A STUDY ON CUSTOMERS INTEREST & ADOPTION OF MOBILE BANKING

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      First of all we are grateful to "GOD ALMIGHTY" for his grace, mercy, wisdom and blessings throughout endeavour without which it would not have been possible. Every success stands as a testimony not only to hardship encountered but also hearts and hands behind it.

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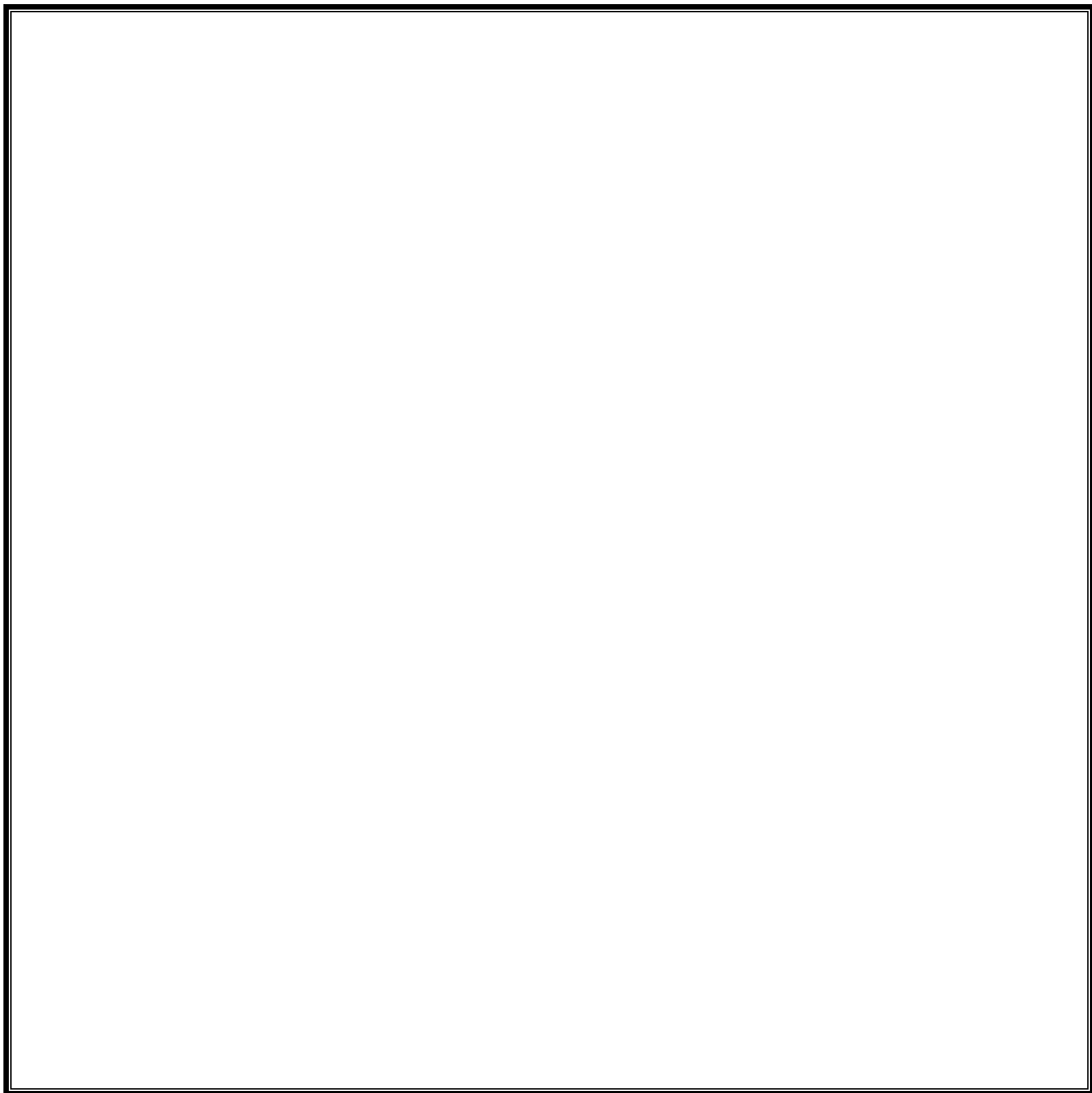
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INTRODUCTION

The last time that technology had a major impact in helping banks service their customers was with the introduction of the Internet banking. Internet Banking helped give the customer's anytime access to their banks. Customer's could check out their account details, get their bank statements, perform transactions like transferring money to other accounts and pay their bills sitting in the comfort of their homes and offices.

However the <u>biggest limitation</u> of Internet banking is the <u>requirement of a PC</u> 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 <u>India</u>. Mobile banking addresses this fundamental limitation of Internet Banking, as it <u>reduces the customer requirement to just a mobile phone.</u> Mobile usage has seen an explosive growth in most of the Asian economies like India. China and Korea. In fact Korea boasts about a 70% mobile penetration rate and with its tech-savvy populace has seen one of the most aggressive rollouts of mobile banking services.

Still the main reason that Mobile Banking scores over Internet Banking is that it enables '<u>Anywhere Banking'</u> Customers now don't need access to a computer terminal to access their banks, they can now do so on the go-when they are waiting for their bus to work, when they are traveling or when they are waiting for their orders to come through in a restaurant.

The scales 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 <u>India hit 40.6 million</u> 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 expect5ed to have about 300 million mobile users by the end of 2004. South Korea is targeted to reach about 42 million mobile users by the end of 2005. All three of these countries have seen gradual roll-out of mobile banking services,

the most aggressive being Korea which is now witnessing the roll-out of some of the most advanced services like using mobile phones to pay bills in shops and restaurants.

STATEMENT OF THE PROBLEM

Conduct a study on customer's interest and adoption of mobile banking services in Ernakulam City to evaluate the awareness of people about the various mobile banking Services provided by their banks and assess their willingness and interest to use mobile Services and also find out the factors which influence them to adopt the m-banking services And find the problems faced by the account holders while using these services and provide Valuable suggestions on the basis of the findings.

OBJECTIVES OF THE STUDY

- To understand the awareness of m-banking and its adoption by the people.

- To identify the benefits and limitations of mobile banking.

- To identify the problems faced by the customers through m-banking.

- To analyze at what extent m-banking services reaches to common people.

- To see the future prospects of m-banking in India.

- To give suggestions for improvements.

SCOPE OF THE STUDY

A study on customers adoption of m-banking is limited to Ernakulam City and this study was aimed to bring out the feedback from the people those who are using online banking services.

METHODOLOGY

For the purpose of data collection I had chosen both the p primary data and secondary data. Primary data were collected from a proposed set of questionnaire with 50 samples. The sampling technique adopted was convenience. Secondary data is collected by way of internet, magazines, Articles etc.

LIMITATIONS OF THE STUDY

- The conclusions are based up on the information obtained from 50 customers only.

- Some respondents may have given biased and incorrect information to some questions.

- Area of survey is limited to Ernakulam City.

- As in a sample it may not be exact representation to the population and there may be a slight variation in the findings to that extend.

- Time consuming.

- Getting suggestions from respondents was very difficult.

Advantages and Benefits of Mobile Banking

The biggest advantage that mobile banking offer 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 Rs.2.36 each, whereas an electronic transaction costs only about Rs.0.10 each. Additionally this new channel gives the bank ability to cross-sell up-sell their other complex products and services such as vehicle loans, credit cards etc.

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

Mobile banking solutions offer a full range of benefits for financial institutions, ranging from <u>reduced customer support costs to improved customer satisfaction and retention as well as revenue growth.</u>

A recent Gartner Measurement study showed that an average contact center deflects 16% of its contacts to phone-based automated self-service technology, with some high-performing companies achieving deflection rates of up to 50%. With typical IVR (Integrated Voice Response) calls a averaging Rs.0.95 per call, banks could reap cost savings of up to 45% by deflecting half of their calls to an IVR system.

A mobile self-service alternative to both call center and IRV customer queries could reap even more cost savings. Bank-related customer support calls typically relate to routine banking inquiries, such as account balances, which are perfectly suited to a mobile self-service solution. Customer ROI studies has shown that Mobile Aware can reduce the cost of simple query resolutions or transactions by up to 95%. Added to that is a more satisfied customer base that is no longer faced with frustrations of dealing with IVR systems, or waiting in line for the next available customer service representative.

Offering <u>innovative, personalized mobile services can also assist banks to attract and retain customers.</u> Mobile banking offers financial institutions the opportunity to target and acquire new customer segments that value mobility and real-time control of their finances, leading to increased customer growth and revenue.

Mobile Banking Services

Banks offering mobile access are mostly supporting some or all of the following services:

1. Account Balance Inquiry.

2. Account Statement Inquiries.

3. Cheque Status Inquiry.

4. Cheque Book Requests.

5. Fund Transfer between Accounts.

6. Credit/Debit Alerts.

7. Minimum Balance Alerts.

8. Bill Payment Alerts.

9. Bill Payment.

10. Recent Transaction History Requests.

11. Information Requests like Interest Rates/Exchange Rates.

The above services are the basic services provided by a bank. However, a more systematic and thorough look at a proper banking operation providing such services could classify them in a more opt and dignified manner as shown below:

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.

Payment & 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.

Investments

1. Portfolio management services.

2. Real-time stock quotes.

3. Personalized alerts and notifications on security prices.

Support

1. Status of requests for credit, including mortgage approval, and insurance coverage.

2. Check (cheque) book and card requests.

3. Exchange of data message and email, including complaint submission and tracking.

4. ATM location

Content Services

1. General information such as weather updates, news

2. Loyalty-related offers

3. Location-based services

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 transaction statement is a Pull based offering.

The other way to categorize the mobile banking services, by the nature of the service, gives us two kind of services – Transaction based and Inquiry Based. So a request for your bank statement is an inquiry 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 inquiry 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 • Bill Payment • Other financial services like share trading
Inquiry Based	• Credit/Debit Alerts. • Minimum Balance Alerts • Bill Payment Alerts	• Account Balance Inquiry. • Account Statement Inquiry. • Cheque Status Inquiry. • Cheque Book Requests. • Recent Transaction History.

