

Trust In The Internet As A Delivery Channel The Retail Bank's Perspective

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Abstract: This empirical study explores the relationship between trust and the Internet from the retail bank's perspective. The overall aim of this study is to develop a conceptual framework systemically measure trust for the adoption of internet banking as a delivery channel in retail banking industry. By doing so, future retail banks can decide when the time is right for them to adopt Internet banking. This theoretical study should make a significant contribution to our understanding of factors that influence retail banks trust in Internet banking, specifically the role of the role of perceived risk and perceived benefits for an adoption of internet banking as a delivery channel.

Keywords: Trust, Internet Banking, Delivery Channel, Benefits, Risk, Adoption

1. Background

Internet banking flourished after the late 90s in the retail banking industry, giving customers access to banking products and services from all over the world. The growth and success of the Internet [Tweney, 1998; Jarvenpaa et al., 1999] as a delivery channel has highlighted the importance of trust, as it operates in a single domain of trust [Ratnasingham, 1998; Stewart, 1999]. The Internet is not only innovative but has also created explosive growth in on-line activities for the financial sector [Karjaluo et al., 2002]. The successful implementation of the Internet depends on a variety of forces. These forces both work in favor and against the Internet's success. Among these, one of the forces is the trust within the system itself [Aljifri et al., 2003]. However, even with the increased adoption and usage of the Internet as a delivery channel in recent years, retail banks are faced with a conundrum due to trust concerns in the majority of retail banking throughout the world [Sarel and Marmorstein, 2004; Wong et al., 2009]. Among others, the main factors for lack of trust are mostly due to legal, trading partners, security and privacy concerns. Therefore, this theoretical study should make a contribution to our understanding of factors that influence retail bank's trust in Internet banking, specifically the role of perceived risk and perceived benefits for the adoption of Internet banking as a delivery channel. *The first stage* of the study aimed to get new evidence to test the existing theory [Gillham, 2000] in this topic: Trust in Internet as a Delivery Channel: "The Retail Bank's Perspective". *The second stage* is to investigate the problem that needs to be solved. For this study, the problem identified was that to date there is no systematic way to measure trust in adopting Internet banking as a delivery channel in the retail banking industry.

Third an objective is defined to solve the above-mentioned problem. The objective for this study is to empirically examine the role of trust in the adoption of Internet banking as a delivery channel in the retail banking industry. By doing so, trusting behavior in the retail banking sector can be identified. This will increase awareness in retail banks before the adoption of Internet banking as a delivery channel. *Fourth* a conceptual model was developed to achieve the above-mentioned objective. The conceptual model is based on the theoretical foundation, as discussed in the literature review. To achieve a complete and comprehensive conceptual model, four theoretical perspectives: social learning theory; inter-organizational theory, transactional cost economics theory and adoption theory were considered. *Fifth* using this conceptual model, we propose that the trust aspects both the perceived benefits and perceived risks during the adoption of the Internet as a delivery channel in the retail banking sector. Perceived risk and perceived benefits are key dimensions of trust in this study. We demonstrate that perceived risk and perceived benefits are based on emergent trust towards the adoption of Internet banking, which is based on propensity to trust.

2. Literature Review

The concept of trust has been investigated widely across the spectrum of human relationships in many disciplines. Among these are: marketing [Keh and Xie, 2009; Morgan and Hunt, 1994; Grönroos, 1996; Andaleeb, 1996; Hollis, 1998; Hart and Johnson, 1999; Geyskens et al., 1998; Beckett et al., 2000]; economics [Dasgupta, 2000; Williamson, 1993]; psychology [Rotter, 1980]; sociology [Goffman, 1972] and game theory [Rapoport and Orwant, 1962; Milgrom and Roberts, 1992]. Also, there have been a number of studies that have attempted to investigate the role of trust in the specific contexts of the Internet and e-commerce. The reason for this may be because some researchers believe trust is a foundation of e-commerce [Jamieson, 1996]. An empirical study of on-line trust conducted by Grabner-Krauter and Kaluscha [2003] investigated that Internet transactions and exchange relationships are not only characterized by uncertainty but also by anonymity, lack of control and potential opportunism, making trust the need of risky situation. In the literature Mayer, Davis, and Schoorman [1995a]; Luo [2002]; Kandel and Hota [2012]; McKnight and Chervany [2002]; Lee and Turban [2001]; Grabner-Krauter and

