## A STUDY ON CUSTOMER SATISFACTION TOWARDS MOBILE BANKING

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*Abstract*
*Banks today know better than anyone the opportunities and the risks they face in an ever-changing competitive environment. The marketing mantra "Customer is a King" is no more on paper, and how it has become a reality. Increased level of awareness among the customers leads to increased preferences. Today's customers are not satisfied with care and courtesy alone, they expect concern and commitment. Therefore customer centric approach is the need of the hour. In this competition environment not the oldest, not the strongest and not the first can survive, but only the "Best" can survive. Therefore usage of modern technology for better service is imperative. Educational level of respondents influence the use of internet banking facility and highly satisfied with secrecy maintenance, transaction updating, account transfer and security followed by easy access while using the internet banking services. The internet and the mobile phone – two technological advancements that have profoundly affected human behaviour in the last decade – have started to converge. The products of this association are mobile data services. Using a variety of platforms, services are being created to enable mobile devices to perform many activities of the traditional internet, albeit in a reduced format for mobile devices. One area of activity is mobile (m-) banking (one of the first areas of commercial transaction on the wireless internet). Banking is an area that has extended in many different ways in recent years, including telephone and online banking. M-banking provides yet another channel for banking services, and in emerging markets, provides some possibility for becoming a primary channel. This paper examines the strategic implications of m-banking and the strategic positioning of m-banking services in different markets.*

## INTRODUCTION

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 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. A recent study (May 2012) by Mapa Research suggests that over a third of banks have mobile device detection upon visiting the banks' main website. A number of things can happen on mobile detection such as redirecting to an app store, redirection to a mobile banking specific website or providing a menu of mobile banking options for the user to choose from.

Mobile Technology-enabled banking system helps to transform the financial services to their customers. Use of technology-enabled financial information mediums in expanding banking is one of the key focus areas of banks like, Automated Teller Machines (ATMs), online banking, m-banking, telebanking, credit/debit cards. Presently, the banking sectors in India are moving towards mobile technology-enabled financial information and it is not only to improve their own internal processes but also to increase financial services to their customers without discrimination. Efficient implementation of mobile technology has facilitated accurate and timely management of the increased transaction volume of banks of that comes with larger customer base. By designing and offering simple, safe and secure technology, banks reach at doorstep of customer with delight customer satisfaction.

### Origin of Mobile Banking in India

One of the most leading sectors in the world in the adoption of mobile technology is the banking industry including India. India was depicted to be the fastest growing mobile communications nation in Asia. Presently, banking industry of India has engaged the use of Information and Communication Technology (ICT) as a platform for effective and efficient means of conducting financial transactions. But, banking sector of India found technology-oriented financial services in the year of 1987 through the Automated Teller Machines (ATMs). It was installed by HSBC bank, after 20 years completion of the execution process of cash dispensers for the first appearance in the world made by Barclays bank in UK, 1967. To strengthen the banking sector, financial reforms were initiated as a part of the economic reform started in India since 1991 onwards. Reforms were introduced in two phases, based on the report of Narsimahan committee in the year of 1991 and 1997. The second committee report, suggested whatever programme required by the banking sector reforms and make it in the India"s

banking system to become internationally competitive. This suggestion also helped to making fast development of technological-oriented financial services provided by the bankers to their customers in the past two decades. In recent days, finance-related services that are offered by employing mobile telecommunication technologies are generally referred to as m-banking technology-enabled financial information or services (Tiwari. R, et.al). So, the first m-banking and payment initiatives were announced during 1999. The first bank to provide mobile banking facilities in India was ICICI bank in the year 1999, followed by HDFC bank and IDBI bank. Self-service Technological advances have reshaped the size and nature of the financial industry, allowing it to extend beyond the traditional to modern concept of saving and borrowing through extension of the technological progression in the banking sector. The terms m-banking, m-finance, m-transfers and m-payments refer to the inter-services between customers and bankers. Now, mbanking development is a next generation of electronic banking which delivers financial services when the customers use their handheld devices to access their accounts and pay their bills from a bank which operates their account without having to physically visit their bank. In recent days, mobile banking is performed between bankers and its customers in the form of Short Message Service (SMS) or the Mobile Internet for the purpose of attaining higher levels of customer satisfaction and increased loyalty by providing 24X7 and bankers will benefit further from reduced administrative expenses, lesser number of branches and lower handling charges with better service to the customers than branch banking. However, around the globe various IT initiatives developed by the bankers and use the mobile phone to provide financial services to those without access to traditional banks. Innovations in mobile technology the banks are conduct fast paced demands among the various group of peoples or customers in the 21st Century through the high-quality of response and m-banking which is an integral part of m-commerce has become very popular among mobile users ever since its existence in 2007. The success of m-banking services depends upon the mobile network operator, m-banking technology vendor, bank and the customer. Further, m-banking has great deal of capabilities to offer value-added service, transformation of information and decision making services to the organization. M-banking is a type of m-commerce service since it allows consumers to perform the following technology-enabled financial information availed from the banks through the mobile device. Therefore, the Government of India and the Reserve Bank of India (RBI) encourage banks to provide banking facilities to those peoples through m-banking technology. In the year 2008, the RBI issued m-banking guidelines to the banks. This disqualifies mobile network operators from offering their own service.