Technology 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)
2. SMS (Short Messaging Service)
3. WAP (Wireless Access Protocol
4. Standalone Mobile Application Clients.

1. **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 a PBX solution 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** 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. For example, customers of the HDFC Bank in India can get their account balance details by sending the keyword 'HDFCBAL' and receive their balance information again by SMS. Most of the services rolled out by major banks using SMS have been limited to the Inquiry based ones.

However there have been few instances where even transaction-based services have been made available to customer using SMS. For instance, customers, of the Bank of Punjab can make fund transfer by sending the SMS 'TRN (A/c No) (PIN NO.) (Amount)'.

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 Center. There are a couple of hosted IP based SMS gateways available in the market and also some open sources ones like Kannel.

3. **WAP** used 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 at 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 inquiry 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.

4.   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 on J2ME. 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 phone. 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 teach=savvy population has a widespread adoption of the higher-end mobiles, which support application development.

The Value of Mobile Banking

Despite mobile phones being much more prevalent than PCs, there are more services available in the marketplace for Internet commerce rather than mobile commerce or M-commerce. It is interesting to note this phenomenon, as one would assume a marketer's interest in tapping a device that is always with the customer. While one almost always carries a mobile phone one does not carry one's PC or laptop. The adoption of mobile technology is still slow while web technology is being used by people to offer more convenient customer services.

The same is true for banking services. Banks need to look fro multiple and alternate channels to engage the customer by providing him/her with value added services. Banks also need to look for <u>innovative means</u> of banks are providing multiple services under one roof. Mobile technologies could come to the rescue of financial services in such a scenario. SMSs based through a web interface could be one such service. A web interface allows you to communicate instantly with individuals or groups via bulk text messaging. One could send SMSs to one's groups through a mobile phone. Yet another 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 instalments 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 authorise the required amounts for payment.

The customers can also request for additional information. They can automatically view deposits and withdrawals as they occur and also pre-schedule payments to be made or cheques to be issued. Similarly, one could also request for services like stop cheque or issue of a cheque book over one's mobile phone. There a number of reasons that should persuade banks in favour of mobile phones. They are set to become a crucial part of the total banking services experience for the customers. Also, they have the potential to <u>bring down costs for the bank itself.</u> Through mobile messaging and other such interfaces, banks provide value added services to the customer at marginal costs.

Such messages also bear the virtue of being targeted and personal making the services offered more effective. They will also carry better results on account of better customer profiling. Yet another benefit is the anywhere/anytime characteristics of mobile services. A mobile is almost always with the customer. As such it can be used over a vast geographical area. The customer does not have to visit the bank ATM or branch to avail of the banks' services. Research indicates that the number of footfalls at a

banks' branch has faller down drastically after the installation of ATMs. As such with mobile services, a bank will need to hire ever fewer employees, as people will no longer need to visit bank branches apart from certain occasions.

With Indian telecom operators working on offering services like money transaction over a mobile, it may soon be possible for a bank to offer phone based credit systems. This will make credit cards redundant and also aid in checking credit card fraud apart from offering enhanced customer convenience. The use of mobile technologies is thus a win-win proposition for both the banks and the bank's customers. Such services are highly personal in nature and are effective because of the same.

The banks add to this personalized communication through the process of automation. For instance, if the customer asks for his account or card balance after conducting a transaction, the installed software can send him an automated reply informing of the same. These automated replies thus save the bank the need to hire additional employees for servicing customer needs.

Mobile Banking In India

"The account that travels with you". This is needed in today's fast business environment with unending deadlines for fulfilment and loads of appointments to need and meetings to attend. With mobile banking facilities, **on can bank from anywhere, at anytime and in any condition or anyhow.** The system is either through SMS or through WAP, (Check out for SMS Banking under different head).

Mobile Banking is the hottest area of development in the banking sector and is expected to replace the credit/debit card system in future. In past two years, mobile-banking users has increased three times if we compare the use of either debit card or credit card. Moreover 85-90% mobile users do not own credit cards.

Mobile banking uses the same infrastructure like the ATM solution. But it is extremely easy and inexpensive to implement. It reduces the cost of operation for bankers in comparison to the use of ATMs.

Using compact HTML and WAP technologies, the following operations can be conducted through advanced mobile phones which can is further viewed on channels such as the Internet via the Channel Manager.

- ❖ Bill Payments
- ❖ Fund transfers
- ❖ Check balances
- ❖ Any many more which is also available in SMS Banking.

In countries like Korea, two SIM Card is used in mobile phones. One for the telephonic purpose and the other for banking, Bank account data is encrypted on a smart-card chip. About 3.3 million transactions were reported by Bank of Korea in 2004.

Indians Receptive to Mobile Banking

One of every three Indians with a bank account is ready to switch to another bank on being offered free mobile banking, states and Asia Pacific survey on mobile banking opportunities. The survey found Indian users to be more aware of mobile banking than those in other countries. The report titled, 'Mobile Opportunities for the Financial Sector' was conducted in five countries. It was commissioned by Sybase 365, a subsidiary of Sybase, along with BDM Intelligence-a custom market research firm in Asia. It surveyed 1,818 mobile users.The survey states that 81 percent of Indian respondents are aware they can check bank balance on a mobile phone, while 49 percent have used these services in the last three months-the highest amongst the five countries surveyed in the region.

The survey found out that consumers in Indian (71 percent) are more aware when compared to their counter parts in the other regions on the offerings their bank provides on mobile phones. Almost a half of the Indian respondents checked their bank balance on their mobile phone and 54 per cent via the Internet. The biggest concern among the Indian user while accessing details through mobile phones is security. In line with this, they accounted for the largest percentage of survey respondents expressing an interest in the ability to report potentially fraudulent transactions and to freeze cards via their mobile phones (67 per cent for both). Indian respondents were also the most willing to pay for these services.Kaustuv Ghosh, country manager Sybase 365 India said, "Indian banks needed a comprehensive view of mobile service deployment and its benefit to customer and operational expenditure alike. The survey reveals a growing culture of financial awareness as customers are becoming increasingly vigilant when it comes to their money."
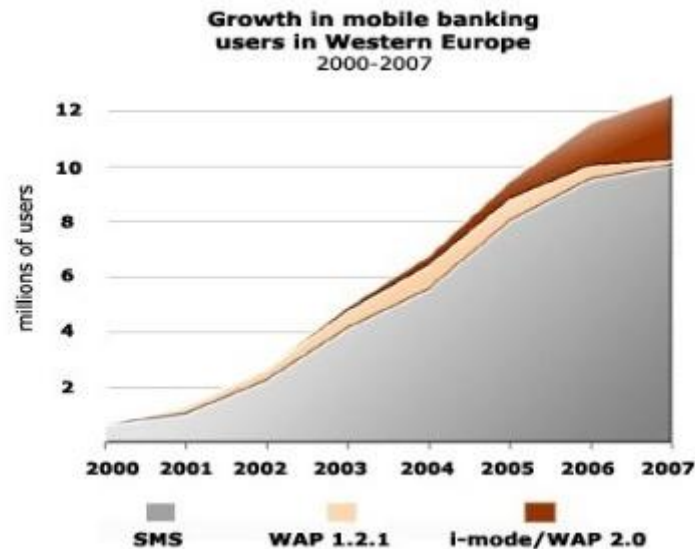
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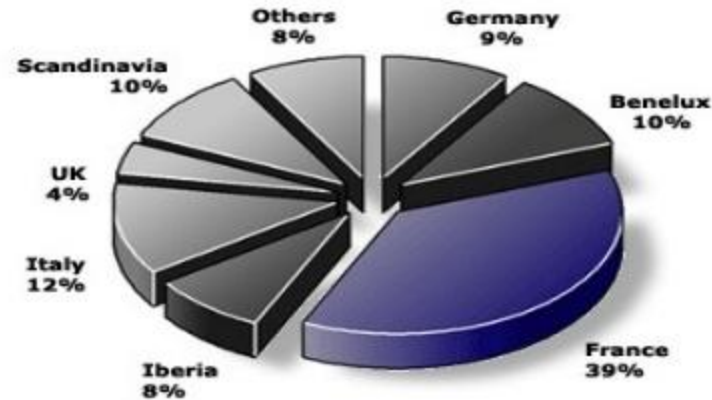
According to a recent report by Celent, there are currently about 5 million users of mobile financial services in Europe. Recently, i-mode services have been imported from Japan, and a number of banks are offering i-mode services now, hoping that it will lead to more rapid growth in terms of usage.After the failure of WAP based mobile financial services in 2001, new hopes for mobile banking in Europe have been awakened by Japanese import, i-mode. A handful of banks in Western Europe have deployed mobile banking services using the Japanese i-mode standard.

However, according to Octavio Marenzi author of the report, "there is little demand for interactive banking services via WAP or i-mode in Western Europe. However, **there has been rapid growth in the use of text messages or SMS messages.** We expect that future growth will continue to be driven by SMS alerts, rather than more sophisticated interactive services."

According to the study, wide variances exist between countries in Europe, with mobile banking playing a virtually non-existent role in many countries. The rather unexpected leader in terms of mobile banking penetration is the French market, which accounts for almost 40% of all mobile banking users in Western Europe.

**Growth in mobile banking
users in Western Europe**
2000-2007

The report analyzes and compares the mobile banking offerings of the top twenty-five banks in Western Europe, compares the state of play in the major countries within Europe, examines the role of WAP, i-mode and SMS and make recommendations to banks regarding future mobile strategies.

