MOBILE BANKING IN INDIA - CHALLENGES & WAY TO OVERCOME

ER.SANJEEVPURI

Abstract: The increased prevalence of mobile phones provides exciting opportunities for the growth of mobile banking (m-banking). This paper reviews the emerging research literature on m-banking. It presents a classification framework for m-banking research based in Information Systems (IS), technology innovation, management, and marketing journals, and majorIS conferences. This papers is classified into five maincategories: m-banking overview and conceptual issues ,Features& Benefits of Mobile Banking, Current operating practices of commercial banks, Mobile banking/payment practices in Indian, legal and ethical issues in mbanking. It is expected that the comprehensive list of references and assessments presented inthis paper will provide a useful anatomy to young m-banking literature and mobile bankers to up rise in m-banking in India and help stimulate further interest.

Keywords: Banking and Mobile Services, Customer, Issues,IVR,SMS Mobile Banking, M-Banking, Adoption of m-banking in India.

Introduction: Three billion people are expected to own mobile phones in the globe by 2013. There are currently 225 million mobile phones in India and 100 million are added every year. In a few years more than 500 million people are expected to have mobile phones in India. Mobile commerce is a natural successor to electronic commerce. The capability to pay electronically coupled with a website is the engine behind electronic commerce. Electronic commerce has been facilitated by Automatic Teller Machines (ATMs) and shared banking networks, debit and credit card systems, electronic money and stored value applications and electronic bill presentment and payment systems. Mobile payments area natural evolution e-payment schemes that will facilitate mobile commerce.Today, banks are trying to offer their customers not just anytime banking but anywhere any time banking through appropriate application of developments in the information technology area. The latest step in this area was the introduction of mobile banking facilities to customers. 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. This paper provides an overview of some of the relevant technologies, applications, and issues in the relatively new field of m-banking in India.

Features & Benefits Of Mobile Banking(Mobile Payment Characteristics)

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

Simplicity and Usability: The m-payment application must be user friendly with little or no learning curve to the customer. The customer must also be able to personalize the application to suit his or her convenience.

Universality: M-payments service must provide for transactions between one customer to another customer (C2C), or from a business to a customer(B2C) or between businesses (B2B). The coverage should include domestic, regional and global environments. Payments must be possible in terms of both low value micro-payments and high value macro-payments.

Interoperability:Development should be based on standards and open technologies that allow one implemented system to interact with other systems.

Security, Privacy and Trust:A customer must be able to trust a mobile payment application provider that his or her credit or debit card information may not be misused. Secondly, when these transactions become recorded customer privacy should not be lost in the sense that the credit histories and spending patterns of the customer should not be openly available for public scrutiny. Mobile payments have to be as anonymous as cash transactions. Third, the system should be foolproof, resistant to attacks from hackers and terrorists. This may be provided using public key infrastructure security, biometrics and passwords integrated into the mobile payment solution architectures .

Cost: The m-payments should not be costlier than existing payment mechanisms to the extent possible. Am-payment solution should compete with other modes of payment in terms of cost and convenience

Speed: The speed at which m-payments are executed must be acceptable to customers andmerchants

Cross border payments: To become widely accepted the m-payment application must be available globally,word-wide.

Technologies behind Mobile Banking: Mobile Banking is being deployed using mobile applications developed on one of the following these emerging

technologies.

IVR – Interactive Voice Response: IVR Technology used in Banks: - 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 and multiple options. Customers can choose any options by pressing the corresponding number in their keypads, and then read the regarding information, mostly using a text to speech program.

SMS (Short Messaging Service): SMS Banking initiatives permit you to access your Bank accounts and carry out various banking transactions and Services. If you have a mobile phone, you can use the SMS facility and conduct the following operations using the messaging services of your service provider.

a) Balance Enquiry
b) Last Few Transactions
c) Cheque Paid Status
d) Suspend ATM / Debit Card
e) Loan Balance Enquiry
f) Deposit Service

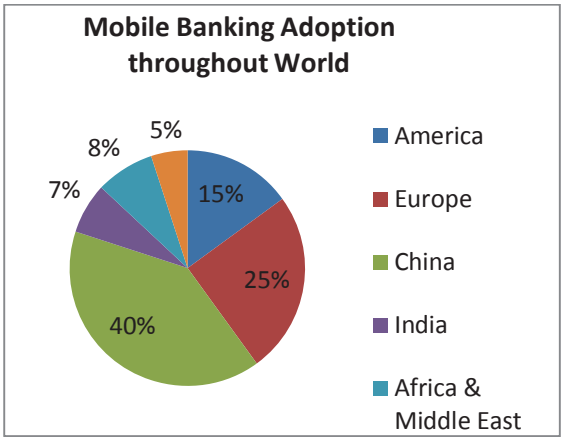
WAP – Wireless Access Protocol: A WAP based service requires hosting a WAP gateway. Mobile Application users access the bank's site through the WAP gateway to carry out transactions, much like internet users access a web portal for accessing the banks services.

Standalone Mobile Application Clients: Standalone mobile applications are most suitable to implement complex banking transactions like trading insecurities. They can be easily customized according to the user interface complexity supported by the mobile. J2ME,USIM,BREW,USSD are various techniques used by client to manage the mobile banking.

Mobile Banking Adoption In India: In India, the situation of the banks is quite different from the banks overseas particularly in developed markets. Indian banks are not facing huge write downs or losses and are still quite well capitalized. Globally, the IT spends of financial institutions are expected to go down drastically in 2009-10. In India, however, this could be an opportune moment for banks to focus on the internal processes and consolidate their IT platforms across functionalities to use technology as an effective strategic tool. The use of technology in India has undergone rapid transformation. The last two decades have witnessed a sea change in the nature of services offered by not only banks but also the financial sector and even the Government - all of which have had a positive impact on the customers of these organizations and the general public at large.

