

Chapter 2.34

Trust in E-Commerce: Consideration of Interface Design Factors¹

Ye Diana Wang

University of Maryland, Baltimore County, USA

Henry H. Emurian

University of Maryland, Baltimore County, USA

INTRODUCTION AND BACKGROUND

Derived from the general definition of trust (Rousseau, Sitkin, Burt, & Camerer, 1998), online trust can be defined as an Internet user's psychological state of risk acceptance, based upon the positive expectations of the intentions or behaviors of an online merchant. Research has repeatedly identified online trust as a crucial factor for consumers' purchase decisions online (Ang & Lee, 2000; Jarvenpaa, Tractinsky & Saarinen, 1999; Teo, 2002). If consumers trust online merchants and have confidence in the reliability and integrity of merchants, they will likely feel more at ease making purchases and disclosing sensitive information online. Therefore, the success of online merchants and the future of e-commerce may depend heavily on online trust.

Gaining trust from consumers, however, is a challenging task. According to Ang and Lee (2000), "If the web site does not lead the consumer to believe that the merchant is trustworthy, no purchase decision will result" (p. 3). In other words, one key consideration in fostering online trust is to build a trust-inducing e-commerce interface. In that regard, several studies have reported evaluations of a list of design features that potentially could appear on an interface to impact trust (Fogg et al., 2001; Lee, Kim, & Moon, 2000). Related studies have reported evaluations of existing e-commerce Web sites, such as Amazon.com, as a method for determining trust-inducing features (Cheskin/Sapient, 1999; Gefen, 2002; Jarvenpaa, Tractinsky & Saarinen, 1999). However, the trust-inducing features of those sites could not always be measured accurately or generalized to other e-commerce Web sites, due to a lack of a standardized interface for evaluation.

Against that background, the authors developed a synthetic e-commerce interface that reflects 14 trust-inducing features reported in our previous study (Wang & Emurian, 2005). The trust-inducing features were presented together as a conceptual framework in an effort to synthesize existing literature on enhancing online trust by Web interface design. The interface, which was aimed to represent an online merchant's Web home page, was used in the current study to show examples of the design features that were identified and to assist subjects in completing a survey that evaluated the trust-inducing importance of each feature. Using a synthetic e-commerce interface enabled us to address the following objectives: (1) to continue our previous study by undertaking a factor analysis in order to confirm and evaluate the underlying dimensions of the conceptual framework and (2) to obtain insights into practical trust-building issues by collecting qualitative data directly from Internet users.

There are almost certainly many potential sources of influence that promote or hinder online trust. However, the present study focuses on investigating interface design features and seeking indicative support for the importance of the interface design aspect in inducing online trust. Nevertheless, the intent of the study is not to compare the presence or absence of these features on trust ratings or to manipulate the features themselves in an experimental analysis. We chose first to develop a standardized synthetic interface to assure the presence of all 14 features rather than to attempt to find an existing e-commerce interface that might exhibit all 14 features in the manner that we intended to assess. Although the Saks Fifth Avenue² e-commerce Web site, which is given in a figure in Wang and Emurian (2005), closely approximates a coverage of the 14 features, the dynamic nature of electronic storefronts, together with our intent to assure the presence of all 14 features, motivated the development of a standardized interface for this research.

The remainder of this paper describes the proposed conceptual framework, the research methodology, the results of the survey, the synthesis of respondents' feedback, and, finally, our conclusions.

PROPOSED CONCEPTUAL FRAMEWORK OF TRUST-INDUCING FEATURES

The outcome of our previous study (Wang & Emurian, 2005) was a conceptual framework of trust-inducing features that were identified from the literature on enhancing online trust by Web interface design. The framework classifies 14 trust-inducing features into four broad dimensions: namely, (1) graphics design, (2) structure design, (3) content design, and (4) social-cue design. Table 1 illustrates the framework in detail, including the explanations, design features, and literature sources for each dimension, which was proposed on the basis of a semantic and functional grouping of features obtained from the literature. The first three dimensions are straightforward. The fourth dimension, the social-cue design dimension, relates to embedding social cues into Web site interfaces via different communication media, and it is a relatively new design strategy being suggested by some human-computer interaction (HCI) researchers (Basso, Goldberg, Greenspan & Weimer, 2001; Riegelsberger & Sasse, 2001; Steinbruck, Schaumburg, Duda & Kruger, 2002). The framework is not exhaustive in the sense that it does not attempt to capture every possible trust-inducing feature the Web designer can apply. It is focused on articulating the most prominent set of trust-inducing features derived from numerous previous studies and presenting them as an integrated entity that can be evaluated empirically.

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/trust-commerce-consideration-interface-design/18220

Related Content

IT Artefacts as Socio-Pragmatic Instruments: Reconciling the Pragmatic, Semiotic, and Technical

G. Goldkuhl and P. J. Agerfalk (2008). *End-User Computing: Concepts, Methodologies, Tools, and Applications* (pp. 2252-2264).

www.irma-international.org/chapter/artefacts-socio-pragmatic-instruments/18293

Analyzing E-Commerce Market Data Using Deep Learning Techniques to Predict Industry Trends

Wei Qian and Yijie Wang (2024). *Journal of Organizational and End User Computing* (pp. 1-22).

www.irma-international.org/article/analyzing-e-commerce-market-data-using-deep-learning-techniques-to-predict-industry-trends/342093

End-User Quality of Experience-Aware Personalized E-Learning

Cristina Hava Muntean and Gabriel-Miro Muntean (2009). *Evolutionary Concepts in End User Productivity and Performance: Applications for Organizational Progress* (pp. 281-301).

www.irma-international.org/chapter/end-user-quality-experience-aware/18658

Use of ICT and Student Learning in Higher Education: Challenges and Responses

Rodney Arambewela, Dilanthi Koralagama and Shyamali Kaluarachchi (2012). *International Journal of People-Oriented Programming* (pp. 37-49).

www.irma-international.org/article/use-of-ict-and-student-learning-in-higher-education/94609

Strategies for Managing EUC on the Web

R. Ryan Nelson and Peter Todd (1999). *Journal of End User Computing* (pp. 24-31).

www.irma-international.org/article/strategies-managing-euc-web/55764