Factors Affecting The Adoption of Mobile Banking Services.
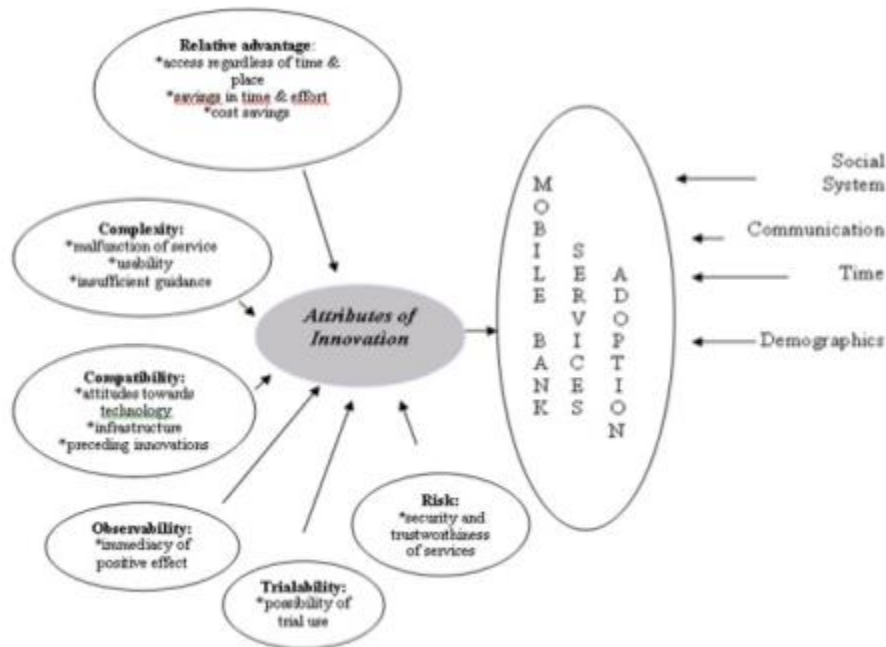
Relative advantage

Relative advantage is concerned with the degree to which an innovation is perceived as being better than the idea it supersedes. The degree of relative advantage is often expressed as economic profitability, social prestige, and savings in time and effort, immediacy of the reward or as decrease of discomfort. The construct of relative advantage is highly domain specific and thus advantage can be seen differently in context of different innovations and on other hand of different consumer. In the case of mobile banking relative advantage is mainly formed across the mobile value of the new banking service delivery medium. Mobile value signifies the value arising from the mobility of the medium. i.e. making use of electronic services while on the move/road; mobility offers the creation of choice and new freedom. As the major

trigger for adopting mobile banking services regular users (85.4%) and occasional users (77.8%) named the accessibility and availability of services regardless of time and place. Over half of the regular users (52.1%) and 43.8% of occasional users mentioned also savings in time and effort as reasons to adopt as well as savings in financial costs of conducting banking.

Complexity

The perception of complexity involved when conducting financial transactions via mobile channel is often inversely related to a consumer's experience with technology in general. Adoption of complex products depends on adopter's ability to develop new knowledge and new patterns of experience. This ability can be enhanced by the knowledge gained from related products. In Finland usage of Internet banking has already diffused to masses of banking customers, it can be argued that Internet banking is sort of related service. Payments and account management products over mobile GSM phone as SMS have been available in Finland since 1992 too. When respondents were asked about problem faced with mobile banking, all the response alternatives got rather low ratings. Regular users mentioned that malfunction of service (12.5%) had caused some problems, whereas occasional users complained about insufficient guidance (14.6%) to using mobile banking services.

Compatibility

The degree to which in innovative channel such as a mobile device is compatible with the individuals past experiences and values appears to have a significant impact on willingness to adopt. Respondents were asked about their attitudes towards technology-based products and services. Every target segment informed with positive mean scores to mobile phone and services, Internet, personal computer, cable television, e-mail that they were pretty enthusiastic about using technology, except of electronic ID-card. Furthermore 82% of the respondent had an Internet connection on use. In Finland mobile phone penetration exceeds 85%, which certainly affect adoption of mobile banking services too. These results are consistent with Rogers' suggestion and previous research that compatibility of an innovation with

previously introduced idea can influence the adoption of the innovation as well as the development stage of infrastructure. Further, Hirschman (1980) has suggested that prior experience with the product class, which for example in this case if usage of Internet banking, may lead to greater acceptability of a new product.

Observability

Observability of an innovation describes the extent to which an innovation is visible to other members of a social system, how easily the benefits can be observed and communicated. The lack of physical domain in service products may present some problems, even though in this case the service delivery medium, mobile phone itself, may enhance physical evidence of the innovation. In this survey respondents mentioned they had gained information of mobile banking services from banks' personnel via personal selling activities, and secondly from marketing communication activities, such as advertisements and mailings.

Trialability

Rogers argues that potential adopters who are allowed to experiment with an innovation will feel more comfortable with it and are more likely to adopt it. Consequently, if consumers are given the opportunity to try the innovation certain fears of unknowns and inability to use can be reduced. In this survey 12.7% of non-users had tested mobile banking services, but this did not lead to permanent use. However, this evidences that trial use of mobile banking services is possible.

Perceived risk

Security and trustworthiness of usage of service was mentioned to be the most important factor within every target segments when deciding on banking service delivery channel. Survey participants responded also positively to the argument **"using mobile phone in banking is trustworthy."**

Marketing for Mobile Banking

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 be the 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. A WAP 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, a leading wireless computing consulting organization, 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 a 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 any indication, mobile banking could well be the driving factor to increase sales of high-end mobile phones. Nevertheless, Bank's need to take a hard and deep look into the mobile usage patterns among their target customers and enable their mobile services on a technology with reaches out to the majority of their customers.

SMS Banking

When people are hard pressed for time, the need for "anytime anywhere" banking gains utmost importance. Bearing this in mind, banks provide a novel service which gives retail customers account information and real-time transaction capabilities from their cell phones. With SMS banking the following services can be obtained:

- Get account balance details
- Request a cheque book
- Request last three transaction details
- Pay bills for electricity, mobile, insurance etc.

SMS Banking Overview

In order to avail the services mentioned above, a user subscribing to a wireless carrier sends an SMS with a predefined code to the bulk service provider's number.
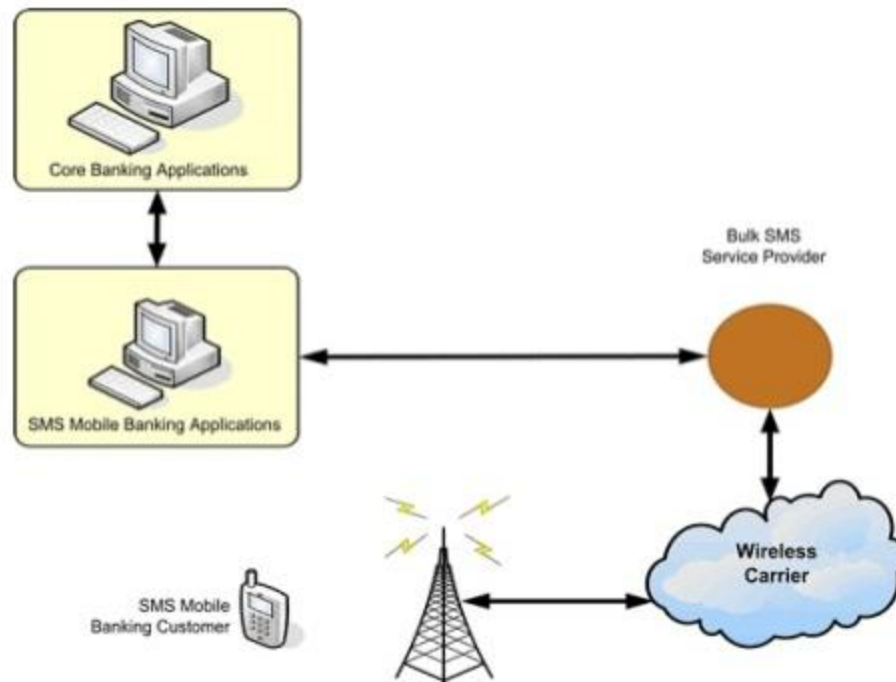
The service provider forwards this message to the bank's mobile banking applications. The mobile banking applications interface with the core banking servers (that contain the user account information) that service the request made by the user. The response is then sent by the mobile banking applications to the bulk service provider who in turn forward it to the valid user via SMS.

There are two ways in which a bank can communicate with a customer using SMS.

1.In the first method the bank proactively sends data to customers in response to certain transactions. For e.g. account to account transfer, salary credit and some promotional messages. This data can be sent to the customer in two ways

E-mail to mobile (E2M) : In this method, the bank sends an email to the mobile banking application through a specific email address. This email may consist of the message content together with the mobile

numbers of the customer. The mobile banking application in turn sends this message in a specific format (for e.g. XML tags are part of a HTTP GET message query string) to the service provider's application server. From hereon the information from the XML tags is extracted and sent as a SMS to the wireless which in turn forwards this message to the customer.

Database to mobile (D2M) : Here a mobile banking application continuously polls the banks database server and whenever a relevant event happens, for e.g. an account to account transfer, it forwards the specific message to the service providers' application server. The message format may be the same as the one used in the E2M case. This message is then forwarded to the wireless carrier which in turn forwards this message to the customer.

In the second method the bank sends data in response to specific customer query such as account balance details. The customer first sends a pre-defined request code via SMS to the Bulk SMS service provider's registered mobile number. Depending on the message code, the bulk SMS provider forwards the SMS to a PULL application in the mobile banking server. The PULL application receives the request and forwards it to the core banking application for further processing. The core banking server then processes this message and sends the reply to the PULL application which in turn forwards in to the customer via the service provider. As in the above cases the request and the response for the PULL application may be a HTTP GET message with tags in the query string.

Push and pull messages

SMS Banking services are operated using both Push and Pull message. Push messages are those that the bank chooses to send out to a customer's mobile phone, without the customer initiating a request for the information. Typically push messages could be either Mobile Marketing messages or messages alerting an event which happens in the customer's bank account, such as a large withdrawal of funds from the ATM or a large payment using the customers' credit card etc.

Another type of push message is One-time password (OTPs). OTPs are the latest tool used by financial and banking service providers in the fight against cyber fraud. Instead of relying on traditional memorized passwords. OTPs are requested by consumers each time they want to perform transaction using the online or mobile banking interface. When the request is receive 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.