## Mobile Banking
Mobile banking refers to the use of a smart phone or other cellular device to perform online banking tasks while away from your home computer, such as monitoring account balances, transferring funds between accounts, bill payment and locating an ATM.

## STATEMENT OF THE PROBLEM
The mobile technology has given potential for banks regarding customers" expectations. The changes that mobile technologies have brought to banking are enormous in their impact on officers/employees, and customers of banks. Advances in mobile technology are allowing for delivery of financial products and services more conveniently and effectively than traditional banks. Rapid access to important financial information and the ability to act quickly and effectively will distinguish the successful banks of the future. The bank gains a vital competitive advantage by having a door marketing of their financial products and accountable customer service environment and new, streamlined business processes. For that reason, relevant literature and past research works were extensively reviewed a wide range of published works, in order to conduct the present study more effectively. The present paper studies the benefits, limitations and problems faced by customer through mobile banking. This paper also studies about the future prospects of mobile banking and the methods for improvement.

## REVIEW OF LITERATURE
**Sudalaimuthu.S and Angamuthu.B (2011)** made a research with the aim of explore the influencing factors on adoption of mobile banking technology by the bankers and compare the factors between bankers through the using 365 valid questionnaires. This study is to find out 10 different factors on adoption of mbanking technology and among them 8 different factors are highly influenced to adoption of m-banking technology by the bankers. Finally, hypotheses testing conclude that nine influencing factors of mobile banking technology adoption do not differ between public and private sector banks in India.

**Tai-Kuei Yu and Kwoting Fang (2009)** with liberalization and internationalization in the financial market and progress in information technology, banks face dual competitive pressures to provide service quality and administrative efficiency. That these recent developments are fueled by technology might misleadingly suggest that the adoption of mobile banking is largely based on technological criteria. The purpose of this study is to establish a better measurement model for post adoption user perception of mobile banking services. Based on 458 valid responses of mobile banking users, the result shows that the

instrument, consisting of 21 items and 6 factors, is a reliable, valid and useful measurement for assessing the post adoption perception of mobile banking.

**Piya Baptista (2008)** involves a comparative study of m-banking user's and non user's behaviors in five countries, with particular focus on the BOP market, in order to draw general conclusions that will benefit a broad m-banking audience globally. The study will work with both MNOs and FIs to reach users and non-users. Simply put, users are expected to be individuals who are currently availing of m-banking services, mainly under additive models, while non-users are individuals who own a mobile phone but do not have bank account.

**Bamoriya and Singh (2011)** found that the mobile banking has the issues and challenges like mobile handset compatibility, standardizing, software downloading, privacy & security.

**Palani.A and Yasodha.P (2012)** focused on what are the customer's perceptions about mobile banking offered by Indian Overseas Bank and what are the drivers that drive consumers. How consumers have accepted mobile banking and how to improve the usage rate were the focus of research area in this study. Descriptive research using questionnaire was applied. 250 respondents from Indian Overseas Bank Peters Road Chennai were selected for study after initial screening. They were all bank customers. The study revealed that education, gender, income plays an important role in usage of mobile banking. Not much research has been done on these areas as they were focused more on the acceptance of technology rather than on people. The research corroborated the conceptual framework stating that if skills can be upgraded there will be greater will to use Mobile banking by consumers. Inhibitory factors like trust, gender, education, culture, religion, security, and price can have minimal effect on consumer mindset towards Mobile banking.

**Devadevan.V (2013)** India is the second largest telecom market in the world, which is having high potential for expanding banking services using mobile. However, mobile banking has not become the choice of millions of people. The main objective of this study is to identify the mindset and analyse the security issues in Mobile banking among the banking customers in India.

