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THE EFFECTS OF TRUST-ASSURING ARGUMENTS ON CONSUMER TRUST IN INTERNET STORES

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Abstract

The difficulty Internet stores face in developing consumer trust is an ongoing impediment to the proliferation of Internet shopping. In order to develop consumer trust, many e-commerce strategies and Website features have been proposed in the IS discipline. Trust-assuring arguments are one proposed feature and refer to a statement or statements offering support for a claim made by an Internet store to address trust related issues. Although trust-assuring arguments are often found in Internet stores, to date little research has examined the effects of the arguments in building consumer trust. To fill the gap, this paper examines the effects of trust-assuring arguments on consumer trust in Internet stores.

Keywords: Trust, electronic commerce, argumentation, trust-assuring arguments

Introduction

Given the importance of trust in business-to-consumer electronic commerce, examining a way to increase consumer trust would be beneficial to both consumers and Internet stores. *Trust-assuring arguments* are already used by many Internet stores, and warrant further analysis and development. One example of this kind of argument is

100% Safe Shopping: We absolutely guarantee that your order will be transmitted securely and that you will pay nothing if unauthorized charges ever appear on your credit card as a result of shopping here. (excerpted from www.buydigitaldirect.com)

Although trust-assuring arguments are often found in Internet stores, little research effort has been devoted to examining the effects of these arguments in building consumer trust. To address this gap, the current paper examines the effects of trust-assuring arguments on consumer trust in Internet stores. In particular, the following questions are addressed:

- Do trust-assuring arguments increase consumer trust in Internet stores?
- How can more convincing arguments be developed?

To answer the study questions, the literature resulting from previous IS research regarding trust in online shopping is reviewed. Specifically, trust enhancing strategies and features, Toulmin's (1958) model of argumentation, and trust constructs in Internet shopping are reviewed to construct a set of testable hypotheses. The research hypotheses are then tested with data obtained from a laboratory experiment.

Literature Review

Trust-Enhancing Strategies and Features in IS Literature

Many trust-building strategies and features discussed in the information systems literature can be classified based on four common themes (Kim and Benbasat 2003; see Table 1).

Trust-assuring arguments should be particularly effective in communicating assuring information categorized in Groups 1 and 2 in the table, in a summarized form.

Table 1. Trust Building Strategies and Features in the IS Literature

Groups	Strategies/Features
1. Providing assuring information created from others	Third party certificates
	Consumer feedback
	Advertising reputation
2. Providing assuring information created by a store itself	Displaying stores' security and privacy policies
3. Utilizing trust transfer	Links from reputable sites
4. Interaction and cues for simple examinations	Interacting with customers effectively
	Cues for a simple examination

Toulmin's Model of Argumentation

A model of argumentation in daily communication, based on claims and arguments made in court of law settings, has been formalized by Toulmin (1958). He has identified six argument elements that appear to be common and invariant across different field settings. However, only three of them—*claims*, *data*, and *backing*—appear frequently in daily communications. Thus, the current study focuses on these three common elements, while also reviewing warrants, statements whose existence is assumed implicitly in daily communication although they often remain unexpressed.

- Claims: “assertions or conclusions put forward for general acceptance” (Ye and Johnson 1995)
- Data: “evidence used to support a claim” (VerLinden 1998)
- Warrants: propositions that establish links between data and claims (Toulmin 1958)
- Backing: evidence explaining why warrants and data should be accepted (Toulmin 1958; VerLinden 1998)

An example of an argument and the relationships among these four elements is depicted in Figure 1. In the figure, warrants are surrounded with a dotted box because they are often unexpressed, although their implicit existence is generally assumed in daily communications.

Trust in Internet Stores

Trusting Intentions

Consumer trust in the context of Internet shopping is “the willingness of a consumer to expose himself/herself to the possibility of loss during an Internet shopping transaction, based on the expectation that the merchant will engage in generally acceptable practices, and will be able to deliver the promised products or services” (Lim et al. 2001). This kind of trust has also been referred to as *trusting intentions* (Gefen and Straub 1999; McKnight et al. 1998).