Pull messages are those that are initiated by the customer, using a mobile phone, for obtaining information or performing a transaction in the bank account. Examples of pull messages for information include an account balance inquiry, or requests for current information like currency exchange rates and deposit interest rates, as published and updated by the bank.

The bank's customer is empowered with the capability to select the list of activities (or alerts) that he/she needs to be informed. This functionality to choose activities can be done either by integrating to the Internet Banking channel or through the bank's customer service call centre.

Typical Push and Pull Services offered under SMS Banking

Depending on the selected extent of SMS Banking transactions offered by the bank, a customer can be authorized to carry out either non-financial transactions, or both and financial and non-financial transactions. SMS Banking solutions offer customers a range of functionality, classified by Push and Pull services as outlined below.

Typical Push Services would include
- ❖ Periodic Account balance reporting (say at the end of month);
- ❖ Reporting of salary and other credits to the bank account;
- ❖ Successful or unsuccessful execution of a standing order;
- ❖ Successful payment of a cheque issued on the account;
- ❖ Insufficient funds;
- ❖ Large value withdrawals on an account;

❖ Large value withdrawals on the ATM or on a debit card;

❖ Large value payment on a credit card or out of country activity on a credit card.

❖ One-time password and authentication.

Typical Pull Services would include:

❖ Account balance inquiry;

❖ Mini statement request;

❖ Electronic bill payment

❖ Transfers between customer's own accounts, like moving money from a savings account to a current account to fund a cheque;

❖ Stop payment instruction on a cheque;

❖ Requesting for an ATM card credit card to be suspended;

❖ De-activating a credit or debit card when it is lost or the PIN is known to be compromised;

❖ Foreign currency exchange rates inquiry;

❖ Fixed deposit interest rate inquiry.

Concerns and Skepticism about SMS Banking

Many banks would have some concerns when the prospects of introducing SMS Banking are discussed. Most of these concerns could revolve around security and operational controls around SMS Banking. However supporters of SMS claim that while SMS Banking is not as secure as other conventional banking channels.

Challenges for a Mobile Banking Solution

Key challenges in developing a sophisticated mobile banking application are:

Interoperability

There is a lack of common technology standards for mobile banking. Many protocols are being used for mobile banking—HTMR, WAP, SOAP, XML to name a few. It would be a wise idea for the vendor to develop a mobile banking application that can connect multiple banks. It would require either the application to support multiple protocols or use of a common and widely acceptable set of protocols for data exchange.

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 J2ME and other support WAP browser or only SMS. Overcoming interoperability issues however have been localized, with countries like India using portals like R-World to enable the limitations of low end java based phones, while focus on areas such as South Africa have defaulted to the USSD as a basis of communication achievable with any phone.

The desire for interoperability is largely dependent on the banks themselves, where java enabled applications are of better security, easier to use and offer development of more complex transactions similar to that of internet banking while SMS can provide the basics but becomes a hassle to operate with more difficult transactions.

Security

Security of financial transaction, 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 bank's IT department.

The following aspects need to be addressed to offer a secure infrastructure for financial transaction over wireless network.

1. Physical security of the hand-held device. If the bank is offering smart-card based security, the physical security of the device is more important.

2. Security of the thick-client application running on the device. In case the device is stolen, the hacker should require ID/Password to access the application.

3. Authentication of the device with service provider before initiating a transaction. This would ensure that unauthorized devices are not connected to perform financial transactions.

4. User ID/Password authentication of bank's customer.

5. Encryption of the data being transmitted over the air.

6. Encryption of the data that will be stored in device for later/off-line analysis by the customer.

Scalability & Reliability

Another challenge for 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 (a 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.

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. However, there could be many issues to implement this approach such as upgrade/synchronization of other dependent components.

<u>Personalization</u>

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

1. Preferred Language

2. Date / Time format

3. Amount format

4. Default transactions

5. Standard Beneficiary list

6. Alerts

There are a few of the <u>most probable challenges</u> that a banking organisation or company will face while <u>newly introducing the mobile banking system</u> into its business processes. However, a bank should <u>see past</u> all the difficulties and drawbacks in the mobile banking system as every aspect of today's world has some negative quality incorporated in it as every coin as two sides and so on.

The main point that such a bank should focus on is the <u>benefit such a system has in the future and how such a system will help the bank to further increase its customer base and increase its business in the future to come of the bank.</u>For the time being these challenges, and many more which may arise and pose a threat to the adoption of mobile banking and it success, is not to be considered as a real drawback because for every problem or hindrance which may occur in mobile banking, there is a solution and such solutions are being devised, formulated and solved by professionals and experts who do what they do best and that is consult and find the most logical solution for that problem.

For Example, an information security company NSS MSC Sdn Bhd has devised a suitable solution for mobile banking fraud. The main headache, which was caused by this fraud, for the banks were that the instructions regarding what has to be done by them which was told by the account holder, via mobile banking services, would fall into the wrong hands and lead to illegal transactions

or, even worse, identity theft. For this reason, NSS MSC had devised a way to encrypt the message sent by the account holder to the bank. Only the account holders' bank could read the encrypted message and the bank could carry on its duties as instructed by the account holder without the worry or hassle of fraud or information falling into the wrong hands. Therefore, in future all problems and dead ends of mobile banking will be taken care of which will pave the way for the ascension of mobile banking services throughout all parts of the word.

"A STUDY ON CUSTOMERS INTEREST & ADOPTION OF MOBILE BANKING"

ANALYSIS AND INTERPRETATION

Locality	Ernakulam City
Sample Unit	Individual Persons
Sample Size	50
Sampling method	Convenience Sampling
Source	Primary Data
Instruments For Investment	Structured Questionnaire

Table showing the gender wise classification of respondents

GENDER	NO. OF RESPONDENTS	PERCENTAGE
MALE	32	64
FEMALE	18	36
TOTAL	50	100

Table N0.1

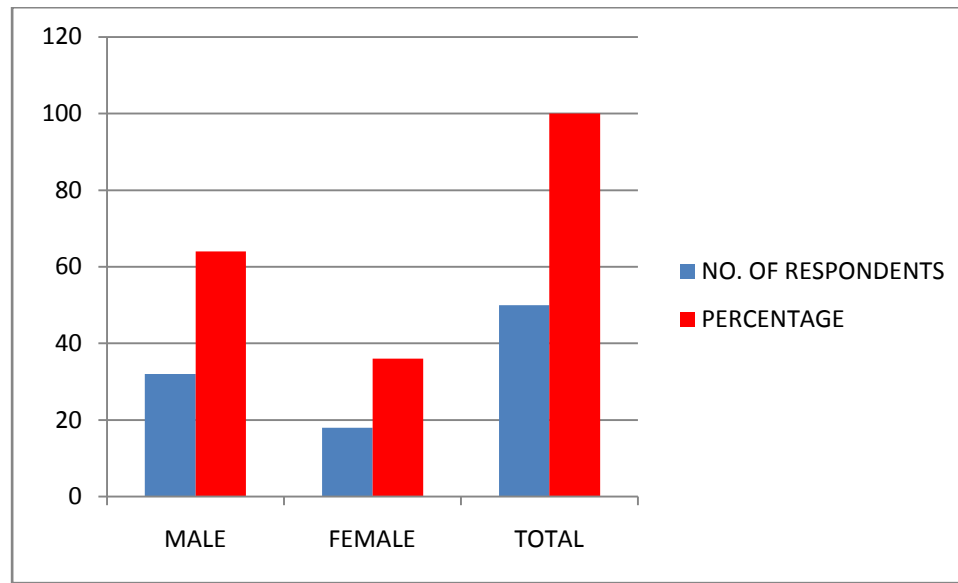**Graph showing the gender wise classification of respondents**

Exhibit No.1

INTERPRETATION: The result shows that majority of respondents that are using m-banking services is male is respondents i.e. 64% they use m-banking because it is convenient, safe ,easy to maintain and time saving. Among other respondents 36% are females who are unaware of m-banking functions and operations.

Table showing age wise classification of respondents

AGE	NO OF RESPONDENTS	PERCENTAGE
BELOW 20	05	10
21-30	12	24
31-40	21	42
41-50	09	18
ABOVE 50	03	16
TOTAL	**50**	100

Table N0.2

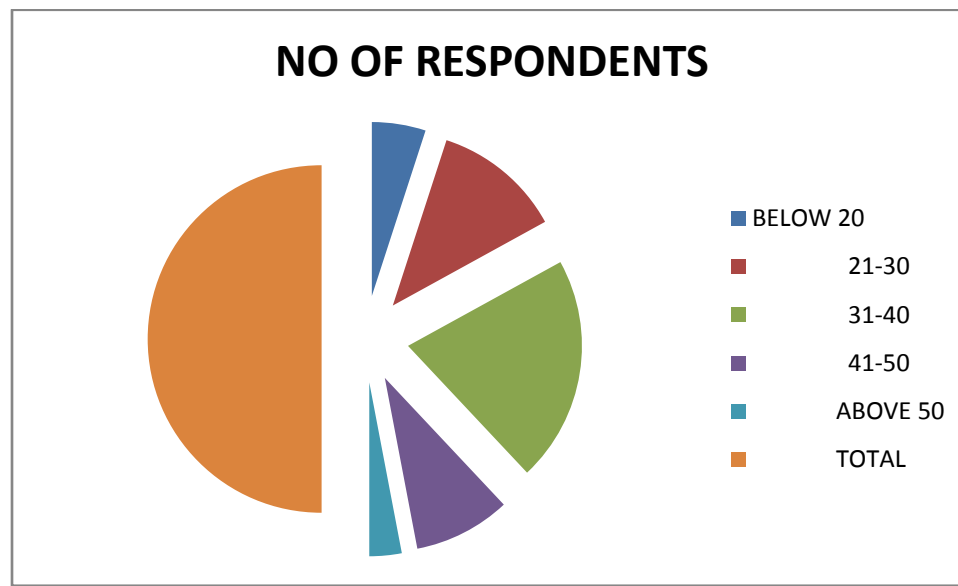**Graph showing age wise classification of respondents**

Exhibit No.2

INTERPRETATION: The result shows that majority of respondents i.e. 42% falls under the category of 31-40 years and 24% under 21-30 years .Only 10%, 18%, 16% falls under below 10, 41-50 and above 50 categories respectively. It shows that M-banking is mainly famous among youngsters as they are major users of M-banking and least comes under below 20.

