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

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Introduction

Low levels of consumer trust in Internet stores continue to be a significant impediment to the proliferation of Internet shopping (Gefen and Straub forthcoming). Many websites have responded to this situation with *trust-assuring arguments*, a statement or statements offering support for a claim made by an Internet store to address trust-related issues (Kim and Benbasat 2002). One example of this kind of argument used by an Internet store 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. (buydigitaldirect.com; see Figure 1)

The screenshot shows the BuyDigitalDirect website in a Microsoft Internet Explorer browser window. The page displays a shopping cart for a Canon Powershot S45 camera. A red circle highlights a '100% Safe Shopping' guarantee section on the right side of the page. The guarantee text reads: '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.' Other sections on the page include 'Shop With Confidence', 'Satisfaction Guarantee', and 'Delighted Customers'.

| Product Name | Unit Price | Quantity | Subtotal | Remove |
|------------------------|------------|------------|----------|--------|
| CANON POWERSHOT S45 | \$479 | 1 | \$479 | |
| Sub Total: | | | \$479 | |
| Shipping and Handling: | | Ground \$0 | \$0 | |
| Total: | | | \$479 | |

Figure 1. An Example of a *Trust-Assuring Argument*
(Source: <http://www.buydigitaldirect.com/cart.php>)

Although Internet stores often use *trust-assuring arguments*, researchers have thus far paid little attention to their use as a method of strengthening consumer trust.

The current paper examines the effects of *trust-assuring arguments* on consumer trust in Internet stores. First, literature from previous studies regarding trust in online shopping is reviewed. Drawing from the Elaboration Likelihood Model (ELM), it is postulated that *trust-assuring arguments* at an Internet store can increase consumers' trust in the store. Based on Toulmin's model of argumentation (1958), three elements of arguments that commonly appear in daily communication are identified: claim, data, and backings. Each of these elements can amplify the effects of arguments on consumer trust in Internet stores.

The research model proposed for this study is then tested with data obtained from a laboratory experiment. The research model, depicted in Figure 2, hypothesizes that *trust-assuring arguments* positively affect trusting intentions by changing consumers' trusting beliefs, and the magnitude of the effects of arguments increase if each of the argument elements (e.g., claim, data, and backings) are added.

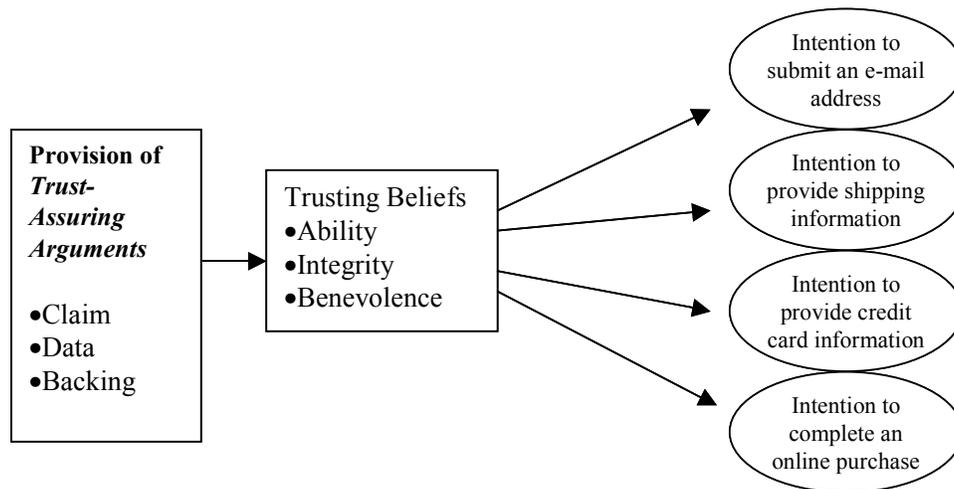


Figure 2. Research Model

The literature on the central concept of trust is reviewed herewith, followed by the development of several hypotheses.

