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Acceptance of E-banking among Adult Customers: An Empirical Investigation in India

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Abstract

Internet banking is a form of self service technology. The numbers of Internet users have increased dramatically, but most of them are reluctant to provide sensitive personal information to websites because they do not trust e-commerce security. This paper investigates the factors which are affecting the acceptance of e-banking services among adult customers and also indicates level of concern regarding security and privacy issues in Indian context. Primary data was collected from 200 respondents, above the age of 35, through a structured questionnaire. Statistical analysis, descriptive statistics was used to explain demographic profile of respondents and also Factor and Regression analyses were used to know trend of internet use and factors affecting e-banking

services among adult customer in India. The finding depicts many factors like security & privacy, trust, innovativeness, familiarity, awareness level increase the acceptance of e-banking services among Indian customers. The finding shows that in spite of their security and privacy concern, adult customers are willing to adopt online banking if banks provide him necessary guidance. Based on the results of current study, Bank's managers would segment the market on the basis of age group and take their opinion and will provide them necessary guidance regarding use of online banking.

Keywords: **Customer perception, Adult customers, E-banking, Security & Privacy.**

INTRODUCTION

In the world of banking, the development of information technology has an enormous effect on development of more flexible payments methods and more-user friendly banking services. Internet banking involves, consumer using the Internet to access their bank account and to undertake banking transactions. At the basic level, Internet banking can mean the setting up of a web page by a bank to give information about its products and services. At an advanced level, it involves provision of facilities such as accessing accounts, transferring funds, and buying financial products or services online. This is called "transactional" online banking (Sathye, 1999). In spite of the great benefits of the online banking, it is extremely essential that banks regard the risks associated with it. One significant step that banks must take before going through any transformation is to insure the proper handling of online banking risk (Al-Alawi, 2005). But it is very difficult for both the customers and the banks to determine the best approach to use of online banking. A particular risk arises with trying to integrate new channels with existing channels (Aljlfri et. al., 2003). In India, slowly but steadily, the Indian customer is moving towards Internet banking. But they are very concern about security and privacy of internet banking (Malhotra and Singh, 2009). In the Internet banking trust plays a very important role. It is very difficult to analyze trust as a phenomenon and may be almost impossible to analyze trust in the context of electronic commerce because of the complexity and risk of electronic commerce. Trust will be the decisive factor for success or failure of e-businesses. Karake Shalhoub (2002a and 2006b) has studied a number of US-based pure play firms to determine what she labeled trust enhancers. Her findings identified two main categories: privacy and security as the main determinants of trust in electronic commerce. Privacy has long been defined as the right of a person to be left alone and to be able to have control over the flow and disclosure of information about him or herself (Warren and Brandeis, 1890). Worries about privacy are not new, although businesses have gathered information about their customers for years. However, privacy issues often come about because of new information technologies that have improved the collection, storage, use, and sharing of personal information.

This study focuses only on adult customer acceptance of online banking. Now there are number of study has been done. But there seems to be no clear definition for the adult consumer. Some of the earliest studies in the field considered 35-plus customers are adult (Al-Alawi, 2005) and some 50-plus segment of the population as "adult" market

(Bartos, 1980). Conaway (1994) states that the adult market is the group of consumers over the age of 50, but sometimes grouped as those over the age of 55. Today's adult consumers are often defined as those falling into the 55-plus segment (Kennett et al., 1995; Moschis et al., 2004) while some of the studies restrict adult consumers to those over 65 years of age (Oumlil et al., 2000; Mattila et al., 2003). In this study adult consumers are defined as those consumers over the age of 35.

The Purpose of this paper is to gain an understanding of the acceptance of online banking in an Indian market where the 70% population reside in rural areas and 30% population reside in urban area of the country (Gerrard and Cunningham, 2003). This study explore acceptance of online banking in India from the point of view adult of customer above the age of 35 and investigate how adult customers perceive electronic banking services? As well as also depicts that what are the acceptance factors in spite of security and privacy concern between Indian customers? And what should be guidance provides by banks to customers that they can increase their willingness to adopt online banking? The answers of these questions are found through a simple survey for a random sample. In conclusion and recommendations are given based on the survey findings.

LITERATURE REVIEW

E-banking in India

In the recent years there has been explosion of Internet based electronic banking applications (Liao & Cheung, 2003). Beckett, Hewer & Howcroft (2000) states that the emergence of new forms of technology has created highly competitive market conditions for bank providers. However, the changed market conditions demand for banks to better understanding of consumers' needs.

