

# DIGITAL BANKING INDIAN: PRESENT PROSPECTS AND FUTURE CHALLENGES

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## Abstract

Digital banking is generally an extension of traditional banking, using the internet as an Electric delivery channel for banking products and services. The banking today is redefined and Re-engineered with the use of IT and it is sure that the future of banking will offer more sophisticated services to customers with the continuous products and process innovations. Many traditional banks offer some online services, but the very cheapest choices some will find are internet-only banks, which operate specifically online. Customers can get the same services online that are used to from traditional banks, such as checking and savings accounts, CDs, and other financial products and services. Those who are interested in paying lower fees for better customer service, they should investigate internet banking. Face of Global Banking is undergoing a transition. Banking is now a global issue. Reforms in the financial sector, covering banking, insurance, financial markets, trade, taxation etc. have been a major catalyst in strengthening the fundamentals of the Indian economy. The reform measures have brought about sweeping changes in this critical sector of the Indian's economy. Use of advanced technology has led to the shift from traditional banking methods to e-banking methods. Currently, the most common and useful technology based banking methods are online banking, Mobile banking, ATMs, Plastic money and so on.

## .Keywords:

Digital banking  
E-commerce,  
E-finance,  
E-money,  
E-Banking,  
Mobile banking,  
SMS Banking,  
ATMs,  
Debit card,  
Credit card.

## I. INTRODUCTION

Banking Sector is the Backbone of the country's Economy. They are the elements of social and economic development of the nation. They are pillars of support to the growth and development of the country. Internet has touched almost all aspects of our lives. The emergence of e-commerce has revolutionized the way we live, shop, entertain and interact. Therefore, it should not come as a surprise if it tries to influence the way we save and the way we invest. E- banking is an Internet based service enabling people to do financial transactions, account management, and so on. In essence, online banking is an Digital consumer interface and an alternative channel of distributions. E- banking has been regarded as the most important way to reduce cost and maintain or enhance services for consumers.

There has been a rapid growth of Indian e-banking with e-commerce. The e- banking users including organizational and individual users have been growing rapidly. Along with the entrance in the Internet and in the e-business age, of the new economy, in general, certain fundamental transformations of the social-economical structure are produced. The new economy or the digital one resulting from the interaction between the personal computer, telecommunications, Internet and Digitals, is characterized by a range of features completely different from the traditional economy and is subjected to the principle according to which the more people involved the bigger the benefit for everyone involved . The Internet is still more present everywhere, its increasing presence changes also the way business is done. The banking is no exception.

## II. E- Banking

It is an Digital payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. To access a financial institution's e- banking facility, a customer with Internet access would need to register with the institution for the service, and set up a password and other credentials for customer verification. Financial institutions now routinely allocate customers numbers, whether or not customers have indicated an intention to access their e-banking facility. Customers' numbers are normally not the same as account numbers, because a number of customer accounts can be linked to the one customer number. The customer number can be linked to any account that the customer controls, such as cheque, savings, loan, credit card and other accounts. To access e- banking, a customer visits the financial institution's secure website, and enters the online banking facility using the customer number and credentials previously setup. E-banking services usually include viewing and downloading balances and statements, and may include the ability to initiate payments, transfers and other transactions, as well as interacting with the bank in other ways.

Face of Global Banking is undergoing a transition. Banking is now a global issue. Reforms in the financial sector, covering banking, insurance, financial markets, trade, taxation etc. have been a major catalyst in strengthening the fundamentals of the Indian economy. The reform measures have brought about sweeping changes in this critical sector of the Indian's economy. Banking in India is generally fairly mature in terms of supply, product range, and reach-even though reach in rural India still remains a challenge for the private sector and foreign banks in the year 2007. The broad objective of the financial sector reform has thus been to create a viable and efficient banking system. Indian economy has been recording impressive growth rates since 1991. The main thrust of the financial sector reforms has been the creation of efficient and stable financial institutions and development of the markets, especially the money and government securities market. In addition, fiscal correction was undertaken and reforms in the banking and external sector were also initiated. The year 1991-92 is the year of remarkable initiatives taken by the Government of India affecting the various facets of the Indian economy. The face of banking is changing rapidly.

