UNIVERSITI TEKNOLOGI MARA

A CONCEPTUAL MODEL OF TRUST INDUCING FEATURES FOR WEB MEDIATED INFORMATION ENVIRONMENT IN SENSITIVE INFORMATION CONTEXT

EMMA NURAIHAN BINTI MIOR IBRAHIM

Thesis submitted in fulfillment of the requirement
for the degree of
Doctor of Philosophy

Faculty of Computer Science and Mathematics

April 2009

Candidate's Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

In the event that my thesis be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree to be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

Name of Candidate : EMMA NURAIHAN BINTI MIOR IBRAHIM

Candidate's ID No. : 2005220868

Programme : Doctor of Philosophy (CS990)

Faculty : FACULTY OF COMPUTER SCIENCE AND MATHEMATICS

Thesis Title : A CONCEPTUAL MODEL OF TRUST INDUCING FEATURES FOR WEB MEDIATED INFORMATION ENVIRONMENT IN SENSITIVE INFORMATION CONTEXT

Signature of Candidate :

Date : 15 APRIL 2009.

ABSTRACT

Trust aspects of commercial transactions have long become embedded in the custom and practices within the e-tailing environment. However, consumers are not only involved in the interpersonal or inter-organizational transaction within the electronic exchange model but also in the knowledge transactions and exchanges within the information exchange mode. This research proposed the term web mediated information environment (W-MIE) by referring to the activities involved in acquiring, seeking and disseminating information on the web as a result of the growing number of informational websites. It is noted, trust in W-MIE is fairly new and risks associated with it are novel to users. Hence the aim of this research is to address on how to impose the sense of *"legitimacy"* in the design of an information artefact which can be rationalized and control as part of the overall interface design strategy and future information systems (IS) construction for sensitive context. Drawing the attention to the *"soft"* dimensions of trust, we seek to fill in the gap by explicate the role of trust from the institutional theory and semiotic paradigm to maximize the "goodness of fit" for future IS construction through the analysis of its social context, pragmatic and semantic levels of signification. We contend that institutional design features could make the alignment between formal and informal signs of trust to match their meanings through shared norms, assumptions, beliefs and perceptions. The conceptual model of *Institutional Symbolism Trust Inducing Features* and its four underlying dimensions (content credibility, emotional assurance, third party/ seals of approval and brand/reputation) are developed to facilitate thinking and perception as how trust can be built and design through signs comprehension. The research uses psychological method to evoke user's mental model via card sorting technique to explore on users trust perception of institutional signs operationalized in web based information for Islamic content sharing sites. It was then further investigated for its semantical meaning via qualitative inquiry which uses the semi-structured interview technique. The results indicate the elements of content trustworthy (truth, validity), content legitimacy (lawful, evidential), content presentation (appearance, functionality), site benevolence (goodwill), site integrity (security application and enforcement), demonstrating user's satisfaction, guarantees and safety nets, information practices, ethics(obligations), expertness (authority, knowledge) and familiarity (general business sense) which depicts the connotations of *"online legitimacy"*. This thesis provides contributions in terms of construct development of online trust elements and theoretical generation within the domain of W-MIE and operationalized in the web based for Islamic content sharing sites which extend the literature of trust aspects and in the wider HCI scope to provoke further arguments and comparative judgments. The outcome will be benefits for designers design guidance for trust elements placement on the web, cultural embedded design features and effective security and privacy protecting behaviors for those who would want to involve in acquiring, communicating Islamic knowledge or information on the web.

ACKNOWLEDGEMENTS

Praise be to Allah, the Most Gracious, the Most Merciful

I thank my teachers Assoc. Prof. Dr. Nor Laila Md Noor and Assoc. Prof. Shafie Mehad for their *thoughtful* and *benevolent trust*;

I thank my Father, Hj. Mior Ibrahim B. Mior Abdul Wahab and my Mother, Hjh. Meheran Bt. Kamaruddin for their *thick* and *blind trust*;

I thank to all those who have been *cooperative* and *unselfishly trustworthy*;

I thank Him, Allah the Almighty, who trusted so much that He bestows mankind with the Noble Quran, an absolute *authenticity* and *truth*; incumbent upon all those who have known it, and who have enjoyed its taste and have been guided through its guidance;

And now, it's my turn-

my turn to trust- *thoughtfully, benevolently, thickly, blindly, selflessly and truthfully.*

2009   EMMA NURAIHAN BINTI MIOR IBRAHIM

TABLE OF CONTENTS