



## THE ROLE OF ELECTRONIC BANKING SERVICES IN INDIA

<sup>1</sup>M.Sunil Manohar Subbaiah, <sup>2</sup>S.Mahammad Yasin, <sup>3</sup>A.Mahesh Gowd

<sup>1</sup>Research Scholar

Management Science , JNTUA, Gates Institute of Technology, Gooty

<sup>2</sup>PG Student, Department of Management Studies, Gates Institute of Technology, Gooty

<sup>3</sup>PG Student, Department of Management Studies, Gates Institute of Technology, Gooty

### Abstract

*E-Banking is one of the latest approaches to provide comfort to the client regarding monetary transactions. Through E-Banking the bank wants to introduce the core concept of IT based Enabled Services (ITES). Retail electronic payment system has progressed in the recent years in various countries. We find that India is no exception .Reserve Bank in its Vision statement has set the objective to proactively promote electronic payments with an objective towards less cash society. The formation of National Payments Corporation (NPCI) in the year 2009 has set the stage for development of retail electronic payments which offers enormous opportunity to move towards cashless and less cash society.*

*The major idea is to provide a series of services to the customer through the internet, and make the customer feel flexible in calling out simple tasks faster instead of making visit to the bank every time. Today, one of the surest most comfortable and less risk oriented faced by banking sectors the application of electronic commerce. E-banking is considered to have a substantial impact on banks' performance. The main reason behind this success is the numerous benefits it can provide, both to the banks and to customers of financial services. In this Study discuss only the role of E Banking Services in India and its tools of E Banking.*

**Keywords:** *ITES (Information Technology based enable Services), Ebanking, Electronic Commerce, National Payments Corporation of India*

### INTRODUCTION

**Online banking**, also known as **internet banking**, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. The online banking system will typically connect to or be part of the core banking system operated by a bank and is in contrast to branch banking which was the traditional way customers accessed banking

# 14<sup>th</sup> International Conference on Science, Technology and Management (ICSTM-19)

Guru Gobind Singh Polytechnic, Nashik, Maharashtra (India)

2<sup>nd</sup> March 2019, [www.conferenceworld.in](http://www.conferenceworld.in)



ISBN: 978-93-87793-74-3

services. Some banks operate as a "direct bank" (or "virtual bank"), where they rely completely on internet banking. Internet banking software provides personal and corporate banking services offering features such as viewing account balances, obtaining statements, checking recent transaction and making payments. Access is usually through a secure web site using a username and password, but security is a key consideration in internet banking and many banks also offer two factor authentication using a (security token).

The conventional functions of banking are confined to accept deposits and to lend money through loans and advances. Now-a-days banking is known as innovative banking. Use of Information technology has given rise to innovations in the product and service designing and their delivery in the banking sector and finance industries, customer services satisfaction are their principle work. Present banking scenario has come up with a lot of new initiatives which are oriented to provide a better customer service and facilities with the help of information technology.

Banking sector focuses the larger economy its linkages to all sectors make it representative for what is going on in the economy. Indian banking sector, presently has the same sense of opportunity that is evidence in the Indian banking market and economy. The current developments in the worldwide markets offer too many opportunities to the banking sector. In today's competitive banking word improvement day by day in customer services is the most significant tool for their growth and development. Banking company offers so many changes to access their banking and other services.

Banks are playing an important role in the economic development country. Economic development of a country involves investment in various sectors of the economy. The bank collects small savings from the public for investment in various projects. In general banking the banks performs various agency works for their customers and helps economic development of the country.