## III. OBJECTIVES OF THE STUDY

This research has taken into consideration to accomplish the following objectives:

- ❖ To identify various e-banking services adopted by Indian banks.
- ❖ To give the present status of e banking in banking sector of India.
- ❖ To analyse the impact of e- banking Services in Indian economy.
- ❖ To know the challenges in E-banking.

## IV. LITERATURE REVIEW

Mia, Rahman and Debnath (2007) observed that the latest development in financial services by banks is Digital banking, where banks have now put themselves in the World Wide Web to take advantage of the Internet's power and access to cope with the accelerating pace of change of business environment. Indeed the use of the internet as a new alternative channel for the distribution of financial services has become a competitive necessity instead of just a way to achieve competitive advantage with the advent of globalization and fiercer competition (Flavián, Torres, & Guinalfú, 2004; Gan, Clemes, Limsombunchai, & Weng, 2006). Banks use online banking as it is one of the cheapest delivery channels for banking products (Pikkarainen et al., 2004).

The way Bill Gates (2008) announced that "banking is essential, banks are not". This quotation means that the traditional bank branch is going to vanish in order to be surrogated by Digital banking which continue to attract new users. The banking industry believed that by adopting new technology, the will be able to improve customer service level and tie to their customer closer to the bank.

Ahmed and Islam (2008) observed that adopting e-banking services, banks in developing countries are faced with strategic options between the choice of delivery channels and the level of sophistication of customer services provided by these delivery channels.

Oghenerukeve, (December 2008), e banking provides alternatives for faster delivery of banking services to a wider range of customers. The increasing popularity of internet banking, have attracted the attention of both legitimate and illegitimate e banking practices.

Atiur Rahman (2010) argued that Bank has achieved a historic milestone in the trade and business arena, departing from conventional banking with the introduction of e-banking recently. E banking is a lower-cost delivery channel and a way to increase sales. Internet banking services lies in the increased retention of highly valued customer segments. With the help of e-banking the country can create opportunity as this will help both banker and customer.

## V. SCOPE OF THE STUDY

The main idea is to actually find out various e-banking services adopted by Indian banks in a positive way. The customers perceptible in regards of using internet banking is that using the internet is more efficient than using any other distribution of medium, as it saves time to go to the bank in real and the only thing require to use the internet is a bit of education and internet. The banks can minimize their operating cost by reducing the number of branches and hiring less staff.

## VI. METHODOLOGY

The primary source of the information in this research study is the secondary data. The available information on internet regarding the E-Banking has been extensively used to complete the paper. All the available Journals, Articles, papers provided necessary information to the group to finalize the research study.

## VII. SIGNIFICANCE OF THE STUDY

Customer services and customer satisfaction are the prime work of any system. With customers demanding 'anytime and anywhere' access to their money and financial information, banks have no option but to implement wireless solutions in device-independent and network-agnostic ways. Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity and profitability.

## VIII. LIMITATIONS

The following limitations have been found by the team

- ❖ The research study has been done from a selective material on the internet.
- ❖ Only selective journals, papers and articles have been put to use because of the time factor.
- ❖ There is the possibility of further updating of this research paper because of limited sources.

## IX. IMPACT OF E-BANKING ON TRADITIONAL SERVICES

E-banking transactions are much cheaper than branch or even phone transactions. E-banks are easy to set up, so lots of new entrants will arrive. E-banking gives consumers much more choice. Consumers will be less inclined to remain loyal. Traditional banks may simply be left with payment and settlement business even this could be cast into doubt. Traditional banks will find it difficult to evolve. Not only will they be unable to make acquisitions for cash as opposed to being able to offer shares, they will be unable to obtain additional capital from the stock market. This is in contrast to the situation for Internet firms for whom it seems relatively easy to attract investment. Traditional banks are starting to fight back. E-banks have already found that retail banking only becomes profitable once a large critical mass is achieved. The Digital devices which perform interact with customers and communicate with other banking system is called Digital banking delivery channels.