The concept of electronic banking has been defined in many ways (e.g. Daniel, 1999). According to Karjaluoto (2002) electronic banking is a construct that consists of several distribution channels. Daniel (1999) defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television. Electronic banking also commonly known as internet banking or e-banking. Internet Banking, defined as ‘‘the delivery of banking services through the open-access computer network (the internet) directly to customers' home or private address''. (Lau, 1997) has experienced phenomenal growth in recent years. In 2006, Pew Internet and American Life Project reported that nearly half of internet users in the United States – 63 million adults – bank online (Fox and Beier, 2006). In many ways, e-banking is not unlike traditional payment, inquiry, and information processing system, differing only in that it utilizes a different delivery channel. Any decision to adopt e-banking is normally influenced by a number of factors. Liao et al. (2008) stress that the success in Internet banking will be achieved with tailored financial products and services that fulfill customer' wants, preferences and quality expectations. Mattila (2001) concedes that customer satisfaction is a key to success in Internet banking and banks will use different media to customize products and services to fit customers' specific needs in the future. Liao et al. (2003) suggest that

consumer perceptions of transaction security, transaction accuracy, user friendliness, and network speed are the critical factors for success in Internet banking.

Perception of Adult Customers

Electronic banking is offering its customers with a wide range of services: Customers are able to interact with their banking accounts as well as make financial transactions from virtually anywhere without time restrictions. Adult customers are changing their existing pattern of use of traditional banking and switch over advanced self-service technology (Curran and Meuter, 2007). Liao and Cheung (2002) stated that willingness to use Internet banking depends on the expectations of accuracy, security, network speed, user-friendliness, user involvement, and convenience. A study between Turkey vs. UK has been found that Privacy is the single most important characteristic because of its effect on customers' perceptions. To access the private information shared between the bank and the customer (Sayar and Wolfe, 2007). It is argued that in the e-bank context, the security issue is crucial once, it involves directly the user's actives (Cockburn & Wilson, 1996; Pavlou, 2001).

Hill (2004) conducted a study concerned with identifying the characteristics of online banking users. She mentioned that it is commonly assumed that demographics do influence the acceptance of electronic self-service tools, such as online banking. The results of the study were that people who use such services are young, trendy and high-earning. They actively seek out online banking tools, and they want to conduct all transactions through the same channel. Nevertheless, Lee (2000) conducted a similar research and arrived at different results. He found that the Customer Relationship Management (CRM) efforts of the banks themselves have the real influence on who accesses online self-service tools than any other factor. Therefore, customers tend to use such tools based on attitudes, not demographics. Other study by Al-Alawi (2004) investigated the CRM's actual implementation by finding the criteria and problems that needed to be tackled in order to implement a successful CRM program in banking.

An empirical study by Pew Internet & American Life Project dated 2002 was concerned with the number of people banking online and their gender in addition to their age. The study found that men are somewhat more likely to bank online than women. Also, younger and middle-aged Internet users are the most likely group to turn to online banking. The highest category using online banking in the survey was people aged 30 to 49, the lowest category is above 65 and the rest of them are in between. Of great value was the study of Mattila et. al., (2003). The study was concerned with analyzing the adoption of Internet banking among adult customers. The results show that people over the age of 65 generally tend to be late adopters of technologies. They found that adult customers who discontinued the use of online banking blamed insufficient or non-existent training on how to use the technology. They also pointed that confusing web pages and complex steps discouraged their adoption of online banking. Subsequently, they recommended developing three dimensional web pages with voice recognition, using video technology to provide access to bank employees. Also, Sohail and Shanmugham (2004) wrote a paper concerning customers' preferences in E-banking in Malaysia. Their results were based on a survey of 300 respondents. Their conclusion indicates that age and educational qualifications of electronic and conventional banking have no significant impact on E-banking adoption. Instead, they argued that accessibility

to the Internet, awareness of E-banking and customers' resistance to change are the main factors influencing the adoption.

Fitzergerald (2004) choose to analyze four different research papers to identify current and potential customers' perceptions on online banking. He concluded that there are common perceptions regarding online banking with disregard to demographic, geographic or psycho- graphic characteristics. He argued that among the major 'non-adoption' areas are the security concerns and lack of awareness of online banking. Cleaver (1999) reports an academic study that concluded that older users prefer internet sites that do not demand complicated manipulation of software and hyperlinks the equipment, simply in order to browse. They appreciate functions that make on-line navigation easier and more convenient; for instance, simple, clear, and polite messages. On the other hand, other studies have shown that older people want the same things as users in general: a site that is easy to use, fast, clear, and secure. On the whole, it seems that the expert majority's opinion is that older people need separate internet sites, or at least modifications of existing ones (Judd, 2000), incorporating for instance larger font sizes and simpler graphics.