## **OBJECTIVES OF THE STUDY**

1. An overview of the Role of E Banking in India
2. To know the E-Banking Sources and Applications



## RESEARCH METHODOLOGY

This study is descriptive in nature. The study is based on secondary data which has been taken from case studies, books, journals, newspapers and online databases and websites

## LITERATURE REVIEW

1. **TarandeepKaur (2015)** discussed that India has third largest reservoir of technical human resource, but it is not for medium of commerce for mass people, new models need to be developed and worked out with appropriate strategies to make electronic commerce and M-commerce as key policy for the development and progress in India.
2. **Unyathanakorn et al. (2014)** uncovered that ebanks must fixate on service quality to increment customer contentment and trust and to obtain customer staunchness. Implicative insinuations are discussed in cognition to e-bank management.
3. **N. Jamaluddin (2013)** concluded that Information technology has played a vital role in the advancement of banking system. The reach of Indian banking to every individual is possible because of the computerization process adopted by banking sector. Information technology has not only simplified the operation but it has also given a great comfort an individual who does not have a good knowledge of IT but need to access banking in an optimum manner.
4. **RoshanLal (2012)** analyzed that development of e- banking in banking sector is due to advent of IT. Banks today operate in a highly globalized, liberalized, privatized and a competitive environment. In order to survive in this environment banks have to use IT. Indian banking industry has witnessed a tremendous developments due to sweeping changes that are taking place in the information technology.
5. In the study conducted by **Mohammed and Shariq (2011)** examined the adoption of e-banking channels, particularly ATM, in the city of Lucknow, U.P. He found that ATM was the most adopted technology by banks.
6. **Shukla and Shukla (2011)** stated that E-banking offers a higher level of convenience for managing one's finances even from one's bedroom. However, it continues to present challenges to the financial security and personal privacy. Customers are advised not to share sensitive personal information like PIN numbers, passwords, and OTP (One time password)



etc. with anyone, including employees of the bank; change ATM PIN and online login and transaction passwords on a regular basis; ensure that the logged in session is properly signed out.

7. **Mishra (2011)** provided useful tips to ensure safety of internet based transactions (IBT). IBT users are advised not to reply to any mail, phone call or letter, asking for the IB information like login id or password, and not to click on any link provided in any mail, claiming to be the link for the bank's website are the important tips, among others. Electronic banking has emerged from such an innovative development.

8. **Uppal and Chawla (2009)** found that the customers of public sector, private sector and foreign banks in Ludhiana district of Punjab are interested in e-banking services, but at the same time they are facing problems like inadequate knowledge, poor network, lack of infrastructure, unsuitable location, misuse of ATM cards and difficulty to open an account.

9. Indian customers' perception in the context of e-banking has been examined by **Reeti Aggarwal (2009)** and found that people in the age group of 31- 45 years using e-banking most frequently. Respondents opined that using e-banking for balance inquiry to be the most useful, closely followed by inter-account transfer of funds and they found e-banking least useful for lodging complaints. Slow transaction speed was found to be the most frequent problem faced, closely followed by non-availability of the server while using e-banking.

## THE ROLE OF E BANKING OF INDIA

Electronic banking The changing need of customer reflects the expectation of value added service for basic banking requirements. This is made possible in the post liberalization environment where technology enables banks to provide "Anytime-Anywhere-Banking" to the increasingly demanding customers. The new concept of e-banking has broken the barriers of branch banking. Customer whether individuals or corporate no longer have to go to the bank to do their business. It can be done from home and office 24x7 using the PC or the telephone and through the system of Internet banking. „Electronic Banking“ means banking done through electronic systems for customer transactions (front office computerization) and internal accounting and book keeping (back office computerization), as against the traditional manual system of banking. It may also include the decision support system for various levels of management and marketing/ cross-selling through electronic medium. E-banking is a mix of services which include internet banking, mobile banking , ATM kiosks, fund transfer system, real time gross settlement, cash management services, credit/debit/kisan cards/smart cards, operational data for MIS and customer relationship management. Communication



channel can be of three types – bit serial, byte serial and parallel. For faster communication, data compressions techniques are used. For secure transmission data encryption techniques are used. E-mail is used for transmission of data from one place to another with speed, accuracy and security. Email can be used over dial-up line or a dedicated line. The dedicated leased line connectivity can be via satellite link or terrestrial link. VSAT networks are used across banking industry for many on-line applications. Following are the new banking technologies:

**Automated Teller Machines (ATMs):** ATM is a computer driven system which is user friendly and operates 24 hours a day and 7 days a week. It is totally menu-driven, which displays step-by- step instructions for the customer. ATM can be accessed by a customer by using his ATM card to gain entry into the ATM room and the Personal Identification Number (PIN) for desired transactions.

