# E-banking: Threats and Opportunities in India

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#### Abstract

Financial sector plays an important role in the economic development of a country. Banking is the lifeline of an economy. A strong and healthy banking system is important requirement for economic growth. Indian banking industry, today is observing an IT revolution. The implementation of internet in banking organizations has modernized the banks. Implementing the internet banking approach has benefited the both i.e. consumers as well as banks. Considering the benefits, the banks all over the globe have implemented the internet banking and banking organizations in India are no exception. The competition among the banks has led to the increasing total banking automation in the Indian banking industry. E-Banking is a generic term encompassing internet banking, telephone banking, mobile banking etc. Through E-Banking the bank wants to introduce the core concept of IT based Enabled Services (ITES). The objective of the present paper is to examine and analyze the progress made by Internet Banking in India. Ebanking has the potential to transform the banking business as it significantly lowers transaction and delivery costs. This paper investigates the factors, which are affecting the acceptance of ebanking services among the customers, and indicates level of concern regarding security and privacy issues in Indian context. Some issues related to the adaptation of Banking Technology and major problems in developing countries, which have a low penetration of information and telecommunication technology, face in realizing the advantages of e-banking initiatives. Major concerns such as the 'digital divide' between the rich and poor, the different operational environments for public and private sector banks, problems of security and authentication, management and regulation; and inadequate financing of small and medium scale enterprises (SMEs) are highlighted. **Keywords**: Security, Privacy, Awareness, Customers, E-banking.

The rapid advancement in electronic distribution channels has produced tremendous changes in the financial industry in recent years, with an increasing rate of change in technology, competition among players and consumer needs. Internet banking has become the self-service delivery channel that allows banks to

provide information and offer services to their customers with more convenience via the web services technology. The evolution of E banking has fundamentally transformed the way banks traditionally conduct their businesses and the ways consumers perform their banking activities. Today E-banking has experienced phenomenal growth and has become one of the main avenues for banks to deliver their products and services. Electronic banking (E-banking), also known as Internet banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. E banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the internet. Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM), kiosk, or Touch Tone telephone.

## **Indian Scenario**

In India, ICICI bank was the first bank, which offered this delivery channel, by kicking off its online services in 1996. Other private sector banks like Citibank, IndusInd Bank and HDFC and Times Bank (now part of HDFC bank) started offering internet services in 1999. State bank of India launched its services in July 2001. Other public sector banks like Bank of Baroda, Allahabad Bank, Syndicate Bank and Bank of India, also rolled its services during the same time. Banks in India currently offers "Fully Transactional Websites" to their customers. The customers would conduct a variety of transactions through internet banking facility which includes: account summary, details of historical banking transactions, funds transfer, loan applications, bill payments, cheque book request, cheque status enquiry, stop cheque request, credit card payments/ statements, facilities to contact account managers, etc. In a survey conducted by IAMAI and IMRB (IMRB and IMAI, 2006) the estimated number of internet users as of September, 2006 was 37 million and the number of "active users" was pegged at around 25 million. The survey also estimates around 2.4 million E-commerce users, which included

internet-banking users. An estimated 4.6 million Indian internet users are availing internet banking services as of 2007(Kothari, 2007). In India, slowly but steadily, the Indian customer is moving towards Internet banking. However, they are very concern about security and privacy of internet banking (Malhotra and Singh, 2009). The competition has been especially tough for the public sector banks (PSBs), as the newly established private sector and foreign banks have already sharpened their competitive edge. Some of the proactive PSBs have been striving hard to make their structures flexible enough to accommodate technological changes. Adoption of technology has facilitated alternative channels for delivery within the PSBs, and, in turn, put pressure on them to restrict or limit the branch network and employ a better skilled workforce. E banking, facilitated by the technological revolution, has strongly affected strategic business considerations for Indian banks (including the PSBs) by cutting down costs of delivery and transaction massively.

# **Scope of E-Banking**

In India, currently, there are two types of customers – one who is a multi-channel user and the other who still relies on the branch as the anchor channel. The primary challenge for banks is to provide consistent service to customers irrespective of the kind of channel they use. The channels broadly cover the primary channels of branch (teller, platform, ATM), phone (call centre, interactive voice response unit), and internet channel (personal computer, browser, wireless) banking. Banks in India have been working towards a vision that includes transformed branches, enhanced telephone services, and leading-edge internet banking functions that provide a consistently positive multi-channel experience for customers. Even for PSBs, the ongoing and future investments in technology are massive. At present, the cumulative amount earmarked by 10 major PSBs adds up to a hefty Rs 2,200 crore plus. It is expected that the provision of financial services through a versatile technology platform will enable these banks to acquire more customers, cut costs, and improve service delivery. Though many positive signs are already visible in India, including a higher acceptance of technology by banks and customers, it is a reality that most projects have not yet been deployed on a large scale.

