Performance Analysis of consumers in context of e-Transaction and e-Banking

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ABSTRACT

The foremost banks in India are increasingly providing services through electronic channels such as ATMs, internet banking, Tele-banking and mobile banking. The work is an attempt to study the consumer awareness on mobile banking & perception about the same. A survey is conducted among the consumers who are residing in Rohtak. The study shows that consumers are aware about mobile banking service provided by their bank. Consumers are familiar about various banking transactions that can be done with the help of mobile banking. Consumers think that mobile banking is easy to use; it is very useful for them as it will give them flexibility to do transactions irrespective the time of day. Consumers think that major benefit of mobile banking is ‘Anywhere anytime banking’.

Keywords: Electronic channels, Mobile Banking, consumers.

INTRODUCTION

The world is changing at a staggering rate and technology is considered to be the key driver for these changes around us. An analysis of technology and its uses show that it has permeated in almost every aspect of our life. Many activities are handled electronically due to the acceptance of information technology at home as well as at workplace. Slowly but steadily, the Indian customer is moving towards new banking services like internet banking & mobile banking. Mobile banking is a generic term for the delivery of banking services through mobile phones, personal digital assistant (PDA). It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably. Mobile phones as a delivery channel for extending banking services have off-late been attaining greater significance. With the rapid growth in the number of mobile phone subscribers in India (about 950 million as at the end of February 2013 and growing at about 8 million a month) mobile banking has a lot of potential. Most of the banks have started offering information based services like balance enquiry, stop payment instruction of cheques, transactions enquiry, and location of the nearest ATM/branch etc. Acceptance of transfer of funds instruction for credit to beneficiaries of same/or another bank in favor of preregistered beneficiaries have also commenced in a few banks. In order to ensure a level playing field and considering that the technology is relatively new.

E-BANKING

E-Banking is electronic banking which underlies not only the determinants of the banking business but also the special conditions of mobile commerce. Mobile Banking has been gaining increasing popularity amongst various sections of the society for past few years, having recovered from the shock of the dot-com burst. Mobile Banking refers to provision and availment of banking- and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities Customer’s Adoption of Mobile-Commerce. With mobile technology, banks can offer services to their customers such as doing funds transfer while travelling, receiving online updates of stock price or even performing stock trading while being stuck in traffic. Smart phones and 3G connectivity provide some capabilities that older text message-only phones do not. The convergence of mobile communications and distributed networked computing has provided the foundation for the development of a new channel of electronic business, mobile business. Mobile business (m-business) is defined as the use of the mobile information technologies, including the wireless Internet, for organizational communication and coordination, and the management of the firm.

M-Banking is a term used for performing balance checks, account transactions, payments, credit applications etc. via a mobile device such as a mobile phone or Personal Digital Assistant (PDA). It is the convenient, simple, secure, anytime and anywhere banking. Many new e-commerce applications will be possible and significantly benefit from emerging wireless
and mobile networks. These applications can collectively be termed wireless e-commerce or mobile commerce. The earliest mobile banking services were offered via SMS. With the introduction of the first primitive smart phones with WAP (wireless application protocol) 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. SMS Banking is a Mobile technology that allows you to request and receive banking information from your bank on your mobile phone via SMS. WAP banking is another form of the E-banking that enables the user to communicate interactively with the bank, for which client uses only GSM mobile phone with WAP service. With its options and the method of controlling WAP banking reminds an easy form of Internet banking. WAP is a universal standard for bringing Internet-based content and advanced value-added services to wireless devices such as phones and PDAs.

Mobile Banking Term Meaning

Mobile banking (also known as M Banking, m-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. Mobile Banking refers to provision and availing 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 the conceptual model of Mobile Banking can be said to consist of three inter-related concepts:

- Mobile Accounting
- Mobile Brokerage
- Mobile Financial Information

Mobile Banking Services

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

1. A/c Balance Enquiry
3. Cheque Status Enquiry.
5. Fund Transfer between Accounts.
6. Credit/Debit Alerts.
8. Bill Payment Alerts.
10. Recent Transaction History
11. Information Requests like Interest Rates/Exchange Rates.

