

## Internet Banking- A transformation Based on Technology from Traditional to Virtual Banking

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### ***Abstract***

*Indian Banking has undergone a total transformation over the last decade. Moving seamlessly from a manual, scale constrained environment to a technological leading position, it has been a miracle. Such a transformation takes place as per the need of the hour within a short span of time with low cost. In the development of Indian economy, banking sector plays a very important and crucial role. With the use of technology there had been an increase in penetration, productivity and efficiency. It has not only increased the cost effectiveness but also has helped in making small value transaction viable. Electronic delivery channels, ATMs, variety of cards, web based banking, and mobile banking are names of few outcome of the process of automation and computerization in banking sector.*

*Customer values and their preferences need to be recognized for the development of internet banking to ensure long term organization- customer relationship in the E-era. The advancement and development in technology and a concrete mix of these with the information technology have brought about a critical change in outlook in the banking sector from conventional to internet-based banking framework. IT and globalization have forced the latest banking system to embrace the fast-growing innovations and change the delivery channels of financial services provided by them. Apart from the various advantages of internet banking, there are many disadvantages also as everything has both pros and cons. It has some disadvantages which must be studied and taken care of.*

*E Banking is not a separate business; it is Banking using E Channels. Banking is regulated by RBI under RBI Act Subject to licensing Law regarding Electronic documents is contained in Information Technology Act 2000 As amended by Information technology Act 2008. There are various provisions of law, which are applicable to traditional banking activities and, are also applicable to e-banking. However, this does not overcome many problems, hence there is need for introducing more stringent rules and regulations specifically to meet the problems of e-banking. The legal framework of Indian banking system is governed by a set of enactments, i.e., The Banking Regulation*

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*Act, 1949, the Reserve Bank of India Act, 1934 and Foreign Exchange Management Act, 1999, evidence act, contract act and so on. The Information Technology Act 2000 has attempted to address a number of e-commerce regulatory issues. Yet there exists a grey area, which has neither been spelt out properly nor has there been any workable modes of implementation suggested by Constitutional institutions.*

**Key Words:** E-Banking, Information Technology, Implementation, Development and Social Transformation.

## I. Introduction

Indian banking has undergone a total transformation over the last decade. Moving seamlessly from a manual, scale-constrained environment to a technologically-leading position, it has been a miracle. Nowhere in the world has such a transformation taken place in such a short span of time with such a low cost. The process started in 1999-2000 when a couple of banks signed their first core banking transformation deal with Infosys. The dramatic boon in the usage of internet has made all banking institutions to make use of internet for serving their customers and delivering all financial services. The hunt to embrace new technology to gain an advantage in the market gives the bank a new shape called online Banking. The increased internet usage has made bank to leverage over the internet for gaining competitive advantage in the sector. Information technology and communication networking system have revolutionized the working of banks and financial institutions all over the world. Banking has become more complex with the introduction of electronic banking. The Convenience of e-banking has attracted the public at large all over the world. Banking services has reached rural people of Indiaand has its working wing globalized. Thus is the combinatory story of e-banking, where there are advantages of numerous facilities offered due to digitalization, there is also plenty obligation to be meted out by the banks.Banker has to act like a king and servant at the same time.<sup>3</sup>

Customer values and their preferences need to be recognised for the development of Internet banking to ensure long term organization – customer

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<sup>3</sup> . B.R. SHARMA, BANK FRAUDS PREVENTION AND DETECTION 281(3<sup>rd</sup> edition, Universal Law Publishing Co. 2009).

relationship in the E-era. The advancements and development in technology is transforming the banking structure by changing its business models from traditional physical banking to virtual online banking. The advent of internet banking has completely changed the way we do banking in all main banking areas viz. Distribution, fund transfer, payment and trading.

## **II. Meaning and Definition of E-banking**

E-banking is being used in India for some time now in the form of digital data in computers, credit and debit cards, Automated Teller Machines, Mobile Banking, net banking and internet banking. Internet or E-banking means any user with a personal computer and a browser can get connected to his bank's website to perform any of the virtual banking functions. E-banking has been defined in law lexicon as banking activities accessed by using a computer, employing modems and telephones. In e-banking, "e" stands for electronic and the 'banking' has been defined as 'an acceptance of money from the public, for purpose of lending or investment of money, which is withdraw able by cheque, draft or otherwise' and banking by using electronic devices is e-banking.<sup>4</sup>

## **III. Features of E-banking**

The main features of e-banking are:-

1. In e-banking, banking functions are carried by using internet facility.
2. It removes the traditional geographical barriers as it could reach customers at different counters/ jurisdictions.
3. E-banking facilitates banking transactions at all time and on the days including holidays and Sundays.
4. It provides several additional delivery channels which are more convenient and cost effective to both customer and banker.
5. It is based on science and technology i.e. use of electronic devices which saves time and energy of banker and customer.