# Challenges in E-banking for India

Based on 'best practices' in India, United Nations Conference on Trade and Development (UNCTAD) report has identified four challenges that developing countries, in general, are expected to overcome to achieve the advantages that e-banking initiatives can bring about [UNCTAD 2002]

• The ability to adopt global technology to local requirements:

An adequate level of infrastructure and human capacity building are required before developing countries can adopt the global technology for their local requirements

• The ability to strengthen public support for e-finance:

Historically, most e-finance initiatives in developing countries have been the result of cooperative efforts between the private and public sectors.

• The ability to create a necessary level of regulatory and institutional frameworks:

The lack of regulatory frameworks, trust, security and privacy standards, high trade barriers, customer and investor protections impede progress in implementing e-banking initiatives on a larger scale in many developing countries.

• The ability to mainstream small and medium scale enterprises (SMEs) towards E-banking:

The availability of and access to quality data and banking information is required for SMEs in developing countries to move towards E banking. Similarly, on-line credit information will enhance SME's ability to secure financing.

## E banking in India: Major Concerns

**First,** in India, there is a risk of the emergence of a 'digital divide' as the poor are excluded from the use of the internet and so from the financial system. Empirical evidence shows that richer countries possess higher concentrations of internet users (higher than income concentration) in comparison with poorer countries. In India (where the poverty ratio is still adverse at 26.1 per cent of total population), it is likely that wealthier people will rapidly migrate to e-banking platforms leaving the poor to bear the cost of the physical infrastructure of branches in the form of transaction fees or non-competitive interest rates on their deposits.

**Second,** even today, the operational environment for public, private and foreign banks in the Indian financial system is quite different. However, challenges before the public sector banks are

plenty and of a different kind Systems of accounting, control and delegation were set up decades ago and adoption of technology in terms of 'real time' banking and its compatibility with all phases of banking is not yet adequately perceived. Furthermore, the security risk involved in computerization is directly related to the size of the network. For PSBs, the major problems are in the form of security risks, network downtime, and scarcity of trained personnel, expensive system upgrades and recurring costs given the massive scale of their current operations.

Third, confidentiality, integrity and authentication are very important features of the banking sector and were very successfully managed the world over in pre-internet times. Communication across an open and thus insecure channel such as the internet might not be the best base for bank-client relations as trust might partially be lost. Therefore, at different levels in the computerization spectrum, both public and private banks in India have realized the importance of Public Key Infrastructure (PKI) solutions. PKI is expected to guarantee the required level of trust and to provide for the security needs of all e-communities in terms of confidentiality, integrity, non-repudiation services, etc.

**Fourth,** e banking has created many new challenges for bank management and regulatory and supervisory authorities. The Basel Committee on Banking Supervision's Electronic Banking Group (EBG) (2001) has defined risk management principles for electronic banking. They primarily focus on how to extend, adapt, and tailor the existing risk-management framework to the electronic banking setting. It is necessary to know whether the efforts undertaken by the RBI are sufficient to ensure a reasonable level of security.

**Fifth,** it is a common argument that low transaction costs potentially make it much easier to conduct cross-border banking electronically. For many banks, cross-border operations offer an opportunity to reap economies of scale. However, cross-border finance also needs a higher degree of cross-border supervision. Such cooperation may need to extend to similar supervisory rules and disclosure requirements (for efficiency and to avoid regulatory arbitrage) and some harmonizing of legal, accounting and taxation arrangements.

**Sixth,** there is no commercial bank in India, which has exclusively specialized in the small business segment. SMEs in India have generic problems like the inability to provide quality data, to exhibit formal systems and practices and the lack of asset cover. This has created unwillingness in banks to undertake large-scale lending to SMEs. Legal and regulatory compliance has also been inadequate. Traditional drawbacks like asymmetric and nontransparent

data and low capital bases continue to characterize their balance sheets. The problem is further compounded due to the preponderance of a large cash economy in this segment. There are many challenges involved in a web-based relationship model for SMEs within India given the current state of regulation.

# State of E-banking Regulations in India

At present, there are three major statutes or guidelines governing e-finance operations within India, notably, The Information Technology Act, 2000; The Information Technology (Certifying Authorities) Rules 2000; and Central Bank (Reserve Bank of India (RBI)) guidelines on Internet Banking in India. The RBI guidelines have defined the operational framework on internet banking with a focus on security issues. Though the RBI has mandated that the commonly used PKI technology standard should be followed, no compulsory timeframe has been set for the same so far. However, the guidelines detail the organizational, operational, and supervisory structures that banks will have to implement while offering internet banking. The IT Act 2000 and the IT Rules for Certifying Authorities lay down the framework for appointment of digital certifying authorities, acceptance of digital signatures, etc, which would enable the orderly development of cyber business. However, there is a feeling that the Act has not given enough power to safeguard E-banking from frauds and complexities. With many sites being hacked and content being changed, it is felt that the IT Act should have given more powers to deal with the complexities of the virtual world.

