Association for Information Systems
AIS Electronic Library (AISeL)

AMCIS 2010 Proceedings

Americas Conference on Information Systems (AMCIS)

8-2010

An Empirical Study of Multi-dimensional Trust and Eloyalty in E-commerce in China

Lin Xiao

School of Information Systems, Technology and Management, University of New South Wales, Sydney NSW 2052, Australia, lin.xiao@student.unsw.edu.au

Zixiu Guo

University of New South Wales, z.guo@unsw.edu.au

John D'Ambra

School of Information Systems, Technology and Management, University of New South Wales, Sydney NSW 2051, Australia, j.dambra@unsw.edu.au

Follow this and additional works at: http://aisel.aisnet.org/amcis2010

An Empirical Study of Multi-dimensional Trust and E-loyalty in E-commerce in China

Lin Xiao
School of Information Systems, Technology and Management, University of New South Wales, Sydney NSW 2052, Australia
lin.xiao@student.unsw.edu.au

Zixiu Guo
School of Information Systems, Technology and Management, University of New South Wales, Sydney NSW 2052, Australia
z.guo@unsw.edu.au

John D'Ambra
School of Information Systems, Technology and Management, University of New South Wales, Sydney NSW 2051, Australia
j.dambra@unsw.edu.au

ABSTRACT

As online shopping is becoming more and more popular in recent years, many studies have been conducted to explore the key issues involved in online shopping such as trust problems and strategies to retain customers. This study examined the importance of multi-dimensional trust to e-loyalty, the interrelationships among different dimensions of trust, and the antecedents of different dimensions of trust. A research model was developed with several hypotheses which were proposed for empirical examination. A total of 403 responses from the biggest E-marketplace in China were analysed to test the proposed model and its hypotheses using Partial Least Square (PLS). The empirical results showed that all trust dimensions had great impacts on e-loyalty and relationships existed in different dimensions of trust. This finding implied that practitioners should focus on developing an appropriate online strategy in terms of how to build up trust-based relationships with online customers.

Keywords

E-loyalty, trust, e-commerce

INTRODUCTION

The phenomenal growth in numbers of internet users and the enormous potential of electronic commerce (e-commerce) have pushed many merchants to conduct business online. Then how to succeed in the online business become a crucial management issue for e-vendors. Studies indicate that winning consumer loyalty is the most important task in e-business because it is a major driver for success in e-commerce (Ribbink, Riel, Liljander and Streukens, 2004; Yoo, Lee and Hoffmann, 2008). Prior research demonstrated that acquiring a customer is much more difficult and inefficient than retaining a customer, as costs associated with acquiring new customers are approximately five time the cost of retaining customers (Keaveny, 1995). In addition, an increase in customer retention rates by only 5 percent can increase profits by 25 to 95 percent (Reichheld and Schefter, 2000). Consequently, it is crucial for online companies to develop strategy to keep consumers.

Trust has been emphasised as one of the key determinants of customer loyalty throughout the literature (Jin, Park and Kim, 2008; Pavlou, 2003; Thatcher and George, 2004). It has been brought forward as a precondition for patronage behaviour and the development of long-term customer relationships (Singh and Sirdeshmukh, 2000) for it can generally decreases the perceived risk and uncertainty. The role of trust could be even more important in the e-commerce setting, since e-customers do not deal directly with the physical store, or its staff (Urban, Sultan and Qualls, 2000). Although Information Systems (IS) researchers' interest in the topic of trust has increased, to date studies on the trust construct have provided a limited view of the phenomenon. Three significant gaps are evident in the research.

First, no study has empirically tested trust from a multi-dimensional perspective. Mcknight and Chervany (2002) argue that it is better and necessary to provide a typology of trust since trust is such a broad concept and is defined in so many different

ways. They formulated an interdisciplinary model of trust types including interpersonal trust, institutional trust, and dispositional trust. This multi-dimensional trust construct is supported by Tan and Sutherland (2004) later. However, a review of previous studies including more recent studies illustrates that majority of studies still use a one-dimensional scale. Kim et al. (2008), for example, included a relatively comprehensive set of predictors of trust, but the trust scale was one-dimensional. While this approach may provide a simple way to understand trust in e-commerce, we believe that using a multi-dimensional trust scale would provide more detailed information about this important construct. Further, prior researchers propose that there are relationships among different dimensions of trust (Mcknight and Chervany, 2002; Tan and Sutherland, 2004). Thus, by using a multi-dimensional scale, the relationships among different dimensions of trust can also be examined.