Security and Privacy

Now day's uptake of EC applications in the banking industry is very slow only because of security and data confidentiality issues have been a major barrier. Security and privacy are one of the most challenging problems faced by customers who wish to trade in the e-commerce world. Security in the form of keeping customer safe from an invasion of their privacy, affects trust and satisfaction. If company wish to maintain customer trust, they need to keep their promises regarding security and privacy. Since security is closely related to trust, violations of security norms may backfire in terms of losing customers and negative word-of mouth. Security perceptions are defined as "the subjective probability with which consumers believe that their private information will not be viewed, store and manipulated during transit and storage by inappropriate parties in a manner consistent with their confident expectations" (Pavlou 2001).

The banking sector was reluctant to use e-commerce applications as they felt that transactions conducted electronically were open to hackers and viruses, which are beyond their control. As well as convinced that online services are a mixture of customer insecurities, technology investment costs and a lack of market-readiness have all conspired to make e-banking 'unattractive' (Abdulwahed and Yaqoub, 2006). 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. Howcroft et. al., (2002) the principal characteristics that inhibit online banking adoption are security and privacy. An interview held on web security and showed four screen shots of a browser connecting to a website and asked participants to state if the connection was secure or not secure and to affirm the motivating factor for their appraisal. It was discovered that about 72 participants cannot tell if a connection is secure (Friedman et. al., 2002).

In Malaysia it is found that security is 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). Similarly, (Nahar

et al., 2000) describe, that IT manger contributed to the discussion, by saying, “security implementation over the internet is still considered as a big risk by many financial organizations that are skeptical about the technologies available”. He added, “However, with the introduction of new technologies such as SSL, digital signature, encryption, firewalls, PKI infrastructure, etc. internet security can be resolved, but it will take some time”. 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). Dr. David Chaum, CEO of DigiCash said that security is simply the protection of interests. People want to protect their own money and bank their own exposure. The role of government is to maintain the integrity of and confidence in the whole system. With electronic cash, just as with paper cash today, it will be the responsibility of government to protect against systemic risk. This is a serious role that cannot be left to the micro-economic interests of commercial organizations.

Ganesan and Vivekanandan (2009) described a secured hybrid architecture model for the internet banking using Hyperelliptic curve cryptosystem and MD5 is described. Information about financial institutions, their customers, and their transactions are, by necessity, extremely sensitive; thus, doing business via a public network introduces new challenges for security and trustworthiness. Given the open nature of the Internet, transaction security is likely to emerge as the biggest concern among the e-bank’s account holders. The rapid growth in account hijacking and online fraud are on the rise. The negative publicity damages consumer trust in the online service.

Since personal and financial information can be intercepted and used for fraudulent purposes, online investing involves greater security concerns than conventional trading; users need a sense of security when conducting financial transactions, and it is still one of the major barriers to e-commerce growth (Lee and Turban, 2002). Perceived security was defined as a threat that creates a circumstance, condition, or event with the potential to cause economic hardship to data or network resources in the form of destruction, disclosures, and modification of data, denial of service, and/or fraud, waste and abuse (Kalakota and Whinston, 1997). Security, which involves the use of technical advancements like cryptography, digital signature and certificates aimed at protecting users from risk of fraud, hacking or “phishing”, has a positive influence on the intention to purchase online (Lian and Lin, 2008).

Potential customers mentioned Internet security, online banking regulations, consumers’ privacy, and bank’s reputation as the most important future challenges of online banking adoption. (Aladwani, 2001). Indeed, in Aladwani’s (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 bank’s 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 customers. It is followed by "responsiveness of service delivery (speed and timeliness)", "ease of use", "credibility of the bank", and "product variety". Akinci et al. (2004) find that the selection of an internet banking service provider is effected by security, reliability and privacy. Security, which involves protecting users from the risk of fraud and financial loss, has been another important issue in safe use of the internet when conducting financial transactions in Saudi Arabia (Sohail and Shaikh, 2007).

