

Mobile Banking – A way Towards Technological Growth in Indian Banks

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Abstract. Technology or getting technologically strong is somewhere the dream of every organization. With a growing culture and changing pace of organization it is too important to keep yourself up to date and very much belonging with the pace of changing environment. Banking is by far the largest financial sector in India and is constantly trying things with technological usage in order to provide better service to its clients, in fact the base of whole service in this sector lies on customer satisfaction and ease. Indian so far is the second largest telecom industry in the world. With the upcoming on smartest gadgets it definitely turn ease for users to have everything in a gadget they buy. Therefore mobile banking is a comfort to switch over your work from handling those big laptops or searching for desktops or cyber cafes and just having all your work in your hands. But despite of its comfort yet many people are reluctant to use this technology due to fear or drawbacks or security issue attached with it. This paper is basically an attempt to highlight or understand the concept behind reluctance of people in using M-Banking and securities issues with it and analyzing safety measures requiring necessary maintenance for it success.

Keywords: M-Banking, technology, banking

1 Introduction

In order to be with the rhythm of technical development and innovations especially in telecomm sector has led to ease in various working parameters and one of them is banking sector, where customers have a privilege of interacting with banks via mobile phones (Barnes & Corbitt, 2003). In India 617 million mobile subscribers far exceed fixed line subscribers because of better mobile infrastructure (TRAI, 2010). The banks in India are racing to use this latest technology to reduce their operational costs and increase customer base (Peterson, 2009). Mobile Banking refers to provision and availing of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank transactions, to administer accounts and to access customized information (Tiwari & Buse, 2007).

After the launch of mobile banking in India, mobile banking transactions have tremendous growth. What attracts customers to mobile banking is the round the clock availability and ease of transactions. But mobile banking still has a long way to go as majority of customers prefer banking in the traditional ways (Ashta, 2010; Wang, Wang, Lin & Tang, 2003). Mobile banking is a term used for performing balance checks, account transactions, payments etc. via a mobile device such as a mobile phone.

Mobile banking now a days often referred to as a banking via SMS which is so easy to operate that just by registering yourself to mobile activities you can get such alerts in a go. In fact in order to avail all your transactions easily you just need to download various banking apps you have an account in and that will all make you're working easier and convenient. The services offered by mobile banking included getting account information, transferring funds, sending checkbook request, managing deposits, checking transactions and so on. Mobile banking is most often performed by SMS and hence is also known as SMS banking.

All kinds of banks public, private or government all consider use of mobile banking as a means to increase their customer database, and with changing technology and generation next where everyone is keen to use technology it perhaps turns a need of hour to avail such technical benefits which in future will led to growth and business generation for banking sector. Mobile banking services in India started with SMS banking way back in 2002. With an increasing mobile subscriber base in India, mobile banking has picked up steam in recent years. Today more than half the population in India has a mobile phone. However, less than 1% of that uses mobile phone as a medium for banking. Though mobile banking is synonymous with the word convenience banking, its usage is not anywhere close to its potential.

With the advent of smart phones and ever growing usage of internet on mobile handsets, application based banking has emerged as a new - 3 - concept within this space. Other than SMS banking, banks are now offering banking services on mobile handsets through WAP-based internet websites and application based mobile banking services. (Mehta, 2012).

But despite of Indian banks trying hard to make use of these technological services still majority of population is reluctant to adopt such measure because of a tendency of resistance to change among people, further in order to use such technology it is important to impart proper education to masses where there exist lack of infrastructure with banking sector. But with changing rules and providing

more security proof working banks are trying hard to meet the challenge of shifting their base to mobile banking in order to face their survival in upcoming world. RBI itself time and again regulate the working of these mobile apps and keep on issuing guidelines for better working of banking sector.

There used to be a time when you cannot open an account without a passport size photographs, and now is a time when u don't need a picture banks take it themselves further u can create your own accounts on banks website which are easily accessible by login ids and passwords provided by bank to make transactions smooth, easy and convenient.