LITERATURE ANALYSIS

Following the boom of new technologies such as the internet and mobile phones in practice, e-banking has also been the focus of numerous academic papers Adoption, perception and usage of internet banking by consumers is one of the topics heavily examined in e-banking literature. Centeno (2004) argues that speed, the convenience of remote access, 7/24 availability and price incentives are the main motivation factors for the consumers to use internet banking. Durkin, et. al. (2008) notes that the simplicity of the products offered via internet banking facilitates the adoption of internet banking by consumers. Calisir and Gumussoy (2008) compare the consumer perception of internet banking and other banking channels and report that internet banking, ATM and phone banking substitute each other. Maenpaa et.al. (2008) examine the consumer perceptions of internet banking in Finland and their findings indicate that familiarity has a moderating role in the perception. Guerrero, et.al. (2007) examine the usage of internet banking by Europeans and their results indicate that ownership of diverse financial products and services, attitude towards finances and trust in the internet as a banking channel influence clients’ usage of internet banking.
Confirming other papers, Sohail and Shanmugham (2003) document accessibility of internet, awareness of e-banking and resistance to change are found to be influencing Malaysians’ use of internet banking. Another factor that promotes clients’ usage of internet banking is seller support (Nilsson, 2007). Perceived risk was one of the major factors affecting consumer adoption, as well as customer satisfaction of online banking services (Polatoglu and Ekin, 2001). Perceived risk usually arises from uncertainty. To Howcroft, et. al., (2002) the principal characteristics that inhibit online banking adoption are security and privacy. In Malaysia it was found that security was main barrier to e-commerce expansion. Security is perhaps the most feared problem on the internet. Banks and customers take a very high risk by dealing electronically (Mukti, 2000; Chung and Paynter, 2002). It is noted that although consumer’s confidence in their bank was strong, yet their confidence in the technology was weak (Roboff and Charles, 1998). Today’s consumers are increasingly more concerned about security and privacy issues (Howcroft et al., 2002).

Potential customers mentioned Internet security, online banking regulations, consumers’ privacy, and banks reputation as the most important future challenges of online banking adoption. (Aladwani, 2001). Indeed, in Aladwani (2001) study of online banking, potential customers ranked internet security and customers’ privacy as the most important future challenges that banks are facing. Perceived usefulness, perceived Web security has a strong and direct effect on acceptance of internet banking, too. A high level of perceived risk is considered to be a barrier to propagation of new innovations (Ostlund, 1974). Influenced by the imagination-capturing stories of hackers, customers may fear that an unauthorized party will gain access to their online account and serious financial implications will follow. The survey by White and Nteli (2004) found that UK consumers ranked the security of banks website as the most important attribute of internet banking service quality.

This widespread anxiety is vividly illustrated by the results of Sathye (1999), who reported that three-quarters of Australian respondents expressed security concerns with regard to electronic banking. Overall, the literature appears to be unequivocal in its finding that the level of perceived risk is negatively related to the attitude towards banking on the World Wide Web (Black et al., 2001; Rotchanakitumnuai and Spence, 2003; Singh, 2004; Lee et al., 2005 and Gerrard et al., 2006). For this reason, this study uses perceived security as a predictor of customer acceptance. A majority of studies highlight the fact that “security” is the biggest single concern for customers when faced with the decision to use internet banking. Security has always been an issue, but its scope has changed from mere doubts about the privacy of personal information to worries of financial loss (Sayar and Wolfe, 2007). White and Nteli (2004) find that “security” is the most important attribute for UK internet banking.

CONSUMER ATTITUDE TOWARDS MOBILE BANKING

Technological innovations are having significant importance in human general and professional life. This era can safely be attributed as technology revolution. The quick expansion of information technology has imbibed into the lives of millions of people. Rapid technology advancements have introduced major changes in the worldwide economic and business atmosphere. Research on consumer attitude and adoption of mobile banking showed there are several factors predetermining the consumer’s attitude towards online banking such as person’s demography, motivation and behavior towards different banking technologies and individual acceptance of new technology. It has been found that consumer’s attitudes toward online banking are influenced by the prior experience of computer and new technology. The adoption of electronic banking forces consumers to consider concerns about password integrity, privacy, data encryption, hacking, and the protection of personal information.

Electronic banking requires perhaps the most consumer involvement, as it requires the consumer to maintain and regularly interact with additional technology (a computer and an Internet connection). Consumers who use e-banking use it on an ongoing basis and need to acquire a certain comfort level with the technology to keep using it. Customer adoption is a recognized dilemma for the strategic plans of financial institutions. Several studies have investigated why individuals choose a specific bank. Important consumer selection factors include convenience, service facilities, reputation and interest rates. According to [6], customers have less time to spend on activities such as visiting a bank and therefore want a higher degree of convenience and accessibility. The service-quality attributes that the Internet banks must offer to induce consumers to switch to online transactions and keep using them are perceived usefulness, ease of use, reliability, responsiveness, security, and continuous improvement. In another study by [8], they found that individual expectations regarding accuracy, security, network speed, user-friendliness, and user involvement and convenience were the most important quality attributes in the perceived usefulness of Internet-based e-retail banking.

The crucial factors that affect an individual’s decision to use or not to use online services the individual’s age, the difficulties of using the Internet, the fear of changes in the banking sector due to technological development and the lack of information concerning products and services provided to customers through electronic delivery channels. Factors such as the speed of transactions or the cost of using the Internet have little impact on an individual’s final decision [9]. In the study...
by [1], revealed six composite dimensions of electronic service quality, including the provision of convenient/accurate electronic banking operations; the accessibility and reliability of service provision; good queue management; service personalization; the provision of friendly and responsive customer service; and the provision of targeted customer service. Perceived usefulness, security and privacy are the main perusing factors to accept online banking system [9]. According to a study by WAP, GPRS and 3G features from mobile devices are of no significance or influence in the adoption of e-banking services [3].