## CONCEPT OF MOBILE BANKING
According to this model mobile banking can be said to consist of three inter-related concepts:
- Mobile accounting
- Mobile brokerage
- Mobile financial information services

Most services in the categories designated accounting and brokerage are transaction-based. The non-transaction-based services of an informational nature are however essential for conducting transactions - for instance, balance inquiries might be needed before committing a money remittance. The accounting and brokerage services are therefore offered invariably in combination with information services. Information services, on the other hand, may be offered as an independent module. Mobile banking may also be used to help in business situations as well as financial

## MOBILE BANKING SERVICES
Banks offering mobile access are mostly supporting some or all of the following services:
- Account Balance Enquiry
- Account Statement Enquiries.
- Cheque Status Enquiry.
- Cheque Book Requests.
- Fund Transfer between Accounts.
- Credit/Debit Alerts.
- Minimum Balance Alerts.
- Bill Payment Alerts.
- Bill Payment.
- Recent Transaction History Requests.
- Information Requests like Interest Rates/Exchange Rates.

One way to classify these services depending on the originator of a service session is the 'Push/Pull' nature. 'Push' is when the bank sends out information based upon an agreed set of rules, for example your banks sends out an alert when your account balance goes below a threshold level. 'Pull' is when the customer explicitly requests a service or information from the bank, so a request for your last five transactions statement is a Pull based offering. .

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The other way to categorize the mobile banking services, by the nature of the service, gives us two kind of services – Transaction based and Enquiry Based. So a request for your bank statement is an enquiry based service and a request for your fund's transfer to some other account is a transaction-based service. Transaction based services are also differentiated from enquiry based services in the sense that they require additional security across the channel from the mobile phone to the banks data servers. Based upon the above classifications, we arrive at the following taxonomy of the services listed before.

|  | **Push Based** | **Pull Based** |
|---|---|---|
| Transaction Based |  | • Fund Transfer<br>• Bill Payment<br>• Other financial services like share trading. |
| Enquiry Based | • Credit/Debit Alerts.<br>• Minimum Balance Alerts<br>• Bill Payment Alerts | • Account Balance Enquiry<br>• Account Statement Enquiry.<br>• Cheque Status Enquiry.<br>• Cheque Book Requests.<br>• Recent Transaction History. |

**This can be further classified into following types**
- **Inter-bank mobile payment service (IMPS)**
  It was a fund transfer service through National Payment Council of India (NPCI). This service lets customer transfer funds from one account to another across banks within the country using the mobile phone. The customer can use the IMPS via their banks' app, USSD'S dial-in number, encrypted SMS banking or net banking.
- **Bank apps**
  Here the customer need to download the bank's application or software on the mobile phone via internet. This works on both GSM and CDMA handsets for Android and iPhone platforms.
- **USSD-based**
  For this type, a customer have to do is dial the bank's service code and ask for information on their bank account and need a Smartphone or high end phone to use the USSD platform.
- **SMS-Based**
  It is the most popular method of mobile banking to get the account information via SMS.
- **Internet-based mobile banking**
  This way of banking is where the customer use the mobile screen like a computer monitor.

**TECHNOLOGIES ENABLING MOBILE BANKING**
Technically speaking most of these services can be deployed using more than one channel. Presently, Mobile Banking is being deployed using mobile applications developed on one of the following four channels.

**1.IVR (Interactive Voice Response)**
IVR or Interactive Voice Response service operates through pre-specified numbers that banks advertise to their customers. Customer's make a call at the IVR number and are usually greeted by a stored electronic message followed by a menu of different options. Customers can choose options by pressing the corresponding number in their keypads, and are then read out the corresponding information, mostly using a text to speech program. Mobile banking based on IVR has some major limitations that they can be used only for Enquiry based services. Also, IVR is more expensive as compared to other channels as it involves making a voice call which is generally more expensive than sending an SMS or making data transfer (as in WAP or Standalone clients). One way to enable IVR is by deploying a PBX system that can host IVR dial plans. Banks looking to go the low cost way should consider evaluating Asterisk , which is an open source Linux PBX system

Asterisk, due to its open source nature has caught on in a big way and is being sold as an PBX solutions by quite a few companies commercially. However there has been considerable noise on multiple Asterisk related forums over the stability of Asterisk based systems. Companies planning to use Asterisk for their IVR solutions should certainly do a rigorous evaluation of its capabilities before committing their long term future on it.

