

TRUST IN ELECTRONIC BANKING

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ABSTRACT

Trust among stakeholders is vital for the successful implementation of IS projects such as electronic banking, because such IS initiative do not typically require face-to-face interactions. The Business-to-Business (B2B) model is an example of a relationship that facilitates the implementation of electronic banking. For example, ICT suppliers in alliance with banks to provide and support the IT infrastructure required for electronic banking implementation. These different stakeholders may have different perceptions of trust, which may affect electronic banking implementation. This short paper's aim is to examine how trust from the stakeholder theory perspective impacts the implementation of electronic banking. This paper proposes, from the stakeholder perspective, an integrated framework that conceptualizes trust between B2B relationships as antecedent to the successful implementation of electronic banking. The research will be based on the multi-case study method. Our proposed study provides a foundation for researchers and practitioners alike in understanding the concept of trust and its impact on IS projects.

KEYWORDS

Electronic Banking, Trust, B2B Model, Stakeholder Theory

1. INTRODUCTION

Like many industries, the global banking industry has over the years witnessed a high level of Information Systems (IS) investments to deliver electronic business activities (Zhu et al. 2004). While IS investments such as electronic banking services allow banks improve their organizational activities, during the implementation of such IS projects, the issue of trust among key stakeholders (customers, senior management, ICT suppliers etc.) is raised. Trust is vital because unlike traditional banking transactions, electronic banking services do not typically require face-to-face interactions with stakeholders. The Business-to-Business (B2B) model is an example of a relationship that facilitates the implementation of electronic banking services. An example of the B2B relationship is ICT suppliers who provide and support the IT infrastructure required for banks to implement electronic banking activities. These different stakeholders may have different perceptions of trust (Shankar et al 2002), which may affect the implementation of electronic banking services. Investigating trust from the perspective of the B2B model (Banks and ICT supplier) may help provide the missing piece in the jigsaw of clearly understanding how trust may be a useful antecedent in ensuring the trustworthiness of implemented electronic banking services (Shankar et al 2002). The stakeholder theory has been adopted in IS studies to help provide a better understanding of how various stakeholders can achieve the overall objective of implementing IS projects (Chan and Pan 2008; Smith and Hasnas 1999; Vidgen 1997). The stakeholder theory can be adopted to investigate how banks and ICT suppliers perceive trust during the implementation of electronic banking services. This would facilitate the understanding of how trustworthiness between banks and their ICT supplier impact the implementation of electronic banking services. Although our research approach could be applicable to a B2B system in a different industry, the banking industry provides an interesting context to investigate trust in the relationships between banks and ICT suppliers during e-banking implementations. This network of interrelationships characterized as complex and shared (Mulligan and Gordon, 2002), provides an ideal context to undertake the study of trust between stakeholders during the implementation of a B2B system.

This short paper's aim is to examine how trust from a stakeholder theory perspective impacts the implementation of electronic banking services. To this end, the study proposes to answer the following research questions: (1) How do banks and their ICT suppliers' perceived trust in the implementations of

electronic banking services? (2) How do the perceptions of trust between these stakeholders impact the implementations of electronic banking services?

2. THEORETICAL BACKGROUND

2.1 The Trust Concept

Trust is a multidisciplinary concept with roots in psychology, sociology (Rousseau et al 1998), social psychology (Suh and Han 2002), and economics (Rousseau, et al., 1998). Mayer et al (1995) defines trust 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 truster, irrespective of the ability to monitor and control that other party” (Mayer et al. 1995, p. 712). Lewicki et al. (1998) define trust as confident positive expectations regarding another’s conduct. This confident positive expectation is based on a belief in, a propensity to attribute virtuous intentions to, and a willingness to act on the basis of another’s conduct. In search of a multidisciplinary view, Rousseau et al (1998, p. 395) define trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another”.

The wide range of definition of trust highlights its multidimensional nature and provides different perspectives in explaining this variable. It is therefore vital to identify relevant constructs of trust that will be applicable to the study. Our study adopting the stakeholder theory requires familiarity and prior interactions, i.e. between banks and their ICT suppliers. Therefore, we adopt the constructs of benevolence and credibility (reliability) as part of the key constructs to conceptualize trust. Li et al (2011) highlights the importance of trust antecedents by suggesting that the presence of trust antecedents certify an online transaction to be trustworthy, which is required before an organization or individual participates in such online transactions.