## X. VARIOUS FORMS OF E-BANKING SYSTEMS IN INDIAN BANKING SECTOR

Use of advanced technology has led to the shift from traditional banking methods to modern banking methods. Currently, the most common and useful technology based banking methods are online banking, Mobile banking, ATMs, Plastic money and so on. Today various forms of e-banking systems use by different banks for providing better and quick services to their consumers. The important are described below:

### ➤ Online Banking

It empowers customers to conduct financial banking transactions on a secure website which can be operated by a retail, virtual bank, credit union or building society. It makes banking faster and easy. At present, 29 scheduled banks offer any branch banking facilities through their respective bank online network; payment against pay order or pay order encashment, demand draft encashment, remote fund transfer, cash withdrawal, cash deposit, account statement, clearing and balance enquiry within branches of the same bank; loan repayment facility to and from any branch of respective bank under its own online network.

### ➤ Mobile Banking

Mobile banking is a system that allows customers of a financial institution to conduct a number of financial transactions through a mobile device such as mobile phone or personal digital assistant. It is used for performing through mobile device such as a mobile phone or a Personal Digital Assistant (PDA), banking activities such as: mini-statements and checking of account history; monitoring of term deposits; access to loan statements; access to card statements; mutual funds/equity statements; insurance policy management; pension plan management; status on cheque, stop payment on cheque; ordering check books; balance checking in the account; recent transactions; due date of payment; PIN provision, change of PIN and reminder over the internet; blocking of (lost/stolen) cards; domestic and international fund transfers;

micro-payment handling; mobile recharging; commercial payment processing; bill payment processing; withdrawal at banking agent; and deposit at banking agent, account details, portfolio management, account transactions, payments and investments ,credit applications and other transactions. Mobile Banking enables connection with customers throughout the customer life cycle in a much better way than before.

#### ➤ **SMS Banking**

SMS banking uses short text messages sent through the client's mobile phone. SMS text messages can be used for both passive and active operations similarly as with classic telephone banking. A client can automatically receive information about his account balance: an SMS is sent to the client immediately after a certain operation is performed, or on request: a client sends the bank a correctly formatted message which processes it and answers the client's request by SMS. SMS allows the customers to do some banking inquiries on their mobile from anywhere under the mobile network coverage in a country. SMS Banking is developed to provide transactions related to client's car number via SMS using cell phones..

#### ➤ **ATM (Automated Teller Machine)**

These are the cash dispensing machines, which are frequently seen at banks and other locations such as shopping centres, petrol pumps and building societies. Their main purpose is to allow customers to draw cash any time and provide banking services. Because this system allows customers to withdraw money any time from the bank. It is popularly known as "Any Time Money". ATMs are Digital machines, which are operated by a customer himself to deposit or to withdraw cash from bank. For using an ATM, a customer has to obtain an ATM card from his bank. The ATM card is a plastic card, which is magnetically coded. It can be easily read by the machine.

#### ➤ **Debit card**

A debit card is mainly used for two purposes –a) first for cash withdrawal and b) Second for making cash purchase. The debit cardholder should have an account with the bank and the limit of the cardholder is determined by the amount standing in their bank account. When the holder makes a purchase, the merchant establishment swipes the card on the Digital data capture machine which then debits the account of the holder. It is different from credit card, where the holder is charged much after the purchase (20 to 50 days). Presently, banks are issuing ATM-cum-Debit card in India.

#### ➤ **Smart card**

Smart cards are being offered to consumers for small purchases. It is very portable, quick and easy way for using our money. The smart card transaction is normally lesser value. A cup of coffee, a newspaper, lunch or bus fare is typical smart-card transactions. When we make purchase with smart card at that moment, the money is transferred from our card to the merchant. There is no delay waiting for an authorization or signing a receipt.

#### ➤ **Digital Fund Transfer (EFT)**

RBI's EFT system is result of the Shere Committee recommendations. EFT came into force from 2nd Feb. 1996. It was introduced by Reserve Bank of India to help banks offering their customers, money transfer service from one account of a bank branch to another account of any banks. EFT system is an improvement over the existing system of demand draft mail transfer as funds are transferred in a day or Two. With the help of EFT individuals and corporate can transfer funds without leaving their premises.

