# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT



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## A STUDY ON CUSTOMER PERCEPTION ON MOBILE BANKING

## H. RADHIKA ASST. PROFESSOR BADRUKA COLLEGE P.G. CENTRE KACHIGUDA

## **ABSTRACT**

Mobile usage has seen an explosive growth in most of the Asian economies like India, China and Korea. The main reason that Mobile Banking scores over Internet Banking is that it enables 'Anywhere Anytime Banking. Customers don't need access to a computer terminal to access their bank accounts, now they can do so on-the-go while waiting for the bus to work, traveling or when they are waiting for their orders to come through in a restaurant. Mobile banking in India is set to explode - approximately 43 million urban Indians used their mobile phones to access banking services during quarter ending August, 2009, a reach of 15% among urban Indian mobile phone user .As per a survey made by Bangalore based research firm that tracks current and future mobile trends in India has revealed that the most popular mobile banking services used by consumers are Checking accounts, to view last three transactions, status of checks, payment reminders, to sent a request for new check book. The present study is done to know the awareness of mobile banking among banking customers and their perceptions on mobile banking. And the impact of mobile banking on customers. The research was conducted by taking 100 account holders of various banks.

#### **KEYWORDS**

Mobile banking, awareness, customer perception, impact on customers.

## **INTRODUCTION**

he customer anytime can access to internet for Internet Banking if that facility is given by 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.

However the biggest limitation of Internet banking is the requirement of a PC with an Internet connection, not a big obstacle if we look at the US and the European countries, but definitely a big barrier if we consider most of the developing countries of Asia like China and 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, China and Korea. The main reason that Mobile Banking scores over Internet Banking is that it enables 'Anywhere Anytime Banking'. Customers don't need access to a computer terminal to access their bank accounts, now they can do so on-the-go while waiting for the bus to work, traveling or when they are waiting for their orders to come through in a restaurant.

The scale at which Mobile banking has the potential to grow can be gauged by looking at the pace users are getting mobile in these big Asian economies. According to the Cellular Operators' Association of India (COAI) the mobile subscriber base in India hit 40.6 million in the August 2004. In September 2004 it added about 1.85 million more. The explosion as most analysts say, is yet to come as India has about one of the biggest untapped markets. China, which already witnessed the mobile boom, is expected to have about 300 million mobile users by the end of 2004. All of these countries have seen gradual roll-out of mobile banking mobile phones to pay bills in shops eServices, the most aggressive being Korea which is now witnessing the roll-out of some of the most advanced services.

## **DEFINITION OF MOBILE BANKING**

Mobile banking (also known as M-Banking, banking, SMS Banking) is a term used for performing balance checks, account transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA). The earliest mobile banking services were offered over SMS. With the introduction of the first primitive 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 phone 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.

In one academic model mobile banking is defined as:

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 customized information." 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 phone banking may also be used to help in business situations as well as finance.

The advent of the Internet has enabled new ways to conduct banking business, resulting in the creation of new institutions, such as online banks, online brokers and wealth managers. Such institutions still account for a tiny percentage of the industry.

Over the last few years, the mobile and wireless market has been one of the fastest growing markets in the world and it is still growing at a rapid pace. According to the GSM Association and Ovum, the number of mobile subscribers exceeded 2 billion in September 2005, and now (2009) exceeds 2.5 billion.

## **MOBILE BANKING IN INDIA**

Tap a few buttons and check your account balance sitting in the comfort of your home or pay your credit card bill while you are commuting to work. The new age Indian customer wants these and even more – s/he wants "Anytime Banking Anywhere". Rapid strides in technological advancement in the telecom industry have made all this possible via the concept of mobile banking – a channel via which customers interact with banks using handheld devices. The number of wireless subscribers is more than 650 million in India as of July 2010 and the growth rate is pegged at a massive 18-19 million every month. This is a huge market and every bank worth its salt – be it in the private or public sector, offers mobile banking services such as:

- Update on account balance
- View last few transactions
- Request for check books
- Fund transfers

