

A Study on Challenges of Mobile Banking Services in India

G. Jothilakshmi

Assistant Professor MBA, Department of Management Studies

Bharath Institute of law,

Bharath Institute of Higher Education and Research

Selayur, Chennai, Tamil Nadu 600 073

ABSTRACT

A new communications technology is redefining the convergence of telecommunications and computing. Mobile banking has emerged as a possible powerful provider of bundled banking services. Technology plays an important role in banking sector in India. Banking is one of the largest financial institutions constantly explores the opportunity of technology enabled services to provide better customer experience and convenience. Mobile phone is a common technology device that became part of every individual in the information era. Mobile Banking is an emerging alternate channel for providing banking services. In India is the second largest telecom market in the world, however, mobilebanking has not become the choice of millions of people.

Keywords: Mobile Banking, Mobile Banking in India, Challenges of mobile banking.

1. INTRODUCTION

Mobile banking has until recently (2010) most often been performed via SMS or the mobile web. Apple's initial success with iPhone and the rapid growth of phones based on Google's Android (operating system) have led to increasing use of special client programs, called apps, downloaded to the mobile device. With that said, advancements in web technologies such as HTML5, CSS3 and JavaScript have seen more banks launching mobile web based services to complement native applications.

Mobile banking is a service provided by a bank that allows its customers to conduct some financial transactions remotely using a mobile device such as a mobile phone or tablet. The earliest mobile banking services used SMS, a service known as SMS banking. With the introduction of smart phones with WAP support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to their customers.

Mobile banking differs from mobile payments, which involves the use of a mobile device to pay for goods or services either at the point of sale or remotely, analogously to the use of a debit or credit card to effect an EFTPOS payment.

MOBILE BANKING

Mobile banking can be defined as the ability to conduct bank transactions via a mobile device, or more broadly – to conduct financial transactions via a mobile terminal. This definition is a suitable working one as it includes not only basic services such as bank account statements and funds transfer but also electronic payment options as well as information based financial. It compares well with the definition found in (Kiesnoski, 2000) where mobile banking is referred to as the “ability to bank virtually anytime, anywhere”. This definition needs to be expanded to include the two different types of customer account access: a Web based interface and a simple text-messaging interface. This addition is important as it differentiates between the two network infrastructures for mobile commerce: the global, public, and ‘free’ Internet, and the cluster of regional, public, and paid wireless telecommunication networks.

BENEFITS OF MOBILE BANKING

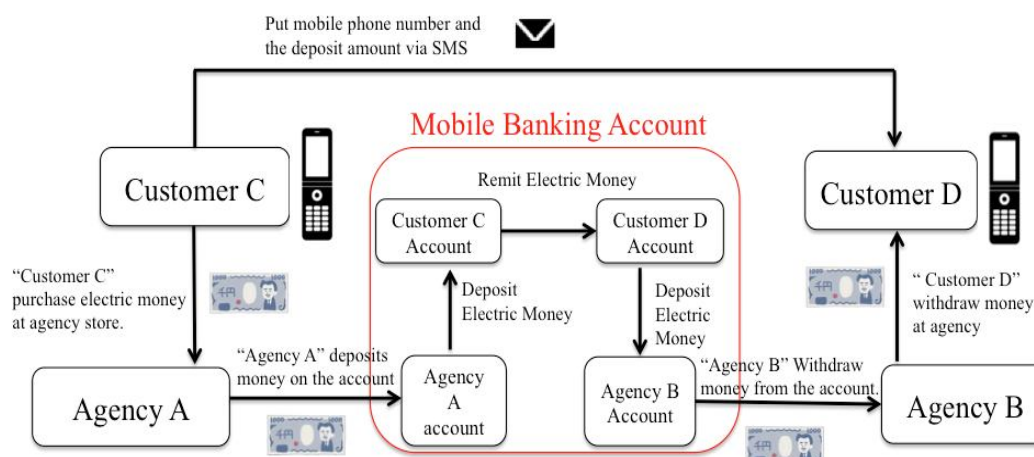
- **Time saving:** Instead of allocating time to walk into a bank, you can check account balances, schedule and receive payments, transfer money and organise your accounts when you're on the go.
- **Convenient:** The ability to access bank accounts, make payments, and even track investments regardless of where you are can be a big advantage. Do your banking at a time and place that suits you, instead of waiting in queues.
- **Secure:** Generally, good mobile banking apps have a security guarantee or send you a SMS verification code you need to input to authorise a payment for added security. Mobile banking is said to be even more secure than online/internet banking.
- **Easy access:** to your finances: with the introduction of mobile banking, you are able to access your financial information even beyond the working hours. It helps to avail banking services even by making a call to the bank.
- **Increased efficiency:** mobile banking functions are functional, efficient and competitive. It also helps in decongesting the banking halls and reduces the amount of paperwork for both the banker and the customer.
- **Fraud reduction:** one very real advantage to implementing mobile banking. “Customers are being deputized in real time to watch their accounts.
- It utilizes the mobile connectivity of telecom operators and therefore does not require an internet connection.
- Check account balance, review recent transaction, transfer funds, pay bills, locate ATMs, deposit cheques, manage investments, etc.
- Mobile banking is available round the clock 24/7/365, it is easy and convenient and an ideal choice for accessing financial services for most mobile phone owners in the rural areas.

