

PERCEPTION ON E-BANKING SERVICES – A THEORETICAL REVIEW

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ABSTRACT

The different kinds of technological Innovation along with the information technology had made a paradigm shift in the Banking Sector. E-Banking encompasses Internet banking, ATM banking, Mobile banking, Television based banking, PC banking and online banking. Research studies pertaining to Internet banking in India is very less compared to foreign countries. Internet Banking services does not only offer competitive advantage to bankers but has become the competitive necessity to sustain in the industry. Mobile banking is a system wherein the customers are allowed to do financial transactions through a device called Mobile or Personal digital assistant. Of late, mobile banking services are easily accessible to everyone irrespective of their income groups. Again there has been a growing interest among banks and financial institutions in encouraging bank customers to use automatic teller machines (ATMs). This paper is a modest attempt to bring to light the research gaps in the field of internet banking, ATM banking services and Mobile banking. The research gaps are identified based on the reviews collected in these areas.

Keywords: e-banking services – Internet Banking, ATM banking, Mobile banking, users - non users, Perception.

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INTRODUCTION

The different kinds of technological Innovation along with the information technology had made a paradigm shift in the Banking Sector. E-Banking encompasses Internet banking, ATM banking, Mobile banking, Television based banking, PC banking and online banking. Research studies pertaining to Internet banking in India is very less compared to foreign countries. Internet Banking services does not only offer competitive advantage to bankers but has become the competitive necessity to sustain in the industry. Mobile banking is a system wherein the customers are allowed to do financial transactions through a device called Mobile or Personal digital assistant. Of late, mobile banking services are easily accessible to everyone irrespective of their income groups. Again there has been a growing interest among banks and financial institutions in encouraging bank customers to use automatic teller machines (ATMs). This paper is a modest attempt to bring to light the research gaps in the field of internet banking, ATM banking services and Mobile banking. The research gaps are identified based on the reviews collected in these areas.

INTERNET BANKING

INTRODUCTION

Internet Banking services does not only offer competitive advantage to bankers but has become the competitive necessity to sustain in the industry (Jane M. Kolodinsky (2004). There are many factors which influence the perceptions towards usage of internet banking services namely demographic factors, psychographic factors etc., Several research studies pertaining to internet banking services had been made in different countries across the globe like Finland, Australia, Mexico, Sweden, Hongkong, Thailand, Pakistan, etc.. Research studies pertaining to Internet banking in India is very less compared to the foreign countries

FACTORS/ INFLUENCING ADOPTION OF INTERNET BANKING: PERCEPTION

Relative advantage and complexity of the technology had a strong influence in the adoption of internet banking among 1831 Ethiopian bank customers. (Eriksson.K, et al., (1983) .In a exploratory research conducted in Singapore, Tan.M and Thompson S.H.Teo (2000) found that attitudinal(perception) and perceived behavioural control factors were significant than subjective norms (social influence) in the adoption of internet banking services among customers. In a study conducted in Taiwan, it was found from 164 respondents that brand credibility influence the customer adoption of online banking (Wang J.S and Pho.T.S(2009) . Baraghani, S.N (2008) had also found that belief and trust in internet banking were the most important influencing factors to adoption of Internet banking.

Studies have shown that major respondents are only bank customers for analyzing the factors or perception on internet banking services. But Al-Hajri.S and Tatnall.A (2007) had made a comparative study of inhibitors and enablers of Internet Banking among Managers of banks in Oman and Australia. Semi Structured Interview was conducted among 27 bank managers from nine major banks in both the countries, 5 from Oman and 4 from Australia. The study revealed that that four main factors namely Relative Advantage, Organisational Performance, Customer Relationship and Ease of use affects the decision to adopt internet banking.

Similarly students were taken as major respondents in developing a conceptual framework to explain the various factors influencing internet banking among the Undergraduate students in Malaysia. The researcher had developed a modified version of Technology Acceptance Model (TAM). He had analyzed four factors namely perceived usefulness (PU) and Perceived ease of use (PEOU), Perceived Credibility (PC) and Computer Self Efficacy (CSE) leading to Behavioral intention to use Internet Banking. Convenience Sampling was followed to survey 250 students. The results of Multiple Regression Analysis indicate PU, PEOU and PC are significantly associated with behavioral intention to adopt internet banking, Amin.H, (2007).