- Deposits in banks
- Make payments

## **COMMONLY PROVIDED MOBILE BANKING SERVICES ARE AS UNDER**

#### ACCOUNT INFORMATION

- 1. Mini-statements and checking of account history
- 2. Alerts on account activity or passing of set thresholds
- 3. Monitoring of term deposits
- 4. Access to loan statements
- 5. Access to card statements
- 6. Mutual funds / equity statements
- 7. Insurance policy management
- 8. Pension plan management
- 9. Status on cheque, stop payment on cheque
- 10. Ordering cheque books
- 11. Balance checking in the account
- 12. Recent transactions
- 13. Due date of payment (functionality for stop, change and deleting of payments)
- 14. PIN provision. Change of PIN and reminder over the Internet
- 15. Blocking of (lost, stolen) cards

#### PAYMENTS, DEPOSITS, WITHDRAWALS, AND TRANSFERS:

- 1. Domestic and international fund transfers
- 2. Micro-payment handling
- 3. Mobile recharging
- 4. Commercial payment processing
- 5. Bill payment processing
- 6. Peer to Peer payments
- 7. Withdrawal at banking agent
- 8. Deposit at banking agent

## **ADVANTAGES 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. For example an average teller or phone transaction costs about \$2.36 each, whereas an electronic transaction costs only about \$0.10 each. Additionally, this new channel gives the bank ability to cross-sell up-sell their other complex banking products and services such as vehicle loans, credit cards etc.

For service providers, Mobile banking offers the next surest way to achieve growth. Countries like Korea where mobile penetration is nearing saturation, mobile banking is helping service providers increase revenues from the now static subscriber base. Service providers are increasingly using the complexity of their supported mobile banking services to attract new customers and retain old ones. 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.

## **CHALLENGES FOR MOBILE BANKING**

Key challenges in developing a sophisticated mobile banking application are:

## Hand set operability:

There are a large number of different mobile phone devices and it is a big challenge for banks to offer 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:

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.

## 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 Central 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.

## Personalization:

It would be expected from the mobile application to support personalization such as :

- Preferred Language
- 2. Date / Time format
- 3. Amount format
- 4. Default transactions
- 5. Standard Beneficiary list

## • Customer Protection Issues

1. Any security procedure adopted by banks for authenticating users needs to be recognized by law as a substitute for signature. In India, the Information Technology Act, 2000, provides for a particular technology as a means of authenticating electronic record. Any other method used by banks for authentication is a source of legal risk. Customers must be made aware of the said legal risk prior to sign up.

- 2. Banks are required to maintain secrecy and confidentiality of customers' accounts. In the mobile banking scenario, the risk of banks not meeting the above obligation is high. Banks may be exposed to enhanced risk of liability to customers on account of breach of secrecy, denial of service etc., on account of hacking/other technological failures. The banks should, therefore, institute adequate risk control measures to manage such risks.
- 3. As in an Internet banking scenario, in the mobile banking scenario too, there is very limited or no stop-payment privileges for mobile banking transactions since it becomes impossible for the banks to stop payment in spite of receipt of stop payment instruction as the transactions are completely instantaneous and are incapable of being reversed. Hence, banks offering mobile banking should notify the customers the timeframe and the circumstances in which any stop-payment instructions could be accepted.
- 4. The Consumer Protection Act, 1986 defines the rights of consumers in India and is applicable to banking services as well. Currently, the rights and liabilities of customers availing of mobile banking services are being determined by bilateral agreements between the banks and customers. Taking into account the risks arising out of unauthorized transfer through hacking, denial of service on account of technological failure etc. banks providing mobile banking would need to assess the liabilities arising out of such events and take appropriate counter measures like insuring themselves against such risks, as in the case with internet banking.
- 5. Bilateral contracts drawn up between the payee and payee's bank, the participating banks and service provider should clearly define the rights and obligations of each party.
- 6. Banks are required to make mandatory disclosures of risks, responsibilities and liabilities of the customers on their websites and/or through printed material.
- 7. The existing mechanism for handling customer complaints / grievances may be used for mobile banking transactions as well. However, in view of the fact that the technology is relatively new, banks should set up a help desk and disclose the details of the help desk and escalation procedure for lodging the complaints, on their websites. Such details should also be made available to the customer at the time of sign up.
- 8. In cases where the customer files a complaint with the bank disputing a transaction, it would be the responsibility of the service providing bank, to expeditiously redress the complaint. Banks may put in place procedures for addressing such customer grievances. The grievance handling procedure including the compensation policy should be disclosed.