DISADVANTAGES OF MOBILE BANKING

- Mobile banking users are at risk of receiving fake SMS messages and scams.
- The loss of a person's mobile device often means that criminals can gain access to your mobile banking PIN and other sensitive information.
- Modern mobile devices like Smartphone and tablets are better suited for mobile banking than old models of mobile phones and devices.

- Regular users of mobile banking over time can accumulate significant charges from their banks.
- Even though there are 1.5 billion computers on the Internet and 4.5 billion people using mobile phones, there's currently no significant operating system supporting the mobile space. "Hackers want to do the least amount of work for the biggest gain..
- Most mobile banking apps need an internet connection to be able to operate, so if you live in a rural area or experience problems with your internet connection, then you won't be able to access your account. The same applies if your mobile phone runs out of battery.
- Many phones aren't yet compatible with anti-virus software. Most cell phones don't come standard with anti-virus protection even if they have the capacity to browse the internet.

DIAGRAM OF REMITTANCE BY MOBILE FINANCE



SERVICES OF MOBILE BANKING

ACCOUNT INFORMATION

- Mini-statements and checking of account history
- Alerts on account activity or passing of set thresholds
- Monitoring of term deposits
- Access to loan statements
- Access to card statements
- Mutual funds / equity statements
- Insurance policy management

TRANSACTION

- Funds transfers between the customer's linked accounts

- Paying third parties, including bill payments and third party fund transfers
- Check Remote Deposit

INVESTMENTS

- Portfolio management services
- Real-time stock quotes
- Personalized alerts and notifications on security prices

SUPPORT

- Status of requests for credit, including mortgage approval, and insurance coverage
- Check (cheque) book and card requests
- Exchange of data messages and email, including complaint submission and tracking
- ATM Location

RECENT TREND IN MOBILE BANKING

YEAR	NO. OF USERS (BILLIONS)	VOLUME (BILLION)	VALUE (BILLION)
2011-2012	12.96	25.56	18.21
2012-2013	22.51 (73.69)	53.31 (108.56)	59.90 (228.94)
2013-2014	35.53 (57.84)	94.71 (77.66)	224.38 (274.59)

Source: RBI (figures in bracket is % changes over previous year)

CHALLENGES OF MOBILE BANKING**HANDSET OPERABILITY**

There are a large number of different mobile phone devices and it is a big challenge for banks to offer a mobile banking solution on any type of device. Some of these devices support Java ME and others support SIM Application Toolkit, a WAP browser, or only SMS.

