



# Mobile Banking: An Innovative Way to Improve Banking Performance

Vineet Pathak<sup>1</sup> Shilpika Pandey<sup>2</sup> Mansi Srivastava<sup>3</sup>

Professor Ambalika Institute of Management and Technology, Lucknow

Assistant Professor Ambalika Institute of Management and Technology, Lucknow

Student MBA 2<sup>nd</sup> Year Ambalika Institute of Management and Technology, Lucknow

## Abstract

Mobile Banking refers to provision and a ailment of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customised information. Mobile devices are creating opportunities for banks and other financial services providers to offer customers' innovative ways of performing traditional banking functions. Nowhere is this trend more evident than in the area of mobile payments. Initial mobile banking services were basic in nature checking balances, etc. but advancements in device and communication technologies and the creation of native applications for mobile devices are allowing these services to move up the value chain, overcoming geographical and technological boundaries.

Smartphones will be the key driver for increased demand for mobile banking services. A study by ACI Worldwide and Aite Group found 80% of respondents had used smartphones for mobile banking, while only one-third of non-Smartphone users had reported doing so. Clearly, mobile banking and smartphone adoption will grow hand in hand.

Keywords:- Mobile Banking, Banking functions, Smartphones, Mobile Payments, Communication.

## Introduction

Mobile banking is an application of mobile computing which provides customers with the support needed to be able to bank anywhere, anytime using a mobile handheld device and a mobile service such as Short Message Service (SMS). Mobile banking facility removes the space and time limitations from banking activities such as checking account balances or transferring money from one account to another and time saving when we go to bank and doing some banking activities. Internet Banking helps give the customer's anytime access to their banks. Customer's could check out their account details, get their bank statements, perform transactions like transferring money to other accounts and pay their bills sitting in the comfort of their homes and offices. But the biggest limitation of Internet banking is the requirement of a Personal Computer with an Internet connection, but definitely a big barrier if we consider most of the developing countries of Asia like India. Mobile banking addresses this fundamental limitation of Internet Banking, as it reduces the customer requirement to just a mobile phone. Mobile usage has seen an explosive growth in most of the Asian economies like India. The main purpose of Mobile Banking scores over Internet Banking is that it enables 'Anywhere Anytime Banking is Available'. Customers don't need access to a computer terminal to access their bank accounts.

Financial Services are generally complex and need a lot of trust for the consumer to use technology. Banks have changed from paper-based banking solutions provider to the latest of the technologies like online-banking, mobile-banking, etc. Customers across the world, even technologically optimists, have refrained from using technology aided solutions. There are many reasons why technology has not been able to ride the acceptance wave and cross the hurdle and become an acceptable feature in banking. As today's banking has redefined itself as customer centric, it becomes more important that the customer is happy with the services being provided. Unfortunately, the acceptance and adoption rates are very low even in the case of educated customers. The paper looks at various factors which explain why consumers are not using mobile banking and other technologies in banking. It would also try to suggest why people are not currently using mobile banking and try to suggest how to overcome this problem and increase the acceptance levels.

## Features of Mobile Banking

A mobile payment service in order to become acceptable in the market as a mode of payment the following conditions have to be met:

- a) **Simplicity and Usability:** The m-payment application must be user friendly with little or no learning curve to the customer. The customer must also be able to personalize the application to suit his or her convenience.
- b) **Universality:** M-payments service must provide for transactions between one customer to another customer (C2C), or from a business to a customer (B2C) or between businesses (B2B). The coverage should include domestic, regional and global environments. Payments must be possible in terms of both low value micro payments and high value macro payments.
- c) **Interoperability:** Development should be based on standards and open technologies that allow one implemented system to interact with other systems.
- d) **Security, Privacy and Trust:** A customer must be able to trust a mobile payment application provider that his or her credit or debit card information may not be misused. Secondly, when these transactions become recorded customer privacy should not be lost in the sense that the credit histories and spending patterns of the customer should not be openly available for public scrutiny. Mobile payments have to be as anonymous as cash transactions. Third, the system should be foolproof, resistant to attacks from hackers and terrorists. This may be provided using public key infrastructure security, biometrics and passwords integrated into the mobile payment solution architectures.
- e) **Cost:** The m-payments should not be costlier than existing payment mechanisms to the extent possible. An m-payment solution should compete with other modes of payment in terms of cost and convenience.
- f) **Speed:** The speed at which m-payments are executed must be acceptable to customers and merchants.
- g) **Cross border payments:** To become widely accepted the m-payment application must be available globally, word-wide.

## Advantages of Mobile Banking

A very effective way of improving customer service could be to inform customers better. Credit card fraud is one such area. A bank could, through the use of mobile technology, inform owners each time purchases above a certain value have been made on their card. This way the owner is always informed when their card is used, and how much money was taken for each transaction.