2.1.1 Trust in online B2B model

Banks like most organizations continually outsource their IT activities especially in the deployment of their electronic banking services. However, despite organizations carefully choosing ICT suppliers based on their vendor’s ability to fulfill their long-term outsourcing goals (Mehta and Mehta 2010), the organizations outsourcing objective(s) and fit with their vendors capabilities are essential in determining a successful partnership between the stakeholders (Carmel and Agarwal 2002). The alliance of banks and ICT suppliers (B2B model) in the provision of electronic banking services raises the question of trust between both parties in ensuring that the strategic goal of each other is achieved. A lack of trust amongst the parties can affect the type of service that will be deployed in electronic banking activities. A comprehensive service level agreement (SLA) should be drawn up and agreed by both parties at the beginning of the client-supplier relationship to make sure that terms of agreement such as security, privacy, ethics, reliability, availability and competency, which are vital constructs of ‘trust’ are adhered to when deploying electronic banking services. This suggests that the concept of trust and its implications must be clearly understood and managed by the stakeholders involved in the implementation of electronic banking services. IS research have adopted the stakeholder theory to provide a clearer understanding to issues that arise in the deployment and use of IS and its application across the business models of B2C, B2B and B2G (Chan and Pan 2008, Chua et al 2005, Smith and Hasnas 1999; Vidgen 1997).

2.2 Stakeholder Theory

As argued by Freeman’s (1994), the stakeholder theory is a framework that explains how business should relate with its stakeholders. Stakeholder theory suggests that managers of organization must realize that their stakeholders are active partners who have a stake in the future direction of the organization and not to be treated as just a means to corporate ends (Evan and Freeman 1988). The stakeholder theory has been vital in IS research because it is instrumental in identifying and describing the diverse complexities that may arise in the implementation of an IS project, which normally involves various key stakeholders (Chan and Pan 2008;

Smith and Hasnas 1999). These scholars have used the stakeholder theory to explain how key actors involved in IS initiatives could work together and align their actions to achieve an overall objective. The stakeholder theory as a theoretical lens to investigate trust between the bank and its supplier as an antecedent to the successful implementation of electronic banking will be particularly helpful because as Jawahar and McLaughlin (2001) argue that key stakeholders are vital when an organization undergoes a cycle to attain some vital organizational need. It can be rightly argued that the implementation of an electronic banking service is an evolving process, needing the input of the key stakeholder (ICT suppliers) to ensure that they achieve the effective implementation of electronic banking services. Thus, questions will be raised if the multi-dimensional aspects of trust such as reputation, security, privacy, ethics reliability, availability etc. are managed properly due to likely difference in perceptions and interpretations of trust by both parties. It can be argued the stakeholder theory should be treated as a reversible concept, in that the ICT supplier will also view the bank as a vital stakeholder. Based on the arguments of the importance of the ICT vendor, as a stakeholder to banks and vice-versa, there is a need to identify the best approach to deal with the relationship in the context of trust. There have been diverse suggestions of stakeholder management approaches – termed as proactive, accommodative, defensive and reactive strategies (Clarkson 1995; Jawahar and McLaughlin 2001).

The proactive and accommodative approaches would be adopted in our study because as Chau and Pan (2008) argue, the delivery of electronic banking is resource intensive, with the need for more efforts to be provided to address the stakeholders' concern of the multi-dimensional concept of trust. However, Savage et al (1991) argue that the type of approach to be adopted should be dependent on whether the relationship between the stakeholders is adversarial or cooperative in their behaviors. They further argue that the stakeholder management strategies of collaborative and involvement would be applied to cooperative behaviors from the stakeholders while strategies of monitor would be appropriate to the adversarial behavior. It would be interesting to investigate the type of relationship and the best approach to manage the relationship that ensues between the bank and the ICT suppliers in trying to fulfill the multi-dimensional constructs of trust when implementing electronic banking. Li et al (2011) argue that it is vital to create and deploy safeguards (insurance and enforceable legal contracts) between parties in the deployment of online transactions. These safeguards can be form of governance to ensure that trust can be established and maintained between the wary parties. This will be vital to the perception trust amongst the stakeholders (bank and ICT suppliers) in the deployment of electronic banking services.