Table showing location wise classification of respondents

LOCATION	NO OF RESPONDENTS	PERCENTAGE
urban	43	86
rural	07	14
TOTAL	50	100

Table N0.3

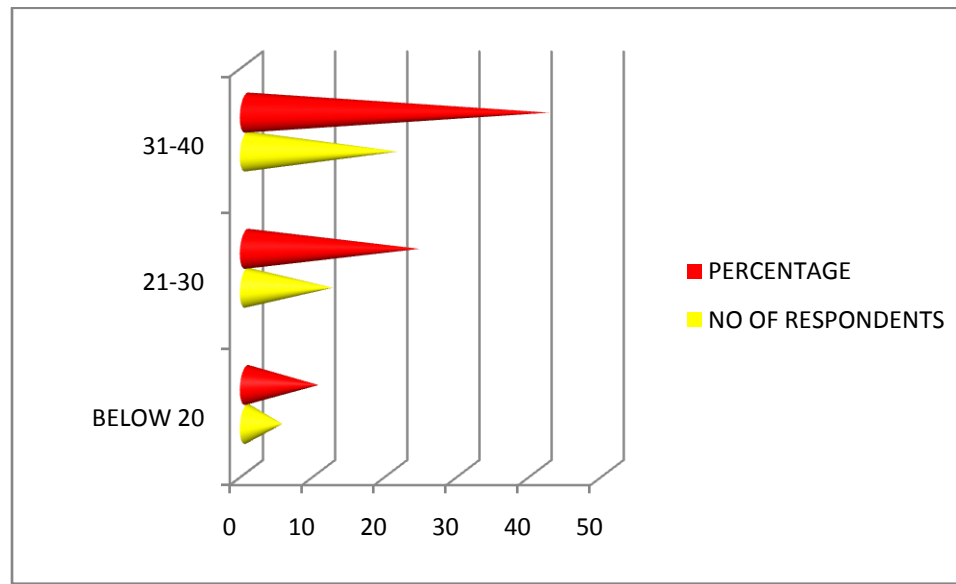**Graph showing location wise classification of respondents**

Exhibit No.3

INTERPRETATION: The results show that 86% respondents living in urban area are using m-banking services and only 14% of respondents living in rural area is using m-banking services. Persons living in rural area are not using this facility because they are worried about security and have less knowledge about the internet and lack of infrastructural facilities. So it shows that m-banking is more effective in urban area.

Table showing respondents with bank accounts

ACCOUNT HOLDERS	NO OF RESPONDENTS	PERCENTAGE
YES	50	100
NO	00	0
TOTAL	50	100

Table N0.4

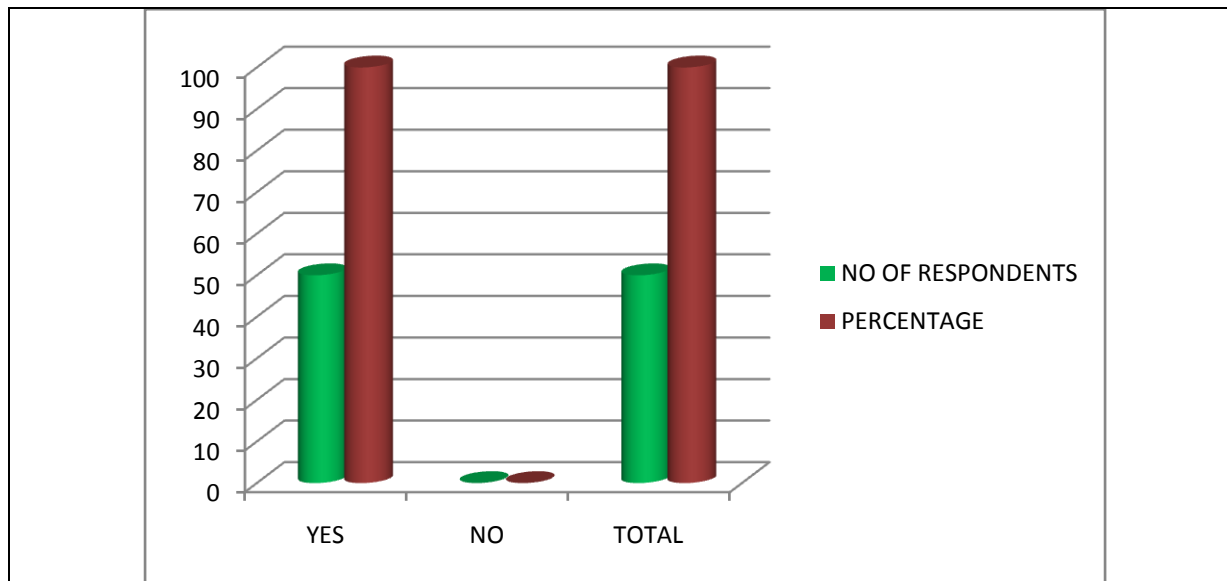**Graph showing respondents with bank accounts**

Exhibit No.4

INTERPRETATION: The results show that 100% of the respondents are having their own bank accounts and are using m-banking services directly through their bank accounts itself.

METHOD	NO OF RESPONDENTS	PERCENTAGE
offline	09	18
online	28	56
both	13	26
TOTAL	50	100

Table N0.5

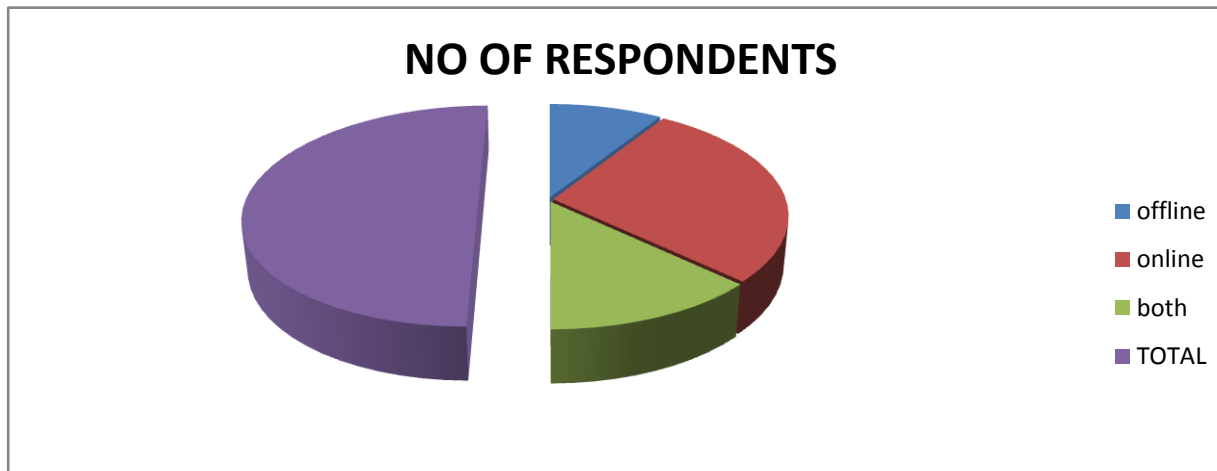**Graph showing the method of banking by the respondents**

Exhibit No.5

INTERPRETATION : This study shows that 56% of the respondents who are following Online method for doing banking transactions because they felt online banking method is more convenient than traditional method (off-line) and among the remaining respondents 18% are still following off-line banking method and 26% are using both the methods i.e. online and off-line for carrying banking transactions.

Table showing the nature of cell phones used by respondents

SMART PHONES	NO OF RESPONDENTS	PERCENTAGE
YES	36	72
NO	14	28
TOTAL	50	100

Table N0.6

Graph showing the nature of cell phones used by respondents
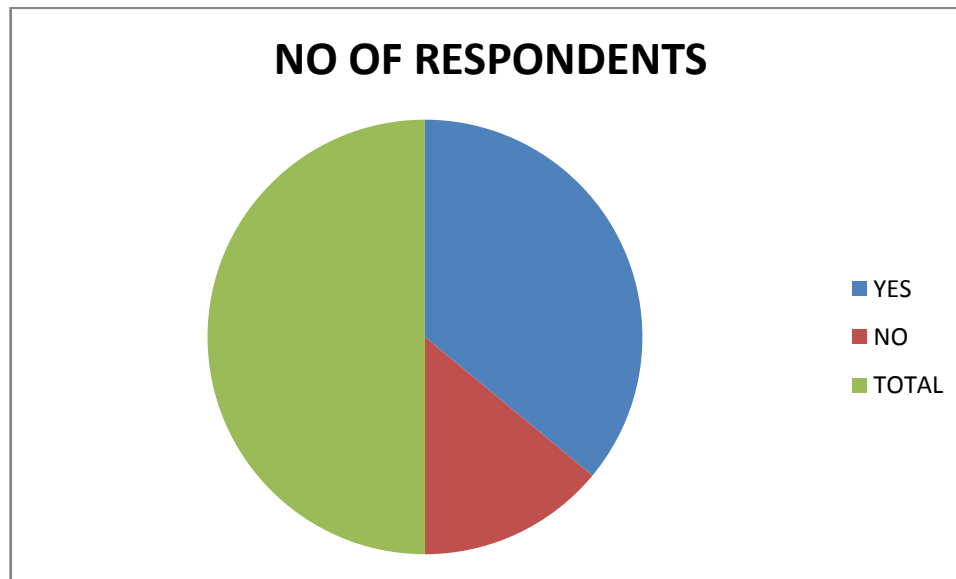

Exhibit No.6

INTERPRETATION : The result of the study shows that 72% of the respondents have their own smart phones with internet connectivity-banking facilities can be availed only by the respondents with a smart phone having internet connectivity.28% of the remaining respondents are not using smart phones .