#### **REVIEW OF LITERATURE**

- The scale at which Mobile banking has the potential to grow can be gauged by looking at the pace users are getting mobile in these big Asian economies. According to the Cellular Operators' Association of India (COAI) the mobile subscriber base in India hit 40.6 million in the August 2004. In September 2004 it added about 1.85 million more. The explosion as most analysts say, is yet to come as India has about one of the biggest untapped markets. China, which already witnessed the mobile boom, is expected to have about 300 million mobile users by the end of 2004.
- Most Popular Banking Service on Mobile: Checking account balances is the most popular banking service used by urban Indians with almost 40 million
  users followed by checking last three transactions, 28 million and status of cheques with 21 million users.

Usage	Unique Users (In millions)
Used mobile banking	43.70
Checking account balance	39.97
View last three transactions	28.15
Status of cheques	21.06
Payment reminders	20.92
Request a cheque book	19.11

Mobile banking is popular among the Rs.1 to 5 lakhs per year income group with almost 60% of mobile banking users falling in the income bracket, an indicator of adoption of this service by younger generation.

## Most Popular Bank

ICICI bank maintains its position as country biggest private lender on mobile screen as well with 17.75 million users. HDFC account for second most subscribers with 9.1 million subscribers followed by State Bank of India with 6.13 million subscribers.

Mobile banking not yet popular in rural India – In spite of efforts from different organizations, mobile banking has not succeeded in taking banking to the
rural areas the way it is expected to.

There are many reasons for this

- ✓ It is not feasible for all banks as the volume and value of transactions are very low.
- It is not only enough to have simplified offerings but also educate the prospective customers on the same and this is lacking.
- ✓ The banking agents have to be aware of products and services and also have enough incentives to get more customers.
- The important aspect here is that the concerned organizations are aware of the challenges and are working towards solutions. Once customers' concerns are addressed through education and they are assured that their money is in safe hands and they get good service, there will be no looking back for mobile banking in India.
- Chantal Tode, (2011)- Ms. Jennifer Canfield, financial services senior associate at Web traffic analysis service Compete Inc., Boston. said that" Increasing mobile banking fees would certainly slow consumer adoption of mobile banking services". Because mobile banking awareness, adoption, and intent to adopt are all low and because mobile banking has a high ROI, banks should focus on building awareness and encouraging adoption, not putting up more barriers. The current rate of adoption for mobile banking is low and any additional fees might scare away consumers who already are not sure if they need the service. According to Compete, 54 percent of bank account owners have used a mobile device to manage their checking and savings accounts in some way but only 11 percent of bank account owners have used remote check deposit.
- Rajnish Tiwari, Stephan Buse, Cornelius Herstatt, (2006)- Mobile Banking as Source of Revenue to banks-Mobile Banking can also serve as a source of revenue. Mobile services can be offered on a premium basis. The price, in this case, should be reasonable enough so that customers are willing to pay them but at the same time they should be from a financial point of view higher than the costs incurred by the bank.

Additional revenues can be generated in two ways:

i) Offering innovative, premium services to existing customers;

ii) Attracting new customers by offering innovative services. Whereby new customers contribute to revenue generation not only by utilising mobile services but also by using other conventional distribution channels.

- Layla. Alsheikh and Jamil. Bojei (2012)- Mental accounting theory proposed by Thaler involves a process of coding, categorizing and evaluating the outcomes of the decisions. It explains the importance of transaction related attributes associated with customer decision making in the presence of risk and uncertainty. Online purchasing decisions and the adoption of other technological applications can be explained using this theory by examining customer behavior towards the value of such technologies. For users of mobile value added services, the value maximization might be their essential principle of decision-making. Mental accounting theory therefore is appropriate for the analysis of mobile banking services usage, as customers tend to make decisions based on multiple attributes. When a customer decides to avail a service such as mobile banking he goes through a mental process that considers the trade-off between what they get and what they give.
- "Consumers and Mobile Financial Services", March 2012, As of March 2011, nearly one out of every five Americans with both a bank account and a mobile phone has used their phone to view account balances, receive account alerts, and conduct banking with their financial institution in the past 90 days. Although mobile payments have been adopted more slowly by consumers in the U.S. than in many other countries, these services may become more popular over the coming years as the technology evolves and if the services become more widely accepted as a form of payment