Second, although various studies were found to examine the relationship between trust and e-loyalty (Cyr, 2008; Kim et al., 2008), most of them treated trust as a one-dimensional construct, and failed to compare the relative impact of different dimensions of trust on e-loyalty. Considering the multi-dimensional nature of the trust, it is necessary to re-visit the relationships between various aspects of trust and e-loyalty.

Finally, prior studies presented inconsistent results of the factors that contributing to trust by defining trust in different ways. Studies exploring antecedents of different dimensions of trust are needed to provide a better understanding of how to improve trust in e-commerce. Thus, the objective of this study is to present a multi-dimensional insight into the nature of consumer trust online. By defining trust as a multi-dimensional construct, the impact of different dimensions of trust on e-loyalty, the relationships among different dimensions of trust, and the antecedents of different dimensions of trust are examined.

The rest of this paper is organised as follows. The next section presents the research model for this study along with the development of research hypotheses. Subsequent sections describe the methods and samples, the results, a discussion of the findings and implications for both researchers and practitioners.

THEORETICAL FOUNDATION AND RESEARCH HYPOTHESES

E-loyalty

E-loyalty has been defined as "a consumer's intention to buy from a web site, and that consumer will not switch to another web site" (Flavian, Guinaliu and Gurrea, 2006, p.5). In online settings, understanding how to improve customer loyalty remains one of the crucial management issues of our day. Actually, most of previous studies show that retaining customers is a more profitable strategy than only increasing market share or decreasing the selling costs (Zeithaml, 2000). Further, e-vendor comes with a great challenge as it is easy for customers to switch to another product or service provider in internet shopping. Thus, understanding how to retain customers is especially important.

Trust and trust dimensions

Throughout the literature, the definition of trust proposed by Mayer, Davis and Schoorman (1995) is the most widely-accepted. It is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trust or, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p.712). Trust has been theorised by many authors from fields of IS and marketing (McKnight and Chervany, 2001;Tan and Sutherland, 2004). According to these theorisations, it has been explicitly recognised that there are three different types of trust: interpersonal, institutional, and dispositional trust. Dispositional trust refers to an individual's trust in general, which is based upon the individual's belief that other people are well-meaning and reliable (Tan and Sutherland, 2004). Institutional trust is defined as the degree of confidence customers have in the online exchange channel (Ribbink et al., 2004). Interpersonal trust is the assessment by the consumer in regards to the trustworthiness of the e-vendor (Tan and Sutherland, 2004).

Research model and hypotheses development

Based on Tan and Sutherland (2004)'s framework, we proposed a research model presented in Figure 1 below. The hypotheses associated with the model are discussed in the following section.
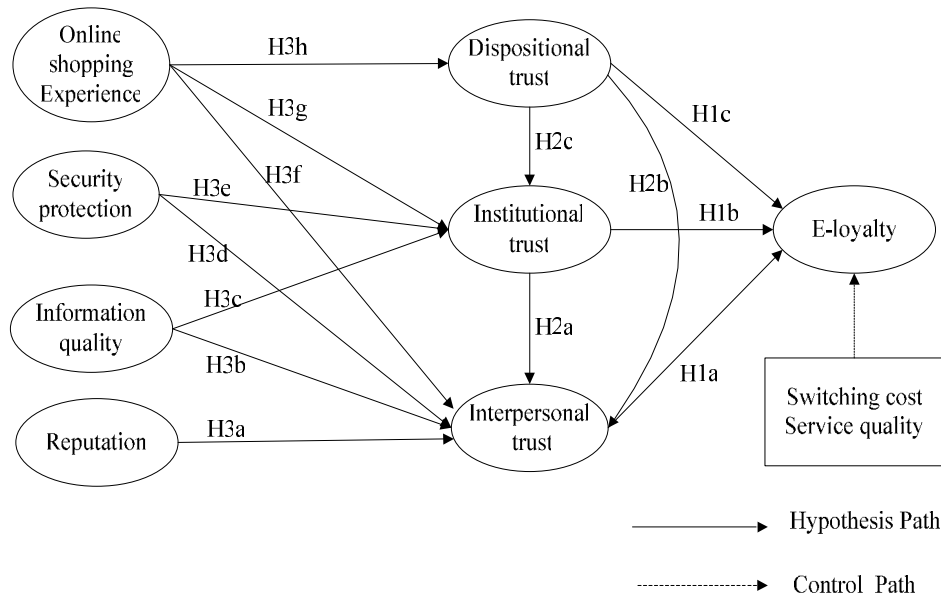
Figure 1: Research Model