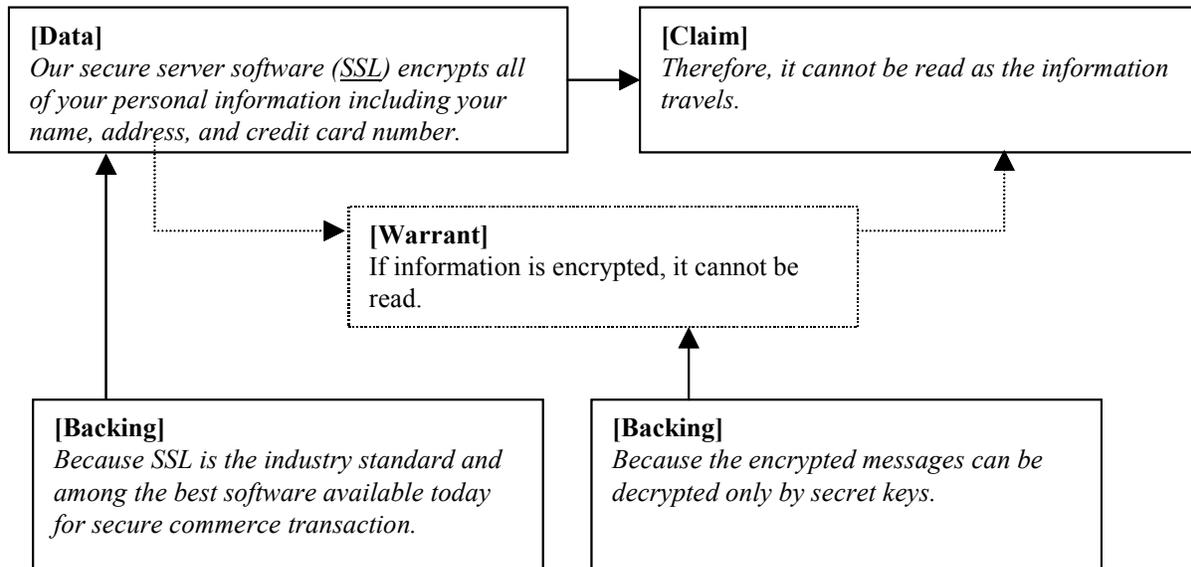


Figure 1. Claim, Data, Warrant, and Backing

Trusting Beliefs

Trusting beliefs, which have also been referred to as trustworthiness (Mayer et al. 1995), can have a positive effect on consumers' trusting intentions (Gefen and Straub 1999; McKnight et al. 1998). In Internet shopping, trusting beliefs are a set of consumers' beliefs regarding particular characteristics of Internet stores, including the *abilities*, the *integrity*, and the *benevolence* exhibited by the Internet stores when they handle consumer transactions (Gefen et al. 2003; Gefen and Straub 1999; Mayer et al. 1995; McKnight et al. 2002).

- Trusting belief—*ability*: “the group of skills, competencies, and characteristics that enable a [trustee] to have influence within some specific domain” (Mayer et al. 1995)
- Trusting belief—*integrity*: “the trustor’s perception that the trustee adheres to a set of principles that the trustor finds acceptable” (Mayer et al. 1995)
- Trusting belief—*benevolence*: “the extent to which a trustee is believed to want to do good to the trustors, aside from an egocentric profit motive” (Mayer et al. 1995)

In the initial relationships between consumers and Internet stores they have not previously visited, integrity and benevolence are likely to merge because both imply that the stores will do good to consumers (McKnight and Chervany 2001). More defined perceptions of benevolence may be developed subsequently after consumers experience a series of interactions with a store (Lim et al. 2001; Mayer et al. 1995). Hence, this study focuses on only two trusting beliefs—beliefs in the *ability* and the *integrity*—because the context of this study is focused on consumers who visit particular Internet stores for the first time.

Research Model and Hypotheses

The research model, depicted in Figure 2, hypothesizes that trust-assuring arguments positively affect consumers' trusting beliefs, and the effects of arguments increase in magnitude if each of the argument elements (i.e., claim, data, and backing) are added.