- An annual global banking survey on "a new era of customer expectation-Rebuild brand perception, conducted by ERNST & YOUNG by taking more than 20,500 participants has revealed the following things for rebuilding the customer confidence they are:
- ✓ **Brand enhancement programs**: All elements of the customer experience, at both the national and local level, need to be reassessed with continued investments made in customer charters and innovative approaches to marketing the bank's ethos and service offerings.
- ✓ **Personalizing banking:** Personalization is a vital element of a successful customer relationship and a cohesive approach to the development of tailored products and services will help to improve brand perception.
- Create brand ambassadors: To ensure that the sales force represents the bank's brand there needs to be a continued focus on transparent and sustainable incentive models and an adequate customer relationship model.
- ✓ Embrace online innovation: Adopting a coherent social media approach will help improve brand perceptions and leverage the benefits of online advocacy.
- ARUN PRABHUDESAI (2012)

Mobile Banking has really caught up in India – according to recently conducted survey by ACI( for 4200 respondents in 14 countries) Worldwide, 76% of Indian mobile respondents used their mobiles for banking in last 6 months. This percentage is highest across the world. Comparatively, only 38% respondents from US, and 31% from UK used mobile banking in last 6 months. China, came in after India with 70% users using mobile banking followed by South Africa (61%). The global average for Mobile Banking adoption rate stands at 35%. India comes in 2nd in terms of making payments on mobile. 64% of the survey respondents from India used their mobile phones to make payment at least once in last 6 months, while Chinese led the pack with 66%. Surprisingly, only 30% of US respondents & 23% of UK respondents have made payments on mobile in last 6 months.

## **NEED OF THE STUDY**

In the current busy life people do not have time to do their money transactions through banks by standing in a queue to deposit, payments, withdraw, transfer money from one account to another account, etc... .By recognizing the needs of the customers bank introduced alternative methods for customers to fulfill their needs related to bank transactions some of them are Internet baking and mobile banking .Internet banking requires a computer with internet connection with which from any place in the world with an internet connection by sitting in front of the system customer can complete his bank transactions. But there is a limitation for with Internet banking is that the computers are not mobile or a person cannot carry that with him and people may not have computer with them so to satisfy the needs of those customers' banks have introduced mobile banking. Which is more convenient to handle, easy to hold and moreover these days it is difficult to identify people without holding mobile phone. The present study is taken up to study to what extent people are aware about mobile banking , for what purposes they are using mobile banking and to the perception of the customers on safety of the transactions with mobiles and their satisfaction levels on usage of mobile banking .

## **IMPORTANCE OF THE STUDY**

Mobile banking through cell phone offers many advantages for customers as well as banks. Some of them are as follows:-

- 1. Mobile banking has an edge over internet banking. In case of online banking, an internet connection and a computer is must. This is a problem in developing countries. However, with mobile banking, connectivity is not a problem .Mobile connectivity in the remotest of places also where having an internet connection is a problem.
- 2. Making transactions or pay bills anytime. It saves a lot of time.
- 3. Mobile banking thorough cell phone is user friendly and the interface is also very simple. It also saves the record of any transactions made.
- 4. Cell phone banking is cost effective. Various banks provide this facility at a lower cost as compared to banking by self.
- 5. Banking through mobile reduces the risk of frau as it get an SMS whenever there is an activity in customers' account. This includes deposits, cash withdrawals, funds transfer etc. You will get a notice as soon as any amount is deducted or deposited in your account.
- 6. Banking through cell phone benefits the banks too. It cuts down on the cost of tele- banking and is more economical. It serves as a guide in order to help the banks improve their customer care services.
- 7. Banks can be in touch with their clients with mobile banking.
- 8. Banks can also promote and sell their products and services like credit cards, loans etc. to a specific group of customers.
- 9. Various banking services like Account Balance Enquiry, Credit/Debit Alerts, Bill Payment Alerts, Transaction History, Fund Transfer Facilities, and Minimum Balance Alerts etc. can be accessed from the mobile.
- 10. Money can be transferred instantly to another account in the same bank using mobile banking.

Mobile banking has become really popular owing to the convenience that it gives its customers. You can access your account, pay bills, and make cash transfers through cell phone banking. It offers many benefits over internet banking and banking in person. With the wide range of mobile connectivity, mobile banking through cell phone can be accessed by anyone. As there are many advantages through mobile banking to banks as well as to customers. The following study throws light on various aspects like things like to what extent people are aware about mobile banking and if they aware about mobile banking whether they are availing those services and to know the perception of the customers of mobile banking users and their satisfaction regarding the services availed by the customers.