SECURITY

As with most internet-connected devices, as well as mobile-telephony devices, cybercrime rates are escalating year-on-year. The types of cybercrimes which may affect mobile-banking might range from unauthorized use while the owner is using the toilet, to remote-hacking, or even jamming or interference via the internet or telephone network datastreams. In the banking world, currency rates may change by the millisecond.

Security of financial transactions, being executed from some remote location and transmission of financial information over the air, are the most complicated challenges that need to be addressed jointly by mobile application developers, wireless network service providers and the banks' IT departments.

One-time password (OTPs)

OTPs are requested by consumers each time they want to perform transactions using the online or mobile banking interface. When the request is received the password is sent to the consumer's phone via SMS. The password is expired once it has been used or once its scheduled life-cycle has expired.

Because of the concerns made explicit above, it is extremely important that SMS gateway providers can provide a decent quality of service for banks and financial institutions in regards to SMS services. Therefore, the provision of service level agreements (SLAs) is a requirement for this industry; it is necessary to give the bank customer delivery guarantees of all messages, as well as measurements on the speed of delivery, throughput, etc. SLAs give the service parameters in which a messaging solution is guaranteed to perform.

SCALABILITY AND RELIABILITY

Another challenge for the CIOs and CTOs of the banks is to scale-up the mobile banking infrastructure to handle exponential growth of the customer base. With mobile banking, the customer may be sitting in any part of the world (true anytime, anywhere banking) and hence banks need to ensure that the systems are up and running in a true 24 x 7 fashion. As customers will find mobile banking more and more useful, their expectations from the solution will increase. Banks unable to meet the performance and reliability expectations may lose customer confidence. There are systems such as Mobile Transaction Platform which allow quick and secure mobile enabling of various banking services. Recently in India there has been a phenomenal growth in the use of Mobile Banking applications, with leading banks adopting Mobile Transaction Platform and the Bank publishing guidelines for mobile banking operations.

APPLICATION DISTRIBUTION

Due to the nature of the connectivity between bank and its customers, it would be impractical to expect customers to regularly visit banks or connect to a web site for regular upgrade of their mobile banking application. It will be expected that the mobile application itself check the upgrades and updates and download necessary patches (so called "Over The Air" updates). However, there could be many issues to implement this approach such as upgrade / synchronization of other dependent components.

USER ADOPTION

It should be noted that studies have shown that a huge concerning factor of having mobil banking more widely used, is a banking customer's unwillingness to adapt. Many consumers, whether they are misinformed or not, do not want to begin using mobile banking for several reasons. These can include the learning curve associated with new technology, having fears about possible security compromises, just simply not wanting to start using technology, etc.

2. CONCLUSION

Mobile banking industry is entering a hugely exciting phase of development but one that will also present major challenges to profitable growth. As data from numerous sources make clear, usage of mobile banking services will continue to grow, and at an accelerated rate, over the next five years until they become essential ubiquitous. From a functional perspective, we believe the coming years will see an explosion in the proliferation of highly innovative re-configurations of banking and other financial services allied to emerging technologies such as augmented reality, wearable technology and contextual services. Boldness and commitment will be required to prosper in the 'Open Banking' era where the only sure fire winner will be consumers, whose choice and quality of experience will only get better.

3. REFERENCE

- [1] Al-Ashban, A.A. and Burney, M.A. Customer adoption of tele-banking technology: the case of Saudi Arabia, *International Journal of Bank Marketing*, 19 (5), pp. 191-200,2001.
- [2] Amir Herzberg. Payments And Banking With Mobile Personal Devices, *Communications of the ACM*, Vol. 46, No. 5, May 2003.
- [3] Banzal S. Mobile Banking & M-Commerce and Related issues, [www.public.webfoundation.org/...../25, Mobile_banking_M-commerce_15.03.pdf](http://www.public.webfoundation.org/...../25/Mobile_banking_M-commerce_15.03.pdf), 2010.
- [4] Barnes,S.J., and Corbitt, B. Mobile Banking: Concept and Potential, *International Journal of Mobile Communications*, 1 (3), pp. 273-288, 2003.