Interpersonal trust

Interpersonal trust focuses on the trust formed in another specific party. In e-commerce, researchers tend to define interpersonal trust as a subjective belief, a subjective probability, the willingness of an individual to be vulnerable, reliance on parties other than oneself (Pavlou, 2003). Prior studies demonstrate that interpersonal trust can positively impact e-loyalty. For example, Liu, Marchewka, Lu and Yu (2005) introduced a theoretical model to explore the relationships between interpersonal trust and behavioural intensions, the outcomes indicated that the degree or level of interpersonal trust positively related to the consumers' behaviour of visit the online store again, repeat purchase, and recommend the online store to others. Further, the study by Ahgriawan and Thakur (2008) also reached the same results. Therefore, it can be hypothesised that:

H1a: Interpersonal trust will be positively related to e-loyalty.

Institutional trust

Institutional trust takes into account the sociological viewpoint that trust is a social structure that is situational constructed. According to Tan and Sutherland (2004), this dimension draws upon the idea of forming trust in the internet as a whole, and therefore trusting the technology. More specifically, institutional trust means consumers' perceptions about the internet environment, such as safety and security, legal and technical protection or some trusted third party like Visa or a bank (Cheung and Lee, 2006). If individuals do not trust that the internet offers sufficient protection, they are unlikely to hold a high level of trust in the internet as a shopping medium. There is evidence supporting a positive relationship between institutional trust and e-loyalty (Ribbink et al., 2004). In addition, institutional trust can affect interpersonal trust as well. Mcknight and Chervany (2001) comment that the consumers' beliefs that the internet has legal or regulatory protections can influence consumers' trust in the e-vendor. Tan and Sutherland (2004) argue that if the individual is unfamiliar with the internet or does not believe there are adequate regulations and security features protecting them online, their assessment of the trustworthiness of the e-vendor will be affected. Then, the following hypotheses are proposed:

H1b: Institutional trust will be positively related to e-loyalty.

H2a: Institutional trust will be positively related to interpersonal trust.

Dispositional trust

Previous studies demonstrate that dispositional trust has positive effects on interpersonal trust (Kim et al., 2008, Tan and Sutherland, 2004), institutional trust, and intension to purchase online (McKnight and Chervany, 2001, Tan and Sutherland, 2004). The individual's dispositional trust varies depending on his/her character and life experience (Tan and Sutherland, 2004). Chung and Lee (2003) found that personal characteristics of consumers such as innovativeness and social interaction orientation have positive effects on online shoppers' repurchase intention. As personal character is the main factor in

formation of dispositional trust, dispositional trust may have a positive effect on e-loyalty. Based on the above discussion, the following hypothesis is proposed:

H1c: Dispositional trust will be positively related to e-loyalty.

Dispositional trust plays a particularly important role in the interaction between unfamiliar parties in e-commerce (Grabner-Krauter and Kaluscha, 2003). It is therefore especially important in novel situations such as e-commerce. It is also the base of consumers' interpersonal trust and institutional trust (Kim et al., 2008; Pennanen, Tiainen and Luomala, 2007; Tan and Sutherland, 2004). If individuals find it easy to trust, they will be likely to consider purchasing online and this dispositional trust is likely to positively affect their trust in a specific selling party (McKnight and Chervany, 2001). Tan and Sutherland (2004) state that dispositional trust could be looked upon as the necessary foundation in the formation of interpersonal trust and institutional trust . Consequently, it can be hypothesised that:

H2b: Dispositional trust will be positively related to interpersonal trust.

H2c: Dispositional trust will be positively related to institutional trust.

Antecedents of trust in e-commerce

Online store reputation

Firm reputation is the consumers' belief that a company is honest and concerned about its customers (Doney and Cannon, 1997). It encompasses the competence and integrity of the e-vendor (Doney and Cannon, 1997). The reputation of the online store has been considered a key factor for creating trust because it provides information that the selling party has met its obligations toward other consumers in the past. Customers are more likely to trust a retailer with good reputation rather than a retailer with poor or no reputation (Jin et al., 2008). In internet shopping, perceived reputation of the online store has been revealed to be significantly related to consumers' trust in the e-vendor (Jin et al., 2008; Kim et al., 2008). Then, we propose the following hypothesis:

H3a: The online store's reputation will be positively related to interpersonal trust.

