Trust in Internet Shopping: Instrument Development and Validation Through Classical and Modern Approaches

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Despite the phenomenal growth of Internet users in recent years, the penetration rate of Internet shopping is still low and one of the most often cited reasons is the lack of consumers’ trust (e.g. Hoffman et al., 1999). Although trust is an important concept in Internet shopping, there is a paucity of theory-guided empirical research in this area. In this paper, a theoretical model is proposed for investigating the nature of trust in the specific context of Internet shopping. In this model, consumers’ trust in Internet shopping is affected by propensity to trust and two groups of antecedent factors, namely, “trustworthiness of Internet vendors” and “external environment”. Trust, in turn, reduces consumers’ perceived risk in Internet shopping. As an important step towards the rigorous testing of the model, the necessary measurement instrument has been developed with its reliability and validity empirically tested. The psychometric properties of the measurement instrument have been investigated using both a classical approach (based on Cronbach’s alpha and exploratory factor analysis) and a contemporary approach (based on structural equation modeling techniques), as a way of methods triangulation for validating instrument properties. The resulting instrument represents a rigorously developed and validated instrument for the measurement of various important trust related constructs. This research contributes to the development of trust theory in e-commerce and add to the repository of rigorous research instruments for IS survey researchers to use.

INTRODUCTION

The growth of the Internet and its user base in recent years has been truly phenomenal. As of November 2000, the estimated number of people online has exceeded 407 million and the annual growth rate remains high. Enormous potential therefore exists for the use of the Internet for the purchase of goods and services (“Internet Shopping”). However, this potential remains largely untapped as market surveys have confirmed that many Internet users are still reluctant to make purchases on the Internet. One of the most often cited reasons for consumers not purchasing from Internet shops is the lack of trust, which stops or discourages consumers from entering into exchange relationships with Internet shops (e.g. Hoffman et al., 1999). Despite the importance of trust in consumer-based electronic commerce, little theory-guided empirical research has been undertaken to understand the nature of trust, its antecedents and consequences in the specific context of Internet shopping. The few research papers available (e.g. Jarvenpaa et. al., 1999) tend to focus on very small models, ignoring many potentially important constructs (e.g. trust propensity, privacy and security) suggested by the rich but distant literature on trust. Thus, more research is called for. In addition, the study of e-commerce trust has been hampered by a lack of validated measurement instrument in the literature. As a step towards bridging this gap, this paper proposes a research model of trust in Internet shopping and presents the development of an empirically validated measurement instrument for testing the trust model.

This paper is presented as follows. The first section reviews the literatures on Trust. Then we present the research model and propositions and describe the instrument development and validation process, and results. Finally, conclusions of the findings and suggestions for future research are provided.

TRUST

The notion of trust has been examined under various contexts over the years, e.g. in bargaining (Schurr & Ozanne,
1985), industrial buyer-seller relationships (Doney & Cannon, 1997), distribution channels (Dwyer, Schurr & Oh, 1987), partner cooperation in strategic alliances (Das, 1998) and the use of market research (Moore et al., 1993). Different theoretical perspectives have been used in these studies, which may be aggregated into three categories (Lewicki & Bunker, 1995):

1. The views of personality theorists, conceptualizing trust as a belief, expectancy, or feeling which is deeply rooted in the personality and has its origins in the individual’s early psychological development.
2. The views of sociologists and economists, conceptualizing trust as a phenomenon within and between institutions, and as the trust individuals put in those institutions.
3. The views of the social psychologists, characterizing trust in terms of the expectation and willingness of the trusting party engaging in a transaction, the risks associated with and acting on such expectations, and the contextual factors that serve to either enhance or inhibit the development and maintenance of that trust.

Although the social-psychological perspective appears to be most relevant in the understanding of consumer trust in Internet shopping as this perspective focuses on transactions, the other perspectives also contribute to our understanding of trust in this context in their unique ways. For example, it would be insufficient to consider consumers’ trust in Internet shopping without examining the trust propensity (which is a personality trait) of the consumers concerned.

The distant literature on trust across a wide variety of disciplines provides a useful basis on which to investigate consumer trust, its antecedents and consequences in the context of Internet shopping. However, most of the literature still suffers from the problems identified by Mayer and Davis (1995). Confusions between trust and its antecedents still abound. For example, in Kini and Choobineh (1999) the definition of trust included the sources of trust itself. In addition, most of the literature does not contain empirical supporting evidence. In the context of consumer trust in Internet shopping, theory-guided empirical study is rare. This severe lack of theory-guided empirical studies is critically impeding our understanding of consumers’ trust in Internet shopping.

RESEARCH MODEL AND PROPOSITIONS

This research synthesizes the diverse literature on trust in order to develop an integral research model of consumer trust in Internet shopping (CTIS). According to Hardin (1992), trust is a three-party relation involving properties of a trustor, attributes of a trustee, and a specific context in which trust is conferred.

As depicted in Figure 1, trust in Internet shopping is affected by: a consumer’s propensity to trust; the trustworthiness of an Internet vendor; and relevant external environmental factors impacting Internet shopping transactions. Limerick and Cunnington (1993) also argued that trust can reduce uncertainty about the future and is a necessity for a continuing

Figure 1: A conceptual model of trust in Internet shopping