Literature Review and Hypothesis Development

Trust in Online Shopping

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). Kim and Benbasat (2002) have further separated trusting intentions into four specific types of intentions involved in online shopping, by investigating the activities that expose consumers to the possibility of loss during Internet shopping transactions. They are: (1) the intention to submit an e-mail address to an Internet store; (2) the intention to provide shipping information such as a name, an address, and a phone number to an Internet store; (3) the intention to provide a credit card number to an Internet store; and (4) the intention to complete an online purchase transaction by clicking the confirm-purchase button at an Internet store.

Trusting Beliefs

Trusting beliefs, which has also been referred to as trustworthiness by 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 result from

consumers' perceptions of an Internet store's characteristics, including the abilities, the integrity, and the benevolence exhibited by the Internet stores when they handle the consumers' transactions (Gefen and Straub 1999, Mayer et al. 1995, McKnight et al. 2002).

Hypothesis Development

Elaboration Likelihood Model (ELM)

The ELM (Petty and Cacioppo 1986) attempts to place existing persuasion theories and research under one conceptual umbrella, by positing two qualitatively different routes to persuasion: the *central* route and the *peripheral* route. The central route of persuasion occurs when people are highly involved with issues of the arguments and when they have a high level of ability to process the arguments. When these factors are limited, the peripheral route of persuasion occurs (O'Keefe 1990, p. 103).

With the central route, when arguments arise they cause people to generate both positive and negative thoughts. If an argument leads to predominantly favorable thoughts, then the argument is relatively successful in eliciting changes in beliefs and attitudes (O'Keefe 1990, p. 103). On the other hand, if an argument leads to predominantly unfavorable thoughts, the argument is relatively unsuccessful in eliciting changes in beliefs and attitudes (O'Keefe 1990, p. 103). With the peripheral route, in contrast, people judge information according to simple heuristic cues such as the reputation of the source, the number of arguments presented, and the length of an argument, without careful consideration of the argument content (Petty and Cacioppo 1986).

Implication of ELM to Argument Provision

Under the central route of persuasion, when people consider completing transactions with Internet stores they don't know, they might think of many potential issues regarding the trustworthiness of Internet stores in general, and subsequently they may be led to unfavorable thoughts. If an Internet store provides assuring arguments about issues potentially related to trust, these arguments are likely to mitigate unfavorable thoughts and to generate favorable thoughts. Under the peripheral route, multiple arguments regarding consumer trust issues can work together as heuristic cues that the store is responsive to consumer concern about trust. As a result, consumers' trusting beliefs are likely to increase in both routes of persuasion, leading to the following hypothesis.

- H1: Provision of *trust-assuring arguments* positively affects consumers' trusting beliefs in an Internet store.

Toulmin's Model of Argumentation

A model of argumentation in daily communication, based on claims and arguments made in legal courts, has been formalized by Toulmin (1958). He has identified six argument elements that appear commonly and invariantly in the context of courtroom. The current study focuses on four of the elements identified by Toulmin: claim, data, backing, and warrants.

- Claim: "assertions or conclusions put forward for general acceptance" (Ye and Johnson 1995)
- Data: "evidence used to support a claim" (VerLinden 1998)
- Warrants: propositions that make a link from data to claim (Toulmin 1958)
- Backing: the 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 3. In the chart, warrants are surrounded with a dotted box because they are often unexpressed, but generally assumed in daily communications.

A claim is what an argument attempts to prove, and data functions as the grounds on which a claim is based. People are more likely to accept a claim with data than one without data, because data provides reasons for accepting the claim. In addition, the length of an argument with data is longer than without data, and therefore data can work as a heuristic cue (i.e. longer arguments are generally more persuasive). Therefore, the following hypothesis can be asserted.

- **H2:** The effects that claims and data have on trusting beliefs are more significant than the effects when only claims are provided.