## STATEMENT OF PROBLEM

As there are many advantages through mobile banking compared with internet banking but the problem here it is that whether the customers of banks are aware bout the mobile banking services provided by their respective banks, if they are aware to what extent the customers are availing those facilities and the type of services they are availing frequently. The customers' perception towards the transaction security and the satisfaction levels of the mobile banking users. The following study concentrates on the above mentioned aspects.

## **OBJECTIVES**

- To study briefly about Mobile Banking in India.
- To know the awareness of mobile banking among banking customers.
- To study the perception of customers on mobile banking.
- > To study the impact of mobile banking on customer.

## **RESEARCH METHODOLOGY**

The study is Descriptive in nature. The data is collected through primary and secondary sources.

## Primary data:

The major source of primary data includes questionnaires distributed to 100 account holders of various banks.

## Secondary data

Secondary data is collected through websites, articles, newsletters, reports of survey conducted by various institutions.

Sample size: The size of the sample consists of 100 bank account holders. And the technique used for collecting the data is convenience sampling.

## **ANALYSIS OF THE DATA**

**TABLE 1: SHOWING GENDER OF THE RESPONDENTS** 

Gender	No. of respondents	percentage
Male	86	86
Female	14	14
Total	100	100

Inference: The above table shows that out of 100 Respondents, 86% are belong to the male category14% are belong to the female category.

**TABLE 2: SHOWING AGE GROUP OF RESPONDENTS** 

Age	No .Of Respondents	Percentage
Below 25yrs	71	71
25-35yrs	29	29
35-45yrs	0	0
45 yrs above	0	0
Total	100	100

From the above table it can be viewed that out 100 Respondents, 71% are below 25yrs, 29% are between age group of 25-30yrs. It can be concluded that most of the respondents who are using mobile banking are below 25 yrs age group.

**TABLE 3: SHOWING THE OCCUPATION OF THE RESPONDENTS** 

Occupation	No. Of Respondents	Percentage
Student	77	77
Employee	12	12
Business	6	6
Others	5	5
Total	100	100

Out of 100 respondents ,77are students, 12are employees ,6 members businessmen ,5 members belongs to the group of others like home makers, retired people, etc.... Most of the respondents belongs to students and employee group.

**TABLE 4: SHOWING MONTHLY INCOME OF RESPONDENTS** 

Monthly Income	No. of Respondents	percentage
Below10000	70	70
10001-20000	19	19
20001-30000	51	5
30001above	6	6
Total	100	100

70% Respondents are below Rs.10000/- income level, 19% are of income level batwenRs.10001-20000/- , 5% Respondents are having Rs. 20001-30000/- income and 6% are earning Rs.30001above income.

FIGURE 1: SHOWING RESPONDENT HAVING ACCOUNT IN A BANK



All are holding bank account.

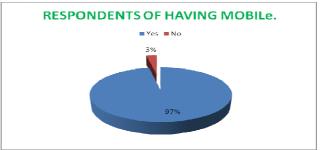
TABLE 5: SHOWING BANKS IN WHICH RESPONDENTS HAVING THEIR ACCOUNT

Response	No. of Respondents	Percentage
SBI	31	31
SBH	42	42
HDFC	3	3
ICICI	2	2
ANDHRA	32	32
Any other banks specify	7	7
Total	117	100

Out 100 Respondents.31% Respondents are having account in SBI, 42% Respondents are having account in SBH,3% Respondents are having account in HDFC,2%Respondents are having account in ICICI,32% Respondents are having account in ANDHRA,7% Respondents are having account in Any other banks.

\*The total number of respondents are more than 100 as they chosen more than one options.

FIGURE 2: SHOWING THE RESPONDENTS OF HAVING MOBILE



Out of 100 respondents 97 are holding mobiles.

#### **TABLE 6: SHOWING AWARENESS ABOUT MOBILE BANKING**

Response	No. of Respondents	Percentage
Yes	74	74
No	26	26
Total	100	100

Out of 100 respondents, 74% respondents are aware about mobile banking. 26% respondents are not aware about mobile banking.