This will help us reach the goal of financial inclusion in India. With these technologies in place, banking on mobile handsets should lead to more transactions on the move as increased reach and last mile connectivity is better achieved via mobiles compared to traditional banking channels like branches and ATMs.

2. Objectives of the study

- i. To identify prospects of mobile banking in India
- ii. To find out reasons restraining people for its use
- iii. To find out potential in m banking.
- iv. To study reasons of its negative or positive response.
- v. Predicting its future in upcoming years

3. Methodology

This is a descriptive research paper based on secondary data. Data have been find out by goggling in different websites, research papers and magazines.

Mobile banking and how it works?

Mobile banking refers to a process of operating your account details with the help of mobile phones while you are away from your home computer or when you have no accessibility of cyber cafes or desktops to perform a work. It includes activities such as transferring funds, NEFT or RTGS transfers , making online payments , shopping online or applying for drafts or checking up of your balances. It is on the click service with the help of your smart phones which some where make your working easy, comfortable and saves lots of your time.

How actually it works???

Mobile banking usually works across countries on basis of 3 models: SMS messaging, mobile web and applications developed for different mobile platforms. Mobile texting & SMS: this is one of the simplest way of mobile banking with the help of this you can easily check the account balance by using text messages e.g.: suppose I would like to know my account balance, so bank will provide me a toll free number where in I will send ACTBL<account number> in order to get my account balance. This method is easiest and often used by majority of people.

Mobile web: this is second popular method of using bank application it works similar to working of your desktop with only difference that you enter your login id and passwords through your mobile app rather than entering data via laptop or desktop.

Application development: this is the latest technology or working means of banks, in this few banks have their own application working on all mobile platforms i.e. android, Samsung, Symbian or iPhone. All you have to do for this is have an internet connection and a mobile app. As you download an application the user will demand a verification code usually send by bank server. This authentication proves your identity and you can do all such work as you were doing earlier, checking your balances, making payments applying for payments or any other routine banking activity.

Mobile banking is a new and interesting use of technology with certain security measures which are very important to maintain its longevity in today's world. As everything comes with good and bad, the only issue with mobile banking is security issues but RBI and various banks are trying hard to keep on updating and fixing such bugs so as to make you use it over and over again.

Mobile Banking Services

Mobile Banking Service over Application/ Wireless Application Protocol (WAP)

- a) Fund transfers (within and outside the bank)
- b) Immediate Payment Services (IMPS)
- c) Enquiry services (Balance enquiry/ Mini statement)
- d) Demat Account Services
- e) Requests (Cheque book request/Generate OTP)
- f) Bill Pay (Utility bills, credit cards, Insurance premium), Donations, Subscription.
- g) Top up / Recharge (Mobile /DTH /MobiCash wallet Top up).

h) M Commerce (Merchant payments, SBI life insurance premium)

Mobile Banking Service over SMS:

- i) Enquiry Services (Balance Enquiry/Mini Statement)
- ii) Prepaid Mobile / MobiCash wallet Top up
- iii) DTH Recharge
- iv) IMPS Fund transfer – (Mobile number & MMID and Account Number & IFS Code)
- v) Change MPIN.
- vi) IMPS Merchant payments

Advantages of Mobile Banking

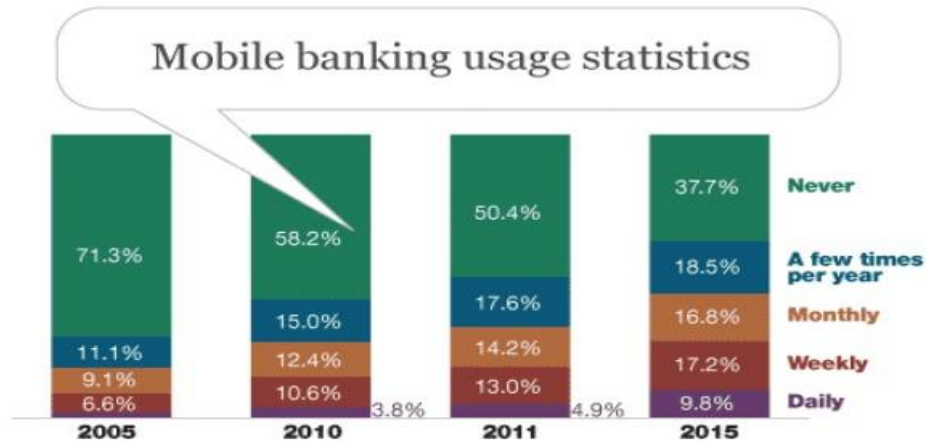
Mobile banking offers various advantages to banks as well as customers Benefits for the banks