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Kaluscha [2003]; Koufaris and Hampton-Sosa [2004]; Jarvenpaa, Tractinsky, and Saarinen [1999]; Gefen [2000]; partly Bhattacharjee [2000]; Pavlou [2003]; De Ruyter, Wetzels, and Kleijnen [2001] investigate the importance of trust in Internet relationships, consumers trust in Internet transactions and exchange relationships. Among others, Grabner-Krauter and Kaluscha [2003]; Ganesan [1994]; Anderson and Weitz [1989]; Pavlou [2003] seem to consider trust as an avoidance to security and risk. Further, [Hoffman et al., 1999; Smith and Barclay, 1997; Shankar et al., 2002] investigate trust in the levels of security and privacy provided by a website.

In terms of trust in Internet banking adoption, the importance of factors of trust was also found in the literature. For instance, the study conducted by Al Nahian Riyadh, Akter, and Islam [2009] in the context of Pakistan suggests that customers hesitate to adopt Internet banking due to low computer literacy and their lack of trust in technology.

In terms of country context, the findings of Gilaninia et al. [2011] suggests that there is greater level of Internet banking risk acceptance by Australians. Similar [Safeena et al., 2011] findings suggest that adult customers in India have a greater level of Internet banking security and privacy acceptance. In the context of Finland, the study conducted by Yiu, Grant, and Edgar [2007] suggests perceived usefulness and information on the website are the key influencing factors for Internet banking acceptance. In Romania, the study conducted by Salari and Salajegheh [2011] suggests that trust factors are related to cost reduction, credibility, security, ease of use, customer retention, wider scope of services and responsiveness. However, Goudarzi, Ahmad, Zakaria, Soleymani, Asadi, and Mohammad hosseini [2013] suggest that there is still a lack of literature to support the adoption of Internet banking which can bring negative consequences for the banks.

3. Gap in the Literature

Almost all of the previous studies [Goudarzi et al., 2013; Costante et al., 2012; Liu and Datta, 2011; Hsu and Wang, 2008; Wong et al., 2009; De Ruyter et al., 2001; Pavlou, 2003; Kim and Prabhakar, 2004; Bhattacharjee, 2000; Suh and Han, 2003; Chang, 2006; Lee and Turban, 2001; Luo, 2002; McKnight and Chervany, 2000; Fogg et al., 2001] consider that trust has been dealt with from the customer's perspective on Internet banking. But, trust in specific Internet banking has yet to be addressed in the context of the retail banking industry. For this reason, the problem is that to date there is no systematic way to measure trust to adopting Internet banking as a delivery channel in the retail banking industry.

4. Expected Contribution

The literature findings suggest that: the past studies on the adoption of Internet banking as a delivery channel did not consider the perceived risks and perceived benefits as important determinants of the Internet adoption behavior. In the past trust has been studied in the context of e-commerce and Internet banking [Goudarzi et al., 2013; Kim and Prabhakar, 2004] but most of the studies were from the customer's perspective and trust from the bank's perspective

has not been specifically addressed in the context of Internet banking. To date there is no systematic way of adopting the Internet as a delivery channel in the retail banking industry. Therefore, this study is expected to show that perceived benefits and perceived risks have an effect on the adoption of Internet banking in the retail banking sector. We believe that the outcome model should provide a proper awareness guide for the adoption of Internet banking as a delivery channel. The points stated above clearly show the importance of this study for future retail banks to decide whether to trust the Internet as a delivery channel or not. Also, the proposed model in this study will help retail banks to evaluate the benefits and risks in the initial stage of adopting the Internet as a delivery channel.

5. Study Components

Component 1 - Study Question

The questions for this study are how and why types of question. These types of questions are beneficial for use in the case study strategy Yin [2009]. The question that was developed for this study is: How does emergent trust influence the perception of Internet banking benefits and risks towards the adoption of Internet banking as a delivery channel in the retail banking industry?

Component 2 - Proposition

This study is exploratory in nature and for this study a tentative hypothesis test was conducted.

Component 3 - Unit(s) of Analysis and Selecting the Cases

In this study theoretical replication Yin, 2009, pg.46 was used for the selection of data. Each theory was carefully selected on the basis of variables proposed in the hypothesis (for example, Security, Legal, Privacy and Trading Partners).