TABLE 7: SHOWING PROVISION OF MOBILE BANKING SERVICES BY BANK

Response	No. of Respondents	Percentage
Yes	74	74
No	26	26
Total	100	100

Out of 100 respondents, 74% respondents said that their bank is providing mobile banking facility.26% respondents said that their bank is not providing mobile banking facility.

**TABLE 8: SHOWING RESPONDENTS USING MOBILE BANK FACILITIES** 

Response	No. of Respondents	Percentage
Yes	74	100
No	0	0
Total	74	100.00

Out of 74 respondents whose banks are providing mobile banking facilities, 100 % respondents are using mobile banking facilities.

**TABLE 9: SHOWING THE SERVICES PROVIDED BY BANKS** 

Response	No. of Respondents	Percentage
Account information	38	51
Payments	14	19
Deposits withdrawals& transfer	25	34
Investments	7	9
Any other specify	24	33

out 74 Respondents, 51%(38) said that their bank providing account information though mobile,19% (14) said that mobile payment services are provided by their bank.34% said that the following services are provided by their banks they are deposits, withdrawals and transfer though mobile. Very few i.e. 9%(7) said that Investment facility is provided by banks though mobile33% Respondents of the provided other services like taking order for issue of cheque books, proving information regarding balance in the account, and provides information of recent transactions made by the customers. Therefore, it can be concluded that most of the banks provide the facility of checking account history and deposits, withdrawals, and transfer of money from one account to another through mobile banking.

TABLE 10: SHOWING THE TYPES OF SERVICES AVAILED BY RESPONDENTS

Response	No. of Respondents	Percentage
Account Information	39	53
Payment	11	15
Deposits. Withdrawals &Transfer	42	56
Investments	3	4
Any other specify	5	7

From the above table it can be viewed that out 74 Respondents,53% are using mobile banking to know account information, 15% are using for payments, 56%(42) are using mobile banking for Deposits, Withdrawals &Transfer of money from one account to another account, 4% (3) using for investments and 5% respondents are using mobile banking for other facilities like for getting Mini-statements, to know the loan statements and card statements, to know the Status on cheque, and to stop payment on cheque etc...

It can be concluded that most of the respondents are using mobile banking for the purpose of deposits, withdrawals &transfer of money from one account to another account.

TABLE 11: SHOWING RESPONDENTS PREFERENCE ABOUT MOBILE BANKING SERVICES AMONG OTHERS SERVICES

Response	No. of Respondents	Percentage
Yes	89	89
No	11	11
Total	100	100

Out 100 respondents, 89 are preferring mobile banking as it is better service than any other services available, and 11 are not preferring mobile banking as better service.

TABLE 12: SHOWING THE REASONS FOR PREFERRING MOBILE BANKING

ì	Response	No. of Respondents	Percentage
l	Time saving	64	71
ľ	Convenience	32	36
	Easy to operate	15	17
	Less cost	10	11
	Any other specify	1	1

From the above table it can be viewed that out 89respondents,71%(64)said that they are preferring mobile banking as it is time saving activity, 36%preferred mobile banking as its is convenient than the other methods available,17%said it is easy to operate,11% said it carries less cost. With this it can be concluded that most of the respondents preferring mobile banking as it is time saving and convenient to do transactions.

TABLE 13: SHOWING RESPONDENTS OPINION REGARDING SAFETY OF TRANSACTIONS THROUGH MOBILE BANKING

Response	No. of Respondents	Percentage
Yes	86	86
No	14	14
Total	100	100

Out 100 respondents 86 expressed that transactions through mobile is safety and remaining 14 i.e. 14% said mobile banking is not a safe mode for banking transactions. With this statement it can be concluded that mobile banking is a safe mode for banking transactions.

TABLE 14: SHOWING THE REASONS FOR POSITIVE OPINION REGARDING SAFETY OF TRANSACTIONS

Response	No. of Respondents	Percentage
Password facility	42	49
Personal information can be kept safely	38	44
Any other specify	6	7
Total	86	100

Out of 86 respondents who said that mobile banking is safety specified the reasons they are, 49% said that mobile banking is safe as it has got password facility, 44%said that the personal information of the candidate is hidden, 7% i.e 6 respondents said that if other reasons like SMS is sent to mobile as soon as the transactions takes place so, the account holder will be alert in case of misuse of the mobile.