Table showing the usage of m-banking services used by respondents

M-BANKING SERVICES	NO OF RESPONDENTS	PERCENTAGE
YES	41	82
NO	09	18
TOTAL	50	100

Table N0.7

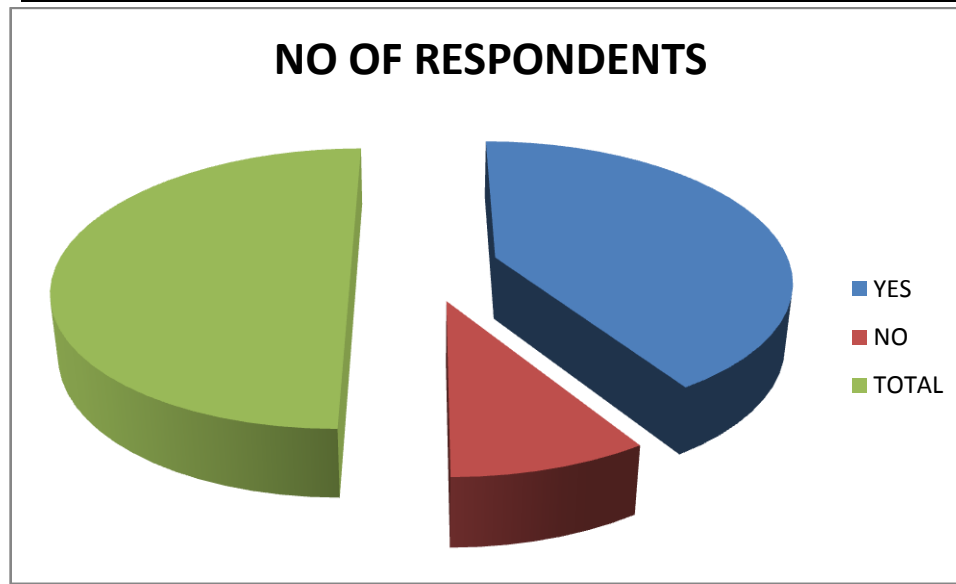**Graph showing the usage of m-banking services used by respondents**

Exhibit No.7

INTERPRETATION: The result shows that majority of the respondents are using m-banking services i.e. 82% because its more convenient and time-saving compared to traditional banking. Among the other remaining respondents 18% are not availing M-banking services.

Table showing the respondents interest towards m-banking services

INTEREST	NO OF RESPONDENTS	PERCENTAGE
Brand name and services	22	44
References by friends	11	22
advertisements	15	30
others	02	04
TOTAL	50	100

Table N0.8

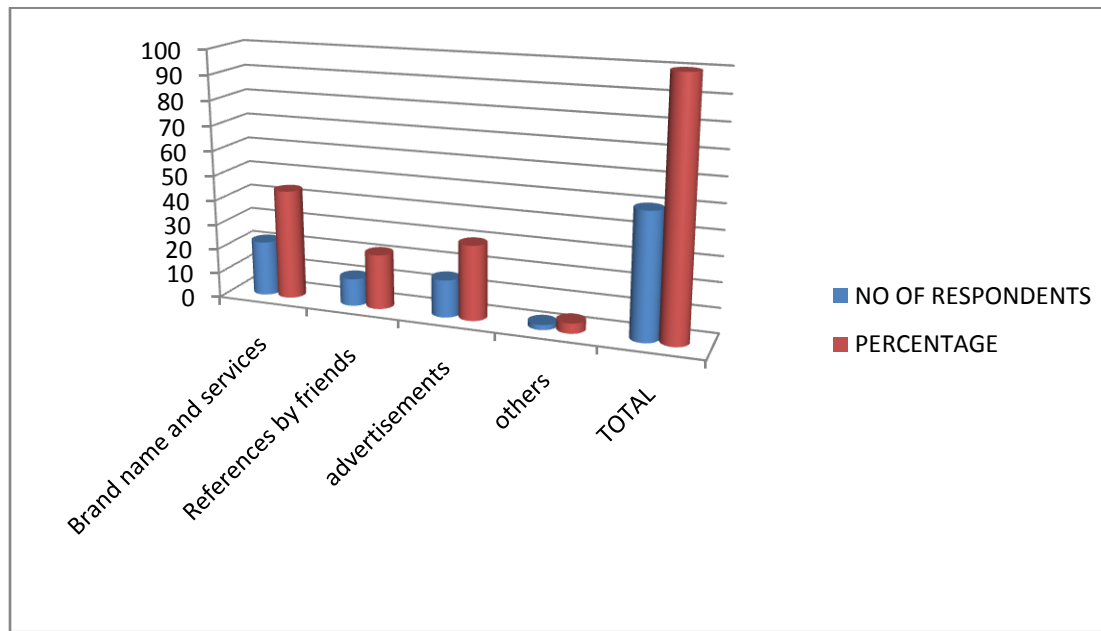**Graph showing the respondents interest towards m-banking services**

Exhibit No.8

INTERPRETATION: The result shows that brand name and services is the main factor which induced the majority of the respondents i.e. 44% to start m-banking. And 30% of the people start to use m-banking because of the advertisements of these services. References by friends and other factors like status symbol etc. Constitute only 22% and 4% respectively.

Table showing the services availed by the respondents through m-banking

SERVICES AVAILED	NO OF RESPONDENTS	PERCENTAGE
Fund transfer	02	04
Online booking	11	22
Bill payment	12	24
e-shopping	10	20
Payment of loans and insurance	02	04
Mobile recharges	13	26
TOTAL	50	100

Table N0.9

Graph showing the services availed by the respondents through m-banking
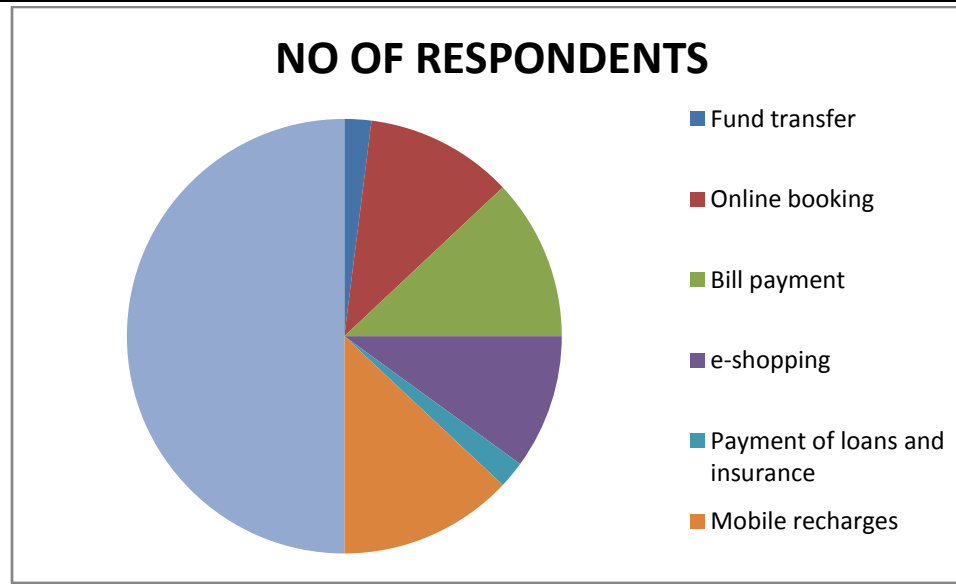

Exhibit No.9

INTERPRETATION: The result of the study shows that 26% of the respondents are most familiar with mobile recharges and 24% of respondents are familiar with bill payments. This means that majority of the respondents are m-banking services mainly for mobile recharges and bill payments.22% of the respondents are using m-banking for online bookings like tickets,hotels,vehicles and 20% of the respondents are using m-banking for e-shopping. Only a

very few number of respondents are using m-banking services for fund transfer and payment of loans and insurance i.e. 4%.

Table showing the respondents review regarding mobile alerts while making Transactions

RECEIVE M-ALERTS	NO OF RESPONDENTS	PERCENTAGE
yes	42	84
no	08	16
TOTAL	50	100

Table N0.10

Graph showing the respondents review regarding mobile alerts while making Transactions
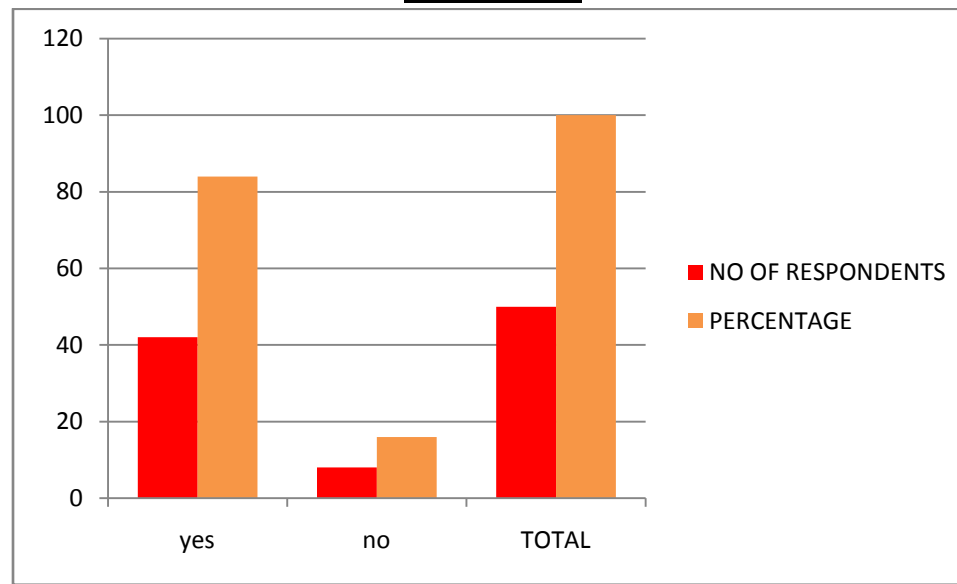

Exhibit No.10

INTERPRETATION: The result of this study shows that 84% of the respondents are receiving m-alerts while transacting banking transactions through mobile phones. This ensures safety and security of the transactions done through mobile phones. Only 16% of the respondents are not aware of any mobile alerts because they might not have linked their mobile number with their respective banks.