#### ➤ **Cheque Truncation System (CTS)**

Cheque Truncation is settlement of clearing transactions on the basis of images and Digital data without the physical movement of the instruments. The Clearing Cheque is truncated at the Presenting bank itself. "A cheque in the Digital form" means a cheque which contains the exact mirror image of a paper cheque and is generated, written and signed in a secure system ensuring the minimum safety standards with the use of digital signature and asymmetric crypto system. "A truncated cheque" means a cheque which is truncated during the course of the clearing cycle either by the clearing house or by the bank whether paying or receiving payment, immediately on generation of an Digital image for transmission, substituting the further physical movement of the cheque in writing.

#### ➤ **Digital cash (E-cash)**

The Digital cash is also referred as E-cash, net cash or digital cash. It provides the means to transfer money between parties over a network such as the Internet. Its main aim is to work with financial institution and merchant to provide an accessible and acceptable payment system on Internet.

#### ➤ **Anywhere banking**

Anywhere banking is the new system of banking adopted by bank in India. It is innovative offering through State Bank of India. This facility is a technology based customer friendly service. Under this system, a customer having an account with any select branch can operate it from other designated branches of the bank throughout the country. The facility includes cash withdrawal, cash deposit, transfer of fund,

collections of local cheques, intra-city and intercity transactions. Now distance is no hindrance and banking has become more convenient for customers.

➤ **Customer Identification Number (CIN) Online**

CIN is 11digit unique number for each and every customer having banking account. The Unique Customer Identification is used to find a particular customer having different products like loan, demat, deposit and all accounts. To know this number one does not need to walk toward banks, just login to net banking.

➤ **Real Time Gross Settlement System (RTGS)**

RBI has launched the RTGS system to offer secure online fund transfers. It helps the transmission and settlement of funds as per the customer's instructions on a constant basis. The system has various security levels such as 128 bit cryptography, access security technology, and firewall technology.

➤ **Credit card**

Credit cards have got wide spread acceptance in the 'metros' and big cities. They are gaining popularity for online payments. Credit card is also known as "Plastic Money". It is simply a piece of plastic which enables the holder to purchase any goods and services, settle hotel bills, hospital bills, railways and railway travelling tickets on credit. Credit Card holder pays the amount of the bank after a specified period (20-50 days). The bank charges a fixed amount of interest for overdue. The credit limit to card holder is fixed by taking into account the status of the applicant. When the cardholder purchases the goods by using his credit card the merchant puts the customer's credit card on the card reader machine and collects all the information related to the customer in his computer. On the basis of that to the merchant receives his payment from the bank. After this the merchant presents his claim in bank and the banks pay the prices of goods to him. Then the bank sends bills to the customer for paying the prices of purchased goods. After receiving the statement, the cardholder pays to the bank. In future when the customer makes another credit purchase this process is run in the same direction.

## **XI. THE ADVANTAGES OF E- BANKING**

Many banks have begun to offer customers the option of e-internet banking, a practice that has advantages for both all parties involved. The convenience of being able to access accounts at any time as well as the ability to perform transactions without visiting a local branch, draw many people to be involved. Some of these advantages of internet banking include:

(i) **Customer's convenience**

Direct banks are open for business anywhere there is an internet connection. They are also 24 hours a day, 365 days a year open while if internet service is not available, customer services is normally provided around the clock via telephone. Real-time account balances and information are available at the touch of a few buttons thus, making banking faster, easier and more efficient.

(ii) **Services**

Direct banks typically have more robust websites that offer a comprehensive set of features that may not be found on the websites of traditional banks. These include functional budgeting and forecasting tools, financial planning capabilities, investment analysis tools, loan calculators and equity trading platforms. In addition, they offer free online bill payments, online tax forms and tax preparation.

(iii) **Mobility**

Internet banking also includes mobile capabilities. New applications are continually being created to expand and improve this capability or smart-phones and other mobile devices.

(iv) **Transfers**

Accounts can be automatically funded from a traditional bank account via Digital transfer. Most direct banks offer unlimited transfers at no cost, including those destined for outside financial institutions. They will also accept direct deposits and withdrawals that the customer authorizes such as payroll deposits and automatic bill payment.

(v) **Ease of use**

Online accounts are easy to set up and require no more information than a traditional bank account. Many offer the option of inputting the customer's data online or downloading the forms and mailing them in. If the customer runs into a problem, he has the option of calling or e-mailing the bank directly.