Component 4 Logic of Linking the Data to the Propositions

In this study the method used to link the data and the hypothesis of this study is via pattern matching across theories [Yin, 2009]. Since the objective of this study is to achieve a better understanding of the importance of trust in Internet banking, a cross-referencing method was applied.

Component 5 - Interpretation of Findings

Yin [2009] suggests that the criteria for interpreting the findings should be directly related to the ways to link the data and hypothesis of the study. In this study, the findings were interpreted via pattern matching and explanation building because this makes it possible to analyze generalization issues and allows predictions to be made [Ratnasingam et al., 2002].

6. Data

The data required for this study includes retail banks security framework, privacy framework, legal framework and their trading partners. Crucial data for retail banks from our criteria, i.e. security, privacy, legal and trading partners, for example, retail banks should meet the legal criteria to adopt the Internet as a delivery channel in the ?India, in

such cases all legal criteria will be (data) variables for this study.

7. Theoretical Approach

Social Learning Theory

The Social Learning Theory, Rotter [1980] explains the development of trust as the formation of the baseline expectation through interactions with significant others [Kim and Prabhakar, 2004]. Sitkin and Pablo [1992] viewed this as a trait that is stable across situations and that defines risk propensity as the tendency of the decision maker to either take or avoid risks. Propensity-to-trust others studied from organizational study is viewed as behaviors of interest [Mayer et al., 1995a]. McKnight and Chervany [2002] suggest that propensity-to-trust has an enormous effect on a person's initial trust in a first relationship. Among others, the proposal put forward by Mayer et al. [1995a] seems to fit with ours, that propensity to trust is positively related to the level of security framework, privacy framework, legal framework and trading partners trust. For this study, propensity to trust is proposed to be a stable and positive within-bank factor that will affect the likelihood of emergent trust towards Internet banking adoption. Also, emergent trust is absolute at this stage because banks should have a positive approach towards the adoption of Internet banking through which the Internet adoption perceptions of the bank will be enhanced [Mayer et al., 1995b].

Inter-Organizational Relationship Theory

An inter-organizational relationship occurs between organizations for mutual benefits [Dwyer et al., 1987; Ring and Van de Ven, 1992; Combs and Ketchen, 1999; Dyer, 2000]. Morgan and Hunt [1994] suggest that trust leads to a willingness to continue an inter-organizational relationship. The foundation of inter-organizational relationships is based on reasons and conditions [Ring and Van de Ven, 1994] which includes procedures, policies, standards and prescribing an overall pattern of interaction in inter-organizational relationships [Ratnasingam et al., 2002]. This makes bank's (trustee's) believe that using the Internet (trustee) in an exchange relationship will behave in accordance with the trustee's confident expectations [Kumar, 1996]. By properly managing situational and structural factors for Internet banking at the initial phase of adoption, outcomes from inter-organizational relationships can be of a high standard and quality [Ratnasingam and Kumar, 2000]. The confidence in a bank's reliability for other organizations towards the adoption of Internet banking can be examined by adopting Sydow [1998] definition: the confidence in the reliability of two organizations in a possibly risky situation that all parties involved in the action will act competently and dutifully.

Transaction Cost Economics Theory

Transaction cost economics theory [Williamson, 1993] predicts that significant reductions in transaction cost enables new organizational and channel structures [Ciborra, 1983; Williamson, 1985] and contributes to the understanding of perceived benefits and perceived risks of e-commerce [Ratnasingam et al., 2002]. In 1987, Malone et al. proposed the electronic market hypothesis, which argues that a cost reduction in information coordination will

encourage the use of the electronic market; but in 1993, Clemons et al. came up with a new proposal: the move to the middle hypothesis, where they argue that information technology in the form of an Inter Organizational System will reduce coordination costs, operation risks and opportunism risks [Ibrahim et al., 2006]. Further, the study conducted by Kumar [1996] suggests that cost reduction search and monitoring compliance can also reduce opportunism, transaction risk and coordination costs, thereby reducing transaction costs [Ratnasingam and Kumar, 2000]. Going back, Williamson [1975] suggested that where transactions have highly uncertain outcomes, recur infrequently and require unique or transaction-specific investment, they could be performed most efficiently within hierarchies. From the transaction cost theory perspective, the Internet will bring the benefit of efficiency by reducing the governance costs of transacting with external parties relative to internal coordination costs [Malone et al., 1987; Williamson, 1993].