Information quality

Information quality refers to a consumer's general perception of the accuracy and completeness of the information on the website as it relates to products details and transactions procedure (Kim et al., 2008). A website may provide diverse information such as product details, price, delivery information, and return policy. Such information may reveal the trustworthiness of the e-vendor to customers (Kim, Xu and Koh, 2004). If the consumers perceive that a website presents accurate information, they are more likely to have confidence that the vendor is reliable, and therefore will perceive the selling entity as trustworthy. There are some empirical studies identified that there is a positive relationship between website information quality and interpersonal trust (Kim et al., 2008; Kim et al., 2004). Moreover, a large amount of well organised and reliable information is frequently mentioned by consumers as important reason to purchase on the internet. Thus, the following relationships can be anticipated:

H3b: The information quality on the website will be positively related to interpersonal trust.

H3c: The information quality on the website will be positively related to institutional trust.

Security protection

Security protection is defined as the protection of unauthorised access, destruction, use or disclosure of the data (Shalhoub, 2006). Many consumers are afraid of false information or are not sure about the statements displayed on the website and are reluctant to release payment card information to online merchants, fearing a loss of control over their accounts (Shareef, Kumar and Kumar, 2008). When the consumers find security features in the online store's website, such as security policy, security disclaimer, a safe shopping guarantee, they can recognise the seller's intention to fulfil the security requirements during online transactions (Pavlou, 2003). Also the protection mechanisms such as the encryption and authentication on the website can make the customers feel more confident about the internet environment. Thus, the perceived security protection can improve the institutional trust as well. The security protection has been found to have positive impacts on the trust of the e-vendors (Kim et al., 2008) and the internet shopping medium (Ribbink et al., 2004). From the above discussion, the following hypotheses are formulated:

H3d: Perceived security protection is positively related to interpersonal trust.

H3e: Perceived security protection is positively related to institutional trust.

Online shopping experience

Online shopping experience reflects the consumers' knowledge of the e-vendor and the understanding of its relevant procedures such as searching for products and information and ordering through the website's purchasing interface and familiarity of the online shopping environment (Kim et al., 2008). If the consumers have had online shopping experience, it is easy to reduce uncertainty and complexity through understanding of how to search and purchase items through the site (Gefen, 2000). Also if the consumers have favourable online shopping experience, their familiarity with the internet will carry considerable weight when consumers make judgments about the online shopping medium. Furthermore, if a consumer has favourable experience in online shopping within a particular online store, he or she is more likely to expect the vendor to honour their obligation, and believe the e-vendor is competent and integrate. Thus, we propose the following hypotheses:

H3f: Previous online shopping experience will be positively related to interpersonal trust.

H3g: Previous online shopping experience will be positively related to institutional trust.

As Mcknight and Chervany (2001) mention, people may grow up with a disposition to trust or may develop it later in life. Either way, it is acted out as a generalised reaction to life's experiences with other people. Thus, the individual's online shopping experience may have impacts on dispositional trust. If the individual has shopped online before and remembered a favourable experience, it may lead to a higher level of dispositional trust.

H3h: Previous online shopping experience will be positively related to dispositional trust.

Control variables

Poter (1980) defines switching costs as the costs associated with switching from one supplier's product or service to another supplier's product or service. The switching costs can influence customers' retention by preventing customers from changing service or product providers. A study by Jones, Mothersbaugh and Beatty (2000) provides empirical support for the viewpoint that consumers who feel ''locked in'' are more likely to remain with a provider. Therefore, switching cost is included in the analysis to control for its possible effect on customer loyalty behaviour.

In the online environment, customers can also experience the service provided by the e-vendor, from which they can infer its quality (Kim et al., 2004). Mohanty et al. (2007) argue that a high level service quality is more important than only changing the price or altering the inventory of goods in retaining customers. Since perceived service quality has an impact on e-loyalty, it is then included in the analysis as the control variable.

RESEARCH METHOD

To measure the various constructs, validated items used by other researchers were adapted. A web-based survey was developed to collect the data. The empirical data was collected from people shopping in the large internet shopping mall in China (www.taobao.com). Announcements that request the consumers' participation were posted on the public online discussion board of Taobao - a famous internet shopping mall in China. The data gathering took place for 49 days between 18th September and 5th November in 2009. A total of 403 usable responses were obtained. Of the respondents, 57% were female. The respondents were well-educated, with about 87% holding a college degree or a higher qualification.

