

TRUST IN E-COMMERCE VENDORS: A TWO-STAGE MODEL

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Abstract

This study investigates the development of trust in a Web-based vendor during two stages of a consumer's Web experience: exploration and commitment. Through an experimental design, the study tests the effects of third party endorsements, reputation, and individual differences on trust in the vendor during these two stages.

1. INTRODUCTION

An important barrier to the widespread diffusion of electronic commerce among consumers is “the fundamental lack of faith between most businesses and consumers on the web today. In essence, consumers simply do not trust most Web providers enough to engage in ‘relationship exchanges’ involving money and personal information with them” (Hoffman et al. 1999). Almost 95% of consumers have declined to provide personal information to web sites at one time or another: 63% of these users indicated this is because they do not trust those collecting the data (Hoffman et al. 1999). The fact that many web-based businesses, and even the electronic medium itself, are not familiar to many consumers, makes them particularly hesitant to reveal personal information or to trust in the ability of the vendors to deliver on their commitments.

Web site providers have taken many steps to overcome trust barriers. These include providing unconditional guarantees of safety with an offer to cover any losses due to credit card fraud (e.g., Amazon); providing detailed explanations of their privacy policies on their web sites (e.g., Travelocity); trying to capitalize on existing brand reputations in the case of established businesses (e.g., Microsoft Expedia, Barnes and Noble); building brand recognition for their web-only businesses (e.g., Travelocity, Amazon); and trying to build transference-based trust (Stewart 1999) by associating themselves with already-trusted businesses, for instance, by placing links on their web sites to well-established businesses. Transference is based on balance theory (Heider 1958).

This study focuses on the vendor strategy of trying to increase consumer trust by placing icons on their web sites from “trusted” third parties, such as the CPA society, Consumer Reports, or Trust-e (which certifies that the vendor has a privacy policy). While this is becoming an increasingly common strategy, there is little empirical evidence that these icons do, in fact, increase consumer trust. One objective of this research is to evaluate experimentally the effectiveness of these icons in promoting consumer trust in web-based businesses.

Research Question 1: Do icons and/or endorsements from third-parties increase consumer trust in web-based businesses?

Web-related consumer decisions take place within the context of an individual's personal tendencies and his/her perceptions about the web environment. Thus, user trust in web vendors and the effect of third party icons may depend, to an extent, on individual characteristics, in particular, propensity or disposition to trust (Mayer et al. 1995), and an individual's prior experience with the web.

Research Question 2: How do individual differences influence consumer trust in web-based businesses?

These two research questions will be pursued within the context of the reputation of web vendors. A positive reputation is likely to increase trust in the vendor (Jarvenpaa and Tractinsky 1999). It is possible that reputation and third party endorsements may either reinforce or substitute for each other in their effects on trust in the vendor.

2. THEORY

Our theoretical model is based largely on Mayer et al. (1995) and the model of initial trust formation proposed by McKnight et al. (1998). We use the term "trust" to mean a combination of *trusting beliefs*, defined as the belief that another is benevolent, competent, honest, or predictable in a given situation, and *trusting intention*, meaning one's willingness to depend on another in a situation (McKnight et al. 1998). We apply an initial trust model because, for a new web-based business, it is important to create that initial trust if it is to induce consumers to use the site for the first time. The initial trust model, which assumes that parties barely know each other, also seems appropriate for the distant, impersonal relationships that characterize most web vendor/consumer relationships.

We posit that a person goes through two stages in his/her potential interaction with a web-based vendor: an *exploratory* stage and a *commitment* stage. These stages are not meant to be definitive, but to approximate the process of how people decide over time to utilize (or not) a web site. It also reflects the general belief in the trust literature (e.g., Blau 1964) that after the first few interactions, a user's trust in an individual/object, such as a web-based business, will be based largely on specific (albeit limited) experience with that individual/object.

At the exploratory stage, the user has not yet directly experienced a specific web site and is still trying to decide whether or not to explore the web site to see what it offers. Trusting intention at this stage, therefore, refers to the willingness to pursue the experience, that is, to explore the web site further.

If the user decides to pursue the experience, he/she proceeds to the commitment stage. At this stage, the user interacts with the vendor through the web site and must decide "Shall I do business with this vendor?" Deciding to do business (trusting intention) may include intent to purchase the product, to exchange personal information with the vendor, or, in the case of an expert advice site (such as the one we use in this study), to act on the vendor's counsel. We propose that the specific influences on trust will be different during the two stages.

At the exploratory stage (Figure 1), in the absence of specific experience, an important influence on a user's trust in a web vendor is the individual's *disposition to trust* (McKnight et al. 1998), which has two components: faith in humanity (where one assumes others are usually upright, well-meaning, and dependable) and trusting stance (where a person assumes that he/she will achieve better outcomes by dealing with people as though they are well-meaning and reliable). *Disposition to trust is posited to influence trust in the web vendor both directly and through its effect on institution-based trust.*

Institution-based trust perceptions—that the context itself ensures trustworthiness of the people within the context (e.g., Shapiro 1987; Zucker 1986)—can take the form of perceived structural assurances (e.g., data encryption safeguards or legal protections) or situational normality (the perception that the web situation is normal or usual, implying that this favorable setting encourages success) (McKnight et al. 1998). *Perceptions of institution-based trust are posited to influence trusting intention, both directly and mediated by trusting beliefs* (McKnight et al. 1998).

Experience with the web may encourage the feeling that the Internet situation is normal and that structures are protective. Thus, web experience is proposed as a positive influence on institution-based trust.

Second, in the exploratory stage, subjects will be presented with a legal situation that is familiar to most students. The students will be told that they have a malfunctioning air-conditioner in their apartment but, after repeated calls to the landlord, the air-conditioner has not been fixed. They are, therefore, faced with the possibility of having to take legal action. They will also be informed of an advertisement for a web site that addresses common legal issues. A 2 x 4 combination of reputation and third party icon treatments will be included as part of the verbal description of the legal advice web site. Reputation treatments will consist of favorable or not described at all. For the third party icons, the site will be described as having seals from Trust-e, ATLA (Association of Trial Lawyers of America), both, or not described as having seals.

Third, subjects will fill out a questionnaire about their inclination to explore the described web site to learn their legal rights in the situation presented, representing the trusting belief and intention constructs shown in Figure 1.

Fourth, to address the commitment stage, the subjects will be asked to visit an experimental legal advice web site—developed specifically for this study¹—to investigate their legal rights in this situation (they will not be told that this is an experimental web site). As the students traverse this site, some will see no third party icons. Others will see an icon from either Trust-e, ATLA, or both.² Equal numbers of students will be randomly assigned to each of the treatment combinations.

Finally, the subjects will be asked to complete another questionnaire about their experience with the web site and their inclination to trust the web-based vendor (measuring the Figure 2 trust constructs). Subjects will also be asked to answer open ended questions about factors that influenced their perceptions of the web site/vendor, both negatively and positively.

The quantitative data will be analyzed using ANOVA and structural equation modeling techniques. Qualitative data will be analyzed to determine which factors are most important to the respondents.

4. CONTRIBUTION

The study should make a substantial contribution to our understanding of factors that influence consumer trust in web businesses, specifically the role of third party icons in promoting such trust.

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¹In the pilot, the site was rated 5.5 out of 7 (on average) for site quality.

²The icons the subjects see at this stage may not be the same ones described in the exploratory stage.