Adoption Theory

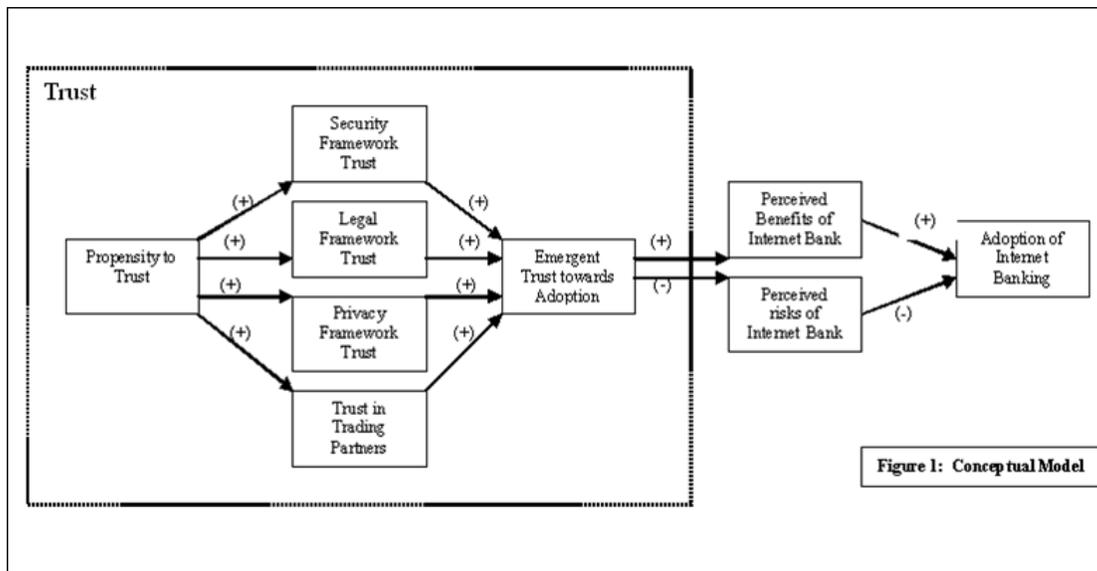
The adoption theory generally refers to the decision of any individual or organization to make use of an innovation [Frambach and Schillewaert, 2002]. According to the innovation adoption theory, it was found that Internet adoption in firms can be based on the perceived characteristics of the innovation. Rogers [2010] proposed five characteristics that are primarily based on individual level adoption decisions. Among others, Hart and Saunders [1998] emphasize trust as an important factor for the adoption of the Internet. The study conducted by Hart and Saunders [1998] is evidence of power and trust in Internet adoption. Ratnasingam et al. [2002] suggest three types of perceived benefits perceived economic, perceived relationship-related and perceived strategic benefits referencing [Riggins and Rhee, 1998; Senn, 2000; Doney and Cannon, 1997; Fearon and Philip, 1998; Ganesan, 1994; Morgan and Hunt, 1994; Nath et al., 1998; Smith and Barclay, 1997]. First, perceived economic benefits are derived from the automated processes that contribute to direct savings in cost and time. Second, perceived relationship-related benefits refer to positive trading partner trust relationships in the form of open communications, information sharing, cooperation, and commitment. Finally, perceived strategic benefits refer to closer ties between trading partners and improved reputation that increases business continuity and organizational performance. Further Ratnasingam et al. [2002] suggest three types of perceived risks referencing Jamieson [1996]; Marcella et al. [1998]; Das and Teng [1996]; Ring and Van de Ven [1994]. First, perceived technology performance-related risks refer to the misuse of e-commerce technologies, incompatible infrastructure and uncertainties of e-commerce operations. Second, perceived relational risks refer to the trading partner's lack of knowledge, exercising opportunistic behavior, conflicting attitudes and reluctance to change. Third, perceived general risks refer to poor business practices, environmental risks and lack of standards and policies. The two above-mentioned dimensions of perceived risk and perceived benefit lead us to decide about the adoption of Internet banking in the retail banking industry as a delivery channel.