Table showing the respondents awareness about m-banking services

AWARENESS	NO OF RESPONDENTS	PERECENTAGE
Fully aware	34	68
Had idea	11	22
Not aware	05	10
Total	50	100

Table N0.11

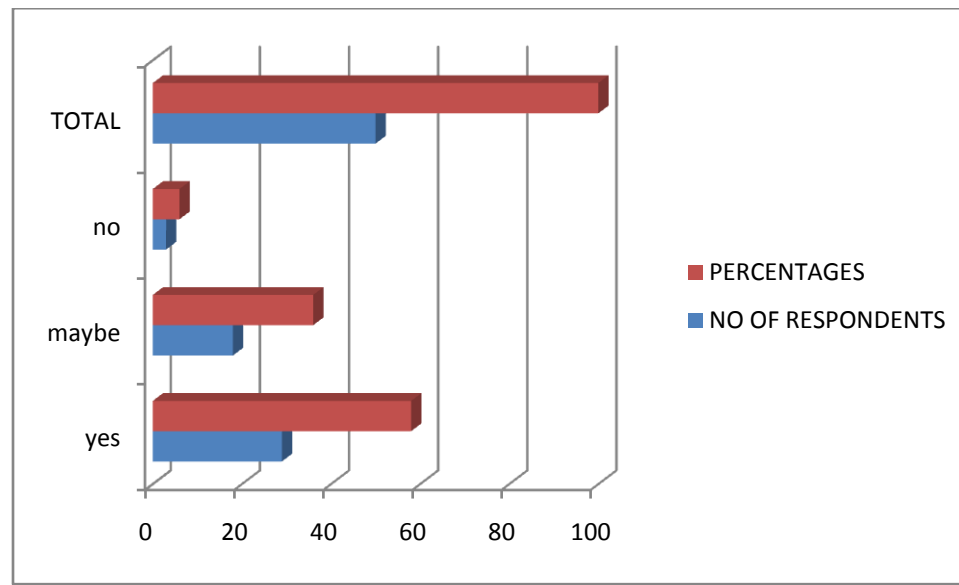**Graph showing the respondents awareness about m-banking services**

Exhibit No.11

INTERPRETATION: The result of this study shows that 68% of the respondents were fully aware of m-banking services and 22% respondents had an idea about m-banking services. Only 10% of the respondents have no idea about m-banking services provided by their banks.

Table showing respondents view towards m-banking

VIEW POINTS	NO OF RESPONDENTS	PERCENTAGE
convenience	14	28
Safe and secure	07	14
Low service charges	09	18
Status symbol	07	14
Easy to maintain and use	13	26
TOTAL	50	100

Table N0.12

Graph showing respondents view towards m-banking
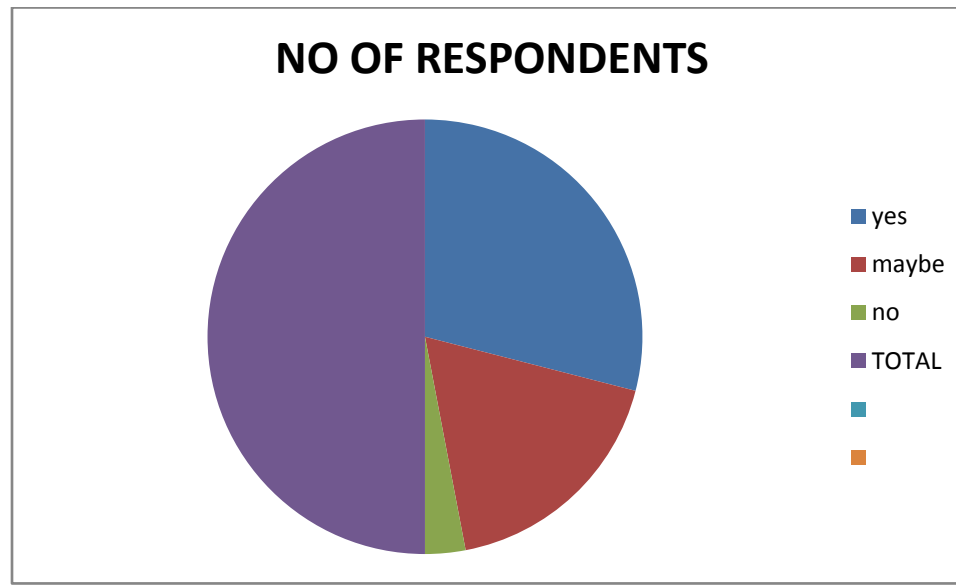
Exhibit No.12

INTERPRETATION: This study shows that 28% of the respondents are adopting m-banking services because of its convenience, 24 hours service availability and any where connectivity.26% of respondents are adopting m-banking because of its easiness to maintain banking transactions.18% of respondents are attracted to its low service charge. The status symbol and safety factors influenced 14% of the respondents who are worried about safety and security.

Table showing the safety of transactions of respondents

SAFETY OF TRANSACTIONS	NO OF RESPONDENTS	PERCENTAGE
yes	29	58
maybe	18	36
no	03	06
TOTAL	50	100

Table N0.13

Graph showing the safety of transactions of respondents
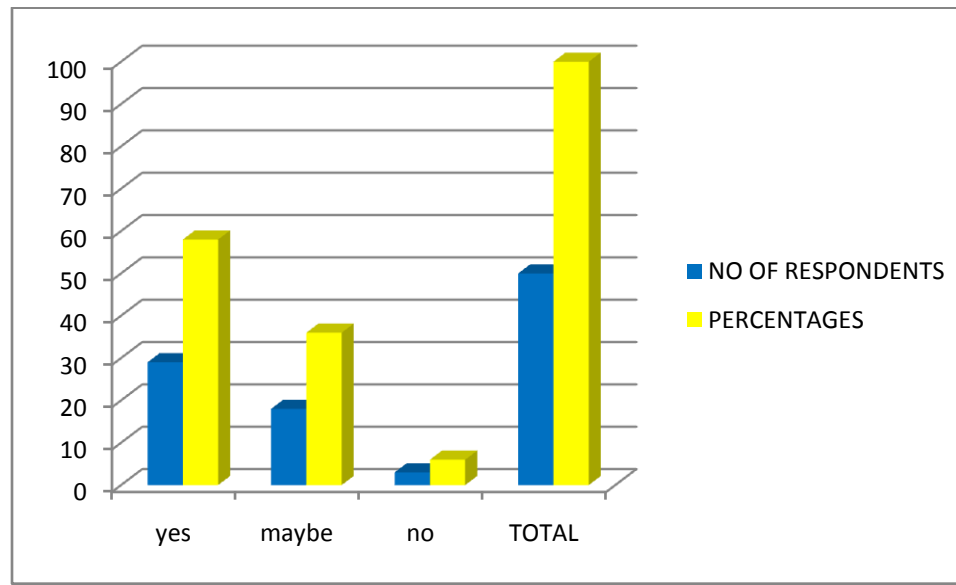
Exhibit No.13

INTERPRETATION: The result of this study shows that,58% of the respondents are sure about the safety of the transactions done through mobile phones because they have unique username and password for doing transactions online through mobiles and also most of them receive m-alerts in their mobiles after the transactions are complete.18% of the respondents are neutral about safety of transactions .And only 6% of the people are not sure about the safety and security of transactions done through mobile phones.

Table showing the difficulties faced in mobile banking

DIFFICULTIES	NO OF RESPONDENTS	PERCENTAGE
Interruption in connectivity	21	42
Security issues	07	14
Heavy charges	09	18
others	13	26
TOTAL	50	100

Table N0.14

Graph showing the difficulties faced in mobile banking
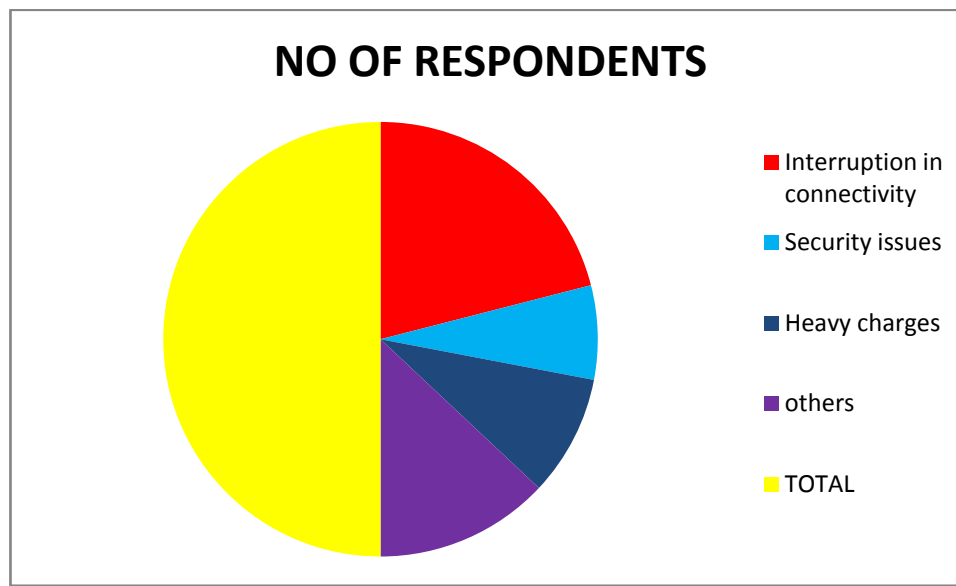
Exhibit No.14

INTERPRETATION: The result of this study shows that 42% of the respondents are facing difficulties with m-banking services due to interruption in internet connectivity. 26% of respondents felt too much of procedures and paper work for availing m-banking services. Respondents also have issues related to heavy charges being levied for providing m-banking services by banks. A few respondents i.e. 14% is concerned about security.