2.3 Conceptual Model

To facilitate undertaking the study and answering the research questions, a conceptual model for the study will be proposed. The constructs required to generate a conceptual model are adopted from existing literature on stakeholder theory, trust, the implementation and usage of online services (e.g. Gefen et al 2002; Jarvenpaa and Tractinsky 1999; Li et al 2011). These studies highlight various constructs such as benevolence, risk, integrity, ability, reliability, ethics, dependability, honesty, governance, vendor size, and reputation etc. to conceptualize trust in online environments. The development of the conceptual model will be based on the identification of these constructs to conceptualize trust as relevant to our study. Due to our study exploring how trust is perceived between banks and their ICT suppliers in the deployment of a trustworthy electronic banking services, constructs of trust such as benevolence, reliability, ethics, security, privacy, governance are adopted for drawing the model's boundary. These dimensions of trust will be utilized to develop a conceptual model to enable the understanding of how trust from the perspective of the bank and its ICT suppliers to improve the implementation of electronic banking services (see figure 1).

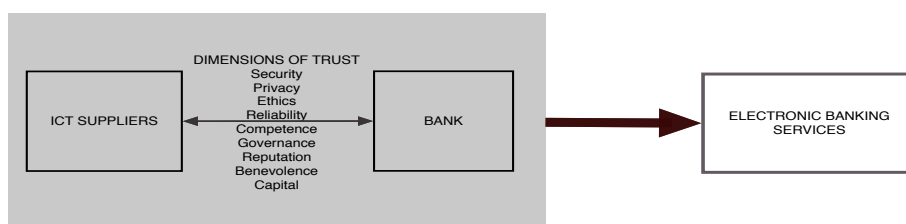


Figure 1. PROPOSED conceptual model of stakeholders (Bank & ICT supplier) trust in electronic banking delivery

For each one of the above dimensions, the conceptual model highlights the link and presents a logical set of criteria that may be useful to explore how trust among banks and a vital stakeholder (ICT supplier) during the implementation of electronic banking. The conceptual model also proposes key constructs as antecedents of trust that may impact on the trustworthiness of electronic banking services. This will facilitate the investigation of how the interaction of the nature of trust between key stakeholders (bank and ICT suppliers) may lead to trustworthiness in implementation of electronic banking. See table 1 below summarizing constructs of trust for the study.

Table 1. ELEMENTS of stakeholder trust

Concept	Operational Definition
Security	The security protocols and policies implemented by ICT suppliers to ensure safety of infrastructure deployed for electronic banking services.
Privacy	The information security protocols and policies implemented by ICT suppliers to ensure bank customer information are safeguarded.
Ethics	The ethical principles, guidelines, and conduct practiced by ICT suppliers upon which their services are rendered.
Reliability	The overall reliability of ICT suppliers in meeting obligations and adhering to terms and conditions in an SLA.
Reputation	The reputation of ICT suppliers in the operation and maintenance of electronic banking services. This also includes the reputation of executives and management.
Competence	The operational and managerial knowledge and competencies exhibited by ICT suppliers and the supporting processes to ensure maintenance and acquisition of relevant competencies.
Benevolence	The belief that ICT suppliers are genuinely concerned that the banks deploy a trustworthy electronic banking service.
Capital	The financial resources and financial management practices that ensure ICT suppliers ability to remain a growing concern. This may include establishment resources like share capital.
Governance	The systems of management and organization structure of t ICT suppliers.

3. RESEARCH METHODS.

This study will be based on the multi-case study method and will adopt the “scientific realism” or “soft positivism” approach (Kirsch 2004; Madill et al 2000), implying this approach will enabled us conduct the data collection and analysis with certain anticipations based on existing theory but will also allow the emergence of unexpected findings and data explanations, as in the manner of the interpretivist approach. This will allow the conduction of semi-structured interviews to help collect the rich data required for understanding on how trust among banks and ICT suppliers may impact the implementation of electronic banking services. Senior representatives of the selected banks and IT firms at the strategic, tactical and operational levels will be selected for interviews. The informants at each of these levels will be able to provide the most valuable insights on the subject matter. This method will ensure validity of generated data because they will be collected from the most knowledgeable respondents in the banks. It is anticipated that data collection will be between February and April 2014. The interviews will be supplemented with on-site observations and requesting formal documentation on policies on electronic banking implementations. This will enable triangulation of data collected from the interviews and further enhance validity of the study.

4. ANTICIPATED CONTRIBUTION TO KNOWLEDGE.

This short paper proposes an integrated framework by conceptualizing trust as an antecedent to the successful implementation of electronic banking services using the stakeholder theory as the theoretical lens to investigate a B2B relationship. The holistic view of our model could be adopted for academic and practitioners alike in understanding how the constructs of trust impacts the implementation of electronic banking services.