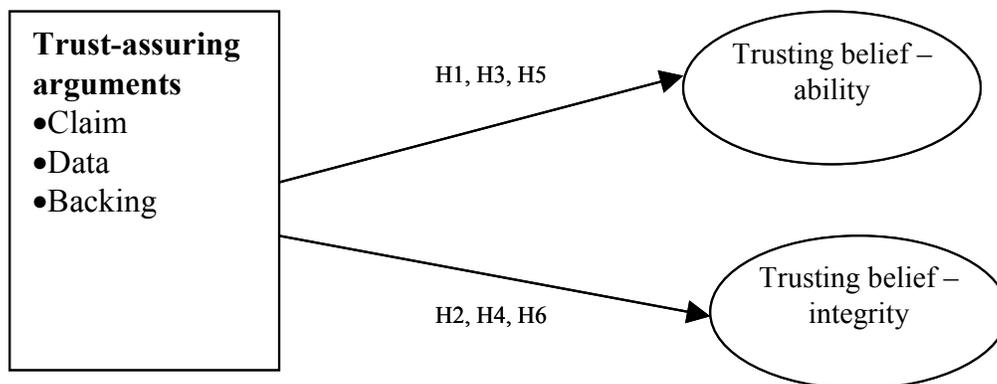


Figure 2. Research Model: Trust-Assuring Arguments on Trusting Beliefs

Concerns regarding trust are addressed primarily through the explication of store policies (e.g., privacy, security, pricing, products, and customer service policies and practices), certifications awarded (e.g., BBBonline, TRUSTe, and VeriSign certifications), and customer feedback (e.g., customer service survey results). By communicating store policies, certifications, and customer feedback, stores assert that they are accountable and sincere in dealing with customers, that their principles are acceptable to customers, and that they have adequate knowledge to manage their business on the Internet. In effect, trust-assuring arguments regarding these issues can lead consumers to perceive that particular stores exhibit satisfactory levels of integrity and ability to handle online transactions securely. Therefore, the following hypotheses are developed.

H1: *Trust-assuring arguments* positively affect trusting beliefs—*ability* regarding Internet stores.

H2: *Trust-assuring arguments* positively affect trusting beliefs—*integrity* regarding Internet stores.

In general, people are more likely to accept claims accompanied by data than claims asserted without accompanying data, because the data can provide reasons for accepting the claims. In addition, the length of an argument with data is longer than that of an argument without data, and therefore adding data can work as a heuristic cue (e.g., longer arguments are more persuasive than shorter ones; O’Keefe 2002, p. 150). Therefore, the following hypotheses can be construed.

H3: The effects that claims accompanied by data have on trusting beliefs—*ability* regarding Internet stores—are more significant than the effects when claims are provided without supporting data.

H4: The effects that claims accompanied by data have on trusting beliefs—*integrity* regarding Internet stores—are more significant than the effects when claims are provided without supporting data.

When arguments are presented with the support of relevant data, however, people generally are not likely to accept the claims of the arguments if they do not accept the related data and warrants. Furthermore, in some situations people might express skepticism about the reasons that they should accept particular data and warrants as valid. *Backings* provide the reasons why people should accept data and warrants, and therefore people are more prone to accept data and warrants with backings than without backings. In addition, the length of an argument with backings is often longer than one without backings, and thus backings can work as heuristic cues insofar as longer arguments are more persuasive than shorter arguments (O’Keefe 2002, p. 150). Therefore, the following can be predicted.

H5: Regarding trusting beliefs—*ability* of Internet stores- the effects of providing backing in addition to claims and data are more significant than the effects of providing claims and data only.

H6: Regarding trusting beliefs—*integrity* of Internet stores- the effects of providing backing in addition to claims and data are more significant than the effects of providing claims and data only.

Method

The research model in Figure 2 is to be tested using a laboratory experiment designed to control potential confounding factors such as download time and environmental distractions. A total of 120 students are to be recruited as subjects.

Experimental Task

In experiments, subjects are asked to evaluate two experimental Websites by visiting them one at a time, and then to decide from which store they would prefer to buy a product. To encourage their involvement in the evaluation task, an incentive is given: they are offered a \$30 gift certificate at a price of \$10, if they agree to buy one of the products designated by the experiment coordinators and if they use the gift certificate from the store they rate higher during the evaluation session.

Design

To test the research model, the experiment includes four groups: (1) a control group that is offered no arguments, (2) a group that is offered only claims, (3) a group that is offered claims accompanied by supporting data, and (4) a group that is offered claims accompanied by both supporting data and backing.

Independent Variables

(1) Trust-assuring arguments

Kim and Benbasat (2003) have identified a list of trust issues in business-to-consumer electronic commerce and categorized them into four groups: issues related to (1) personal information, (2) customer service, (3) product quality and price, and (4) store presence.