TABLE 15: SHOWING THE RESPONSE FOR THE LEVEL OF MOBILE TRANSACTIONS ARE NOT SAFE

Response	No. of Respondents	Percentage
Security problems	14	100
Hacking	12	85
Ethical issues	6	43
Un authorized use of account when mobile phone is lost	7	50
Total	39	278

out 14 respondents who said the mobile banking is not safe specified the following reasons like 100% of the respondents said that security problems are the main reason for non security, 85% respondents specified hacking of mobile account passwords, 43% respondents are specified ethical issues, 50% respondents specified that mobile banking is not safe because un authorized people can access the mobile when it is lost. Here it can be concluded that all the respondents who said that mobile banking is in not a safety mode of transaction mentioned that many security problems are involved in usage of mobile banking. And the other problem is that hacking of mobile phone information.

TABLE 16: SHOWING THE RESPONDENTS OPINION REGARDING SATISFACTION WITH MOBILE BANKING SERVICES

Response	No. of respondents	Percentage
Yes	80	80
No	20	20
Total	100	100

Out 100 Respondents, 80% respondents said that they are satisfied with mobile banking services provided by their banks and rest of them are not satisfied. So, it is concluded that most of them are satisfied with use of mobile banking.

TABLE 17: SHOWING REASONS FOR SATISFACTION WITH MOBILE BANKING SERVICES

Response	No. of Respondents	Percentage
Time saving	47	59
Easy to operate	17	21
Less cost	16	20
Any time any where available	25	31
Total	105	131

Out 80 respondents who are satisfied with mobile banking facility specified the following reasons for their satisfaction, they are, 59% said that they are satisfied as it is time saving, 21% said it is easy to operate, 20% respondents said that it involves less cost, 31% respondents said that they are satisfied as banking transactions can be done through mobile at any time any where available,

TABLE 18: SHOWING THE REASONS FOR RESPONDENTS DISSATISFACTION

Response	No. of Respondents	Percentage
Not user friendly	9	45
Network problems	20	100
Fear of misusing of mobile banking	20	100
Any other specify	5	25
Total	54	270

Out 20 Respondents expressed dissatisfaction on mobile banking usage mentioned the following reasons, they are, 45% respondents said that it is not user friendly, all 20 respondents specified network problems and fear of misusing of mobile banking are major reasons for dissatisfaction, and 25%(5) respondents specified other reasons like not getting SMS at the time of transactions through mobiles and people believe in physical transactions than mobile banking as transactions do not take place in front of the customer and people do not have clear knowledge about the application of mobile banking transactions through mobiles.

## FINDINGS AND CONCLUSIONS

- ✓ Out of 100 respondents, 86% i.e (86) are belong to male group and 14% belong to female group.
- 71% are below 25yrs, 29% are between age group of 25-30yrs. It can be concluded that most of the respondents who are using mobile banking are below 25 yrs age group.
- Out of 100 respondents ,77are students, 12are employees ,6 members businessmen ,5 members belongs to the group of others like home makers, retired people, etc.... Most of the respondents belongs to students and employee group.
- ✓ 70% Respondents are below Rs.10000/- income level, 19% are of income level batwenRs.10001-20000/- , 5% Respondents are having Rs. 20001-30000/- income and 6% are earning Rs.30001above income.
- ✓ All are holding bank account.
- Out 100 Respondents.31% Respondents are having account in SBI, 42% Respondents are having account in SBH, and 32% Respondents are having account in Andhra bank. Most of them i.e. 42 are having account in SBH and Andhra Bank.
- ✓ Out of 100 respondents 97 are holding mobiles.
- Out 100 respondents, 74% respondents are aware about mobile banking.26% respondents are not aware about mobile banking.
- ✓ Most of them (74) are aware about mobile banking.

<sup>\*</sup>The total number of responses is more as respondents chosen more options.

<sup>\*</sup>The total number of responses is more as respondents chosen more options.

