

MASTER'S THESIS

A study of contributing factors to the success of electronic commerce: a trust model for web shopping

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**A Study of Contributing Factors to the Success of
Electronic Commerce: A Trust Model for Web Shopping**

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ABSTRACT

There are three contributions that can be identified from this thesis. First, this thesis determines the contributing factors to explain why people would entrust Web shopping. Second, this thesis examines the relevancy of these influencing factors to Web shopping. Third, this thesis confirms if trust factors play a role to the success of Web shopping. This thesis adopts a two-staged experimental study approach to collect data for analysis. The results of the study are further explained below.

A model for examining the contributing factors to the success of electronic commerce is proposed. In particular, this study focuses on studying a trust model in Web shopping. The proposed model is based on the study of the relationships among influencing factors, 'model of trust' and outcome factor. In this model, the influencing factors are represented by seven factors that could further be classified into two categories of factors: computer experience and shopping experience. For computing experience, there are three factors involved: relative advantage, compatibility and complexity factors. For shopping experience, there are four factors included: sense of familiarity, product quality, confidentiality and brand name specificity factors. The 'model of trust' is represented by five factors, namely ability, benevolence, integrity, propensity to trust and 'trust' factors. The outcome factor is particularly referred to as factor of future intention in adopting Web shopping.

The verification of the proposed model is based on a data set which collected from two stages of study. In stage one study, participants who have no prior Web shopping experience are asked to evaluate their willingness to accept Web shopping. In stage two, those participants are given a chance to purchase goods on the Web, and then they are

asked to re-evaluate their willingness to accept Web shopping. To facilitate this design of experiment, we developed two sets of questionnaires for this study. One hundred university students were invited to participate in this study, and eighty-eight participants completed the two stages of study.

The instrument is subjected to vigorous reliability and validity tests. All criteria of the tests are met except the factor of 'trust' falls short to a proposed level of reliability test. However, the factor of 'trust' is still retained because this is the focal point of this research.

The proposed model is evaluated by Path Analysis. In Path Analysis, factors in the proposed model are analyzed as the direct, indirect and total effects.

The findings show that the factor of integrity has a significant and positive direct effect on the factor of 'trust' in the stage one study. The factors of ability and integrity have a significant and positive direct impact on factor of 'trust' in the stage two study. The factor of 'trust' has a significant and positive direct impact on future intention to use the EC system. The contributing factors of ability and integrity have a significant and positive indirect effect on future intention. The influencing factors of relative advantage and sense of familiarity have a significant and positive indirect effect on future intention, while the factor of product quality has a significant but negative indirect effect on future intention.

Also, the influencing factor of sense of familiarity has a significant and positive direct effect on the factors of ability and integrity in the stage one study. The influencing factors of relative advantage, sense of familiarity and brand name specificity have a significant and positive direct effect on the factor of integrity, while the factor of product quality has a significant but negative direct effect on the factor of ability and integrity in

the stage two study. The influencing factor of sense of familiarity has a significant and positive indirect effect on the factor of further intention in the stage one study. The influencing factors of relative advantage and sense of familiarity have a significant and positive indirect effect on future intention, while the influencing factor of product quality has a significant but negative indirect effect on future intention in the stage two study.

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