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# **Internet banking in India: Problems and Prospects**

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*Abstract:* The new information technology is becoming an important factor in the future development of financial services industry, and especially banking industry. Growing international trading and problems in transferring money have motivated researchers to introduce a new structure. Internet banking is such idea. Most of banks are using the Internet as a new distribution channel. Internet banking has the potential to transform the banking business as it significantly lowers transaction and delivery costs. This paper presents a through survey of internet banking describing features, opportunities and challenges before internet banking. This paper discusses why internet banking is a very reliable way to manage finances. Internet banking provides great value in terms of convenience, customer intimacy, timesaving, inexpensiveness and coherence in banking. Despite a few disadvantages, Internet banking is a highly recommended, new technology.

Keywords: Internet banking, E-Business, E- -banking Cost Reduction, Satisfaction.

## I. INTRODUCTION

The wind of liberalization sweeping through India has affected all sectors of the economy and centre of all these activities is the Indian Banking Industry. In such fast changing environment, to meet emerging needs, the operations in banks need immediate automation to provide services comparable to best international standards and to match technological changes taking place in other countries. The breathtaking advances in technology have shifted the focus from the concept of branch banking to anytime anywhere banking. Information technology has affected banks in two main ways. First, it has reduced costs by replacing paper-based, labor intensive methods with automated process. Secondly, it has modified the ways through which customers' have access to bank's services. With commerce becoming more and more computerized, banks are feeling the necessity to make an online presence[19].

A sound and effective banking system is the backbone of an economy. The economy of a country can function smoothly and without many hassles if the banking system backing it is not only flexible but also capable of meeting the new challenges posed by the technology and other external as well as internal factors. The importance and role of information technology for achieving this benign objective cannot be undermined. There is an urgent need for not only technology up gradation but also its integration with the general way of functioning of banks to give them and rim in respect of services provided to the customers, better housekeeping, optimizing the use of funds and building up of management information system for decision making. The technology has the potential to change methods of marketing, advertising, designing, pricing and distributing financial products and services and cost savings in the form of an electronic, selfservice product-delivery channel. The technology holds the key to the future success of Indian Banks. Thus, internet banking is the need of the hour, which cannot be lost sight of except at the cost of elimination from the competition. The existence of internet banking also becomes inevitable due to the standards required to be matched at the international level. Thus, the domestic as well as the international standards mandates the adoption of internet banking at the earliest possible moment.

# II. TECHNOLOGY IN INDIAN BANKING

- 1960 Mechanized banking introduced
- 1970 Introduction of computer based Banking industry
- 1980 Introduction of computer-linked communication based banking
- In 1970s, SBI installed a ledger-posting machine along with a Mainframe computer at selected branches
- A committee on computerization and mechanization was appointed by RBI in 1983 under chairmanship of Dr. C. Rangrajan.
- Technology was the rational for bank Introducing ATM and POS (Point of sales) In 1970s, telephone banking in 1980s and Internet banking in 1990s.

#### III. CONCEPT OF INTERNET BANKING

Electronic banking refers to an application of the Internet that allows customers to can dial into bank networks or their websites, using their own telephones and computers, and to get a host of banking services directly on their home or office PCs. Electronic banking is the wave of the future. It provides enormous benefits to consumers in terms of the ease and cost of transactions. But it also poses new challenges for country authorities in regulating and supervising the financial system and in designing and implementing macroeconomic policy. Internet banking has been around for some time in the form of automatic teller machines and telephone transactions. More recently, it has been transformed by the Internet, a new delivery channel for banking services that benefits both customers and banks. Access is fast, convenient, and available around the clock, whatever the customer's location banks can provide services more efficiently and at substantially lower costs. Electronic banking also makes it easier for customers to compare banks' services and products, can increase competition among banks, and allows banks to penetrate new markets and thus expand their geographical reach. The distinctive features of Internet banking includes:[19]

- It removes the traditional geographical barriers as it could reach out to customers of different countries
- It has added a new dimension to different kinds of risks traditionally associated with banking, heightening some of them and throwing new risk control challenges.
- Security of banking transactions, validity of electronic contract, customers' privacy, etc., which have all along been concerns of both bankers and supervisors have assumed different dimensions given that Internet is a public domain, not subject to control by any single authority or group of users.
- It poses a strategic risk of loss of business to those banks who do not respond in time to this new technology, being the efficient and cost effective delivery.