PREDICTORS OF INTERNET BANKING:

Ramayah.T et al., (2003) of Malaysia through 180 respondents that compared to perceived ease of use(PEU), perceived usefulness(PU), prior experience and external pressure have significant

influence on the adoption of internet banking. Yet in another study done in Hongkong it was found that perceived ease of use (PEU) was the only determinant of user acceptance of Internet Banking (Chau, P.Y.K et al., (2003)). Tat, H.H et al., (2008) of Malaysia had studied the predictors of intention among 204 users of internet banking and the results showed that trust followed by perceived compatibility and perceived ease of use were the strongest predictor of intention to continue use of Internet Banking. Similar study had been done in India using a sample of 300 respondents based on 3 main factors, perceived usefulness, perceived ease of use and perceived risk on use of internet banking. was used for data analysis.

In a study conducted in Taiwan, 368 users were surveyed online, out of which 58% were male respondents and 42% were female respondents. 69% of the users have not used Internet Banking. It was found through Regression Analysis that the perceived benefit, attitude and perceived usefulness positively influenced the customers but customers are negatively influenced by security/privacy risk and financial risk (Ming-Chi-Lee (2009)). Similar study was undertaken in UK by Yousafzai, S et al., (2009) who had developed a multi-dimensional model of trust comprising of perceived trust worthiness, perceived security and perceived privacy for Internet Banking. A sample of 441 users of Halifax Bank of Scotland was chosen for the study. The results of Mann-Whitney U and Wilcoxon W test showed that trust and perceived risk were the direct antecedents of intention to use Internet Banking.

RISK PERCEPTION

Few Studies have focused on the risk perception among different categories of customers especially the users and non-users. One such study done in Turkey found from 350 users that users of Internet Banking perceive high social risk and high security risk perceptions whereas non-users of internet banking perceive financial risk, psychological risk and security risk perception which is very much higher compared to internet banking users. Demirdogen, O et al., (2010). Similar study had been in conducted in Kerala, which revealed that variables pertaining to different risk dimensions vary with different categories of customers through 120 respondents, which was analysed through Turkey post hoc Analysis and one-way anova (George.A and

Kumar, G.S.G (2012). Another study supported that risk characteristic in internet banking had influenced the adoption of internet banking (Suki, N.M (2010).

INTERNET BANKING – USERS VS NON USERS:

Many research studies explored the difference between users and non-users and the factors influencing their perception towards internet banking. In general, the following studies shows that lack of security, privacy is the major factors hindering the non-users from using internet banking. From a study conducted in Finland with 1167 consumers revealed that 84.4 percent of the respondents considered Internet banking very secure, but lack of security was the major concern among the non-users . Mattila, M. (2002). Similarly Ramayah.T (2006) of Penang found from 180 bank customers that factors like ease of use, awareness of the benefits of Internet banking services influenced users of Internet banking users and the privacy and security issues were a major concern to the non-users of internet banking services. Padachi, K. et al., (2007) of Mauritius also found that there was significant relationship between different variables awareness, access to internet facility, length of banking relationship, education level income group and the usage of internet banking. In a study conducted in Pakistan, it was found from 100 respondents that reliability, convenience, speed, safety, and security help to retain the users and attract the non-users of internet banking.(Omar, A.B et al., Sultan, (2011) . More than 50% of the users considered internet banking more convenient and flexible compared to the non-users of internet banking from (Singhal.D and Padmanabhan.V (2008) .