RESEARCH MODEL AND HYPOTHESES

Perceived usefulness and perceived ease of use are the two components of Technology Acceptance Model (TAM). According to [3], “perceived usefulness is the extent to which a person believes that using a particular system will enhance his or her performance, while perceived ease of use is the extent to which a person believes that using a particular system will be free of effort”. TAM has been widely used by information system researcher; there is a common agreement among them that the model is valid in predicting the individual’s acceptance of new technologies. Perceived usefulness and perceived ease of use is significant factors affecting acceptance of an information system or new technologies. Prior research has empirically found positive relationship between perceived ease of use and perceived usefulness as critical factors on the use of e-banking. Hence an application perceived to be useful perceived to be easier to use than another is more likely to be accepted by users. By applying these into online banking context we hypothesize:

**H1:** Perceived usefulness has a positive effect on intention to adopt and use MB.

**H2:** Perceived ease of use has a positive effect on intention to adopt and use MB. Adoption is the acceptance and continued use of a product, service or idea.

According to [4], consumers go through “a process of knowledge, persuasion, decision and confirmation” before they are ready to adopt a product or service. The adoption or rejection of an innovation begins when “the consumer becomes aware of the product”. Consumers will seek out services which offer the best value for money. Hence, for adoption of mobile banking, it is necessary that the banks offering this service make the consumers aware about the availability of such a product and explain how it adds value relative to other products of its own or that of the competitors. An important characteristic for any adoption of innovative service or product is creating awareness among the consumers about the service/product. The amount of information consumers have about online banking has been identified as a major factor impacting the adoption. According to [4], while the use of online banking services is fairly new experience to many people, low awareness of online banking is a major factor in causing people not to adopt online banking. In an empirical study of Australian consumers found that consumers were unaware about the possibilities, advantages/disadvantages involved with online banking. Hence, we posit that: H3: Awareness about MB has a positive effect on intention to adopt and use MB. Perceptions of risk are a powerful explanatory factor in consumer behavior as individuals appear to be more motivated to avoid mistakes than to maximize purchasing benefits [2].

The construct Perceived Risk reflects an individual’s subjective belief about the possible negative consequences of some type of planned action or behavior, due to inherent uncertainty. The Perceived Risk associated with online transactions may reduce perceptions of behavioral and environmental control, and this lack of control is likely to negatively influence e-commerce usage intentions. Similar is with m-commerce applications. Diffusion of innovation literature is often silent on perceived risk as a factor influencing the diffusion of an innovation, despite adoption behavior often being a process of dealing with the uncertainty about incorporating an innovation into ongoing practice. Services are inherently more risky than products and that the major reason for this is the higher levels of uncertainty which are associated with services. Polatoglu and Ekin also found that perceived risk was one of the major factors affecting consumer adoption, as well as customer satisfaction of mobile banking services.

Perceived risk usually arises from uncertainty. Hence we hypothesize:

**H4:** Perceived risks have a negative impact on intention to adopt and use MB. Subjective norm is the perceived social pressure to engage or not to engage in a behavior. Subjective norm is determined by the total set of accessible normative beliefs concerning the expectations of important referents. It is the person’s perception that most people who are important to him think he should or should not perform the behavior in question. Individual often respond to social normative influences to establish a favorable image within a reference group. Moore and Benbasant define image as the degree to which use of an innovation is perceived to enhance one’s status in social system.

**H5:** Subjective norm has a positive effect on intention to adopt and use MB.
The key intention of this paper is to evaluate those factors that manipulate the nature of customers towards mobile banking and their growing tendency towards the online financial institutions. A survey instrument in the form of questionnaire was developed through data collected from previous studies on acceptance of mobile banking. We constructed several questions in the questionnaire based on the objectives of the research. SPSS 12 package was used for analysis. Likert scale is used in order to identify the respondents’ perceptions towards mobile banking adoption. During the interviews we sought general information from the managers about mobile banking and asked them to discuss the reasons for undertaking mobile banking and to highlight mobile banking development challenges. We also asked them to discuss the issues relevant to the future of the initiative. The questionnaires were based on customers’ intention to adopt mobile banking.

CONCLUSION

The result of this study shows that perceived usefulness, perceived ease of use, subjective norm, consumer awareness and perceived risk are the important determinants of mobile banking adoption. This study meets the desired objective; but it suffers from one setback. Study concludes that majority of customers are accepting online banking because of many favorable factors. Analysis concluded that usefulness, ease of use, subjective norm, awareness and risks related to it are the main perusing factors to accept online banking system. These factors have a strong and positive effect on customers to accept mobile banking system. The relatively small size of the sample limits generalization of the outcome of the study. The study is concentrated on a particular location and hence the result may vary with location and the demography of the people. Similar study can be conducted in other colleges and universities and results can be compared.

REFERENCES