RESEARCH GAP

The review of literature suggest that most of the studies have been done on issues related to Internet banking in countries like Australia (Sathye, 1999), Malaysia (Mukti, 2000; Chung and Paynter, 2002; Sohail and Shanmugham 2004), Singapore (Gerrard and Cunningham, 2003a, 2006b), Turkey vs. UK (Sayar and Wolfe, 2007) and Saudi Arabia (Sohail and Shaikh, 2007). Much work has not been done in India with regard to Internet banking issues. The present study intends to know the factors affecting the acceptance of adult customers and also indicates level of concern regarding security and privacy issues in Indian context.

RESEARCH HYPOTHESES

It is indeed essential to emphasize the fact that the Indian culture is different from the countries where previous research was conducted. The researchers predicted that the familiarity and economic benefits of using the Internet has a significant impact on the acceptance of online banking. If adult customers are not used to accessing the Internet frequently, and if they do not trust the Internet as a secure environment to conduct financial transactions, then it is nearly impossible for them to accept online banking. Therefore, the following is hypothesized:

H1. Security and privacy has significant impact on adoption of Internet banking among adult customers.

H2. Trust has significant impact on adoption of Internet banking among adult customers.

H3. Innovativeness has significant impact on adoption of Internet banking among adult customers.

H4. Familiarity has significant impact on adoption of Internet banking among adult

customers.

H5. Awareness has significant impact on adoption of Internet banking among adult customers.

METHODOLOGY

A questionnaire form was made by the researchers consisting of 30 questions about the respondents and their willingness to conduct online banking. The questions were focused on the extent to which adult people use the Internet and purchase items using online methods. Following, respondents were asked if they were aware of online banking and whether they were willing to experience it had their banks provided sufficient support.

The survey instrument used in this study was a structured questionnaire for the empirical study. The questionnaire was made up the dimension which measures the acceptance of online banking among Indian adult customers. The variables were measures using multiple items. All of the scale items represented in the survey instrument utilizing a five-point categorical rating scale. The anchors used included: a) 1= strongly disagree, b) 2= disagree, c) 3= neither agree nor disagree, d) 4= agree, e) 5= strongly agree. The data obtained responses from adults employed in the town area. The total number of useable responses was 200.

RESEARCH FINDINGS

The descriptive statistics of the respondents were analyzed in Table 1 and presents the demographic characteristics of the 200 respondents. It first shows that about 59% of the respondents are male and 41% respondents are female. Table 1 also shows that all respondents are adult, 60% respondents were 35-45, 17% were 46-55, 31% were 56-65 and 7.5% were more than 65 in age.

Table1. Distribution of Respondents on the basis of demographic factors

Demographic Variables	**Categories**	**No. of respondents**
Gender	Male	118 (59)
	Female	82 (41)
Age (in years)	35-45	120 (60)
	46-55	34 (17)
	56-65	31 (15.5)
	More than 65	10 (7.5)
Qualification	Up to 12	30 (15)
	Graduate	27 (13.5)
	Masters	88 (44)
	Professional	55 (27.5)
	Less than 15000	38 (19)

Income (in month)	15001-30000	33 (16.5)
	30001-45000	96 (48)
	More than 45000	33 (16.5)
Level of computer literacy	Expert	47 (23.5)
	Advanced	108 (54)
	Beginners	24 (12)
	Don't know how to operate computer	21 (10.5)
Preferred methods of performing banking transactions	ATMs	89 (44.5)
	Visit bank	66 (33)
	Telephone	19 (9.5)
	Online banking	26 (13)

Source: Primary Data
Figures in parentheses show percentages

We first perform the factor analysis for the five multi-item measures by utilizing principal component extraction process with Varimax rotation. A suggested measure of factor loading of 0.5 or greater is adopted as a criterion to examine the item reliabilities of all measures (Hair et. al., 1995). As shown in the table 2, the measurement items are classified into the five independent variables. The Eigenvalues of all factors exceed 1.0, and about 75 percent of total variance is explained by these five factors. These factors are labeled security & privacy, trust, innovativeness, familiarity and awareness.

Internal consistency texts were conducted using Cronbach alpha tests (Cronbach, 1946). The alpha values for all factors vary from 0.55 to 0.91 which are considered acceptable for this type of study (Nunnally, 1978). This reveals that the variables load properly on these five factors.

