

Mobile Banking in India

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Abstract

In today's competitive environment mobile banking is a revolutionary step which involves the access to, and provision of, banking and finance services through mobile devices. Mobile banking which is also known as M-Banking is a term used for performing balance checks, account transactions, payments, credit applications and such other banking transactions through a mobile device. Mobile banking is one of the best alternative channels available to customers for quick, correct and efficient service at any time and anywhere. The ability to allow consumers to have more control over their financial situation is one attraction of mobile banking services as the consumer would like to act on his own when dealing with their own monetary transactions through the mobile device. This paper examines the factors influencing the adoption of mobile banking in India. It also considers the major issues arising in relation to data security and the ways to protect them.

Keywords: Mobile banking, Mobile Device, Data Security

Introduction

The banking industry today is in the industry of its revolution. Information technology has basically been used under two different avenues in banking. One is communication and connectivity and other is business process. Wireless and mobile technology is being used by the banks so that customers are free to pay their bills, they can plan payments and receive updates on various marketing efforts. In the year 2002, Mobile banking services in India started with SMS banking. Now it is becoming a new generation platform in India. Mobile Banking is useful for the customers for making inquiries about their balances on mobile phones. Mobile banking can be a powerful tool to bank the un-banked. It is the evolutionary step after Internet banking. It is an additional service bolted on top of an existing solution, making access to services more immediate and reducing customer reliance on branch infrastructure or access to the Internet. The public perception of mobile financial services has undergone a positive change in past few years. This shift has taken place because of the increased need for mobility and the technological advances in the telecommunication sector.

Mobile banking addresses this fundamental limitation of Internet Banking, as it reduces the customer requirement to just a mobile phone. The main reason that Mobile Banking scores over Internet Banking is that it enables 'Anywhere Anytime Banking'. As customer do not need to access a computer terminal to access their bank accounts, as that can be done through a mobile device only. Banks who are offering mobile access are supporting all or some of the services like nrinistatements and checking of account history, alerts on account activity, monitoring of term deposits, access to loan statements, access to card statements mutual funds equity statements, insurance policy management, and pension plan management. Activities like domestic and international fund transfers, micro payment handling, mobile recharging, commercial payment, and bill payment processing can also be done through mobile device. Portfolio management services and personalized alerts and notifications on security prices can be accessed through mobile. (Moreto, 2011)

Benefits of Mobile Banking Service

- In case of internet or online banking you need a computer and internet connection to access your account and this becomes a problem during urgency or when you don't have internet connection. However this is not a problem with mobile banking as you will get network connection even intheremote areas.
- With the use of mobile banking you can get your work done within few minutes without going personally to bank and standing in a queue.
- With the introduction of new user friendly applications and software, mobile banking through your cellphone has become simpler. As a result of this, more and more people are attracted towards it.
- Mobile banking keeps you updated with any activity done in your account. A money withdrawal, money transfer and other transactions to and from the account can be brought to the customer's knowledge via SMS.
- Various information can be obtained on the mobile phone such as nri-ni-statement of the account, Insurance and mutual fund statement, loan updates, credit card statements etc. Mobile banking is not only used for banking service but also serves as a way to sell the products of bank such as credit cards, loans etc.

- Customers can keep themselves updated with portfolio management services, real-time stock and other news on stock market. (Black and Lockett, 2002)

Ethical Issues in Mobile Banking

Some of the ethical issues in mobile banking are SMS encryption. As default data format for SMS is plaintext. Currently end to end encryption is not available. The only encryption involved at base transceiver station and SMS bank server during transmission. The other one is SMS spoofing attack where attacker can send messages on network by manipulating sender's number. Virus attack is also a threat in mobile banking as there are different types of computer viruses, internet malicious program and Trojans. Software like Trojan horses can easily take up password on the web browser or any cached information on operating system. Malicious codes are written for remote communication. Also there is a risk with digital signature. It is found that digital signature is computational intensive. With unsigned values for example date, amount, they differed from transaction to transaction. So a signed template can be used with several unsigned values like date, amount etc.

Mobile Banking (Quality of Service) Regulations 2012

The Telecom Regulatory Authority of India (TRAI) has issued Mobile Banking (Quality of Service) Regulations 2012 prescribing quality of service standards for mobile banking to ensure faster and reliable communication for enabling banking through the mobile phones.