#### IV. SERVICE PROVIDED BY NET BANKING

## Queries

- Check Balance
- See Statement
- Inquire about Cheque status
- Ask for a Statement
- Ask for a Cheque Book
- Inquire about Fixed Deposit
- Inquire about TDS details
- See Demate Account
- Update profile

## Transactions

- Stop a Cheque
- Pay Bills
- Ask for a Demand Draft
- Transfer funds between accounts
- Transfer funds to a third party
- Request for a new Fixed Deposit
- Shop Online
- Pay Bank Credit Card Dues

# V A GUIDE TO INTERNET BANKING SECURITY

The internet is a worldwide phenomenon, no doubt about it. It has made the life of many people easier and more convenient. Imagine being able to do a host of financial transactions online from buying and selling products and services to paying bills and transferring money without having to leave the comfort of your home or office. Apart from individuals and entrepreneurs who have made their presence online, the banking industry has joined the bandwagon as well.

With the advent of internet banking, customers are given the ability to do multiple financial tasks in just a few clicks of a button. While this may be fast and easy, security threats always exist causing worry among many consumers. Among the different fraudulent online activities that have been identified are the identity theft, phishing, pharming, hacking and spamming. In these criminal acts, it's often hard to identify perpetrators.

As providers of internet banking services, banks have the responsibility of ensuring a secure environment for customers notably as money is always involved in financial transactions. But while this is already being done, experts say that the end user or the public also have to their part and understand the risks involved in internet banking. [6]

Currently, there are two basic security methods used for internet banking - the PIN/TAN system and the signature based encryption system. The PIN/TAN system involves the use of a PIN as password when logging in and TAN which a one-time password is meant to authenticate transactions. On the other hand, the signature-based internet banking involves the use of digital signature and encryption technology. Other countermeasures available include digital certificates used against phishing and pharming and the class-3 card readers which prevent the manipulation of transactions. On the part of consumers, they can take several important steps to make sure they and their money are protected when transacting online. The first step is to avoid engaging in online banking or any other sensitive transactions on public computers such as internet cafes. Another vital step they can take is to be sure that the computers they use at home have adequate security measures such as a firewall, anti-virus scanners and anti-spam programs.

Being vigilant when it comes to your bank accounts and transactions is also a protective measure. Be sure to check your bank statements regularly and report immediately to the bank management or customer service any transactions that you did not do. [19]

Additionally, avoid downloading software and email attachments you are doubtful about as these may contain viruses that can wreck havoc to your computer system.

As for PINs (personal identification number) or passwords, never write it down as much as possible or keep it in your wallet. Use a unique combination of numbers and letters and change them on a periodic basis.

Internet fraud worldwide has caused banks and other commercial companies to lose millions of dollars in a variety of transactions. Keep in mind that the internet is not 100 percent safe and there are always people who will find ways by hook or by crook to commit crimes online. With this reality, it's essential then that consumers understand the possible threats in internet banking.

## **VI. PROBLEMS**

India is the IT and tech services outsourcing hotspot of the world, it's surprising that Internet banking has not really taken off. Despite the advent of a very tech-savvy and vast consumer class in recent years, a mix of industry issues and unique challenges continue to thwart the expansion of net banking in India. Technology challenges, IT practices, certain cultural issues, industry lethargy, and workplace constraints have affected widespread acceptance of Internet banking. Low Broadband Internet Penetration

India has one of the lowest broadband connectivity penetration rates in Asia as compared to Japan, Taiwan, Korea and Singapore. While the bigger cities such as Mumbai, Delhi, Chennai, and Bangalore have relatively better broadband penetration rates, PC users in smaller cities and towns still use dial-up options to connect to the Internet. Slow connectivity speeds often dampen the online banking experience for many customers eager to use such services.