Nasri.W (2011) of Tunisia has analyzed the factors influencing the adoption of Internet banking services. A sample of 253 respondents were chosen, out of which 95 respondents were users of internet banking and 158 respondents were non-users of internet banking. Regression Analysis was used for the studying the relationship among various factors. It was found that factors like convenience, risk, security and prior internet knowledge were strongly influencing the adoption of internet banking among customers and Mansumitrchai.S. and AL-Malkawi H.N(2011) of Mexico had also focused on the same objective and tested a sample of 395 respondents and results of ANOVA test found of these eight factors analyzed, the results show that there is significant difference on adoption of internet banking between adopters and non-adopters on

four factors (difficulty, trust, compatibility and human contact). It was also found that users of internet banking are concerned with 3 issues namely trust, third-party concerns, and security. Akhlaq, M.A., Shah, A. (2011) of Pakistan had created a research model which analysed the acceptance and barriers in the adoption of internet banking in Pakistan. The data was collected by distributing questionnaires in two banks, the Hong Kong Shanghai Bank Corporation (HSBC) Pakistan and the Allied Bank Limited (ABL) of Pakistan customers and to the business professionals. A survey sample of 45 was taken and was analysed using the Chi-square tests. It was found from the survey that security and privacy issues hinder the non-users in adopting internet banking and the users are very comfortable using the Internet banking services.

SERVICE QUALITY

There were studies which focused on perception of service quality of internet banking, one such study was done with 150 respondents comprising of both user and non-user were chosen in Malaysia for data collection. It was found that the non-users fear slow process of download, and service failures that might happen, which will likely lead to frustration and Ease of use is one of the major factors having positive impact on the usage of internet banking. (Raman, M., et al., (2008)). Similar study was done on perception of service quality which examined the perception of service quality in the retail banking sector, The study analysed five factors namely, Service, Tangibles, Reliability, Time duration and growth. 304 responses were taken for analysis through Anova. The results showed that factors like age, gender, occupation had no significant impact on the customer perception towards service quality except time duration. (Kumari, H.V., & Rani, S.S. (2011)).

BANKING CHANNELS

Some studies were related to preference of customers in selecting their banking channels. One such study done by Srivatsa. H.S and Srinivasan.R (2007) has studied the psychographic attributes that influences the selection of banking channel among customers. The study covered 4 regions in Karnataka namely Bangalore, Mysore, Hubli and Dharwad with a sample of 537

respondents. Percentage Analysis was done based on demographic variables like age, gender, salary range pertaining to all four regions. The study has revealed that customers prefer branch banking and not ready to change their mindset towards internet banking. channel convenience, channel control and channel security plays an important role in the banking channel selection. Tele-banking was not popular as it was perceived to be unsafe and inconvenient channel. In another study which had investigated the factors affecting the acceptance of internet banking in Indian market. They had developed a conceptual model for the study. A study sample of 200 responses was taken and the data analysis was done using Multiple Regression and t test. It was revealed from the study that 50% of the respondents preferred branch banking, 9% preferred telephone banking, internet banking users as 62.5%, and remaining 3% for other banking services. (Y.Sofri, Harashid, R.Thakur (2009)).

MAJOR ISSUES:

Rotchanakitumnuai.S and Speece.M (2004) of Thailand, examined the benefits and barriers which influenced the adoption of internet banking among 195 Corporate customers and found that perception of accessibility does not influence adoption of Internet Banking. Information sharing benefit was found to be a great barrier in the perception of corporate customers. Similar study pertaining to barriers in adoption of internet banking, was done in Pakistan which found that lack of trust is one the major issues including problem of security, low reliability of transaction, and distrust of service provider (Khan.S (2009)).

MEASURES:

The following studies had made an attempt to discuss the measures that could be taken to influence the adoption of internet banking services. Srivastava, R.K (2007) in his conceptual model relating to usage of internet banking had examined the acceptance of internet banking among Indian customer and how it was perceived by the customers. A sample of 500 respondents was selected for data collection which was analysed through percentage Analysis was carried out based on various parameters. He concluded that the customer perceptions can be

changed by awareness program, friendly usage, less service charges, proper security and also found that the Traditional banking customers can be converted into potential customers through intensive awareness program by the banks. It was found in a research done in U.K that acceptance of internet banking can be increased by providing reliable service and building trust in internet banking services collecting data from 441 respondents. A study conducted in Ireland by Loonam.M, Loughlin, D.O' (2008) revealed that online marketing campaigns along with website responsiveness would evoke more positive response among customers towards e-service quality of internet banking. Redlinghuis.A and Renleigh.C (2010) of South Africa was quantitative research which had examined the perception of customers on internet banking information protection using 138 respondents. Percentage analysis was done for different features of internet banking. The study results showed that education and awareness are two main areas which the bank should focus on. In one of the study, selected retail banks and studied 250 respondents which revealed that bank has to adopt proactive and creative approach like education to bank customers on internet banking and friendly customer service which help to improve customer confidence and lead to overall satisfaction level among customers (Ankit.S (2011). It was found through Chi-square test and correlation test that increased familiarity by advertisement and long term customer service help in retaining the bank customers (Safeena, R et al., (2011).