## **Exploiting E-banking in India: Strategic Learning from other developing Countries**

Nobody would deny that electronic banking is the wave of the future. Though the 'practice' of E banking in India is quite limited, there is a huge potential for it given its impact on the cost and efficiency of financial intermediation. As regards the problem of a possible 'digital divide', there is a lot one can learn from the experiences of other developing countries to include the poor within the net of E-banking. For instance, some countries have adopted policies to encourage the spread of mobile phone networks into poorer rural areas, In South Africa, post offices in remote parts of the country provided financial services including bill payments through terminals where illiterate users were identified biometrically, "license obligations to serve rural communities", (as in Mexico and the Philippines); subsidies through rural telecom development funds (as in the

case of Chile, Peru); variations of build-operate-transfer arrangements (as in Thailand) and low-interest loans". In East Africa, the internet has been effectively used to make micro-loans to small entrepreneurs. As regards PSBs within India, one certainly sees a paradigm shift in their behavior triggered by the heightened competition. There has been a strong realization that technology is not just an enabler but also a driver of business. At least the first phase of technology adoption has been more or less completed within PSBs, and involved large-scale computerization of branches and operations for better operational efficiencies. There has been some reorientation of staff in terms of newer skills, though at a lower level. There is also an awareness that such large-scale computerization is not going to help in other operational areas like back-office functions, management information systems (MIS), fraud prevention, marketing and higher value-added business. As stated earlier, security concerns are an important factor for many internet users in India who are shying away from the PSBs. PSBs can try to change this situation by creating a positive work culture and gaining the confidence and support of all the employees for organizational goals.

As far as the regulatory or legal framework is concerned, the IT Bill in India has served the purpose of bringing in structure legal validity and authenticity for transacting online. Its passage could be seen as an indication of the government's inclination towards promoting e-commerce and e-governance while ensuring accountability. However, there should be a proper inclusion of IT issues and their accompanying operational risks in RBI's safety and soundness evaluations. In addition to aspects like privacy and security, the regulator should also examine the banks' business plan for e banking in detail, especially if banks have outsourced critical functions to the third party. As regards SME financing, some private sector banks in India are aggressively developing web-based relationship banking models, which are customer driven. Their focus is on giving the SME customer what is wanted and in the form in which it is wanted. They are using echannels to offer processes or relationship benefits and not just as channel point solutions to maximize value for customers. It is strongly felt that after acquiring the necessary technical capabilities, PSBs are better situated to provide value-maximizing services to SMEs given their comparatively larger sizes and extensive branch networks, which has given them a unique advantage of a close relationship with their business clients and a good knowledge of their needs, requirements and cash positions.

## **Conclusion**

The e-banking revolution has fundamentally changed the business of banking by scaling borders and bringing about new opportunities. In India also, it has strongly affected the strategic business considerations for banks (including the PSBs) by significantly cutting down costs of delivery and transactions. In this paper, we have identified some such impediments in the Indian context and have suggested ways to overcome them in order to move forward with the wave of e-banking successfully. However, there are ways to overcome these obstacles and exploit trends in E banking to derive the desired benefits. As regards the problem of a digital divide, India can learn many lessons and include the poor within the net of E banking from a rich international experience. As regards the PSB situation, they can rapidly change their work environment by attracting young specialists in critical functional domains and by creating a positive work culture that has all employees supporting organizational goals. For the security, issues involved in ebanking, risk management principles recommended by the BIS should be implemented by PSBs on an urgent basis. Their board of directors and senior management should regularly review and approve key aspects of the security control process. The top management should ensure that their staff members have the relevant technological expertise to assess potential changes in risks. For this, they should accord a high priority to investment in staff training and technological infrastructure. In the regulatory arena, in addition to aspects like privacy and security, the regulator should also examine banks' business plan for e-banking more closely, especially if banks have outsourced critical functions to a third party. To avoid the risks involved in crossborder E banking, India can make a gradual beginning, first by seeking benefits in the export of remote processing services in which it has a strong comparative advantage. In the case of SMEfinancing, it is strongly felt that after acquiring the necessary technical capabilities, PSBs are better situated to provide value propositions to SMEs given their comparatively extensive branching networks, close relationship with business clients and a good knowledge of their needs, requirements and cash positions. This actually offers them another growth channel unmatched by most private players.

## References

- Basel Committee on Banking Supervision (2001) Risk Management
   Principles for Electronic Banking, paper 82, May, (www.bis.org).
- Claessens, S, T Glaessner and Klingebiel (2000) E-finance in Emerging
   Markets: Is Leapfrogging Possible, World Bank Financial Sector Discussion Paper, No 4,
   June.
- D'souza, Errol (2002) How Well Have Public Sector Banks Done? A Note, Economic and Political Weekly, Vol XXXVII, No 9, pp 867-70.
- Economist (2003) Banking on the Technology Cycle', The Economist's Technology Quarterly, September 6, pp 12-16.
- Grethen, H (2001) The E-banking Revolution, Speech delivered at the Luxembourg International Trade Fairs, October 24.
- Hawkins, J (2002) E-finance and Development: Policy Issues', Bank forInternational Settlements, March, (www.bis.org).
- Kohli, S S (2003) Indian Banking Sector: Challenges and opportunities',
   Vikalpa, Vol 28, No 3, July-September, pp 85-89.
- Mathew Joseph and Rupa Nitsure (2002) WTO and Indian Banking Sector: The Road Ahead', Economic and Political Weekly, June 15, pp 2315-22.