8. Conceptual Model & Hypotheses

Conceptual Model

The conceptual model for trust in the adoption of Internet banking is based on the theoretical foundations, as

discussed in the literature review above. To achieve a complete and comprehensive conceptual model, the four theoretical perspectives are social learning theory, inter-organizational theory, transaction cost economics theory and adoption theory.



Model

The relationship of trust towards the behavior of adoption is mediating relationships [Gefen et al., 2003]. This type of relationship was put forth by Stewart [1999] and Ratnasingham and Kumar [2000]. For this study, we have adopted a similar model to that used by Ratnasingham and Kumar [2000]. By this model, as shown in Figure 1, we propose that trust affects both the perceived benefits and perceived risks during the adoption of the Internet as a delivery channel. Perceived risk and perceived benefit are key dimensions of trust in this study. Perceived risks and perceived benefits are based on emergent trust towards adoption. The emergent trust towards adoption is based on propensity to trust. To date there is no single conceptual framework that we are aware of which has been used to examine the motivational determinants of the adoption of the Internet as a delivery channel. The conceptual model proposed below can be tested to determine its effectiveness for the adoption behavior of the Internet as a delivery channel in the retail banking industry.

Importance of Model

The purposed model in this study is important because a number of authors have dealt with trust (for example Ratnasingam et al. [2002]; Kim and Prabhakar [2004]; Ganesan [1994]; Anderson and Weitz [1989]; Pavlou [2003] and Stewart and Gosain [2001]) from the initial adoption of Internet banking or the customers perspective. Even though such approaches help to provide a general sense of the considerations involved in trust [Mayer et al., 1995b], they do not clarify the relationship between banks and the Internet and also why banks would trust the Internet as a delivery channel. By testing the benefits and risks in the above model we hope to fill the gap in the literature and organizations.

Hypothesis

The hypothesis will examine the impact of trust towards emergent adoption: trust in security framework, privacy framework, legal framework and trading partner.

Ha:

Emergent trust towards the adoption of Internet banking is negatively related to the perceived risks [Lui and Jamieson, 2003]. Trust is always expected to reduce the perception of risk by privacy and security. Also, trust is habitually related to security and risk avoidance [Ganesan, 1994; Anderson and Weitz, 1989; Pavlou, 2003; Stewart and Gosain, 2001].

Hb:

Emergent trust towards the adoption of Internet banking is positively related to the perceived benefits [Lui and Jamieson, 2003].

Hc:

Perceived benefits of Internet banking are positively related to the adoption of Internet banking [Ratnasingham and Kumar, 2000]. Trust in the ability of the Internet to act, as the business infrastructure is dependent upon perceived security and perceived privacy and that perceived security may be related to perceived risk [Chellappa and Pavlou, 2002].

Hd:

Perceived risk of Internet banking is negatively related to the adoption of Internet banking Ratnasingham and Kumar [2000]. The higher the perceived risk greater the perceived chance of experiencing a loss [Sitkin and Weingart, 1995]. Trust generally decreases the perceived risk of using a service [Garbarino and Johnson, 1999]. Trust should have

a positive influence on risk, otherwise the consequences can be negative [Mayer, Davis, and Schoorman, 1995a].

9. Further Study

The above hypothesis can be used to examine the impact of trust towards emergent adoption: trust in security framework, privacy framework, legal framework and trading partners. The exploratory in depth multiple case study method that followed the guidelines drafted by Yin [2009], found it was appropriate to test the proposed model. The rationale for using a case study approach is given by Yin [2009] who states: A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries between a phenomenon and context are not clearly evident and in which multiple sources of evidence are used. As [Yin, 2003] has suggested source of evidence for case study. Sources of data collection for this study can be documentation such as company reports, internal documents, certification handbooks, memorandum, agendas, study reports, journals, Legal Acts, etc. as complementary sources [Yin, 2003] and interviews Yin [1994]. Face-to-face semi-structured interviews are considered to be appropriate methods to obtain respondents own viewpoints for further study. The study structure suggested by Yin [1994] has five important components. These are: study question, proposition unit of analysis, logical thinking and interpretation of findings. All these mentioned components can be adapted for further study. Finally, the data collection and model testing should be completed.

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