MOBILE BANKING SERVICES

INTRODUCTION

Mobile banking is a system wherein the customers are allowed to do financial transactions through a device called Mobile or Personal digital assistant. Of late, mobile banking services are easily accessible to everyone irrespective of their income groups. Usage of mobile banking services offers relative advantage and compatibility of services influenced the adoption of mobile banking services. This was an outcome of a study conducted by Mattila.M (2003) in Finland. The researcher had developed a model for consumer behavior patterns and analysed the various

factors influencing the usage of mobile banking. The data was collected from 1253 survey respondents through postal survey.

Consumer awareness to a great extent influences the adoption of mobile banking services. Zarpou.T, et al., (2010) of Greece had developed a conceptual framework comprising of four factors comprising of perceived ease of use, perceived usefulness, innovativeness and trust that influences the adoption of mobile banking among customers. A study sample 445 consumers were taken and data analysis was done using regression analysis. It was found that except trust the remaining factors mentioned above have significant influence on the adoption of mobile banking. In common, perceived usefulness, and perceived ease of use have significant influence in the mobile banking adoption among customers. A similar study was investigated by Safeena.R, et al., (2011) in Saudi. They had investigated five factors consisting of perceived usefulness, perceived ease of use, subjective norm, consumer awareness about mobile banking and perceived risks associated with mobile banking. Convenience sampling method was used to collect information from a sample of 53 respondents. The study revealed that factors like perceived usefulness, perceived ease of use, subjective norm, consumer awareness had a positive impact on usage of mobile banking except perceived risk which has negative impact on usage of mobile banking.

USERS AND NON USERS

Cost of availing the mobile banking services was considered as important criteria to adopting the mobile banking. A research study conducted in Bangladesh, which revealed that mobile banking saves both time and cost compared to traditional banking found from 120 respondents. Ahmed, S.M.S et al., (2011). On the contrary, Gilannia.S et al.,(2012) had found that non-users feel that the cost of these services are higher than traditional banking. They had examined the various factors influencing the usage of mobile banking among customers. The research was conducted in Iran. About 650 bank customers were chosen for the study in Guilan province. The study confirmed that there was relationship between perceived usefulness and positive attitude towards adoption of mobile banking. Similar study was done using 100 was taken from various respondents comprising of both users and non-users of mobile banking. Percentage analysis was

done which showed perceived risk has a negative impact in the adoption of mobile banking in India (Archana Sharma (2011))

URBAN AND RURAL CUSTOMERS

Sharma,A et al.,(2011) focused on the various issues pertaining to mobile banking from Urban customer perspective and had also made a comparative study on the perceived utility of Mobile banking with retail and online banking among both users and non-users of mobile banking. 50 users and 50 non-users of mobile banking were chosen to collect the data and the analysis revealed that mobile handset operability, security, privacy and standardisation were the critical issues faced by non-users. The findings showed that customers were indifferent to the benefits of mobile banking as compared to online banking. On the other hand, Rajpara.Y.R & Mistry, K (2012) had studied the usage of mobile banking among the rural consumers. Primary data was collected through survey undertaken in 9 states representing different regions of India: Gujarat, Maharashtra, Madhya Pradesh, Rajasthan, Karnataka, Andhra Pradesh, Kerala, Uttar Pradesh, and West Bengal. From each state 25 respondents from rural area were chosen to collect data. 33% of respondents are Female and 67% Male. Security in the usage of mobile banking was the main concern to customers. It was also found that was lack of awareness among rural customers was the main hurdle in using the mobile banking.