- Out 100 respondents, 74% respondents said that their bank is providing mobile banking facility.26% respondents said that their bank is not providing
  mobile banking facility.
- Out 74 Respondents, 51% (38) said that their bank providing account information though mobile, and 25 said that their banks provide deposits, withdrawals, and transfer of money from one account to another through mobile banking.
- ✓ Out of 74 respondents whose banks are providing mobile banking facilities, 100 % respondents ar using mobile banking facilities
- ✓ Out 74 respondents, 56%(42) are using mobile banking for Deposits, Withdrawals & Transfer of money from one account to another account, and 53% are using mobile banking to know account information.
- Out 100 respondents, 89 are preferring mobile banking as it is better service than any other services available, and 11 are not preferring mobile banking as better service.
- ✓ Out 89respondents,71%(64)said that they are preferring mobile banking as it is time saving activity, 36%preferred mobile banking as its is convenient than the other methods available
- ✓ Out 100 respondents 86 expressed that transactions through mobile is safety
- Out of 86 respondents who said that mobile banking is safety specified the reasons they are, 49% (42) said that mobile banking is safe as it has got password facility, 44% (38) said that the personal information of the candidate is hidden.
- ✓ Out 14respondents who said the mobile banking is not safe specified the following reasons like 100% of the respondents said that security problems are the main reason for non security, 85% respondents specified hacking of mobile account passwords
- ✓ Out 100 Respondents, 80% respondents said that they are satisfied with mobile banking services provided by their banks
- Out 80respondents 59% (47) said that they are satisfied as it is time saving, 31% (25)respondents said that they are satisfied as banking transactions can be
  done through mobile at any time any where available.
- Out 20 Respondents expressed dissatisfaction on mobile banking usage mentioned the following reasons, that all 20 respondents specified network problems and fear of misusing of mobile banking are major reasons for dissatisfaction and some of the respondents specified other reasons like not getting SMS at the time of transactions through mobiles and people believe in physical transactions than mobile banking as transactions do not take place in front of the customer and people do not have clear knowledge about the application of mobile banking transactions through mobiles.

## **SUGGESTIONS**

- 1. Before providing the mobile banking awareness among the customers is necessary, today there are millions of people are holding mobiles and are having account in the banks but, among them few are using mobile banking, this is because of lack of awareness about the utilization of mobiles. Therefore the first thing that banks need to do is that they need to aware public about the application of mobile banking then it will be cheaper for customers as well as for hanks
- 2. Awareness among rural customer who are account holders and using mobile phones is another important aspect on which banks need to concentrate. For that they need to explain advantages usage of mobiles for doing banking transactions.
- 3. The operating method should be easy and understandable to any one so, that a customer who is new to mobile banking can easily complete the transaction.
- 4. Mobile banking depends on network, if there is no proper network there is no use of mobile banking. So to develop the mobile banking there should be developing efficient network. Therefore banks need to concentrate on this also.
- 5. In mobile banking there are certain security problems like hacking of information and password affecting the usage of mobile banking, therefore banks need to maintain strong security so that customers can believe and use mobile banking for effective transactions.
- 6. By using the mobile banking customer receives alerts (SMS) any time anywhere and any place the he will get conformation of the transaction being processed, so this facility helps customers to deal with their transaction at any time and from any place which leads to benefit the customer as well as the bank. Therefore it is suggested to the banks that they need to provide the conformation of the transaction to customers on time.

## CONCLUSION

Mobile banking is poised to become the big killer mobile application arena. However, Banks going mobile the first time need to tread the path cautiously. The biggest decision that banks need to make is the channel that they will support their services on. Mobile banking through an SMS based service would require the lowest amount of effort, in terms of cost and time, but will not be able to support the full breath of Transaction-based services. However, in markets like India where a bulk of the Mobile population users' phones can only support SMS based services, this might Bethe only option left. On the other hand a market heavily segmented by the type and complexity of mobile phone usage might be good place to roll of WAP based mobile applications. AWAP based service can let go of the need to customize usability to the profile of each mobile phone, the trade-off being that it cannot take advantage of the full breadth of features that a mobile phone might offer. Mobile application standalone clients bring along the burden of supporting multiple Mobile device profiles. According to the Gartner Group, mobile banking services will have to support a minimum of 50 different device profiles in the near future.

However, currently the best user experience, depending on the capabilities of a mobile phone, is possible only by using standalone client. Mobile banking has the potential to do to the mobile phone what E-mail did to the Internet. Mobile Application based banking is poised to be a big m-commerce feature, and if South Korea's foray into mass mobile banking is an indication, mobile banking could well be the driving factor to increase sales of high-end mobile phones.

## SCOPE FOR FURTHER RESEARCH

As this study is restricted to 100 respondents of bank account holders which can be increased and the present has concentrated on mobile banking users further the research can be extended by taking banks and their problems in provision of mobile banking services and Their further developments in mobile banking.

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