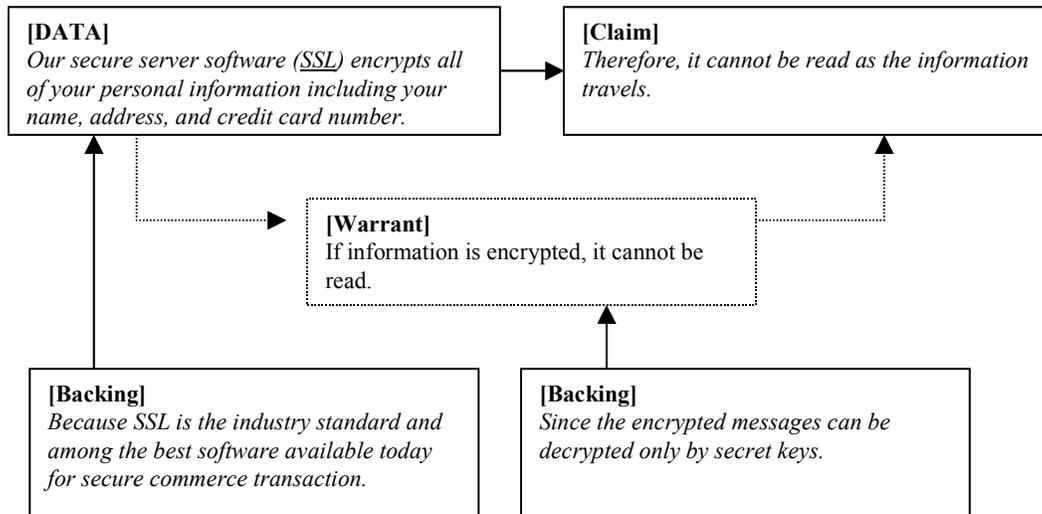


Figure 3. Claim, Data, Warrant, and Backing

People are not likely to accept the claim in an argument if they do not accept the related data and warrants. Furthermore, people might ask why they should accept particular data and warrants. Backings provide the reasons why people should accept data and warrants, and therefore people are more likely to accept data and warrants with backings than without backings. In addition, similar to the case when data is added to arguments, the length of an argument with backings is longer than without backings, and thus backings can work as a heuristic cue. Therefore, the following can be predicted.

H3: The effects of providing backings in addition to claims and data on trusting beliefs are more significant than the effects of providing claims and data only.

Relationship between Trusting Beliefs and Trusting Intentions

According to the theory of reasoned action, people's beliefs affect their intentions (McKnight et al. 1998). Similarly, it has been noted that trusting beliefs positively affect trusting intentions (Mayer et al. 1995, Gefen and Straub 1999). If people perceive that Internet stores have enough ability, integrity, and benevolence to take care of issues related to trust, it is likely that they will more willingly expose themselves to the possibility of loss during an Internet shopping transaction. Therefore, the following hypotheses can be drawn.

H4: Trusting beliefs positively affect consumers' intentions to submit e-mail addresses to Internet stores during online shopping transactions.

H5: Trusting beliefs positively affect consumers' intentions to provide shipping information to Internet stores during online shopping transactions.

H6: Trusting beliefs positively affect consumers' intentions to provide credit card numbers to Internet stores during online shopping transactions.

H7: Trusting beliefs positively affect consumers' intentions to complete online purchase transactions from Internet stores during online shopping transactions.

Method

The research model for this study is to be tested using a laboratory experiment designed to control potential confounding factors such as download time, computer speed, and environmental distractions.

Experimental Task

Subjects are asked to evaluate two experimental websites, 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 can buy a thirty dollar gift certificate for ten dollars from researchers, if they agree to purchase one of the products designated by researchers, and if they use the gift certificate at the store they rate higher during the evaluation session.

Design

To test the research model, the experiment includes four groups: (1) control (no argument), (2) claim only, (3) claim + data, and (4) claim + data + backing. One hundred twenty undergraduate students are recruited as subjects.