1. Reduces transaction cost: Mobile banking enables banks to reduce cost of courier, communication, paper works, etc. It reduces costs in setting up a branch and the resources to process transactions.
2. Helps in improving services: as there is a direct contact between customers and banks, banks can improve their services on the basis of customers feedback.
3. Increases customer loyalty: using M-banking customers need not to go in banks braches for fund transfer or for information, which creates a good relationship between banks and customers which helps in increasing loyalty towards the banks.
4. Broader customer base: with mobile banking banks can reach a broader customer base beyond their geographical base and area of operations.

Benefits for the customers

1. 24x7 hour banking: through mobile banking, customers has online access to their bank accounts. Challenges related to mobile Banking. Customers has no longer to wait in banks lines of wait for opening branches.
2. Anytime anywhere banking: unlike traditional banking, consumers can perform banking transactions at anyplace.
3. Safe and secure transaction: mobile banking reduces the risk of fraud. An SMS is send by bank whenever customer withdraws money from his/her bank account. It has secured pin code which is known by the user, and also has a check digit without it no one can deposit money.

Real usage of mobile banking as per RBI



Having look at the growing technological awareness and demand among the people, majority of people prefer using technology and switching to m-banking is making their work easier comfortable and saving lots of time of people concern. Looking and analyzing the data collected above from RBI website it clearly depicts where In 2005 there were around 71.3% people resisting mobile banking has now resulted in only 37.7% and almost 9.8% of our total population prefers using mobile banking for their day to day working. This has led to banking expansion to a large extent and further leading to growth and services in banking sector.

Need for mobile banking in India

Need of Mobile Banking



When worlds grows at a fast pace it ultimately runs equally important for every nation to grow with a speed with which it can match. So that all was actually a cause of we requiring turning point in banking or Indian’s biggest financial sector. It is important to have mobile banking because:

- It leads to growth in banking sector, it's purely a way of increasing customer database and attracting more and more customers.
- Helps banks for achieving financial inclusions.
- Far and extended reach: operating anything from anywhere that's what mobile banking has enabled banks with, withdrawing money and accessing transactions and transferring money all this was never so easy as it is today.
- Creating and educating people with a habit of cost saving, since you know balance of account before making investment so there exist no bouncing of cheques, in fact u can invest as per your own pocket.
- A help to business sector to take any decision firmly.

RBI regulation for mobile banking in India

RBI is central governing body for financial sector in India, time and again it come up with various regulations for its smooth working. Following are guidelines issued by RBI

- i) Only such banks having principal working India and have authentication to operate are licensed to provide such service in India.
- ii) Mobile banking service can only be provided in terms of rupees.
- iii) The service is supposed to be restricted to only bank accounts/ credit cards of KYC applicants.
- iv) The risk and control as mentioned in telecomm guidelines will apply same in case of banking as well.
- v) The Know your customer (KYC) & Money laundering norms will remain same for mobile banking customers as well as was applicable to general banking.

Transaction limit in mobile banking.

- i) Only Indian rupee and Indian transactions are allowed, a customer is not entitled to go for cross border transactions.
- ii) Per day transaction cap of Rs 50000/- has been removed and every bank can change it depending on their risk.

iii) Transaction without end to end encryption is Rs 5000/- (SMS service).

