–292.

Lu, M.T., Liu, C.H., Jing, J. and Huang, L.J. (2005). Internet banking: strategic responses to

the accession of WTO by Chinese banks. *Industrial Management and Data Systems*, 105(3–4), 429–443.

Murphy, P.A. (2007). Digital DIVIDE. *Independent Banker*, 57(11), 57.

Nilsson, D. (2007), Internet Banking and the Impact of Seller Support and Third Party
Journal of Internet Banking and Commerce, 12 (1), 1-9.

Parasuraman, A., Zeithaml, V.A. and Malhotra, A. (2005). E-S-qual: a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213–234.

Pikkarainen, T.; Pikkarainen, K.; Karjaluoto, H. and Pahnla, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet Research*, 14, (3), 224–235.

Polatoglu, V.N. and Ekin, S.(2001). An Empirical Investigation of the Turkish Consumers' Acceptance of Internet Banking Services. *International Journal of Bank Marketing*, 19(4), 156-165.

Reibstein, D.J.(2002).What attracts customers to online stores, and what keeps them coming