Independent Variables

1) *Trust-assuring arguments*

As defined in the first section of this paper, *trust-assuring arguments* are arguments addressing trust-related issues. Kim and Benbasat (2002) have identified and organized four groups of trust issues: issues related to personal information, product quality and price, customer service, and store presence. In the current study, thirteen arguments have been developed to address these issues (see Figure 4).

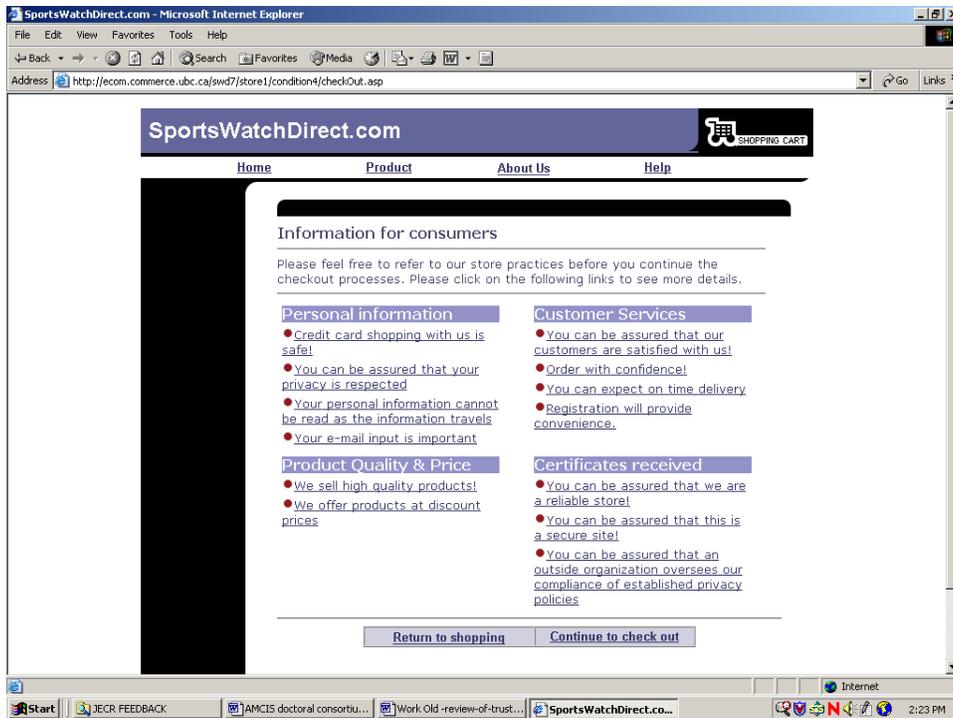


Figure 4. Arguments List

2) *Argument elements (Claim, Data, Backings)*

Three sets of arguments (i.e. claim only, claim + data, and claim + data + backing) are developed by researchers based on Toulmin's model.

3) *Control variable*

Trust in Internet stores in general is expected to influence trusting beliefs (Lim et al. 2001) and is used as a control variable for the experiment.

Dependent Variables

The dependent variables in the study are trusting beliefs, the intention to submit an e-mail address to an Internet store, the intention to provide shipping information to an Internet store, the intention to provide a credit card number to an Internet store, and the intention to complete an online purchase transaction from an Internet store. Items for the variables have been adapted from existing measures in previous studies, to ensure content validity. Measurements for trusting beliefs related to ability (four items) and integrity (three items) have been adapted from Lim et al. (2001), and measures related to benevolence (three items) have been adapted from Gefen and Straub (1999). All of the intention measures (four items each) have been modified with the willingness to buy at a store, as discussed by Wetsch and Cunningham (1999).

Expected Contribution

This study is expected to contribute to an expansion upon McKnight and Chervany's (2001) model of trust, by adding the provision of *trust-assuring arguments* as another web intervention that exhibits potential to increase consumer trust. This study can be of benefit to practitioners by providing useful guidance in implementing *trust-assuring arguments*.

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