

The Impact of Trust on Acceptance of Internet Banking

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Abstract

In today's world Internet Banking is growing day by day. It has been a successful tool in our country to reduce the bank's working cost and on the counter side has reduced the time of working and has also benefited to the customers. But still there are some parts of population who still perceive a great risk for the internet banking. This paper introduces a conceptual framework under which trust will be associated with the acceptance of internet banking by the people. This research shows that the trust is directly proportionate to the willingness of the individuals to accept the new technology and the number of attempts made by them to use this technology. Detailed information on the Internet Banking and trust is provided. All the factors affecting about the trust are discussed in depth. Variables suitable for the internet banking are suggested and also the justification for the conceptual framework is argued. Finally the implementation and recommendations for internet banking acceptance is suggested.

Keywords: Internet Banking, Trust, Technology and Willingness.

Introduction: The economy of world depends on its financial institutions. The banks are the backbone of any financial sector and economy of the world. In recent years, the financial system transformed rapidly due to advancement in technology. The traditional functions of banks were deposit money and give interest in return and also give loans against they use to earn interest on that.

Now the time has changed and banks are offering various services to the customers using different channels of resources. The origin of internet has provided a new way to achieve various services in banking sector. The Indian banks made revolutionary changes in the year 1995. In India, the concept of Internet banking initiated by ICICI bank in the year of 1997.

From the above table (Table 1) it is evident that, India is the third largest Internet user country in the world according to data of June 2012. The reach of Internet banking has increased in India due to increase in usage of Internet.

At the present time banks are using internet banking to serve their customers. Customers access internet banking services using an intelligent electronic device such as personal computer (PC), Automated teller machine (ATM), mobile etc. These are basic services which are associated with internet banking like: view account balances and transaction summaries; paying bills; transferring funds; requesting credit card advances; and ordering cheques etc. With the facility of internet banking the banks are able to minimize operational cost to a great extent and cater various customers even who are not in the reach of the bank. The customers are also in benefit, as they perform a wide range of banking transaction electronically via bank's website 24x7. The Internet banking brings about speed, convenience and anytime anywhere availability of banking services. However Internet Banking has disadvantages for banks like how to use the technology, set-up cost, legal issues, and lack of personal contact with customers. And from the customers' point of view there are security and privacy

Table 1: Top Five Countries with the Highest Number of Internet Users - June 30, 2012

S. No	Country or Region	Population, 2012	Internet Users Year 2000	Internet Users Latest Data	Penetration (%Population)	Users % World
1	China	1,343,239,923	22,500,000	538,000,000	40.1 %	22.4 %
2	United States	313,847,465	95,354,000	245,203,319	78.1 %	10.2 %
3	India	1,205,073,612	5,000,000	137,000,000	11.4 %	5.7 %
4	Japan	127,368,088	47,080,000	101,228,736	79.5 %	4.2 %
5	Brazil	193,946,886	5,000,000	88,494,756	45.6 %	3.7 %

Source: www.internetworldstats.com

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issues are also perceived. The advantages of Internet Banking compensate the disadvantages for both banks and their customers. On the other hand investment in computer-based tools seems risky. These tools improve performance but end users often are unwilling to use them (Davis, et. al, 1989). Reason behind the unwillingness to use Internet banking associated with trust as 'trust' is heart of the system in Internet Banking.

The primary objective of this conceptual framework is to identify the factors that influence Internet Banking adoption for which the constructs defined by Technology Acceptance Model have been used to predict user's acceptance and adoption. A new construct trust is

proposed to enhance the understanding of a user's acceptance behavior of Internet banking with respect to consumers perceived security, perceived privacy and awareness.

Technology Acceptance Model (TAM): (Davis, 1989) developed the Technology acceptance Model (TAM) to explain the effect of users perception of system characteristics on the use acceptance of Information System (IS). The TAM as it is commonly known was adapted from the Theory of Reasoned Action (TRA) (Fishbein, 1975) .The TRA model is a general model, which suggest that an individuals social behaviour is motivated by his/ her attitude towards the behaviour.

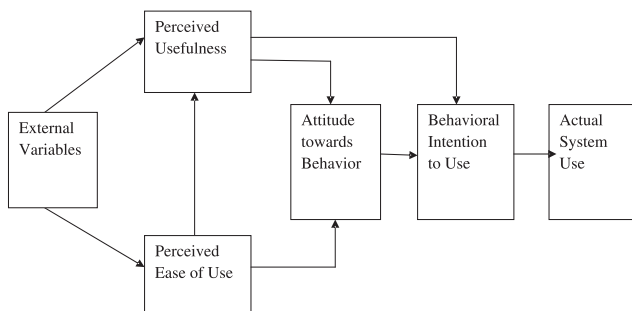
Review of Literature:

Study	Trust Conceptualization	Trust Object	Measures
Bander A. Alsajjan and Charles Dennis (2006)	User willingness	Online transaction	Overall Trust
Singhal D. and Padhmanabhan V, (2008)	Identified different aspects of internet banking	Customer's perception	Trust and Risk
Mwesigwa R.(2008)	Significant positive relationship between Consumer Attitudes and Internet Banking Adoption	Consumer Attitude and Trust	Consumers' Attitudes, Perceived Risk, Trust and Internet Banking adoption
Wong D.H, Loh C., Yap K.B, Bak R (2009)	Consumer's Dilemma with E-banking	Customers behavior	Customers perceived risk and Trust
Gilaninia S., Taleghani M, Taheri T. and Mousavian S.J. (2011)	<ul style="list-style-type: none"> • Customers Attitude • Perceived usefulness and perceived ease 	Effective factors on customer trust in electronic banking	Customer satisfaction
Dr. Mohammad O. Al Smadi (2012)	Factors Affecting Adoption of Electronic Banking	Perceived usefulness and perceived ease of use has a positive and significant impact on customers' attitude toward electronic banking services	Perceived risk on the customers' attitudes to use electronic banking services as well
Kesharwani A., Bisht S.S. (2012)	The impact of trust and perceived risk	behavioral intention of internet banking adoption	causal relationship between trust and perceived risk
Gefen D., Karahanna E. and Straub D.W. (2003)	Trust in the e-vendor	Relationship between e-vendor and consumers	Trust
Wang T.L. and Tseng Y.F. (2011)	Effect on Trust and Attitude with Online Shopping	Behavioral intention	Overall trust in online shopping

TAM has two major elements 1) Perceived Usefulness (PU) and 2) Perceived Ease Of Use (PEOU) . (Davis, 1989) defined perceived usefulness as “the degree to which an individual believes that using a particular system would enhance his/her job performance,” and perceived ease of use as “The degree to which an individual believes that using a particular system would be free of physical and mental effort.”

Proposed Research Model: Based on literature review and discussions with group of Internet banking users the following model proposed (Figure 2). The proposed research model integrates trust with TAM in order to reflect the characteristics of Internet banking environment. The model consists of 3 factors that probably have an effect on consumer's adoption of Internet Banking. They are Perceived Usefulness (adopted from TAM), Perceived ease of use (adopted from TAM), Trust (Variable included for this study). Awareness, Perceived Security and Perceived Privacy are modeled as having direct impact on trust and hence an indirect impact on adoption of Internet Banking.

Figure 1: Technology Acceptance Model



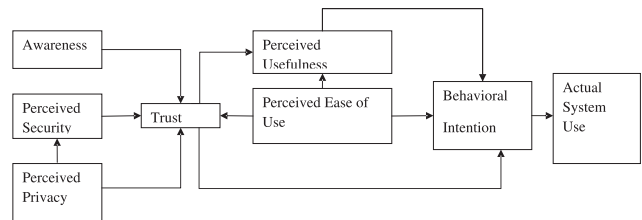
Source: Davis (1989)

Perceived Usefulness: Perceived usefulness (PU) is defined as “the degree to which a person believes that using a particular technology will enhance his/her job performance” (Davis, 1989). The effect of Perceived usefulness on usage intention has been validated in many existing studies such as from Agrawal and karahanna (2000), Hu, Chau, Sheng and Tam (1999) and Venkatesh and Morris (2000). According to Nysveen, Pedersen and Thornbjorsen (2005) as cited by Rao and Troshani (2007) a system that does not help people perform their jobs is not likely to be received favorably. We define Perceived usefulness as the extent to which customer's use of Internet banking is perceived as effective and productive in their overall performance.

Perceived Ease of Use: Perceived ease of use (PEOU) is defined as “The degree to which a person believes that using a particular system would be free from effort” (Davis, 1989). Perceived ease of use was found to influence the adoption of Internet banking services

(Sudha, Singh, Singh & Singh, 2010) In general, when a system is found to be easy to use then users will have the intention to use the system. Here we define ease of use as the extent to which customer's use of Internet banking is perceived as simple or effortless.

Figure 2: Proposed Research Model



Trust: Trust is defined as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustier, irrespective of the ability to monitor or control that other party” (Mayer, Davis & Schoorman, 1995). Trust has played a significant role in Internet banking because in a virtual setting the degree of uncertainty of economic transaction is higher than in traditional settings (Md Nor & Pearson, 2007). Trust refers to the faith or belief that the gives guarantee of another for relied upon and that, in sudden situation. Because of the importance of trust in Internet Banking, Customer trust is a major factor influencing the adoption and expansion of Internet banking.

In the proposed model we are adding 3 more constructs which are assumed to be directly associated with trust. The assumption is based on literature review.

- 1) Awareness
- 2) Perceived Security
- 3) Perceived Privacy.

Awareness: Consumers' level of awareness of internet banking influences the adoption of internet banking.

The internet banking literature supports those individual factors like knowledge (Sathye, 1999; Polatoglu and Ekin, 2001) has an impact on consumer's adoption of internet banking. Sathye (1999) highlighted that many consumers were simply unaware of internet banking and it's unique benefits. As Consumers' knowledge and awareness refers to the existing benefits of internet banking. In this context, Sathye (1999) and Polatoglu and Ekin (2001) empirically supported the idea that consumer knowledge had an effect on electronic banking adoption. Sathye (1999) found that the lack of awareness about electronic banking and its benefits contribute to the non-adoption of electronic banking. As a result consumers who are more aware of internet banking are more likely to perceive internet banking as trustworthy and influencing adoption of internet banking.