#### **THE IMPORTANCE OF E-BANKING IN BUSINESS:**

##### **1. Productivity:**

E-banking leads to productivity gains. Automating routine bill payments, minimizing the need to physically visit the bank and the ability to work as needed rather than on banking hours may decrease the time involved in performing routine banking activities. Additionally, online search tools, banking actions and other programs can allow staff members to research transactions and resolve banking problems on their own, without interacting with bank employees. In some cases, month-end reconciliations for credit card transactions and bank accounts can be automated by using e-banking files.

##### **2. Lower Banking Costs:**

Banking relationships and costs are often based on resource requirements. Businesses that place more demands on banking employees and need more physical assistance with wire transfers, deposits, research requests and other banking activities often incur higher banking fees. Opting for e-banking minimizes business overhead and banking expenses.

##### **3. Reduced Errors:**

Utilizing e-banking reduces banking errors. Automation of payments, wires or other consistent financial activities ensures payments are made on time and may prevent errors caused by keyboard slips or user error. Additionally, opting for electronic banking eliminates errors due to poor handwriting or mistaken information. In many cases, electronic files and daily reviews of banking data can be used to double or triple check vital accounting data, which increases the accuracy of financial statements.

##### **4. Reduced Fraud:**

Increased scrutiny of corporate finances through audits and anti-fraud measures requires a high level of visibility for all financial transactions. Relying on e-banking provides an electronic footprint for all accounting personnel, managers and business owners who modify



banking activities. E-banking offers visibility into banking activities, which makes it harder for under-the-table or fraudulent activities to occur.

## 5. Convenience:

By banking online, you can carry out your banking activities whenever you want. Online banking is a 24 hour service, so you are no longer tied to the branch's hours. On top of that, you don't have to take the time to travel to the branch and wait in the inevitable lines, thus giving you more time to do what you want.

## 6. Mobility:

Online banking can be done from anywhere, as long as you have an Internet connection. Even if you are away for business or a vacation, you can still take care of your banking needs. Some banks, such as Bank of America, have even created mobile applications that make banking easier for those with a Smartphone like the Apple iPhone or iTouch or a Blackberry. With this added mobility, you'll no longer have to worry about missing a payment or any other time sensitive banking activity.

## 7. No fees

Because an online bank doesn't have to worry about funding an actual bank location with all of those additional costs, fees can be reduced and are often non-existent. Those checking and savings accounts that are offered by completely online banks usually have no fees at all.

## 8. Higher Interest Rates:

Again, due to a lack of costs associated with running an online bank, higher interest rates are often offered for their accounts. For higher interest rates, you would usually need to bank with a completely online account.

## 9. Online Statements:

Most online banks try to be as paper-free as possible. Most statements and correspondence is done online, reducing the amount of paper used and sent out to you. This again will help reduce the costs of the online bank. As an added bonus, this makes online banking a great environmental choice. Be warned, some banks do charge if you do want a paper copy of something.

## 10. Automatic Bill Paying:

With automatic bill paying, you can automate paying your monthly bills. Of course, you need to set this up, but it will be worth it in the long run. First, with your bills being paid automatically, you shouldn't ever miss a payment. Plus, by not having to worry about the time taken to mail in your payment, you can keep your money in your account for a bit longer, earning you a little bit more interest – and you save on postage too. Finally, you can actually do away with using checks and you also save on paper used, making this a much greener way of banking also.



## 11. Real Time Account Information:

Because you can access your accounts anytime, you can get up to date, real time information on the money in your accounts. This will allow you to better manage your money and gain the most from different accounts, interest rates and services provided by the bank.

## 12. Transfers:

Transfers between accounts with the same financial institution online can be done almost instantaneously. Not only is there no hold on the money being moved around, you can do it whenever you like and from wherever. You also save time on travelling to the local branch. Even transferring to other financial institutions is easier, and safer as you don't have to carry the money around with you. You can even now e-mail money to and from other people with INTERAC e-mail money transfers.