The salient features of the Regulations are as under:

- Access service providers shall facilitate banks to use SMS, USSD and IVR to provide banking services.
- The response time for delivery of message for mobile banking services generated by the customer or the bank shall be within the prescribed time frame.
- If the SMS sent by the bank is not delivered to the customer due to network or handset related problems, an USSD communication to the customer confirming the completion of the transaction should be sent.
- Service providers have to maintain complete and accurate record of transactions, using mobile banking services through mobile phones.

Factors Influencing the Use of Mobile Banking

Usefulness of service

People think that mobile banking service will be very useful as there is unnecessary hardship among the population in accessing the banking and financial services. People expect convenience banking as expressed by the participants based on the concept of MPE explained to them.

People also consider mobility as there would be no risk of the money being stolen if it is transferred through a mobile device. Convenience and mobility are the main benefits considered by the people.

Awareness

People would like to focus on trust factor on the technology being offered. Here the trust is of two kinds: first the trust of people on technology and second, the trust on the financial service that is being offered. Therefore, generating trust for the mobile banking service is a big challenge to be focused.

And that can only be generated through providing and spreading awareness about the services. They should be provided with on-hand training as well.

Acceptance of Technology

People who have adopted technology-enabled services like mobile phones and ATMs are more open and eager to adopt mobile financial services. User demographics like education and age are also having an impact on the amount of technology readiness of the population. Technology readiness is seen to be higher among the educated people and lower among the higher age groups. Thus, technology readiness among the set of population can be determined based on the awareness and adoption of available technologies and a combination of demographics like education and age.

Ease of Use

The level of education is not very high among the rural population and they are much more comfortable with their local language, it becomes very important to design a service that is easy to use as well as in the language that the people are comfortable with. Once people are being demonstrated of the use of the mobile banking services, they would be able to learn it quickly and easily. Hence, ensuring ease of use of the offered service both in terms of technology as well as the financial products being offered would be a very important factor in the adoption of mobile financial services.

Moreover, the language of communication needs to be the local language of the region for enhancing adoption.

Cost of Availing Services

The cost of availing the mobile financial services is also a concern for availing the services of mobile banking. People are ready to pay small amount of money for the mobile services as it saves a lot of time and effort and money that they previously spending for accessing banking and financial services through the existing channels of delivery. (Bell, 2011)

Examples of Mobile Banking Services

IOBank launch the "Branch on Wheels" which is a mobile branch with an ATM that offers basic banking products and services such as savings accounts, loans, cash deposit/withdrawal, account balance enquiries, statement printing and funds transfer DD/PO collections. Through ICICI Bank Mobile Banking, customer can check their account balance, transfer funds 24x7, pay their bills, recharge their prepaid mobile etc.

HDFC bank provides a host of features through mobile banking to their customers. Some of them are that customer can get their balance details, can enquire about their cheque status, can request for a cheque book, obtain their last 3 transaction details etc. (Thornton, et al 2001)

These services that are offered through PNB Mobile Banking Services are

- View account balance
- Online Mini Statement
- Cheque Book Request and status enquiry
- Changing SMS password and login password
- Account statement and account details

Ways to protect from the mobile data protection threats

1. Mobile data protection must keep up with the lightning-speed pace of innovation.
2. Consumers are scared to use mobile banking. Financial institutions must change public perception of data security measures, which means data protection measures must work.
3. Auto login feature should not be used.

4. Storing confidential information like passwords and social security numbers on the mobile should be avoided.
5. Cooperation on mobile data protection and data security is a must. Everyone involved, such as device manufacturers, network operators, financial institutions and app developers, must work together to develop effective mobile data protection solutions.
6. The mobile device should be password protected and should be locked when not in use.
7. Consumers must take greater responsibility for their own data security. Consumers need to be more careful about not losing their smart phones and protecting the data inside of them. They should guard their phones the same way that they guard their wallets.
8. Consumers want more convenience, therefore, financial institutions need to find the right balance between allowing them to conduct more transactions, but still making sure their personal data is protected from data breach and identity theft. Financial institutions need to educate their customers on data protection methods, like having them lock their smartphone with a password. (Mills, 2009)

Conclusion

It is a known fact that the induction of mobile phone services will lead to financial growth with a lot of convenience. The benefits of mobile banking should reach to the common man and for this all stakeholders like Regulators, Govt, telecom service providers and mobile device manufacturers need to make efforts so that penetration of mobile banking reaches from high-end to low-end users and from metros to the middle towns and rural areas. Mobile banking through an SMS based service would require the lowest amount of effort, in terms of cost and time. It has the potential to do to the mobile phone what E-mail did to the Internet. Bank's need to strongly concentrate into the mobile usage patterns among their target customers and enable their mobile services on a technology, reaches out to the majority of their customers.

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