Table2. Factor Analysis for Acceptance Factors of e-banking

Measurement Items	F1	F2	F3	F4	F5
Security & Privacy					
Banks websites provides me financial security and confidentiality.	.873				
Only authorized person can access own account.	.807				
Internet banking does not insure privacy of my account.	.718				
Banks will never misuse my financial information.	.558				
Online banking provides simple operational procedure.	.541				
Banks website is secure for the fund transfer.	.507				
Banks always incourage me to open an account through online.	.460				
Trust					
Online banking websites are trustworthy.		.832			
I trust my online banking websites.		.712			
I expect my use of online banking will increase in future.		.654			
I trust that my all financial information will remain in the register.		.621			
Banks websites are always increase customer interest.		.590			
I trust the benefit provided by online banking.		.561			
Banks are providing useful tips for use to operate online banking.		.536			
Innovativeness					
Banks are conducting seminare to educate about online banking.			.794		
I intend to use e-banking in future.			.786		
Online banking website provides problem solution menu.			.782		
I will recomend to other that they use online banking.			.502		
Familiarity					
Online banking website design is very efficient.				.799	
Online banking provides clear and easy to follow instructions.				.536	
Awareness					
Banks websites keeps all promises and commitment.					.736
Banks increase the awareness about security of the data.					.692
Banks always incourage me to transfer the fund through online.					.523
Eigenvalues	4.79	4.18	3.52	2.89	2.68
% of variance	19.98	17.45	14.67	12.07	11.16
Cumulative variance	19.98	37.44	52.11	64.18	75.35
Cronbach Alphas	0.91	0.91	0.85	0.55	0.78

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

To test the hypotheses the linear regression analysis was performed. The respondents' intention to intensify the acceptance of e-banking services is regressed on the five independent variables identified through the factor analysis. The results are reported in Table 3. The Durbin-Walson test to detect the existence of autocorrelation among the residuals shows on indications of autocorrelation. The regression equation is significant at 1% level with the F value of 127.98 and the independent variables account for 76% of

the variance of degree of the acceptance of e-banking by adult customers. Security and privacy (β=0.477), trust (β=0.246), innovativeness (β=0.272), familiarity (β=0.589) and awareness (β=0.243) are significantly positively related to the acceptance of e-banking services.

DISCUSSION

The purpose of this study is to investigate the acceptance of online banking among those customers who are the more than 35 age group. Specifically, the study postulated the affect of security and privacy issue in the acceptance of online banking in India. Along with the questions regarding possible acceptance factors of e-banking services we ask them whether they are willing to adopt online banking or not. Our results show that security and privacy, trust, innovativeness, familiarity and awareness have positive influence on the acceptance of e-banking services in India. This is in line with the previous findings of Sathye (1999), Mukti (2000), Chung and Paynter (2002), Sohail and Shanmugham (2004), Gerrard and Cunningham (2003a, 2006b), Sayar and Wolfe (2007), Sohail and Shaikh (2007), among others, which have reported that these factors have positive influences on the acceptance, constant use intension and satisfaction of innovations such as internet banking, electronic commerce etc. Among these factors that turn out to be significant in our study, the security and privacy factor is most influential one for the acceptance concern among adult customers in India.

For example, Koufaris and Hampton-Sosa (2004) also demonstrated that perceived security control of the site strongly influenced acceptance of online banking by customers. If the customers are less concerned about unauthorized use of or illegal access to their personal and financial data by third parties, they will have greater influence the willingness to use of online banking, which in turn will lead to higher acceptance to it. Thus, banks should improve their web security features in order to enhance the customer's acceptance.

Surprisingly, perceived privacy was not a determinant of perceived trust. Since these security characteristics guarantee almost total privacy, the relative importance of privacy concerns for these users is lower. Thus, Belanger et al. (2002) argued that customers generally understand the concept of security better than privacy because security is a more concrete concept, and they also showed that security features were more important than privacy statements. Kim et al. (2008) empirically showed that security protection mechanisms are more important in consumers' behavior than privacy. Pavlou and Chellappa (2001) found that the influence of perceived privacy was weak in comparison with the strong influence of perceived security on acceptance.

Interestingly, online banking has a very promising future in the eyes of adult customers. This is greatly emphasized by the fact that 84% of the participants declared they were willing to try experiencing it once their banks helped them and provided them with necessary guidance.

Table3. Regression Analysis on e-banking Acceptance Factors

Diffusion Factors	β	t	Sig.	Result
(Constant)	2.01	81.734	.000***	
Security & Privacy	.477	13.772	.000***	Accepted
Trust	.246	7.100	.000***	Accepted
Innovativeness	.272	7.859	.008***	Accepted
Familiarity	.589	16.995	.000***	Accepted
Awareness	.243	7.016	.009***	Accepted
F value			127.98***	
R square			.76	

***Denotes significance at 1% level

CONCLUSION AND RECOMMENDATIONS

In a country like India, there is need for providing better and customized services to the customers. Banks must be concerned the attitudes of adult customers with regard to acceptance of online banking. It is shows that adult customers are more reluctant to join new technologies or methods that might contain little risk. It's also important to note that some adult customers are interested in online banking; however, they do not posses the necessary computer literacy to conduct it. In addition banks should design the website to concern security and privacy issues.