## APPLICATION OF ELECTRONIC BANKING

A number of services are being offered through electronic banking. It is quite difficult to measure the extent of such services, but an effort has been made by classifying these services into two categories. Firstly, to judge the impact of ebanking through different websites, services being offered by the banks have been categorized into informational and transactional services. Secondly, the extent of these services has been measured through ATM services offered by the banks.

### ATM

An (ATM) also known as an automated banking machine (ABM) that enables the clients of a financial institution to perform financial transactions without the need for a cashier, human clerk or bank teller. Most ATMs are connected to interbank networks, enabling people to withdraw and deposit money from machines not belonging to the bank where they have their accounts or in the countries where their accounts are held (enabling cash withdrawals in local currency). Although ATMs were originally developed as just cash dispensers, they have evolved to include many other bank-related functions.

### B. Smart card

A smart card, chip card, or integrated circuit card (ICC) is any pocket-sized card with embedded integrated circuits. Smart cards can provide identification, authentication, data storage and application processing. Smart cards may provide strong security authentication for single sign-on (SSO) within large organization. Financial institutions worldwide are developing new methods to maintain and expand their services to meet the need of increasingly sophisticated and technically smart customer, as well as to meet the emerging payment needs of electronic commerce. Traditional credit cards are fast evolving into smart cards as consumers demand payment and financial services product that user friendly, convenient and reliable.



## C. Debit card

An electronic card issued by a bank which allows bank clients access to their account to withdraw cash or pay for goods and services. This type of card, as a form of payment, also removes the need for checks as the debit card immediately transfers money from the client's account to the business account. The major benefits to this type of card are convenience and security. Debit cards are also considered to be a safer form of payment as a code is required to access the account funds, while checks can be easily stolen. Debit cards are also known as check cards. Debit cards look like credit cards or ATM cards, but operate like cash or a personal check.

## D. 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 a mobile phone or personal digital assistant. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information. The following services can be availed through the Mobile banking application:

- Funds transfer (within and outside the bank).
- Immediate Payment Services.
- Enquiry services (Balance enquiry/ Mini statement).
- Demat Account Services.
- Requests (Cheque book request/Generate OTP).
- Bill Pay (Utility bills, credit cards, Insurance premium),

## E. Credit card

The word credit originated from the Latin word credo meaning Trust. A credit card is a payment card issued to users as a system of payment. It indicates an opinion on the future ability to the issuer to make timely payment of principal and interest of fixed income security. A credit card allows small short-term loans to be quickly made to a customer who need not calculate a balance remaining before every transaction.

Credit card enables a card holder to purchase goods, dine in a restaurant, stay in a hotel or travel without making immediate payment the bank makes payment to the establishment concerned. The payment is accommodated for the card holders for a specific period of time, say for forty-five days. It enables the card holder to purchase goods and services without cash at select places. Credit cards can also offer reward points which may be redeemed for cash, products, or airline tickets.



## F. Tele banking

Telebanking is carrying out financial transactions using telephones. Telephone banking is a service provided by a bank or other financial institution, that enables customers to perform financial transactions over the telephone, without the need to visit a bank branch. From the bank's point of view, telephone banking reduces the cost of handling transactions by reducing the need for customers to visit a bank branch for non-cash withdrawal and deposit transactions. Information / Services available through Phone Banking

### •Information about Products and Services.

- Information about Account Balance and Transactions.
- Information about status of Cheque Issued or Deposited.
- Information about ATM and Branch locations.
- Information / Issues on usage of - ATM, Internet Banking or Mobile Banking.
- Request for Cheque Book etc..... Other services provided by bank.
- Online share trading.
- Fund transfer.
- Online account opening.
- Bill payment.

## TOP 20 WALLETS IN INDIAN BANKING SECTOR

### 1) Airtel Money:

With the Airtel Money app, users can easily recharge prepaid accounts or pay postpaid bills. You can also shop online if your digital wallet has cash loaded in it. It's also extremely safe as every transaction or payment you make requires a secret 4-digit mPin.

### 2) Citi MasterPass:

Citi MasterPass, a free digital wallet, helps make checking out while online shopping a speedier process. Once you've stored all your payment and shipping details in your Citi Wallet, simply click on the MasterPass button and it will take care of the rest.