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

Data has been collected from various sources; there is a combination of both primary and secondary data that has been used in this research



Primary Data: The data for the research is extracted from a survey conducted in CHD,India. A total of 100 respondents participated in the research of Mobile banking. The demographic profile of respondents in each research is shown in Table and chart

Demographic Profile Of Respondents

Characteristics	Frequency	%age
Gender Wise		
Male	65	65
Female	35	35
Age Wise		
<20	1	1
20-29	68	68
30-39	21	21
40-49	5	5
>50	5	5

Secondary Data • Articles have been sourced from magazines and journals dealing with current issues in Mobile banking adoption. Internet & Text books related to Mobile Banking & Research Methodology have been a major secondary source for the extraction of the expert's opinion.

Factors That Affect Mobile Banking Adoption Intention

Compatibility	46%
Trial Ability	59%
Risk	64%
Complexity	49%
Adoption Intent	40%

Major Factors Affect Mobile Banking In India

Access Problems: It is the most important factor, Accessing Problem statements such as Possibility of error is higher than Internet Banking , Using key code list with mobile phone is complicated and Mobile phone is an unpractical device for banking emerge with good positive correlations.The great influence on the adopters not to have mobile banking services.

Dissatisfaction: `Dissatisfaction' is the second significant factor, which accounts of the variations. The statements `Data transmission is very slow , Mobile banking services are risky and not secure, Mobile banking services are not enough versatile and Its use has been a disappointment by others signify that the non-adopters have seen the dissatisfaction among the users of mobile banking services.

Inability To Provide Knowledge: This is another crucial factor, which is reflection of variations. The statements of insufficient guidance is there for using mobile banking and its use is complicated which reflects that consumer behavior tends to be based on how a given problem is to be solved. In this research, the non-adopters of mobile banking are afraid of being the usage of new technology due to the complications in the systems and, moreover, no proper guidance is provided to them

limitations In Functionality Of Mobile Devices : Mobile technologies are still dogged by limitations such as limited battery life, unreliable network connections, volatile access points, risk of data loss, portability and location discovery. Even in the developed world, until recently, wireless communications were very limited with regards to functionality of devices and speed of communications. Constraints such as screen size, memory, and storage capabilities as well as data transfer rates averaging 14.4Kilo Bytes Per Second(KBPS), limited the amount of data that could be both displayed and accessed. These limitations are still one of the biggest barriers to the option of mobile working in our countries.

Internet Connectivity Cost: Although connection costs from mobile phones are steadily declining it is still high enough in many countries to deter customers from using their mobiles for applications such as e-banking.

Lack Of Awareness Among Customers: Many banking customers are not even aware of availability of mobile banking or associated benefits. As with other technologies, awareness increases with time and needs consider able promotional efforts.

Security Concerns: Mobile technology still suffers from questionable security. So it may not be suitable for transfer of highly confidential financial information. Mobile devices are increasingly becoming a target for virus writers, hackers, and short message service (SMS) spammers.

Small Number Of Choices (Only a Few Banks Offer Mobile Banking)

There are a bewildering number of options when it comes to providing mobile banking. It is possible to spend anything from a few thousand to several millions of pounds on any combination of mobile hardware, software and networks without realizing many real benefits. With falling prices of mobile technology one may perceive that mobile working is cheap to implement. However, it is important to remember that technology costs are only a small proportion of the likely total costs. As a rule of thumb, these costs account for 30% of a typical mobile project, with the remaining 70% including items such as training, maintenance, security,

management and integration (Flood date?).This implies that the real cost of mobile working could be much greater than promised savings.

Organizatinal Changes: To offer mobile banking many organizations will need to change their business processes, ways in which information is provided and accessed, working practices and work relationships, working styles and most important of all, changes in roles, responsibilities and management structures. It may be a manageable task in some organizations but a very difficult one in others'.

Technology Overload: The proliferation of personal information devices such as home computers, mobile phones and digital organizers, coupled with the rise of new media such as e-mail and the World Wide Web, have forever altered the way in which information consumers work and play. These fragmented information channels often result in inefficient working patterns as users switch from device to device and between different media which may result in mobile savvy customers unable to use their devices for day to day tasks such as e banking.

Methods To Overcome Major Issuse To Upthrust Mbanking In India

Educating Customers By Banks: Steps need to be taken by bank to educate their customers with usage and benefits of m-banking, access should be provided from opening of new account to every transactions.

Educating Customers Through Media: Steps should be taken through source of media so that one can get the knowledge of advantages and usage .

Free Demo/Trial Classes: Demo Classes can be provided by banks time to time to refresh the knowledge of existing users and new ones.

Feasebility In Language: Feasibility needs to be provided in language of usage of m banking so that everyone can access the same in their own comfortable language.

Providing Subsidies / Discounts In M Banking: Special discounts/offers can be provided so that more and more users start accessing m banking and get to know the benefits.

Conclusion: It is well recognized that mobile phones have immense potential of conducting financial transactions thus leading the financial growth with lot of convenience and much reduced cost. For inclusive growth, the benefits of mobile banking should reach to the common man at the remotest locations in the country. For this all stakeholders, mobile device manufactures need to make efforts so that penetration of mobile banking reaches from high-end to low-end usersand from metros to the middle towns and rural areas. Inclusion of non-banking population in financial main stream will benefit all. There is also need to generate awareness about the mobile banking so that more and more people use it for their benefit.

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Asstt Prof, Department of Computer Science
DAV COLLEGE, BATHINDA
E mail –ersanjeevpuri@yahoo.com