#### **Banks' Ambivalent Commitment Levels**

Internet banking did take off in India at the turn of the millennium but soon faltered due to lack of takers. In the middle of this decade, multinational and domestic private banks started offering net banking services as a competitive differentiator. Only recently, state-owned and public sector banks have started doing likewise. However, banks' ambivalent commitment levels and their reluctance to allocate huge budgets for net banking branding initiatives, as well as a lack of industry advocacy efforts, have resulted in poor acceptance levels of Internet banking by customers. [19]

## **Customers' Preference for Traditional Branches**

There are thousands of highly active traditional bank branches in India's crowded cities and major towns. Office workers take longer lunch breaks to finish banking activities and transactions at these branches rather than conduct them online. Most customers prefer the personal touch and customized service offered by staff in brick-and-mortar bank branches. Many Indians are also averse to calling call centers and banks' customer contact lines to address issues related to online bank accounts.

## Fear of Online Threats/Scams:

Ubiquitous and prevalent online threats about hackers, identity theft, stolen passwords, viruses, worms and spy ware tend to make customers wary just like in any other country. Conservative Indian bank customers used to years of saving in an erstwhile mixed-socialist economy are always fearful of losing hard-earned savings in online scams. These customers are also not sure about the efficacy of banks' websites and their commitment to allocate funds for reliable encryption mechanisms and robust back-end technologies and systems.

## Impersonal

Doing transactions on the internet can be very impersonal. In other words, you only do business with the use of a computer. No individual to receive and check your money or correct some wrong information that you might have written on a certain form. And so for people comfortable dealing with real people who provide personalized services and using paper and money, internet banking is not ideal.

# **Difficult for first timers**

For a first time user, navigating through a website of an internet bank may be hard and may take some time. Opening an account could also take time as some sites ask for numerous personal details including a photo identification which can inconvenience the potential customer. Because of this complexity, they may be discouraged to use this internet banking service. Tutorials and live customer support may be provided, though, to help the client in his or her needed tasks so it's best to take the time to know the virtual environment. [19]

#### Security fraud

Many people shy away from internet banking because of the security threat. [1]They can't help but worry about this aspect what with news on fraudulent bank transactions that pop up every now and then. However, this should not be a problem as banks that provide internet banking services prioritize security above anything else. Since they value their customers, they always use the most advanced security technology in protecting their websites.

## **Regulation and Legalities**

Internet banking makes it possible for banks and their customers to do business from anywhere in the world. This greatly increases the bank's potential client base. Nevertheless, according to Andrea Schaechter of All Business, the global approach to banking that internet banking permit makes it extremely difficult for regulatory authorities to enforce finance laws.[9] Additionally, regulations differ from nation to nation and banks are not always proficient in the financial laws for every nation in which they have business. Schaechter asserts that this lack of proficiency opens banks and their clients up to law violations and lawsuits.

## **Digital and Financial Divide**

Rupa Rege Nitsure, claims that a digital divide exists between banks -- i.e., not every bank has access to the hardware and software necessary to make internet banking possible. A study led by Joaquin Yang of Georgia College and State University showed that this problem may be related to size and financial support a bank has. Smaller banks tend not to use internet banking because it is not cost-effective for them.[8] To make Internet banking more commercially fair to banks and customers, all banks would need a sufficient funding source so that banks could eliminate this digital divide. [19]

#### Reputation

Schaechter asserts that problems such as governance and security have the potential to make a bank look bad to clients. Additionally, the more a bank relies on Internet banking, the more the bank may gain an impersonal feel. Both of these problems may discourage clients from choosing a bank that relies on internet banking, regardless of how convenient internet banking may be.

#### VII. PROSPECTS

The Internet has leveled the playing field and afforded open access to customers in the global marketplace. Internet banking is a cost-effective delivery channel for financial institutions.[1] Consumers are embracing the many benefits of Internet banking. Access to one's accounts at anytime and from any location via the World Wide Web is a convenience unknown a short time ago. Thus, a bank's Internet presence transforms from 'brouchreware' status to 'Internet banking' status once **the bank** goes through a technology integration effort to enable the customer to access information about specific account relationship.

#### Convenience -

This is the prime reason that why millions opt for an online banking account.[11] They will be able to do all kinds of banking transactions within the comfort levels of their house. Checking the account balance, depositing money into the account, transferring cash to other similar accounts - the list of activities that one can perform with the aid of online banking platforms is immense. Gone are those days when customer had to visit the local branch to get things done. [19]

## Safe and secure

Banks with online presence provide top security to protect their consumers. [10]They use the latest encryption technology to prevent fraudulent activities such as phishing and identity theft. But while this is given, the consumers have to do their part as well by ensuring that they install the latest antivirus, antispam, and anti-spyware and firewall software installed in their computer.