### 3) Citrus Pay:

Citrus Pay, one of the top e-wallets in India, it offers a Citrus wallet for customers as well as payment solutions to businesses. With a strong base of 800 million customers, it has definitely earned its spot as one of the best mobile wallets in India.

### 4) Ezetap:

Ezetap, a Bangalore based digital payment solution founded in 2011, offers business owners solutions to accept card payments via electronic devices. It also send customers e-receipts through an SMS or email.

# 14<sup>th</sup> International Conference on Science, Technology and Management (ICSTM-19)

Guru Gobind Singh Polytechnic, Nashik, Maharashtra (India)

2<sup>nd</sup> March 2019, [www.conferenceworld.in](http://www.conferenceworld.in)



ISBN: 978-93-87793-74-3

## 5) Freecharge:

Freecharge, one of the most famous names right now when it comes to digital payment in India, has been known to target the youth in all their promotions. With equivalent amount of coupons given for every recharge you make, it's a great option to save while paying your bills online.

## 6) HDFC PayZapp:

HDFC PayZapp, making digital payment in India simplified with one click payments, is one of the top online wallets in India. Users can easily compare flight and hotel tickets and even buy music or pay bills with the app. Simple connect your debit/credit card once and forget to worry about making payments.

## 7) ICICI Pockets:

While you might find a Pocket card redundant, considering you're opting for an e-wallet app to avoid using a card, they do have a pretty neat wallet app. It's VISA powered and can be used on any Indian website, or to transfer money to email ids, WhatsApp contacts, and also just tap and pay your friends easily.

## 8) JioMoney:

JioMoney, launched recently in 2016 by Jio, is a digital payment app. With JioMoney, one can receive great discounts and offers. Users can also bookmark their frequently visited retailers so shopping can be made quicker than usual.

## 9) Juspay:

JusPay Safe is a payment browser with over 650+ transactions in a day. They offer a browser with which users can make payments quickly via cards with 2 clicks.

## 10) LIME:

LIME, launched by AXIS in 2015, was the first mobile app in India to integrate wallets, shopping, payments, and banking. Apart from the usual features like making payments, they also let you analyze what you spend. With a cool feature that rounds up all your change and invest in a deposit and a shared wallet tool, they've definitely earned their spot in the top list of mobile wallets in India.

## 11) Mobikwik:

Mobikwik is a Gurgaon based e-wallet payment system in India that helps its users store their money. Founded in 2009 by Bipin Singh and UpasanaTaku, this digital wallet enables users to recharge, pay bills, and make third-party purchases with one tap.

# 14<sup>th</sup> International Conference on Science, Technology and Management (ICSTM-19)

Guru Gobind Singh Polytechnic, Nashik, Maharashtra (India)

2<sup>nd</sup> March 2019, [www.conferenceworld.in](http://www.conferenceworld.in)



ISBN: 978-93-87793-74-3

## 12) MomoeXpress:

MomoeXpress, a Bangalore based digital wallet in India, claims to have the fastest checkout system. Though they're only available in Bangalore, they have a wide range of solutions they offer to residents on the city. From paying for your rickshaw ride to salons & spas, there are over 3000 outlets available at your disposal.

## 13) MoneyonMobile:

MoneyOnMobile, authorized by the Reserve Bank of India, enables users to buy goods, products, and services from registered merchants. It's a multilingual app that reaches remote areas of the country to millions of users making online payments available to a wide population.

## 14) Mswipe:

Mswipe, the first mobile point-of-sales solution in India was founded in 2012. They don't exactly offer an app, but they do provide a machine that can be attached to your mobile device to accept card payments. This may not be a digital wallet app but it does support going cashless.

## 15) Ola Money:

Ola Money, launched in 2015, is a digital wallet in India offered by Ola. While it's majorly being used to make payments for Ola cab rides, making cashless traveling a dream come true, it can also be used to buy groceries or flight tickets and much more.

## 16) Oxigen:

Oxigen, a FinTech company founded in July 2004, is one of the major providers of digital payment in India. Along with making online purchases and paying bills, you can also send gift cards to your dear ones.