Table showing the satisfaction level of respondents by using M-Banking

LEVEL OF SATISFACTION	NO OF RESPONDENTS	PERCENTAGE
Highly satisfied	16	32
satisfied	20	40
neutral	08	16
dissatisfied	06	12
Total	50	100

Table N0.15

Graph showing the satisfaction level of respondents by using M-Banking
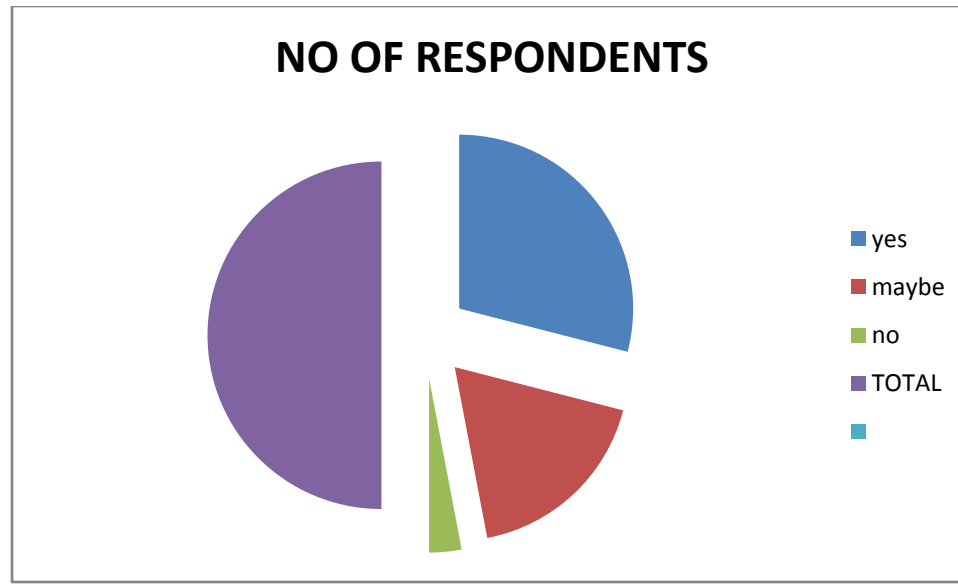
Exhibit No.15

INTERPRETATION: The result of this study shows that 40% of of respondents are satisfied with m-banking services provided by their banks and 32% of the respondents especially youngsters are highly satisfied with m-banking services because they often use these services.16% of the respondents are neutrally satisfied with their bank's mobile banking services and only 12% of respondents are highly dissatisfied with services rendered by their banks.

"A STUDY ON CUSTOMERS INTEREST & ADOPTION OF MOBILE BANKING"

FINDINGS, CONCLUSIONS AND SUGGESTIONS

FINDINGS

- Majority of the customers are using m-banking services rendered by their banks

- Mobile banking is more famous among male and female are not willing to use m-banking services because they are concerned about its security.   .

- Mobile banking is more effective in urban area compared with rural area.

- The major users of m-banking services are under the age category of 31-40 years.

- The users of m-banking services have bank accounts with the respective banks providing m-banking services.

- Majority of the customers are using m-banking services rendered by their banks and only a few numbers of customers are still following traditional banking because they are concerned about security.

- Most of the customers are aware about m-banking and they had an idea about various m-banking services rendered by their banks.

- Most of the customers use smart phones for m-banking services while a very few of them use ordinary mobile phones.

- Convenience, easy to maintain and use, 24 hours availability and low service charges are major factors influencing the customers to shift from "brick bank to click bank".

- It is found that majority of the customers are using m-banking for mobile recharges, bill payments and online booking.

- Most of the customers are influenced by the bank's reputation and its advertisements to avail m-banking services rendered by the banks.

- It is found that majority of the respondents have the opinion that transactions through mobile with internet connectivity is secured.

- Majority of the customers receive mobile alerts in m-banking ensuring the safety and security of the transactions.

- Majority of the customers have the opinion that m-banking is easy to operate,eventhough they face some difficulties while using mobile banking in the nature of interruption of internet connectivity, too much procedures and levying of high charges from the customers by the banks for providing mobile banking services.

- Most of the customers are satisfied with mobile banking services rendered by their banks.

Based on convenience, time, security and easiness to maintain it is found that most of the customers prefer mobile banking.

<u>CONCLUSION</u>

With the rapid development of transport and communication, people and services are coming together as if they were just around the corner. If this is the case for many services, then why should the banking   industry   lagbehind?

Internet banking, phone banking e-banking and now mobile banking all enable the bank to be better connected with the customer and vice versa. A customer who is provided with a variety of additional services feels appreciated and is more likely to be loyal to that bank, which is always a good sign for a bank. In the end mobile not only helps a bank to reduce costs but also helps it to retain its valuable customers. And as far as customers are concerned, this facility enables the customer to bank anywhere, at any time and in any condition, definitely a boon if a customer is stuck in the middle of nowhere and requires banking services as soon as possible.

Thus mobile banking helps both, the customer as well as the bank, to lighten the burden of today's world and to save time, money and energy which is greatly required and appreciated. In a competitive world where everyone is waiting to outdo the other, a helping hand, in whatever forms and from whatever source, is definitely god sent and should not go unrecognized.

<u>SUGGESTIONS</u>

- The banks must improve its service quality in terms of communication, responsiveness, reliability and understanding.

- To provide various effective modes for promotional schemes interaction with the customer, more accuracy in billing, financial security and privacy in transactions.

- If the banks wants to increase the service quality it should enhance level of services in punctuality, transparency and accountability, quality of customers service, safety and confidentiality of transaction, No. of queues in bank branches, 24 hours services to the customers, individualized attention to customers, necessary information to customers, learns the specific requirement of customers.

- In retail payment system although there are multiple systems and options like ECS debit, ECS Credit, EFT & NEFT. But their contribution to overall payment system has not been quite high. So initiative should be taken to increase the share of all the modes of payment system.

- RBI should stops physical cheque clearance beyond a certain amount. So transactions that are conveniently go through electronic channels should be priced higher for paper based clearing.

- ATM's are the fastest mode of payment and employees feel this as the basic requirement behind adoption of e-banking from customer point of view. So the banks in both sectors should increase the number of onsite and offsite ATMs.

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APPENDIX

QUESTIONNAIRE

"A STUDY ON CUSTOMERS INTEREST AND ADOPTION OF MOBILE BANKING"

1. NAME:

2. GENDER: MALE ☐   **FEMALE** ☐

3. AGE:

☐ w 20   ☐ **21- 30**   ☐ **31-40**   ☐ **41-50**   ☐ bove 50

4. LOCATION: Urban ☐   **Rural** ☐

5. DO YOU HAVE A BANK ACCOUNT?   YES ☐ **NO** ☐

6. IF YES, IN WHICH BANK DO YOU HAVE ACCOUNT ?

SBI   SBT ☐ **ICICI** ☐ **CANARA BANK** ☐

SOUTH INDIAN BANK ☐ **OTHERS** ☐

IF ANY OTHERS PLEASE SPECIFY: _____

7. WHICH METHOD DO YOU USE FOR BANKING ?

OFFLINE ☐ **ONLINE** ☐ **BOTH** ☐

8. DO YOU USE MOBILE PHONES? YES   NO

9. IS YOUR MOBILE PHONE A SMART PHONE? YES   NO

10. ARE YOU USING MOBILE BANKING SERVICES?   YES   NO

11. WHAT INDUCED YOU TO START MOBILE BANKING SERVICES?
  THE BRAND NAME & SERVICES OF THE BANK
  REFERENCES BY FRIENDS   ADVERTISEMENTS   OTHERS

12. WHAT ARE THE MAJOR TRANSACTIONAL ACTIVITIES YOU AVAIL THROUGH MOBILE BANKING SERVICES?
FUND TRANSFER   ONLINE BOOKING   BILL PAYMENT
E-SHOPPING   PAYMENT OF LOANS&INSURANCE   MOBILE RECHARGE

13. DO YOU RECEIVE ANY MOBILE ALERTS WHEN THE TRANSACTION IS COMPLETE?
  YES   NO

14. WHILE OPENING THE ACCOUNT, WERE YOU FULLY AWARE OF M-   BANKING?
  FULLY AWARE   HAD IDEA   NO

15. WHAT IS THE MOST VITAL FACTOR WHICH MADE YOU OPEN AN   ACCOUNT IN AN BANK PROVIDING M-SERVICES?
  CONVENIENCE   SAFE&SECURE   LOW SERVICE CHARGE
   STATUS SYMBOL   EASY TO MAINTAIN & USE

16. ARE YOU SURE ABOUT THE SAFETY OF THE TRANSACTIONS DONE THROUGH MOBILE?

  YES   MAYBE   NO

17. WHICH ARE THE TYPES OF NON-TRANSACTIONAL ACTIVITIES YOU ARE FAMILIAR THROUGH M-BANKING?

ACCOUNT INFORMATION   ORDER A CHEQUE BOOK

REQUEST FOR DEMAND DRAFT   REQUEST FOR BLOCKING SERVICES

18. DO YOU FACE ANY DIFFICULTIES IN MOBILE BANKING?

  YES   NO

  IF YES, THEN THE NATURE OF DIFFICULTY YOU FACE?

 INTERRUPTION IN CONNECTIVITY   SECURITY ISSUES

 HEAVY CHARGES FOR TRANSACTIONS   OTHERS

19. ARE YOU SATISFIED WITH SERVICES PROVIDED BY OUR BANK ?

  HIGHLY SATISFIED   SATISFIED   NEUTRAL

  DISSATISFIED

20. ANY SUGGESTIONS TO IMPROVE YOUR M-BANKING SERVICES?

_____

_____