DATA ANALYSIS

PLS Graph 3.0 was used for analysing the research model. PLS provides a powerful method for assessing both the structural model and measurement model because of the minimal demands on measurement scales, sample size, and residual distributions (Wold, 1985). Moreover, PLS can be used not only for theory confirmation, but also for suggesting where relationships might or might not exist and for suggesting propositions for later testing (Chin, 1998).

Measurement model

To assess the reliability and validity of the measurement model, we need to look at composite reliability and average variance extracted (hereafter AVE) first (Chin, 1998). The composite reliability for all the constructs ranged from 0.898 to 0.968 (Table 1). Considering an acceptance level of 0.7 (Chin, 1998), the value was very satisfactory. Additionally, all AVE values of constructs were higher than 0.5, the suggested minimum (Chin, 1998). Construct validity should also be examined by assessing convergent validity and discriminant validity (Chin, 1998). Convergent validity is acceptable when all items loadings are greater than 0.707 (Chin, 1998). Overall, Table 1 showed that all the loadings of the items on their respective

construct revealed a high degree of individual item reliability. The AVE can also be used to evaluate discriminant validity. The AVE from the construct should be higher than the variance shared between the construct and other variables in the model (Chin, 1998). Table 2 indicated that all the square roots of each AVE value were greater than the off-diagonal elements, which indicated discriminant validity.

Construct	Item	CR/AVE	Loading
E-loyalty	EL1	0.924/0.752	0.896
	EL2		0.873
	EL3		0.895
	EL4		0.802
Institutional Trust	IT1	0.900/0.644	0.755
	IT2		0.809
	IT3		0.805
	IT4		0.821
	IT5		0.821
Dispositional Trust	DT1	0.939/0.793	0.912
	DT2		0.906
	DT3		0.875
	DT4		0.869
Interpersonal Trust	IPT1	0.910/0.718	0.860
	IPT2		0.782
	IPT3		0.868
	IPT4		0.875
Security Protection	SP1	0.898/0.639	0.778
	SP2		0.795
	SP3		0.847
	SP4		0.767
	SP5		0.808
Online Shopping Experience	EP1	0.968/0.910	0.951
	EP2		0.953
	EP3		0.957
Reputation	RE1	0.927/0.760	0.874
	RE2		0.924
	RE3		0.781
	RE4		0.901
Information Quality	IQ1	0.963/0.867	0.928
	IQ2		0.932
	IQ3		0.951
	IQ4		0.913
Service Quality	SQ1	0.941/0.841	0.926
	SQ2		0.944
	SQ3		0.881
Switching Cost	SC1	0.918/0.789	0.846
	SC2		0.912
	SC3		0.906

Note: CR is Composite reliability and AVE is Average Variance Extracted.

Table 1: Results of PLS Confirmatory Factor Analysis

	EL	IT	DT	IPT	SP	EP	RE	IQ	SQ	SC
EL	0.867									
IT	0.499	0.802								
DT	0.435	0.483	0.891							
IPT	0.512	0.520	0.483	0.847						
SP	0.463	0.530	0.598	0.609	0.800					
EP	0.386	0.319	0.369	0.448	0.392	0.954				
RE	0.532	0.431	0.455	0.801	0.624	0.454	0.872			
IQ	0.525	0.517	0.486	0.746	0.571	0.452	0.701	0.931		
SQ	0.446	0.350	0.367	0.625	0.452	0.447	0.674	0.709	0.917	
SC	0.385	0.380	0.466	0.476	0.444	0.436	0.447	0.506	0.444	0.888

Note: The number in shaded cell are square roots of AVE.