## 2. SMS (Short Messaging Service)

SMS uses the popular text-messaging standard to enable mobile application based banking. The way this works is that the customer requests for information by sending an SMS containing a service command to a pre-specified number. The bank responds with a reply SMS containing the specific information.

One of the major reasons that transaction based services have not taken of on SMS is because of concerns about security and because SMS doesn't enable the banks to deliver a custom user interface to make it convenient for customers to access more complex services such as transactions.

The main advantage of deploying mobile applications over SMS is that almost all mobile phones, including the low end, cheaper one's, which are most popular in countries like India and China are SMS enabled. An SMS based service is hosted on a SMS gateway that further connects to the Mobile service providers SMS Centre. There are a couple of hosted IP based SMS gateways available in the market and also some open source ones like Kannel .
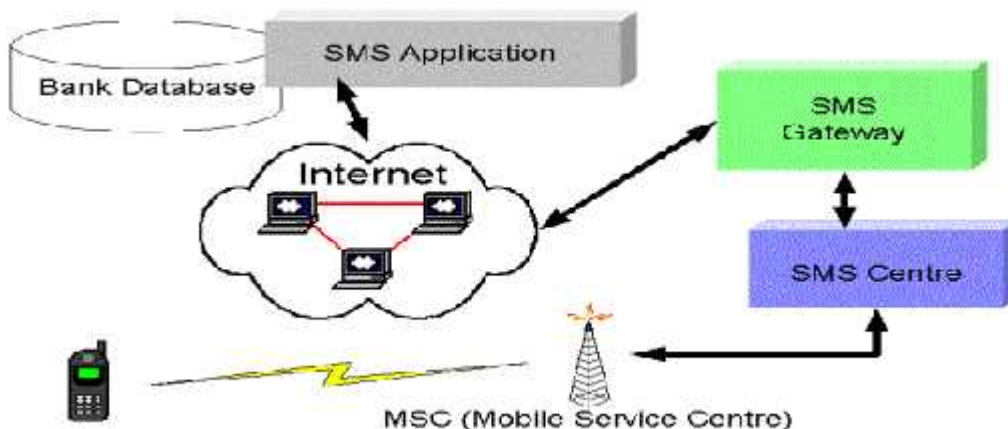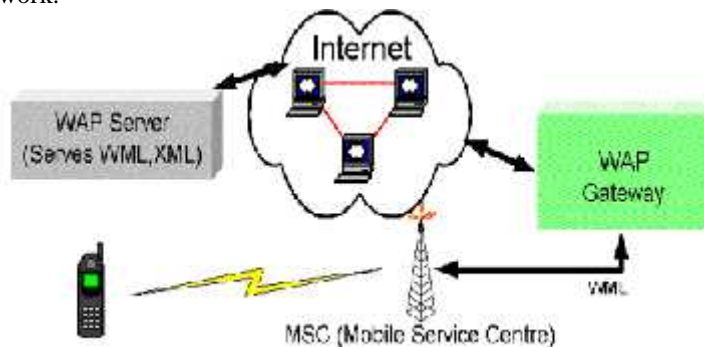


*SMS Network Architecture*

## 3.   WAP (Wireless Access Protocol)

WAP uses a concept similar to that used in Internet banking. Banks maintain WAP sites which customer's access using a WAP compatible browser on their mobile phones. WAP sites offer the familiar form based interface and can also implement security quite effectively.

Bank of America offers a WAP based service channel to its customers in Hong Kong. The banks customers can now have an anytime, anywhere access to a secure reliable service that allows them to access all enquiry and transaction based services and also more complex transaction like trade in securities through their phone

A WAP based service requires hosting a WAP gateway. Mobile Application users access the bank's site through the WAP gateway to carry out transactions, much like internet users access a web portal for accessing the banks services. The following figure demonstrates the framework for enabling mobile applications over WAP. The actually forms that go into a mobile application are stored on a WAP server, and served on demand. The WAP Gateway forms an access point to the internet from the mobile network.



*WAP Network Architecture for Mobile Applications*

## 4. Standalone Mobile Application Clients

Standalone mobile applications are the ones that hold out the most promise as they are most suitable to implement complex banking transactions like trading in securities. They can be easily customized according to the user interface complexity supported by the mobile. In addition, mobile applications enable the implementation of a very secure and reliable channel of communication. One requirement of mobile applications clients is that they require to be downloaded on the client device before they can be used, which further requires the mobile device to support one of the many development environments like J2ME or Qualcomm's BREW. J2ME is fast becoming an industry standard to deploy mobile applications and requires the mobile phone to support Java.