## Minimal costs

Since the system is already well placed, the bank just needs to create an additional online account for the account holder. In fact, many banks encourage the users to create and operate online accounts with them. This will reduce the overall work load because the operations are fully computerized. As a good will gesture, these banks would increase the interest rates for the account holders. It is a win-win situation for both the parties.

## Maintaining a cleaner environment -

Online banking system can directly affect our ecosystem. The reduction in the additional paperwork will help to conserve the trees. Once again, you are doing more good to the bank, by reducing their operational costs. Various hidden charges that are levied to the account holders to cover up the expenses are thus nullified or minimized to an extent

#### One-stop shop.

With an online bank, user can conduct 95 percent of business on the internet. Apart from accessing account information and bank statements, can pay bills, transfer money from one account to another account or apply for a checking, credit or other types of account or apply for loans or even download forms. [11]Most online banks have an easy to use platform so user just have to click on preferred categories and will be directed to the appropriate page in no time with the necessary information needed.

# High interest rates.

If users are resourceful enough, just may find a good online bank that offers higher interest rates than those offered by the standard banks. There are direct banks or those that purely do business on the internet offering high savings rates. The ability of online banks to offer higher yields and more products is attributed to the fact that they have less overhead expenses.

#### VIII. CONCLUSION

There's no doubt that the advent of the internet has made a positive impact in the lives of many people. And not only individuals have benefited from this technological advancement because various industries have felt its great influence as well. The banking industry is just one of the many sectors on the commercial side that has embraced the internet .The adoption of Internet banking in India will have its own advantages to both the banks and the ultimate customers. The use of information technology will not only reduce the costs of operation but also would be effective, easy to maintain, speedier and highly competitive. [3]The challenges posed by the Internet banking are mostly of procedural nature, which can be easily counterbalanced by adopting suitable technological and security measures. There can be no doubt about the enormous potential and emancipated opportunities offered by advances in technology. However, there are prerequisites and preparations, which have to be made before the full benefits of the technology can be harvested.

## IX. REFERENCES

- Internet banking in India Challenges and Opportunities, by R.K. Up pal & Rimpi kaur ISBN: 8177081373, Year of publication 2007
- [2] JSTOR Economic and Political Weekly, Vol\_ 38, No\_ 51-52 (Dec\_ 27, 2003 - Jan\_ 2, 2004)
- [3] IMC India Internet banking and its challenges in India .mht
- [4] Challenges of the Internet banking Revolution\_ Banking & Finance Banking & Finance Overview from AllBusiness\_com.mht
- [5] http://www.networkmagazineindia.com/200302/featu re.shtml
- [6] http://webinternetbanking.com/internetbankingsecurit y.html
- [7] http://finance.indiamart.com/investment\_in\_india/net \_banking.html
- [8] http://www.ehow.com/about\_5147496\_problemsrelated-net-banking-india.html
- [9] Challenges of Electronic Banking | eHow.com http://www.ehow.com/list\_6603416\_challengeselectronic-banking.html#ixzz14UVYJSM5
- [10] http://webinternetbanking.com/advantageinternetbank ing.html
- [11] http://www.fcbl.net/
- [12] Jayawardhena, C., Foley, P. (2000). Changes in thebankingsector-the case of Internet
- [13] banking in the UK // Internet Research. Vol. 10. No. 1
- [14]. Chau, V.S. and Ngai, L.W.L.C. (2009). The youth market for internet banking services:
- [15] perception, attitude and behavior // Journal of Service Marketing, Vol. 24. No. 1.
- [16] Liaoa, Z., Cheung, M.T. (2002). Internet-based ebanking and consumer attitudes: an

[17] empirical study // Information & Management. – Vol. 39.

[18] Malhotra, P., Singh, B. (2010). An analysis of Internet banking offerings and itsdeterminants in India // Internet Research. – Vol. 20. No. 1.

[19]http//:www.google.com