## 17) PayMate:

PayMate, founded in 2006 by Ajay Adishesann, launched PayPOS in 2012, an app for small businessowners to receive payments conveniently via debit cards and credit cards and also process electronic transactions.

## 18) Paytm:

Paytm, launched in 2010, is currently the largest mobile wallet app in India. With payments via Paytm being accepted almost everywhere, it's hard not to simply switch to it completely. From paying mobile bills to buying movie tickets, there's almost nothing you can't do with Paytm.

# 14<sup>th</sup> International Conference on Science, Technology and Management (ICSTM-19)

Guru Gobind Singh Polytechnic, Nashik, Maharashtra (India)

2<sup>nd</sup> March 2019, [www.conferenceworld.in](http://www.conferenceworld.in)



ISBN: 978-93-87793-74-3

## 19) PayUmoney:

PayUmoney, a part of PayU India, is a free payment gateway solution for merchants to collect payments from customers via debit/credit cards or net banking, and more. They also offer SMS and email invoicing for merchants that do not have a website.

## 20) State Bank Buddy:

State Bank Buddy, a product of State Bank of India, is an online wallet in India that's available in 13 languages. Users (non SBI account holders too) can send money via Facebook, or to other bank accounts, book hotels or movie tickets and much more

## Findings:

1. In this paper E banking Play vital role in Banking sector .It gives pure transparency and less time .i.e Productivity, Reduced Errors, Reduced Fraud, Convenience, Mobility, No fees, Online Statements, Automatic Bill Paying, Real Time Account Information etc.
2. There is lot application sources for using e banking in India. I.e. Airtel Money Citi Master Pass, Citrus Pay, Ezetap, Freecharge, HDFCPayZapp, ICICIPockets, JioMoney, Juspay, LIME etc.

## CONCLUSIONS

All these developments in Indian banking show that, the Indian banks are marching towards modern banking and changing their traditional look. It is a grate change in banking industry because of information technology development. They are trying to utilize the information technology for banking business and provide technology based banking products and services to their customers. Indian banks also trying to Univerlisation of banking products and services to one stop banking shop for customer delight, but comparatively, private and foreign banks existing in Indian economy are having a higher level of modernization and also providing numbers of modern services to their customers.

E-banking is a generic term for delivery of banking services and products through electronic channels, such as the telephone, the internet, the cell phone, etc. The concept and scope of Ebanking is still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably. While E-banking has improved efficiency and convenience, it has also posed several challenges to the regulators and supervisors. Several initiatives taken by the government of India, as well as the Reserve Bank of India (RBI), have facilitated the development of E-banking in India.

# 14<sup>th</sup> International Conference on Science, Technology and Management (ICSTM-19)

Guru Gobind Singh Polytechnic, Nashik, Maharashtra (India)

2<sup>nd</sup> March 2019, [www.conferenceworld.in](http://www.conferenceworld.in)



ISBN: 978-93-87793-74-3

## References:

1. HerpreetKaur and J. S. Pasricha (July-Dec 2008) “Journal of banking: Information Technology Management”
2. Yang, J. and Ahmed, K.T. (2009) ‘Recent trends and developments in e-banking in an underdeveloped nation – an empirical study’, Int. J. Electronic Finance,
3. Gao, P. and Owolabi, O. (2008) ‘Consumer adoption of internet banking in Nigeria’, Int. J. Electronic Finance.
4. Jiaqin Yang\* and KhTanveer Ahmed Recent trends and developments in e-banking in an underdeveloped nation – an empirical study Int. J. Electronic Finance,
5. Byers, R.E. and Lederer, P.L. (2001) Retail banking service strategy: a model of traditional, electronic, and mixed distribution choices, Journal of Management Information Systems,
6. Shah.M and Clarke.S. (2009). E-banking management. Issues, Solution, and Strategies. Information Science Reference Publication. New York. pp.
7. Khorshid, S. and Ghane, H. (2009) ranking the challenges of ebanking with the help of AHP model. Journal of ModiriyateSanati Azad University of Sanandaj.