

Trust and Design: A Cross-Cultural Comparison

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ABSTRACT

Building on previous models for e-loyalty, the research incorporates website design and culture as important elements related to how trust and e-loyalty evolve in online business relationships. A new model for e-loyalty is proposed and subsequently tested in a four-country sample that includes Canada, the U. S., Germany and Japan. More specifically the research addresses: (1) the degree to which predispositions for online trust differ across cultures, and (2) differences in preference and perception of website design in a controlled comparison between a local and foreign website. The results suggest key variables that predispose an individual to trust a site, and therefore presuppose e-loyalty (defined as intent to return to the site to purchase). Implications of the research are relevant for academics and practitioners who seek empirical understanding of how to better address cultural issues related to security and design.

General Terms

Management, Design, Experimentation

Keywords

Trust, Design, Culture

1. INTRODUCTION

Online business environments result in “problems associated with insecurity and privacy among transaction counterparts, which put pressure on Internet marketers to create a trust that is much stronger and more persistent than what is normally demanded offline”. [1] With this in mind, a new model was developed to test for e-loyalty. The model is primarily based on previous work by Yoon [2] and Gommans et al [3], who both considered how e-loyalty is developed in online settings. Predominant aspects of these models as adapted for the current research include disposition to trust online, perceived company reputation, and website design. Further, it is expected these characteristics will lead to trust, website satisfaction and positive perception of the website, which ultimately result in e-loyalty. Of importance, and missing from earlier models, the current research is concerned with antecedents of e-loyalty across cultures.

1.1 A NEW MODEL FOR E-LOYALTY

Figure 1 outlines the elements of the proposed model for e-loyalty across cultures. It is expected central characteristics of the model that will be differentiated across cultures are predispositions for trusting online payment [Payment Security], degree to which a company is considered legitimate and has a solid reputation [Company Legitimacy], the type of assurance in after sales attention that is desired [Assurance], and preferences for design elements [Design]. There is considerable literature that supports

these factors. In particular a user’s confidence to use online payment may be deterred by an absence of payment security policies or security symbols such as Verisign. Company reputation is likewise important, as signaled both in traditional, as well as in online transactions. [4] In addition, it is expected members from different cultures will have different preferences for the type of online sales contact. Gommans et al [3] point out efficient customer service is central to the establishment of e-loyalty. Finally, design has been explored extensively in the usability literature with reference to localization issues. [4, 5] These core elements are represented in the diagram related to website trust, website perception, website satisfaction, and ultimately to e-loyalty.

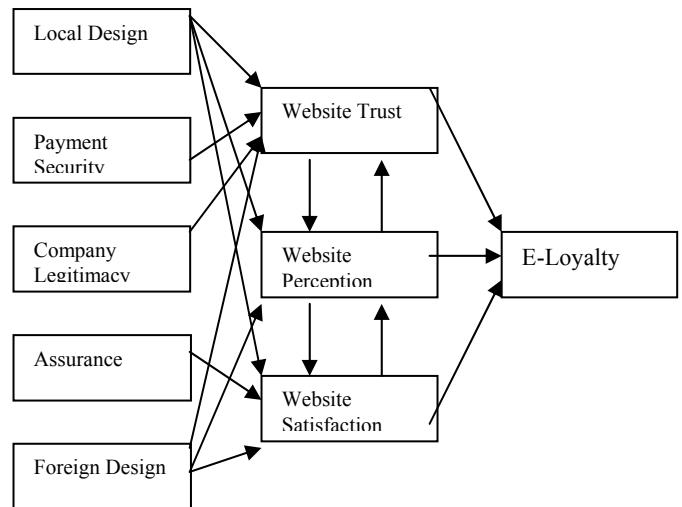


Figure 1 E-loyalty Model

The model is unique in that it combines precursors to trust and e-loyalty with how design is perceived between foreign versus local sites across different cultural groups. The research aims to test the following questions:

Q1: Are there differences across cultures related to payment security, perceived company legitimacy, and assurance?

Q2: Within a cultural group will design elements of the local site be preferred more than those in the foreign site, and if so which elements?

Q3: Within a cultural group will design elements of the local site result in higher levels of website trust, website perception, website satisfaction than for the foreign site?

Q4: Will website trust, website perception, and website satisfaction result in e-loyalty?

2. METHOD

2.1 Participants

120 individuals, 30 from each the U.S., Canada, Germany and Japan participated in the study. The sample was comprised of a stratified sample of employees in a high tech company. The sample included 41.5% females and 58.5% males, with a mean age of 35.

2.2 Procedure

A 65-item questionnaire was developed to measure the various factors as outlined in Figure 1. The survey was translated and back translated for each language required. In addition, interview questions were constructed that parallel the survey. Finally, each participant was asked to complete a task comprised of examining and then navigating (for search for a cell phone) the local and a foreign (Hong Kong in each case) site. Data collection was on site in each country. Interviews were tape recorded, and conducted with the assistance of a local interpreter as necessary.

2.3 Analysis

In this exploratory stage of the analysis, factor analysis using Principal Component Analysis using Varimax rotation was performed to determine clustering of variables and their reliability. From this, specific items were selected that well represented the factors. T-tests were run to determine between country differences, and AMOS structured equation modeling was used to determine preliminary fit among the factors in the model.

3. RESULTS

Some differences exist between countries related to payment security, company legitimacy and assurance. Although interview data suggest Japanese are more risk averse and concerned about online payment security, t-tests show that only significant differences exist between Canada and Germany, with Germany more concerned with online payment. No differences exist between countries related to company legitimacy, but it is interesting to note that all countries find this important. Interview data supports this finding, with respondents indicating type of product purchased, availability of password protection features, and company size are relevant determinants of legitimacy. Concerning assurance, t-tests are significant for comparisons between the U.S. and Japan, and Germany and Japan. The Japanese in particular note telephone follow-up is desirable and is more personal than email. In general, members of a culture prefer design features of the local site, however many also note they like the design of the Hong Kong site. Finally, the model was tested for fit, and appeared to hold for both local and foreign design. Exceptions are: for local design the 2 most important considerations were layout and ease of use, while foreign design

was most represented by screen design and easy access to product information. Further, structural relationships were observed between design with trust, perception and satisfaction, somewhat filtered by attitudes to payment security and company legitimacy. Assurance was related to satisfaction in the local portion of the model, and to both satisfaction and perception in the foreign portion of the model. As expected, trust and satisfaction were related to e-loyalty.

4. DISCUSSION

Data from the study both supports and extends previous work. It would appear that it is possible to determine an overarching model for e-loyalty across cultures. However, it is also expected that within each country, there will be differences related to specific factors. The triangulation of various forms of data is important to gain a richer, more complete picture of how online trust is both developed and maintained.

5. CONCLUSION

This research represents a preliminary stage of a 3-year study. As such, it serves as a building block to better understanding of how design, trust and culture intersect. The work will be of interest to those involved in design, cultural representation, online communication, and other areas. Not only is the research applicable in online business transactions, but also related to issues of universality concerning how trust is fostered in diverse groups.

6. ACKNOWLEDGMENTS

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