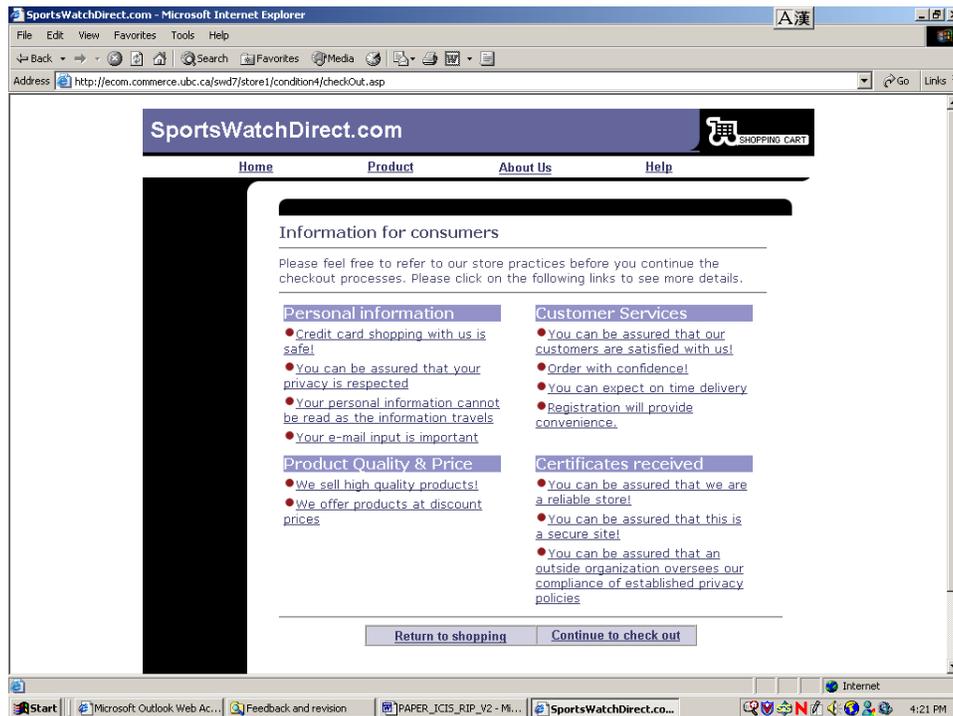


Figure 3. Claims Used in the Study

In the current study, 13 arguments, which cover most of the identified issues directly or indirectly, are developed based on content from actual Websites and modified to fit Toulmin’s model. Figure 3 displays the claims used in this study.

(2) Argument elements (claim, data, backings)

The developed arguments include claim, data, and backing respectively. Based on these arguments, two more sets of arguments (e.g., claims only, claims and data) are developed by removing the argument elements.

Dependent Variables

Trusting belief—*ability* and trusting belief—*integrity* of Internet stores are dependent variables. Measures in trusting beliefs related to ability (four items) and integrity (three items) are adapted from Lim et al. (2001).

Preliminary Findings

The results of a pilot study of 19 subjects has revealed that groups exposed to trust-assuring arguments report perceptions of higher ability and integrity on average than the perceptions made by a control group (see Figure 4). A more thorough experiment is in progress and the results will be presented at the conference.

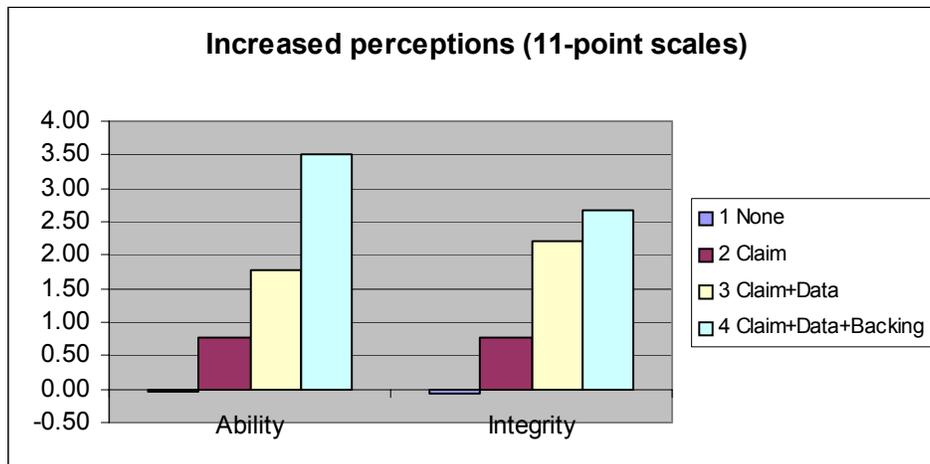


Figure 4. Pilot Test Result (Mean Comparison Among Groups)

Expected Contributions

This study is expected to expand upon McKnight and Chervany’s (2001) model of trust by adding the provision of *trust-assuring arguments* as a Web intervention that has the potential to increase consumer trust. This study can be of benefit to practitioners by providing useful guidance in implementing *trust-assuring arguments*, such as using Toulmin’s model as a framework for Internet stores to develop convincing arguments.

Acknowledgements

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