The major disadvantage of mobile application clients is that the applications needs to be customized to each mobile phone on which it might finally run. J2ME ties together the API for mobile phones which have the similar functionality in what it calls 'profiles'. However, the rapid proliferation of mobile phones which support different functionality has resulted in a huge number of profiles, which are further significantly driving up development costs. This scale of this problem can be gauged by the fact that companies implementing mobile application clients might need to spend as much as 50% of their development time and resources on just customizing their applications to meet the needs of different mobile profiles.

Out of J2ME and BREW, J2ME seems to have an edge right now as Nokia has made the development tools open to developers which has further fostered a huge online community focused in developing applications based onJ2ME. Nokia has gone an additional mile by providing an open online market place for developers where they can sell their applications to major cellular operators around the world. BREW on the other hand has seen limited popularity among the developer community, mostly because of the proprietary nature of its business and because of the steep prices it charges for its development tools.

Quite a few mobile software product companies have rolled out solutions, which enable J2ME mobile applications based banking. One such product is Wireless I-banco . The mobile user downloads and installs the wireless I-banco application on their J2ME pone. The J2ME client connects to the wireless I-banco server through the service providers GSM network to enable users to access information about their accounts and perform transactions. One of the other big advantages of using a mobile application client is that it can implement a very secure channel with end-to-end encryption.

However countries like India face a serious obstacle in the proliferation of such clients as few users have mobiles, which support J2ME or BREW. However, one of the biggest CDMA players in the Indian telecom industry, Reliance Infocomm has about 7.01 million users all of which have handsets, which support J2ME. Reliance has unveiled one of the most ambitious data services deployment program in the country. On the other hand a country like South Korea with its tech-savvy population has a widespread adoption of the higher-end mobiles, which support application development.

## PRESENT POSITION OF M-BANKING IN THE BANKING SECTOR OF INDIA

The trend in usage of Mobile Banking in the last three years is given below:

| Year | No. of Users (Million) | Volume (Million) | Value (Billion Rs.) |
|---|---|---|---|
| 2010-11 | 5.96 | 6.85 | 6.14 |
| 2011-12 | 12.96 | 25.56 | 18.21 |
| | (117.45%) | (273.139%) | (196.58%) |
| 2012-13 | 22.51 | 53.30 | 59.90 |
| | (73.69%) | (108.53%) | (228.94%) |

*Figures in brackets indicate the growth over the previous year.*
*Source: RBI*

According to RBI, in recent years, the mobile banking has been reflecting a growing trend (albeit the low volumes) with the volume and value increasing by 108.5% (53.30 million in 2012-13 vis-à-vis 25.56 million in 2011-12) and 228.9% (Rs.59.90 billion in 2012-13 vis-à-vis Rs.18.21 billion in 2011-12) respectively.

## PROBLEMS FACED BY THE CUSTOMERS
- Not sure about the safety of transactions
- Mobile security

- Network availability
- Heavy charges for transactions
- E-mail and web security
- Identity theft
- Literacy of people in rural areas
- Not aware of new innovation
- Handset operate ability
- Application distribution
- Inadequate guidance

## ADVANTAGES AND DISADVANTAGES OF MOBILE BANKING

The biggest advantage that mobile banking offers to banks is that it drastically cuts down the costs of providing service to the customers.

**Advantages**
- It utilizes the mobile connectivity of telecom operators and therefore does not require an internet connection.
- With mobile banking, users of mobile phones can perform several financial functions conveniently and securely from their mobile.
- You can check your 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.
- Mobile banking is said to be even more secure than online/internet banking.

**Disadvantages**
- 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.

## FUTURE PROSPECTS OF MOBILE BANKING IN INDIA

**1.Mobile Network Operators and Large Corporate Houses Co-Venture.**
With the popularity of collaborations between mobile network operators (MNO's) and banks live up to the promise of financial inclusion, the RBI and TRAI (Telecom Regulatory
Authority of India) have announced that they will harmonize and coordinate with each other to avoid any form of regularity conflict. Many large Indian banks have partnered/co-ventured
with large mobile network operations (MNO's) and handset vendors to facilitate their connection through mobile channel by providing access to financial services.

**2. Under-banked and Un-Banked Population**
Almost half of the country's population is unbanked. The large section of the Indian population not just in rural areas but also in many segments of urban markets, offers a large untapped market with a tremendous business potential.