In conclusion, despite the existing literature on the impact of trust in electronic banking services, there is still a dearth of empirical work that specifically explore how trust from the stakeholder perspective (e.g.

Banks and ICT suppliers) may impact the implementation of IS projects. This will also help shed insights on the roles and expectations of stakeholders during the implementation of IS projects in other industries. Thus, our proposed study provides a foundation for researchers in exploring the concept of trust and its impact on B2B projects in other sectors. Our study could also serve as an opportunity to test our proposed conceptual model.

REFERENCE

- Carmel, E. & Agarwal, R. (2002). The maturation of offshore sourcing of information technology work. *MIS Quarterly Executive*, 1 (2), 65-76.
- Chan, C. M. L. & Pan, S. L. (2008). User Engagement in e-Government Systems Implementation: A Comparative Case Study of Two Singaporean e-Government Initiatives. *Journal of Strategic Information Systems*, 17(2), 124-139.
- Chua, C. E. H., Straub, D. W., Khoo, H. M., Kadiyala, S. & Kuechler, D. (2005). The evolution of E-commerce research: A stakeholder perspective. *Journal of Electronic Commerce Research*, 6(4), 262-279.
- Clarkson, M. B. E. (1995). *A Risk Based Model of Stakeholder Theory*. University of Toronto, Toronto, Canada.
- Evan, W. M. & Freeman, R. E. (1988). A Stakeholder Theory of the Modern Corporation: Kantian Capitalism. In Beauchamp, T. L. & Bowie, N. E. (eds.), *Ethical Theory and Business*, 3rd edition (Englewood Cliffs), 97-106.
- Freeman, R. (1984). *Strategic Management: A Stakeholder Approach*, Ballinger: Boston, MA.
- Gefen, D., Karahanna, E. & Straub, D.W. (2003). Trust and TAM in online shopping: an integrated model. *MIS Quarterly*, 27, 51-90.
- Jarvenpaa, S. L. & Tractinsky, N. (1999). Consumer trust in an Internet store: a cross- cultural validation. *Journal of Computer-Mediated Communication*, 5(2).
- Jawahar, I. M. & McLaughlin, G. L. (2001). Toward a descriptive stakeholder theory: an organizational life cycle approach. *Academy of Management Review* 26 (3), 397-414.
- Kirsch, L. J. (2004). Deploying Common Systems Globally: The Dynamics of Control. *Information Systems Research*, 15(4), 374-395.
- Lewicki, R., McAllister, D., & Bies, R. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review*, 23(3), 438-458.
- Li, F, Pieńkowski, D., van Moorsel, A., & Smith, C. (2012). A Holistic Framework for Trust in Online Transactions. *International Journal of Management Reviews*, 14, 85-103.
- Madill, A., Jordan, A. & Shirley, C. (2000). Objectivity and reliability in qualitative analysis: realist, contextualist and radical constructionist epistemologies. *British Journal of Psychology*, 91(1), 1-20.
- Mayer, R. C., Davis, J. H. & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- Mulligan, P., & Gordon, S. R. (2002). The impact of information technology on customer and supplier relationships in the financial services, *International Journal of Service Industry Management*, 13(1), 29-46.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Savage, G. T., Nix, T. W., Whitehead, C.J. & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Executive* 5 (2), 61-7
- Shankar, V., Urban, G. L. & Sultan, F. (2002). Online Trust: a Stakeholder Perspective, Concepts, Implications, and Future Directions. *Journal of Strategic Information Systems* 113(4), 325-344
- Smith, H. J., & Hasnas, J. (1999). Ethics and information systems: The corporate domain. *MIS Quarterly*, 23(1), 109-128.
- Suh, B. & Han, I. (2002). Effect of trust on customer acceptance of Internet banking. *Electronic Commerce Research and Applications*, 1(3-4), 247-263.
- Vidgen, R. (1997). Stakeholders, soft systems and technology: Separation and mediation in the analysis of information system requirements. *Information Systems Journal*, 7(1), 21-46.
- Zhu, K., Kraemer, K., L., Xu, S., & Dedrick, J. (2004). Information Technology Payoff in E-Business Environments: An International Perspective on Value Creation of E-Business in the Financial Services Industry. *Journal of Management information system*. 21(1), 17-54.