The recommendations to the banks are that they have to increase the level of trust between banks' website and customers. Because customer perception on security and privacy aspect have been seen in the literature. The importance of security and privacy for the acceptance of internet banking has been noted in many banks study and found that people have weak understanding of internet banking, although they are aware about risk. Banks noted that although consumer confidence in their bank was strong yet their confidence in the technology was weak through many studies. It is clear those adult customers are ready to adopt online banking if banks take necessary action. There are following strategies should be applied by banks.

- Banks should ensure that online banking is safe and secure for financial transaction like as traditional banking.
- Banks should organize seminar and conference to educate the customer regarding uses of online banking as well as security and privacy of their accounts.
- Some elder customers are hindered by lack of computer skills. They need to be educated on basic skills required to conduct online banking.
- Banks must emphasize the convenience that online banking can provide to elder people, such as avoiding long queue, in order to motivate them to use it.
- Banks must emphasize the cost saving that online can provide to the elder people, such as reduce transaction cost by use of online banking.

Adult customer always prefers advanced technology but sometimes lack of knowledge they are unable to access such technologies. The fact that people have positive perceptions about online banking should be treated with great value. This is because

one bad experience can result in customer discontinuation of the E-banking service (Jun & Cai, 2001).

LIMITATIONS AND SCOPE OF FURTHER RESEARCH

This research serves as an initial step in exploring customers' views and expectations on online banking. However, it is limited by the following factors:

- The sample was distributed randomly over adult people from the working environment. It did not include adult people who are less educated or those who never used computers or accessed the Internet.
- The sample is comprised with 200 people. Future research requires a larger sample for the purpose of higher accuracy.
- This research focused to a high degree on acceptance of online banking among Indian customers and opinion regarding security and privacy issues.
  Further research is required to investigate issues related to online banking in deeper manner and what strategies should adopt by banks by which they can enhance level of e-satisfaction and e-loyalty with respect to online banking.

MANAGERIAL IMPLICATIONS

Through out this research, we have shown the level of concern regarding security and privacy aspect among adult customers in India. The result show that customers are ready to adopt on line banking if banks provide him necessary guidelines regarding security and privacy aspect because there are many factors trust, familiarity, innovativeness, awareness affects the acceptance of online banking in India. Therefore, there factors will need to be considered as a strategic variable, and will need to be present in all organizational activities. But, how can these factors may be won to acceptance of online banking in India?

The literature shows that besides these factors security and privacy is main concern to the acceptance of online banking. Thus, we may consider the existence of some variable, which act as positive factor to the acceptance of online banking.

- Security and privacy: Security and privacy is a key factor to the acceptance of online banking. Cheung and Lee (2001) point out that security refers to aspects such as integrity, authentification, encryption, and non-repudiation. Integrity refers to impossibility of the transmitted data by third party without permission. Authentification enables a certain operation carried out only after identification. Finally, non- recognition refers to procedure that prevents an individual or organization from denying that they had carried out a certain operation. Privacy refers to protection of personal financial information. Moreover privacy is the consumer's perception of the ability of the bank to protect personal information from unauthorized use.

- Trust: Trust is the "willingness to rely". Trust is especially important in online transaction. Banks or organisation should provide him useful tips to use of banks website and operational procedure by which customer can enhance their level of trust in online banking. And they can increase their uses in future.

- Familiarity: Familiarity has also significant impact on acceptance of online banking among adult customers in India. Banks website design should be very simple by which customer can easily operate.

- Innovativeness: Innovativeness has influencing factor to the acceptance of online banking. Adult customers are innovative in nature. They are easily ready to adopt online banking if bank motivates them. Organisation should segment the market and focus on their needs and preference.

- Awareness: Adult customers are very much aware about security and privacy concern. They believe that online banking is not secure for conducting financial operations. Banks should increase the level of awareness and should kept their promises and commitment.

The result of the research also show that the need to target marketing actions on certain segments of the population. In this respect, those most likely to use the internet are in the upper income group, professional, more than 35 years age and male. Consequently, a through analysis will need to be made of what the needs of these population groups are so as to be able to design the most suitable response as well as the best way to present it on the internet.

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