**3. Demographic Factors**
In India the population of youth (between the ages of 14-29) is the largest youth population globally, which is around 27% of the total 1.2 billion. Furthermore, adding the age group of 30-44, the proportion is 47%. %. Apart from the huge size of this segment, they are among those who are the early adopters of latest technology and new services, which presents a huge opportunity for e/m-banking service providers. It has been observed that for the majority, access to financial services is a household need, and not only an individual need, and if the account holder is illiterate, other members of the family are competent enough to execute transactions and use electronic or mobile banking services.

## CONCLUSION

The factual information and resultant evaluations revealing and substantiating the potential of mobile banking in India in order to ensure more meaningful inclusive banking and financial practices. With the implementation of Financial Sector Reforms the process of computerization in the banking industry significantly changed the structure and texture of urban and metropolitan economy. Now, it is the need of the time for concern and commitment to create enabling environment for

application of m-banking technology in rural India to erase the rural-urban divide and integrate rural economy with global economy. There are various factors which have played vital role in the Indian banking sector for adoption of technology. Further, new technology has rapidly altered the traditional ways of doing banking business. Customers can view the accounts, get account statements, transfer funds, purchase drafts by just making a few key punches. Availability of ATMs and plastic cards, EFT, electronic clearing services, internet banking, mobile banking and phone banking; to a large extent avoid customers going to branch premises and has provided a wider range of services to the customers.

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. Banking apps can make bill paying and bank account management incredibly convenient, but the risk of identity theft is a major downside. Fortunately, it's easy to avoid most of the pitfalls with commonsense solutions like strong password protection and secure connections. By keeping these security tips in mind, you can enjoy a safer mobile banking experience.

### RECOMMENDATIONS

If a customer visits their bank's website using with phone, make sure to clear out the cookies and cache regularly. Never store any usernames or passwords in the phone, regardless of how difficult they are to remember. If they were to lose the phone where this information is stored, someone could easily access your bank account. It is also important to change the password regularly. If they use the phone for business purposes, be doubly careful on protecting confidential information.

Most banks now offer text message alerts via SMS to alert of a low balance or a paid bill. Larger banks like Bank of America use SMS texts to aid in fraud prevention. Nine times out of ten, consumers can easily sign up for these phone alerts with online banking. Receiving alerts on your phone is a great way to stay on top of your account activity around the clock. It's also an added convenience for times when a computer isn't close at hand.

Most banks offer tailored mobile banking applications to their customers which can be downloaded to a Smartphone and used to manage bank accounts. Unfortunately, this has also invited potential fraud in the form of carefully duplicated applications created by scam artists. Before downloading any app to the phone, make sure that it's an authentic application released by the concern bank. Avoid third party software that asks for any personal information if the customer can't verify the source. While most apps are legit, it never hurts to be too careful.

### REFERENCES

1. Tiwari. R & Buse. S (2001): "The Mobile Commerce Prospects: A Strategic Analysis of Opportunities in the Banking Sector", Hamburg University Press, P.No. 64&69.
2. Tai-Kuei Yu and Kwoting Fang (2009). "Measuring the Post- Adoption customer perception of Mobile banking services", Cyber Psycology & Behaviour, Vol.12(1).
3. Piya Baptista (2008) "Mobile banking users and non-users behavior study".
4. Sudalaimuthu.S and Angamuthu.B (2011) "Influencing Factors On Adoption Of Mobile Banking Technology By The Bankers Of India", International Journal of Management, Vol.1(3):23.
5. Sharma, Prerna, Bamoriya & Preeti Singh (2011) "Issues & Challenges in Mobile Banking In India: A Customers' Perspective".
6. Atiya Parveen, Sobia Habib & Saoud Sarwar "Mobile Commerce - New Way to Business" International Journal of Research and
7. Development - A Management Review (IJRDMR) 2012Volume-1, Issue – 1, PP 37-40.
8. A third of banks have mobile detection, Mapa Research. 2012-05-16. Retrieved 2012, p.05-16.
9. Palani.A and Yasodha.P (2012) "A study on customer perception towards Mobile banking in Indian Overseas Bank Chennai", Vol.2(4):262-276.
10. Devadevan.V (2013) "Mobile Banking in India – Issues & Challenges", International Journal of Emerging Technology and Advanced Engineering, Vol.3(6):516-520.
11. www.rbi.org.in.
12. www.bankingnetindia.com.