Security and authentication

The highlights of security and authentication guidelines by RBI are:

- i) The Mpin Or Higher Authentication Must Be Used.
- ii) End To End Encryption Must Be Used
- iii) Banks Must Conduct Time To Time Audit In Order To Maintain Security.

4. Current Scenario of Mobile Banking In India

Year	No. of Users (million)	Volume (million)	Value (billion)
2011-12	12.96	25.56	18.21
2012-13	22.51 (73.69%)	53.31 (108.56%)	59.90 (228.94%)
2013-14	35.53 (57.84%)	94.71 (77.66%)	224.38 (274.59%)

Source: RBI

The above table states that M-banking usage in India is showing a positive trend. In terms of no: of users it was 12.96 million in 2011-12 and reached at 35.53 million in the year 2013-14. Volume of transactions also increased during the given period. In case of value of transactions it was only 18.21 billion in 2011-12 and reached at 224.38 in 2013-14 i.e. an increase of 274.59%. So the table reveals the fact that M- banking transactions of the country is growing at a rocket speed and it have more scope in the near future.

5. Challenges related to mobile banking

There are some issues and challenges that need to be addressed, which includes technical, regulatory and legal issues. Some non-users still consider it a complicated task due to lack of proper guidance. It's up to the banks how effectively and efficiently they change the notion of people towards mobile banking. Rapidly changing technology in Mobile technology like 2G, 3G, and 4G

has become major challenges for banks. The major concern among customers was privacy and security. Banks are advised to educate customers on this issue to raise their awareness. Especially for the customers who feels that there are chances in case of mobile handset theft. It is strongly believed that familiarizing customers with how to use the service and ensuring the security of Mobile banking will definitely increase the rate of using Mobile banking services. Though users in rural India are increasing at a very high speed but mobile banking has not made inroads in rural India. On basis on analyzing the trend keenly there are list of some challenges as mentioned below:

- 1) Customer awareness : majority of people in India are living in rural sector and hence are reluctant to use mobile banking as they are not even have bank accounts. This is by far one of the main reason of risk and security attached with it and due to which not just people some banks are also not keen of introducing this service as it would led to huge expenditure.
- 2) Security issues and privacy: it is a big challenge to adopt privacy and security in mobile banking, although banks provide us with login ids and passwords but in case if we lose our phone it can be traced by hackers or the third party providing it. Since the application based service reply more on third party work so it lacks reliability.
- 3) Virus attack: as we say it works like a computer so computer is prone to virus attack same way, mobile handsets are also, it turns a tedious task to keep your data safe and hence risk of it is also there.
- 4) Risk in SMS text: Format of SMS is in plain text. Currently end to end encryption is not available. The only encryption is available in base station at transceiver and at the SMS server during transmission time. Due to this there is risk in SMS banking such as SMS spoofing attack where attacker can send message on network by manipulating the user's number.

6. Conclusion and Suggestions

From the above results it's clear that there is vast opportunities in mobile banking area. With the introduction of smart phones, there is a huge increment is seen in banks customized based applications. The major challenge here is to develop applications for different mobile operating systems. India is a country where different languages are used in different parts. Most of the

population of India is still living in rural areas and everyone doesn't understand same language. So its utmost important to make software that is user friendly and available in different languages.

Further creating an awareness program in rural and backward area where people use mobile phone, and educating them to use to operate banking service. In fact creating an awareness which indulge everyone to have a bank account which can be easily manageable. The author suggests the following:

- i. The banks must improve their services in terms of reliability, authentication and security.
- ii. To provide various banking services like promotional services an interaction with the customers and privacy in transactions need to be maintained.
- iii. Set standards for mobile banking transactions.
- iv. Set standards for banks and other agencies in providing service to the customers.
- v. Educate customers about its effective use.
- vi. Provide 24*7 service, give due importance to customer without making distinction.
- vii. Bank must consider mobile banking as a cost saving issue than revenue generation.
- viii. Banks and telecomm sector must work in unity to solve customer grievances.

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