Table 2: Correlations of the Construct

Structural Model

In this section, the proposed hypotheses were tested using PLS. The explanatory power of the structural model was assessed based on the amount of variance in the endogenous construct. Our structural model can explain 37.4% of the variance for e-loyalty. Bootstrapping technique was applied to obtain the corresponding t-values in order to assess the significance of the path estimates. The results of the structural model were presented in Figure 2 below. Three dimensions of trust were all significant related to e-loyalty. Thus, hypothesis 1a, 1b, and 1c were supported. Reputation and information quality were found to have great impact on interpersonal trust, which validated hypothesis 3a and 3d. Security and information quality were significantly related to institutional trust, which validated hypothesis 3c and 3e respectively. However, hypothesis 3b and 3f were not supported because of the non-significant impacts of security and online shopping experience on interpersonal trust. Additionally, online shopping experience was significant related to dispositional trust, which supported hypothesis 3h.
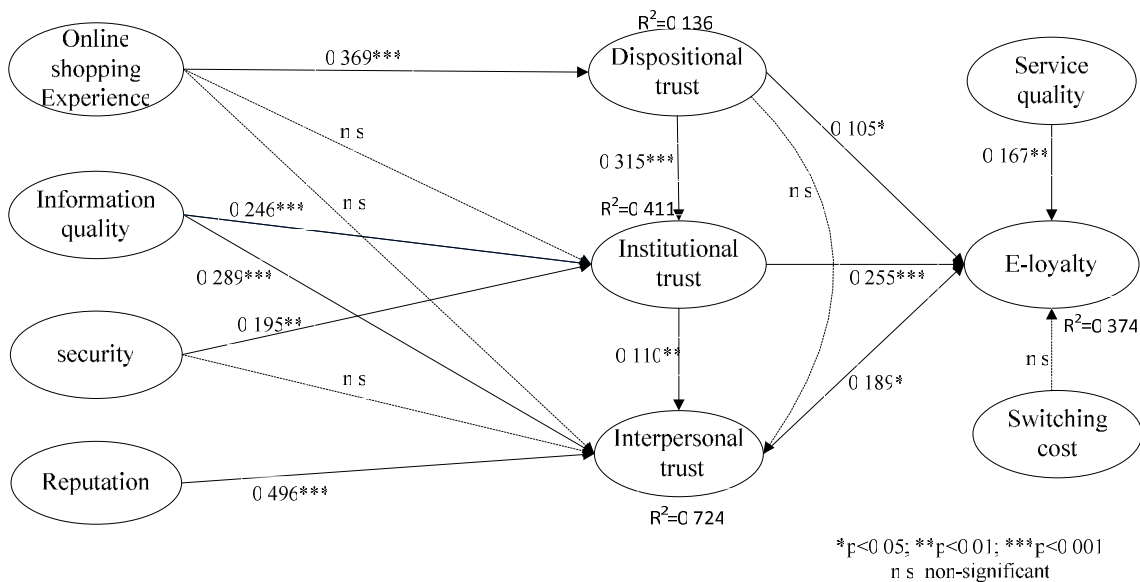

Figure 2: Results of Structural Model

DISSCUSION

The analytical results of this study support the view that three types of trust are all important factors contributing to e-loyalty. Among the three types of trust, institutional trust had the most significant influence on e-loyalty, followed by interpersonal trust and dispositional trust. These findings are in line with the empirical results presented by Kassim and Abdullah (2008) and Ribbink et al.(2004). Their results suggest that institutional trust is an important factor in forming customers' repurchases intention. Additionally, the significant impact of dispositional trust on e-loyalty confirms that people with high level of dispositional trust tend to be more loyal to the online stores.

Although dispositional trust had no direct and significant impact on interpersonal trust, it can influence interpersonal trust through institutional trust. The results suggest that dispositional trust is a necessary prerequisite for institutional trust. Likewise, institutional trust is also a necessary prerequisite for interpersonal trust. These findings support the propositions proposed by Tan and Sutherland (2004), who called for further study to validate the viewpoint that relationships existed in different types of trust. From this finding, researchers will hopefully recognise that trust in e-commerce is not a single dimensional construct, but rather a broad and complex construct that operates on multiple dimensions.

Information quality and security were found to have strong positive effects on institutional trust, suggesting that consumers consider the perceptions of the safety of the online shopping environment and quality of the information on the website when developing their trust in the online shopping medium. However, the consumers' past online shopping experience does not appear to be an important factor in building institutional trust. Consumers in China can pay for the products offline when they are delivered to them, which may be the main reason to explain why the consumers' past online shopping experience does not have much impact on their trust in the online shopping medium. The consumers may trust the online stores, but not confident in the online payment systems for afraid of loss through the credit card payment process. Nevertheless, the consumers' past online shopping experience was found to have significant impact on dispositional trust, which confirms our proposition that people's past online shopping experience is positively related to dispositional trust.

