An Examination of the Impacts of Brand Equity, Security, and Personalization on Trust Processes in an E-Commerce Environment

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ABSTRACT

This research broadens the study of trust as it applies to developing stable relationships in electronic environments. Prior studies have investigated many aspects of trust, but few have looked at its incremental development. Previous empirical research identifies antecedents to initial perceptions of trust that may influence the progression of trust to deeper levels. More conceptual work identifies antecedents that swiftly cultivate trust, allowing for stable relationships to develop more quickly. The antecedents investigated in this study, using regression and structural equation modeling, are the use of security symbols, trustworthy brand names, and personalization techniques. The results of the study indicate that the use of security symbols and trustworthy brand names have a positive and lasting effect on trusting beliefs and that personalization has a decreasing and lasting effect on trusting beliefs. There was no support for the hypothesis that trust develops over time in electronic environments.

Keywords: calculus-based trust; e-commerce; identification-based trust; knowledge-based trust; personalization; process model of trust; security symbol; trust

INTRODUCTION

Electronic commerce is a notably difficult environment in which to display trustworthy behaviors. This environment offers limited personal interaction and minimal support to develop and maintain trusting relationships (Coursaris et al., 2003). Researchers have proposed that stable and trusting relationships are swiftly formed by parties (Meyerson et al., 1996) and factors have been identified that increase initial trust in electronic commerce...
environments (Gefen, 2000; McKnight et al., 2002). However, longitudinal studies to identify whether these factors are stable influences of trust and continue to increase trust after initial interactions are very limited in these areas.

When exploring previous research in electronic commerce and trust, several questions emerge. These questions are:

**Do institutional structures, brand names, and personalization techniques influence calculus-based trust and the formation of knowledge-based and identification-based trusts?**

**Do individuals change their behavior as they develop deeper levels of trust?**

**Does trust develop in an electronic environment beginning with calculus-based trust, then progressing to knowledge-based trust, and finally to identification-based trust?**

This study answers these questions.

Three methods are used to swiftly develop trust. These methods include the presence of security symbols, use of trustworthy brand names, and personalization techniques. We posit that using trustworthy brand names and security emblems enhances a consumer’s initial trust and contributes (longitudinally) to the swift development of deeper types of trusts. This study also investigates whether brand names or institutional structures enhance trust more effectively. Additionally, we examine the use of personalization to encourage the swift formation of trust.

**LITERATURE REVIEW**

There are various definitions of trust proposed in the literature, all similar to the extent that they define trust as the willingness to act based on a state of confidence about another party’s motives and the degree of risk involved with acting. This state of confidence is usually influenced through interactions with the other party that are reliable, predictable, and benevolent (Mayer et al., 1995).

The bases for confidence about another person’s motives are different depending on the disciplinary field. Social psychologists theorize that trust is based on the person’s perceived control over his/her environment (Rotter et al., 1968), and self-confidence factors (Lillibridge & Lundstedt, 1967). Sociologists indicate that the religious affiliation, ethnicity, birth order, and the economic level of a person influence his/her ability to trust (Rotter, 1971). Economic researchers believe trust is derived from a process of assessing the risks and rewards of entering into a transaction (Williamson, 1993). Marketing researchers have found that a supplier’s reputation, support, and competence affect the supplier’s trustworthiness (Anderson & Weitz, 1989). Management researchers indicate that repeated and honest interactions influence trustworthiness (Gulati, 1995). Researchers in management information systems have shown that familiarity and the presence of institutional structures are also antecedents of trust (Gefen, 2000; McKnight et al., 2002).

**Integrative Model: Calculus, Knowledge, and Identification-Based Trust**

Clearly, disciplines have unique perspectives on trust formation. However, two integrative studies by Shapiro et al. (1992) and Lewicki and Bunker (1996) propose that there are three foundations for trust: calculation, knowledge, and identification.

Calculus-based trust originates from the theory of transaction cost economics (Williamson, 1993). According to this theory, any person will behave opportunistically whenever it is profitable and feasible. Examples of opportunistic behavior are withholding information, shirking, or failing to fulfill promises or obligations. Calculus-based trust is formed by evaluating the possibility that the other party will adopt these opportunistic behaviors (Shapiro et al., 1992; Williamson, 1993).
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