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<sup>4</sup> The Banking Regulation Act, 1949, No. 10 of 1949, s. 6.

6. Its special features lie in ensuring security of the transaction, customer's privacy and transparency of transaction.

#### **IV. Services through E-banking**

The heart of the E-banking application is the computer system, which includes web servers, database management system, and web application programmes that can generate dynamic html pages. Bank customers' account and transaction information is stored in a database which is a specialized software that can store and process large amounts of data in high speed. The function of web server is to interact with online customers and deliver information to users through internet. Several banks also use state of the art imaging systems allowing customers to view image of cheques and invoices over the internet. Services of e-banking are the following:

1. **Information System:** General information's like interest rates, branch location, bank products and their features, loan and deposit features are provided in the bank website. There exist facilities for downloading various types of application forms like deposit application form, loan application form etc. The communication is carried out through email; otherwise the person seeking information need not disclose his identity.
2. **Electronic Information Transfer System:** The system provides customer with specific information in the form of account balances, transaction details and statement of accounts. The information is still largely of "read only" format. Identification and authentication of the customer is through password. The application systems cannot directly access through the internet.
3. **Fully Electronic Transactional System:** This system allows bi-directional capabilities. Transactions can be submitted by the customer for online update. This system requires high degree of security and control.
4. **Other Services:** E-banking services can be availed for payment of bill, fund transfer, credit card, railway and air ticket booking, investment, recharging phones and mobiles and shopping etc. Generally bank do not charge customers for providing certain activities.

## V. Advantage and Disadvantage of Internet Banking

The major advantage is that e-banking system offers the decline in the operating cost per transaction. Internet banking possesses several advantages over the traditional banking system by making operating an account at the tips of the fingers. In the present scenario where internet made it possible to perform any task online, banking needs are also fulfilled by this online system. The main advantages of internet banking are as follows:

- 1. Simple and convenient:** Opening and operating an account online is fast, simple and convenient. We can easily transfer funds, retrieving account information, easy retrieval of account statements, bills payment, online recharges etc. Internet banking has made life simple as we can avoid of wasting our time in waiting in queue for bill payments, also the need to keep bill receipts is no longer needed as transactions can be easily retrieved now.
- 2. No geographical and time constraints:** Online banking has made it possible to avail banking services all the time, 24\*7. Online transactions can be made from any place irrespective of the time. Even on bank holidays and in the evening after bank timings, the financial and other banking services can be availed. The only thing you need to have is an active internet connection.
- 3. Quick and Effective:** Funds transfer takes place from one account to the other within few minutes only. Several accounts can be easily managed through internet banking at a time.
- 4. Safe:** Helps in monitoring account and transaction round the clock. This service enhances the safety of the account. Due to this feature, any fraudulent activity can be traced and caught beforehand without being severely affected by the threat. Password protection, verification of details etc. Also come under safety.
- 5. Marketing medium:** Banks can use it as a medium to recommend their latest product and services.
- 6. Cost effective alternative:** As compared with establishing a physical branch, Internet banking is a cost effective option. Banks can avoid large number of expenses like paper work using the online banking system.

**7. Customer Support:** Banks can now manage their customer queries and grievances using online chat support system in online banking round the clock. This helped them in enhanced customer satisfaction and loyalty.

## **VI. Disadvantages of Internet Banking**

Apart from above mentioned advantages of internet banking, it has some disadvantages which must be studied and taken care of. The disadvantages of online banking include the following:

**1. Difficult for newcomer:** Beginners sometimes find it complicated to understand the usage of internet banking in the beginning. In spite of offering a demo on accessing online accounts by some banks, yet a new person might face some difficulty in getting hands over online banking.

**2 Mandatory Connection requirements:** Internet connection is mandatory to access online banking. If any chance you fail to procure internet connection the online services will be of no use to you.

**3. Security threats:** Online banking is full of security threats. Transaction security is big concern. Online banking account might get hacked by unauthorized people over the internet. Another concern is of password security which is a must. The password needs to be changed frequently and also memorizing it is required to avoid it being misused by someone who gets to know your password accidentally.

**4. Banks server issue:** Online banking transaction depends largely on bank server, which is also a disadvantage as online banking cannot be used and its services cannot be availed if the server of the bank is down.

**5. Connectivity issues:** Sometimes transactions success went unnoticed due to loss of connectivity or slow internet connection or banks server issues.