Information quality also maintains significant relationship with interpersonal trust, which confirms Kim et al.(2008)'s findings that information quality is important for consumers to judge the trustworthiness of the e-vendors. Reputation is another important factor which contributes to interpersonal trust, indicating that online consumers believe that if company has a good reputation in the marketplace, then the web site is more trustworthy, even if it lacks tangible and physical signs.

IMPLICATIONS AND CONCLUSIONS

The results of this study shed light on some important issues related to the trust and e-loyalty that have not been addressed in previous studies. First, this study confirms that trust has critical influences on the establishment of e-loyalty. As a multi-dimensional construct, all the trust dimensions have impacts on e-loyalty and institutional trust is the most important one. Currently, online firms are eager to launch e-loyalty programs in which customers obtain substantial benefits by doing most of their online shopping through a single website. This study suggests that online firms should focus not only on improving interpersonal trust, but also improving institutional trust as well.

Second, the study suggests that dispositional trust is a foundation for consumers to develop trust in internet shopping environment, and consumers' trust in the environment will influence their confidence about the e-vendors. The dimensions of trust were modelled to illustrate the relationships and underlying nature of trust as a complete construct in this study. The results can be used to assist the understanding of trust and provide foundation for future research.

Furthermore, perceived security and web site information quality are key determinants of consumers' trust in the internet shopping medium. The general management implications are that to decrease consumers' perceived risks and to increase consumer's perception of trust when shopping online, companies should clearly state security protection procedure, and provide accurate and update information of high quality to consumers.

Finally, this study finds that information quality and reputation are important factors contributing to consumers trust in e-vendors. In e-commerce, customers can only rely on the pictures and description of the goods on the web pages to know the quality and functionality of a commodity. The outdated and irrelevant information is likely to mislead and confuse users and finally ruin customers' trust in the website. Websites with constantly updated, fresh, and relevant content are more likely to attract and retain users. Therefore, we suggest that in the design of an online store website, offering enough and clear information for consumers to compare products is very important.

REFERENCES

1. Ahgriawan, A. and Thakur, R. (2008) A Parsimonious Model of the Antecedents and Consequence of Online Trust: An Uncertainty Perspective *Journal of Internet Commerce,* 7**,** 1**,** 74-94.