CHALLENGES

Sadi,A.H.M.S et al.,(2010) had examined the adoption of Mobile banking to assess the prospects of M-banking in Oman. A sample of 196 respondents were taken for the study and the results showed that though the Omani banks offer e-banking services, Mobile banking services were not popular, when compared to other forms of e-banking services.

Adoption of mobile banking services face lot of challenges among customers. This was examined by Thulani,D. et al., (2011) in Zimbabwe 80% of data was collected from the bank and marketing staffs of banks and remaining 20% from the customers. The analysis was done showed that mobile banking was still in the infancy stage and factors like accessibility and

affordability were the major drivers in the adoption of SMS banking among customers. Similarly Bamoriya.P.S and Singh.P (2012) had focused on barriers in adoption of mobile banking and various factors influencing the adoption of mobile banking among customers. The data collected from 100 customers were analyzed to find out whether security was the major concern among customers in adopting the mobile banking services. It was found that providing security for mobile banking and familiarizing customers with usage of mobile banking services would augment the mobile banking usage among customers.

AUTOMATIC TELLER MACHINE (ATM) BANKING SERVICES

There has been a growing interest among banks and financial institutions in encouraging bank customers to use automatic teller machines (ATMs). Khan.M.A (2010) of Pakistan had examined the service quality of ATM services and satisfaction of customers by choosing a study sample of 500 which was analysed using correlation and regression. The study results revealed that there is a significant relationship between ATM service quality and satisfaction of customers. A research study in India, was conducted to analyse the relationship between demographic variables and the level of satisfaction and attitude among customers towards usage of ATM services with a sample of 200 respondents who were taken from various ATM customers of different banks in Vellore district, Percentage analysis and chi square tests were employed for the study which showed the relationship between the various demographic variables and satisfaction level and concluded that overall satisfaction of customers of ATM services was good (Premalatha,J.R., Sundaram,N 2012). A similar study was also made to investigate the customer satisfaction towards ATM services of public and private sector banks in India. A study sample of 150 respondents was chosen for the study. Mann-Whitney U and Wilcoxon W and t test analysis showed that customers were satisfied with the ATM services of private sector banks compared to public sector banks. Cost effectiveness, efficiency, security and responsiveness, problem handling and compensation and contact service related to ATM service were not satisfactory in both public and private sector banks (Kumbhar, V.M.(2012). Similar study was done by collecting data from 210 respondents using schedule and data was collected March to November 2010. Results of Regression analysis and Correlation showed that cost effectiveness, easy to use and security and

responsiveness in ATM service were key factors influencing the satisfaction of customers. (Kumbhar, Vijay (2011).

ISSUES IN ATM BANKING

Few studies were conducted to examine the issues associated with ATM banking. One such study was conducted by Larkotey, W.O et al., in Africa on the attitudes of customer usage of ATM services and issues of ATM services. A sample of 186 was chosen for the study. Analysis revealed that though the customers were satisfied with the services of ATM, certain issues relating to technical problems associated with ATM working creates negative attitude towards use of ATM services. Similarly, one more study can also be added to the existing study pertaining to issues in ATM Services which was done in Pakistan, which found using 100 respondents, that security, safety and lack of trust were issues which were of major concern to the customers. (Abdullah Bin Omar, et al., (2011).

DIRECTIONS FOR FUTURE RESEARCH:

It is very apparent that flurry of studies were conducted on Internet Banking pertaining to adoption, perception, acceptance, and usage of internet banking by customers at the International level. But there is dearth of studies pertaining to Internet banking services in India. It is concluded from the review of literature examined, that the major inhibitors to the internet banking adoption are consumers security and risk factor associated with the usage which could be mitigated by launching intensive awareness program and effective grievance/problem redressal mechanism in banks. The scope for future study in this area can be extended by taking up studies based on influence of psychographic variables on adoption of internet banking and in addition awareness of cybercrime in internet banking can be undertaken for future research.

Barriers exist for any type of emerging technology, especially towards adoption of mobile banking technology with respect to mobile handset operability, security/privacy in dealing with mobile banking are the major issues confronting the users and non-users of mobile banking services. Extensive study can be taken up in future relating to the adoptors and non-adoptors of mobile banking.

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