Similarly, the bank could remind customers of outstanding loan repayment dates, dates for the payment of monthly installments or simply tell them that a bill has been presented and is up for payment. The customers can then check their balance on the phone and authorize the required amounts for payment.

The customers can also request for additional information. They can automatically view deposits and withdrawals as they occur and also pre-schedule payments to be made or cheques to be issued. Similarly, one could also request for services like stop cheque or issue of a cheque book over one's mobile phone.

There are number of reasons that should persuade banks in favor of mobile phones. They are set to become a crucial part of the total banking services experience for the customers. Also, they have the potential to bring down costs for the bank itself. Through mobile messaging and other such interfaces, banks provide value added services to the customer at marginal costs.

## Reasons for Using Mobile Phone Banking

In terms of how consumers evaluate the benefits conferred by mobile phone banking, no less than eight factors are rated with a response level of 40% or above. The appeal of mobile phone banking is therefore not one-dimensional; rather consumers readily appreciate a number of advantages. Convenience, speed and control emerge as the key benefits for a group who value their time and the ability to regularly monitor their finances to avoid bank charges and stay in the black.

When it comes to service, sometimes it's what you don't get that is most important – mobile phone banking seems to be a case in point. Among consumers who use mobile phone banking, 55% appreciate not having to go into a branch and 43% value not having to use a call centre.

## The Benefits for Corporate Include

**1. Real-time decision making:** Pro-active and user configurable alerts could help with decision making, risk reduction and faster transactions. Treasurers will be able to make decisions much faster because they will have up-to-date information and be able to approve and initiate payments on the go.

**2. Operational supply chain efficiencies:** Real-time, mobile-enabled sales, purchasing, distribution and logistics functions could lead to better processing and improved supply chain insight.

**3. Efficient cash deployment:** Mobile banking could reduce or even remove cash handling from the transaction process. The more parties in a supply chain who adopt this payment method, the higher the operational efficiency.

**4. Simpler cash management:** Mobile banking can help provide more accurate cash positions, projected balances and excess funds estimates.

### Services Provided by Mobile Banking

**Account Details:** - define the information related to accounts and following are the main services of accounts.

- a) Mini-statements and checking of account history
- b) Alerts on account activity
- c) Monitoring of term deposits
- d) Access to loan statements/card statements.
- e) Mutual funds / equity statements
- f) Insurance policy management
- g) Pension plan management

**Payments and Transfers:** - define the information about the payments and transfers activities like bill payment process.

- a) Domestic and international fund transfers
- b) Micro-payment handling
- c) Mobile recharging
- d) Commercial payment processing
- e) Bill payment processing

**Investments Details:** - define the information related to investments services.

- a) Portfolio management services
- b) Real-time stock quotes
- c) Personalized alerts and notifications on security prices Support
- d) Status of requests for credit, including mortgage approval, and insurance coverage
- e) Check (cheque) book and card requests

### Facilities Available On Mobile Banking

- 1) **Balance Enquiry:** The service provides all customers, the available balance in his/ her default/ operative account that are linked to the customer identification number. The maximum number of accounts one can access is five.
- 2) **Cost Transactions:** This type of transaction provides the customer with the information about last five debits/ credits made to the account.
- 3) **Cheque Book Request:** Instead of going personally to the bank, the customer can request for a cheque book to be mailed to his or her address as per the records of the bank. This saves his/ her valuable time.
- 4) **Bill Payment:** for those companies which register with the bank for this service, the payment is made on request on mobile phone banking.
- 5) **Change of Primary Account:** the customer has the option to change the primary account to another new account number for carrying out transactions.
- 6) **Help:** Customers can know the transaction codes for various types of transactions through this option.

Mobile phone bank-users will be alerted about outward clearing cheque realizations, inward cheque returns, alert on term deposits matured, on loan installment due, submission of stock statements by the borrowable client, standing instructions failed on account of insufficient balance in the account, etc. Bank initiates alert messages on minimum balance in the account and also about the utility bills which are due for payments. The services in mobile banking by each of the cellular service providers are tailor-made and customized for each bank that provides mobile banking service to its customers.

## Conclusion

The emergence of m-banking systems has implications for the more general set of discussions about mobile telephony in the developing world. The Mobile Payment Forum of India (MPFI) has been formed with Institute for Development and Research in Banking Technology (IDRBT) and Rural Technology Business Incubator (RTBI), IIT Madras taking the lead role. It has members and representatives from the telecommunications industry, financial institutions (banks and microfinance institutions) as well members from the Reserve Bank of India.

Mobile banking is moving up on the adoption curve, which is evident in the number of implementations known in the world and the level of interest and discussion around the technology and its implementation. It is also evident in the number of technology providers emerging in the mobile banking space. There are several choices when considering how to implement mobile banking. These choices include whether or not to develop the technology within the bank, use a shared infrastructure, or purchase the enabling technology from one of many vendors.

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