2.   Cheung, C. M. K. and Lee, M. K. O. (2006) Understanding Consumer Trust in Internet Shopping: A Multidisciplinary Approach *Journal of American Society for Information Science and Technology,* 57**,** 4**,** 479-492.
3.   Chin, W. W. (1998) In *Modern Methods for Business Research*(Ed, Marcoulides, G. A.) Lawrence Erlbaum Associates, Inc, Mahwah,NJ, pp. 295-336.
4.   Chung, I.-K. and Lee, M.-M. (2003) In *Proceedings of the International Parallel and Distributed Processing Symposium.*
5.   Cyr, D. (2008) Modeling Web Site Design Across Cultures: Relationships to Trust, Satisfaction, and E-Loyalty *Journal of Management Information Systems,* 24**,** 4**,** 47-74.
6.   Doney, P., M. and Cannon, J., P. (1997) An Examination of the Nature of Trust in Buyer-seller Relationship *Journal of Marketing,* 61**,** 2**,** 33-49.
7.   Flavian, C., Guinaliu, M. and Gurrea, R. (2006) The Role Played by Perceived Usability, Satisfaction and Consumer Trust on Website Loyalty *Information & Management,* 43**,** 1**,** 1-14.
8.   Gefen, D. (2000) E-commerce: The Role of Familiarity and Trust *International Journal of Management Science,* 28**,** 6**,** 725-737.
9.   Grabner-Krauter, S. and Kaluscha, E. A. (2003) Empirical Research in On-line Trust: A Review and Critical Assessment *International Journal of Human-Computer Studies,* 58**,** 1**,** 783-812.
10. Jin, B., Park, J. Y. and Kim, J. (2008) Cross-cultural Examination of the Relationships among Firm Reputation, E-satisfaction, E-trust, and E-loyalty *International Marketing Review,* 25**,** 3**,** 324-337.
11. Jones, M. A., Mothersbaugh, D. L. and Beatty, S. E. (2000) Switching Barriers and Repurchase Intentions in Services *Journal of Retailing,* 76**,** 2**,** 259-274.
12. Kassim, N. M. and Abdullah, N. A. (2008) Customer Loyalty in E-Commerce Settings: An Empirical Study *Electronic Markets,* 18**,** 3**,** 275-290.
13. Keaveny, S. M. (1995) Customer Switching Behavior in Service Industries: An Exploratory Study *Journal of Marketing,* 59**,** 1**,** 71-82.
14. Kim, D. J., Ferrin, D., L. and Rao, H. R. (2008) A Trust-based Consumer Decision-Making Model in Electronic Commerce: The Role of Trust, Perceived Risk, and Their Antecedents *Decision Support Systems,* 44**,** 544-564.
15. Kim, H.-W., Xu, Y. and Koh, J. (2004) A Comparison of Online Trust Building Factors between Potential Customers and Repeat Customers *Journal of the Association for Information Systems,* 5**,** 10**,** 392-421.
16. Liu, C., Marchewka, J. T., Lu, J. and Yu, C.-S. (2005) Beyond Concern - A Privacy-Trust-Behavioral Intention Model of Electronic Commerce *Information & Management,* 42**,** 2**,** 289-304.
17. Mayer, R. C., Davis, J. H. and Schoorman, F. D. (1995) An Integrative Model of Organizational Trust *The Academy of Management Review,* 20**,** 3**,** 709-734.
18. McKnight, D. H. and Chervany, N., L. (2001) What Trust Means in E-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology *International Journal of Electronic Commerce,* 6**,** 2**,** 35-59.
19. Mcknight, D. H. and Chervany, N., L. (2002) What Trust Means in E-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology *international journal of electronic commerce,* 6**,** 2**,** 35-59.
20. Mohanty, R. P., Seth, D. and Mukadam, S. (2007) Quality Dimensions of E-Commerce and Their Implications *Total Quality Management,* 18**,** 3**,** 219-249.
21. Pavlou, P. A. (2003) Consumer Acceptance of Electronic Commerce: Integrating Trust and Perceived Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce,* 7**,** 3**,** 101-135.
22. Pennanen, K., Tiainen, T. and Luomala, H. T. (2007) A Qualitative Exploration of a Consumer's Value-based E-trust Building Process *Qualitative Market Research: An International Journal* 10**,** 1**,** 28-48.
23. Poter, M. E. (1980) *Competitive Strategy,* Free Press, New York.
24. Reichheld, F. R. and Schefter, P. (2000) E-loyalty: Your Secret weapon on the Web *Harvard Business Review,* 78**,** 4**,** 105-113.
25. Ribbink, D., Riel, A., C. R. van, Liljander, V. and Streukens, S. (2004) Comfort Your Online Customer: Quality, Trust and Loyalty on the Internet *Managing Service Quality,* 14**,** 6**,** 446-456.
26. Shalhoub, Z. K. (2006) Trust, Privacy, and Security in Electronic Business: The Case of the GCC Countries *Information Management & Computer Security,* 14**,** 3**,** 270-284.
27. Shareef, M. A., Kumar, U. and Kumar, V. (2008) Role of Different Electronic-Commerce Quality Factors on Purchase Decision: A Developing Country Perspective *Journal of Electronic Commerce Research,* 9**,** 2**,** 92-114.
28. Singh, J. and Sirdeshmukh, D. (2000) Agency and Trust Mechanisms in Consumer Satisfaction and Loyalty Judgments *Journal of the Academy of Marketing Science,* 28**,** 1**,** 150-163.
29. Tan, F., B. and Sutherland, P. (2004) Online Consumer Trust: A Multi-Dimensional Model *Journal of Electronic Commerce in Organizations,* 2**,** 3**,** 40-58.

30. Thatcher, J. B. and George, J. F. (2004) Commitment, Trust, and Social Involvement: An Exploratory Study of Antecedents to Web Shopper Loyalty *Organizational Computing and Electronic Commerce,* 14**,** 4**,** 243-269.

31. Urban, G. L., Sultan, F. and Qualls, W. J. (2000) Placing Trust at the Center of Your Internet Strategy *Sloan Management Review,* 42**,** 1**,** 359-369.

32. Wold, H. (1985) In *Encyclopedia Statistical Sciences*(Eds, Kotz, S. and Johnson, N. L.) New York, pp. 581-591.

33. Yoo, J.-S., Lee, J.-N. and Hoffmann, J. (2008) In *Proceedings of the 41st Hawaii International Conference on System Science*.

34. Zeithaml, V. A. (2000) Service Quality, Profitability, and the Eleconomic Worth of Customers: What We Need to Learn *Academy of Marketing Science,* 28**,** 1**,** 67-85.