## **VII. Legal Provisions on E-banking in India**

India is a signatory of WTO. The basic principles of WTO ARE Liberalization, Globalization and Privatization. Therefore, trade and commerce in India has been liberalized. Incidentally, the financial sector has also undergone major

changes. With the advent of e-banking, India is facing unprecedented competition from the world at large. If the technology is not updated in financial sector, international trade would be a distant dream. The deregulation of banking industry coupled with the emergence of new technologies has enabled new competitors to enter the financial services market quickly and efficiently. Various provisions of law, which are applicable to traditional banking activity, are also applicable to internet banking. This does not overcome the problems and therefore there is need for introduction more stringent rules and laws specially to meet the problems of e-banking. The legal framework for banking in India is provided by a set of enactments, viz. The banking Regulation Act, 1949, the Reserve Bank of India Act, 1934 and Foreign Exchange Management Act, 1999 are few among many such legislations. It is mandatory on the part of all entities to obtain a licence from Reserve Bank of India under Banking Regulation Act, 1949 to function as bank. Different types of activities which a bank may undertake and other prudential requirements are provided under this Act. Reserve bank of India has regulated acceptance of deposit by Non-banking Institutions also. Under the Foreign Exchange Management Act, 1999, Non-residential Indians can lend, open a foreign currency account or borrow from a bank in India including from a Non- Resident bank, except under certain circumstances provided under the law. Besides, banking activities are also influenced by various enactments governing trade and commerce, such as, Indian Contract Act, 1872, the Negotiable Instrument Act, 1881, Indian Evidence Act, 1872, etc.<sup>5</sup> Under IT Act, 2008 there are some provisions like section 43, that provide for penalty and compensation for damage to computer, Computer system, section 43 A provide to inter alia that where a body corporate, possessing, dealing and handling any sensitive personal data or information in a computer resource which it owns controls or operates is negligent in implementing and maintaining reasonable security practices and procedures and thereby causes wrongful loss or wrongful gain to any person, such body corporate shall be liable to pay damage by way of compensation. Section 44 provide penalty for failure to furnish information, return, Section 66E provides punishment for violation , it inter alia that whoever intentionally, knowingly computers, publishes or transmits the image of private of any person

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<sup>5</sup> . M. L. TANNAN, TANNAN, BANKING LAW AND PRACTICE IN INDIA 157 (20<sup>th</sup> Edition, India Law House, 2003).

without his or her consent, under circumstances violating the privacy of that person, shall be punished with imprisonment which may extend to three years or with fine not exceeding Two lacs rupees, or with both. Section 67,67A, 67B<sup>6</sup> and some other section which directly or indirectly promote protection to data and privacy in Electronic transactions.

### **VIII. Conclusion and Suggestions**

E-banking is changing the banking industry and causing major effects on banking relationships and its working nature. E-banking involves use of internet for delivery of banking products and services. The internet has levelled the playing field and afforded open access to customers in the global market place. E-banking is a cost effective delivery channel for financial institutions. Consumers are embracing many benefits of E-banking. Access to one's account at anytime and from anywhere via world wide web is a convenient style. Thus, a bank's internet presence transforms from 'brouchware' status to e-banking status once the bank goes through a technology integration plan which enables the customer to access information about his or her specific account relationship. A multi-layered security architecture comprising firewalls, filtering routers, encryption and digital certification ensures that customers account information is protected from unauthorised access. Apart from this the Reserve bank of India has issued circular for the convenience of working with electronic banking as there is a steep rise in the risk involved due to internet banking. The need of the hour is to meet the global challenge of providing different services to customers and also keeping vigil eye, to curtail the risk arising due to e-banking. Some suggestions are:

1. Banks are under obligation to maintain secrecy of customers account. The new RBI circular has given guidelines to minimize the risk of hacking. However, it is the duty of the banker to adopt technology to discharge his duty in a more effective manner. Reserve bank of India should also ensure that the banks are using new technology.
2. The auditor appointed to inform as the misappropriation of funds even at the minutes level. Electronic banking has enhanced the risk of misappropriation of

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<sup>6</sup> . Information Technology Act, 2000, No. 21 of 2000, s. 67B.

funds by the bankers as it goes undetected. The New circular of Reserve Bank of India relating to Internet Banking should be maintained. It is the Statutory duty on every bank that they should develop a clear Customer Acceptance Policy laying down explicit criteria for acceptance of customers.

3. Speedier and cheaper justice is the hallmark of the consumer Protection Act. This is also applicable for banking services. The scope of the Act should be extended specifically to electronic banking also in cases of frequent failure of ATM machines, non compliance of security which results in hacking, and exuberant charges levied by bank for fund transfer.