(vi) **Environment friendly**

E- banking is also environmentally friendly. Digital transmissions require no paper, reduce vehicle traffic and are virtually pollution-free. They also eliminate the need for buildings and office equipment.

## XII. BENEFITS OF E-BANKING FROM THREE POINTS OF VIEW

### a) Benefits from the banks' point of view

From the banks' view point, the first benefits for the banks offering e-banking services is better branding and better responsiveness to the market. The other benefits are possible to measure in monetary terms. The main goal of every company is to maximize profits for its owners and banks are not any exception. Automated e-banking services offer a perfect opportunity for maximizing profits.

### b) Benefits from the customers' point of view

The main benefit from the bank customers' point of view is significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money. The main benefits of e-banking are increased comfort and timesaving-transactions made 24 hr a day without requiring the physical interaction with the bank, quick and continuous access to information, corporations have easier access to information as, they check on multiple accounts at the click of a button, better cash management, e-banking facilities speed up cash cycle and increases efficiency of business processes as large variety of cash management instruments is available on Internet sites of banks. Private customers look for slightly different kind of benefits from e-banking.

### c) Benefits from the economical point of view

E-banking served so many benefits not only to the bank itself, but also to the society as a whole. E-banking made finance economically possible like lower operational costs of banks, automated process and accelerated credit decisions and lowered minimum loan size to be profitable.

## XIII. INDIAN E-BANKING SCENARIO

India is still in the early stages of E-banking growth and development. Competition and changes in technology and lifestyle in the last five years have changed the face of banking. Indian E-banking is still nascent, although it is fast becoming a strategic necessity for most commercial banks, as competition increases from private banks and non banking financial institutions. Despite the global economic challenges facing the IT software and services sector, the outlook for the Indian industry remains optimistic. The Reserve Bank of India has also set up a "Working Group on E-banking to examine different aspects of E-banking. RBI has accepted the guidelines of the group and they provide a good insight into the security requirements of E-banking. The group focused on three major areas of E-banking i.e. 1) Technology and Security issues, 2) Legal issues and 3) Regulatory and Supervisory issues.

The importance of the impact of technology and information security cannot be doubted. Technological developments have been one of the key drivers of the global economy and represent an instrument that if exploited well can boost the efficiency and competitiveness of the banking sector. From a legal perspective, security procedure adopted by banks for authenticating users needs to be recognized by law as a substitute for signature. With institutions becoming more and more global and complex, the nature of risks in the international financial system has changed. Lack of consumer protection laws is another issue that needs to be tackled, if people have to feel more comfortable about transacting online.

### Challenges in adoption of E-banking:

E-banking is facing following challenges in Indian banking industry:

- ❖ The most serious threat faced by e-banking is that it is not safe and secures all the time. There may be loss of data due to technical defaults.
- ❖ E-banks are facing business challenges. For the transactions made through internet, the service charges are very low. Unless a large number of transactions are routed over the Web the e-banks cannot think of profit.
- ❖ There is lack of preparedness both on part of banks and customers in the adoption of new technological changes.

### Recommendations: -

- ❖ E-banks should create awareness among people about e-banking products and services. Customers should be made literate about the use of e-banking products and services
- ❖ Employees of banks should be given special technical training for the use of e-banking so that they can further encourage customers to use the same.
- ❖ Seminars and workshops should be organised on the healthy usage of e-banking especially for those who are ATM or computer illiterate.

## XIV. CONCLUSIONS

In India, E-banking is in a nascent stage. Banks are making sincere efforts to popularise the e-banking services and products. Younger generation is beginning to see the convenience and benefits if e-banking. In years to come, e-banking will not only be acceptable mode of banking but will be preferred

mode of banking. E-banking can improve a bank's efficiency and competitiveness, so that existing and potential customers can benefit from a greater degree of convenience in effecting transactions. A bank may be faced with different levels of risks and expectations arising from Digital banking as opposed to traditional banking. Clearly, the longevity of e-banking depends on its accuracy, reliability and accountability. The challenge for many banks is to ensure that savings from the Digital banking technology more than offset the costs and risks involved in such changes to their systems.

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