Perceived Security: The importance of security issues is

widely examined in the scientific literature and is associated with several aspects of using computers every day. Security mechanisms protect systems and data from being adversely affected by malicious and unauthorized parties (Wright D.). In e-commerce, security issues are the second most important determinant of consumer trust. In particular, the use of secured payment mechanisms that prevent the leakage of credit card information and the use of technology that will keep a system safe from hackers play a significant role in giving the consumer a sense of security (Mukherjee A., and Nath P.). Perceived security is a major attribute related to trust, when a customer perceived that the transaction made by him secure and no fraud or fraudulent is possible so a automatic trust is generated and customer tries to attempt the same several times keeping peace in mind having an intention that the transaction is risk free with a warm feeling of trust. As we have assumed perceived security directly associated with trust.

Perceived Privacy: Wang et al. (2003) define privacy as the protection of all the data that is collected (with or without users being aware of it) during users' interactions with an Internet banking system. Perceived privacy can therefore be defined as the user's perception of aforementioned. Shin (2010) suggests that privacy would be a subset of security, and defines privacy as the "control over the flow of one's personal information, including the transfer and exchange of that information". Research in IS and marketing has argued that information privacy and consumer concerns thereof is one of the most important issues in today's technology based environment (Miyazaki, 2001). The concept of privacy is in itself not new and it has generally been defined as an individual's ability to control the terms by which their personal information is acquired and used (Westin, 1967). We consider privacy is the key sector to enhance trust in the use of Internet Banking. Privacy of every transaction is must in the eyes of customer. Now-a-days as the financial crimes are increasing, customers have a risk of hacking their accounts or a fraud use of their account and personal information. Privacy makes the customer motivated go for Internet Banking as it is the primary and vital part of trust.

Discussion:

Awareness → Trust: The awareness of existing Banking system is a determinant for the consumer who stays with using their Internet banking services. (Sathye, 1999) states that the lack of awareness about the Internet banking and its benefits contributes to the non-adoption of Internet banking. Therefore those users who are more aware of Internet banking have more trust and more likely to adoption of Internet banking.

Perceived Security → Trust: (Shin, 2010) claims that perceived security moderates the effects of perceived privacy and trust. Enhanced feeling of security is stated to improve the perception of trust, and there is a significant relationship between the two concepts. Perceived privacy is claimed to have effect on trust through perceived security and therefore it can be considered as the mediating effect. Generally, improving sense of security will confirmed to improve the perception of trust, and therefore a significant relationship between Perceived Security and Trust have probably an effect of consumers effect on adoption of Internet Banking.

Perceived Privacy → Trust: (Shin, 2010) considers perceived security and perceived privacy as antecedents of trust. Kim et al. (2008) also refers that perceived security protection and perceived privacy protection as cognition-based trust antecedents and states that both of them have a strong, positive effect on trust. Therefore, a considerable relationship between Perceived privacy and trust which can be affected on the consumer trust on the adoption of Internet banking.

As per the discussion we found that there is a direct relationship between Awareness, Perceived security, Perceived privacy with trust. The assumption of proposed model will be tested later.

Conclusion: Introduction of Internet Banking has proven to be a win-win situation for bank as well as the customers. Here the banks are able to add new customer and also able to retain existing ones at a very low cost. This adoption of Internet Banking is directly proportional to the adoption of new technology and building trust by the customers for the same. Many empirical studies have explained TAM as an economical and strong model of technology acceptance behavior. TAM Suggest that users adopt the technology due to its easiness and as a new concept. The adoption is also due to various functions of new technology and the benefit so derived from this technology. Here the trust plays an important role to increase the customer's perception to adopt the Internet Banking and work under same environment. In TAM trust is considered in addition to Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) where sensitive information is manipulated. Taking trust into consideration and its benefits into TAM has resulted in a model that has offered better prediction of Internet Banking acceptance. In addition to this TAM model we have taken into consideration 3 more attributes which affect the adoption of Internet Banking by the user as 1) Awareness 2) Perceived Security and 3) Perceived Privacy. These attributes are derived out of the discussion with various segments of people and going through previous literature review.

This study shall be helpful for the banks in order to redefine their strategic planning and enhancing their competitive advantage. Banks could increase Internet banking awareness through various training courses, promoting their emphasize on personal security and privacy for the customer. We have concluded through various discussions that the bank should design a very secured model which should be easy to use and should be so secure that the chance of fraud should not be possible.

According to (Tomiuk and Pinsonneault, 2001) 'Aside from the customer direct experience, factors like reputation, endorsement and positive word of mouth may affect Trust development'. It is important for banks to build an innovative reputation, because customers are likely to place their trust in well-known innovators and (Bradley and Stewart, 2002) also recommended that this conceptual framework be applied or tested in developing and developed countries. We consider that this conceptual framework can be applicable to Internet Banking.

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