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# How online trust influence B2C e-Commerce adoption? An empirical study among Asian online shoppers

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## ABSTRACT

Though many previous studies has proved the importance of trust from various perspectives, the researches about online consumer's trust are fragmented in nature and still it need more attention from academics. Lack of consumers trust in online systems is a critical impediment to the success of e-Commerce. Therefore it is important to explore the critical factors that affect the formation of user's trust in online environments. The main objective of this paper is to analyze the effects of various antecedents of online trust and to predict the user's intention to engage in online transaction based on their trust in the Information systems. This study is conducted among Asian online consumers and later the results were compared with those from Non-Asian regions. Another objective of this paper is to integrate De Lone and McLean model of IS Success and Technology Acceptance Model (TAM) for measuring the significance of online trust in e-Commerce adoption. The results of this study show that perceived security, perceived privacy, vendor familiarity, system quality and service quality are the significant antecedents of online trust in a B2C e-Commerce context.

## Keywords

Trust model, e-Commerce success, TAM, online purchase intention, Structural Equation Modeling (SEM)

## INTRODUCTION

From time to time, large numbers of researchers investigate the success factors of B2C e-commerce systems. However majority of those were conceptual studies. Though some empirically validated studies were published on B2C e-commerce systems, very few focused on Asian consumers. The study aims to fill this gap by studying ecommerce success factors among Asian online consumers. Asian markets are found to be very lucrative and promising for most of the global firms in this period of time due to their rapid transition to business economies (Shao et al., 1999). Asian countries such as China, India, Taiwan, and South Korea are growing at a faster rate than any other Asian countries (Arnott et al., 2007; Kim et al., 2006; Schramm, 2006). Consumer's purchasing behavior and characteristics are different while comparing on the basis of the eastern and western cultural perspectives. Previous literatures give many evidences of these existing differences. Kacen & Lee (2002) found that attitude- behavior relationship is weaker in collectivist cultures than in individualist cultures. Kacen & Lee, (2002, pp. 168) suggested "*collectivists are less driven than individualists to act on their trait buying impulsiveness by making an impulse purchase.*" Meng (Meng & Nasco, 2009) confirmed significant differences in consumer's price sensitivity, price consciousness and sales proneness while comparing Chinese and US consumers. Considering the significant differences between consumer's buying characteristics across eastern and western cultures, it would be interesting not only for academicians but also for the industrialists and practitioners to know more about the critical success factors of B2C e-Commerce among Asian online consumers. Therefore this study would be justifiable even though similar studies have been conducted under different cultural perspectives

According to the latest results from U.S. Census Bureau, 48.1% of the total retail sales revenue for year 2009 came from e-commerce channels. Clothing and clothing accessories, electronic appliances, books and magazines, furniture and home furnishing items, drugs and beauty aids etc. are the major categories people shopped online. This shows the huge popularity of e-commerce in this era. However, many researches ( Gefen & Karahanna, 2003; Keen et al., 2000; Ott, 2000; Yousafzai et al., 2009) in the field of e-Commerce suggest that people are reluctant to provide personal information and shop online

despite the huge growth of B2C e-commerce channels. The open nature of the internet as a transaction medium and its wide popularity create uncertainty around online transactions (Pavlou, 2003). This suggests that adoption of B2C e-Commerce involves not only technology acceptance (Davis, 1989), but also the online shopper's beliefs about unknown online vendors (McKnight et al., 2002). This makes trust a critical success factor of e-Commerce. In an online context, trust is a set of beliefs held by a consumer about the characteristics and possible behavior of the seller (Flavián & Guinalú, 2006). Online trust (Brown, 2008; Kassim & Abdullah, 2010; Molla & Licker, 2001) is perceived to be an important dimension of determining e-commerce success. Understanding the antecedents of online trust is a big challenge for both academics and practitioners (D. Harrison McKnight et al., 2002). Although the role of trust has been studied from various perspectives (Chellappa, 2002; Chellappa & Pavlou, 2002; Detmar, 2003; Fang et al., 2011; Gefen et al., 2003; Hou, 2006; Keen et al., 2000; Yaghoubiet al., 2011), these studies have been fragmented in nature. This study aims to fill that gap by providing a simple yet comprehensive framework for measuring the role of consumers trust in predicting the success of B2C e-Commerce systems.

The main purpose of this study is to identify and measure the important antecedents of online trust in B2C e-commerce based on the previous literature. The five antecedents of trust measured in this model are perceived security, perceived risk, vendor familiarity, system quality and service quality. This paper also integrates trust and its antecedents into the Technology Acceptance Model (TAM) (Davis, 1989) in an attempt to predict the online user's intention to use online transaction systems. The detailed objectives of this research work are as follows:

- a. Examine the relationship between five major antecedents of online trust for measuring the customer's purchase intention among the Asian online consumers
- b. Develop and empirically validate a conceptual model based on the theoretical backgrounds of DeLone and McLean IS success model (DeLone & McLean, 2003) and Technology Acceptance Model (Davis, 1989).
- c. Provide more insight into the development of online trust by consumers and specify the relationships between online trust and purchase intention of online shoppers.

The remainder of this paper is arranged as follows: firstly, concept of trust based on the previous literature is explained; subsequently review of the two important models of IS adoption is discussed and later conceptual model is presented and important constructs in the model is explained. Paper concludes after stating the main findings and suggestions for further researches in this field.

## LITERATURE REVIEW AND RESEARCH MODEL

### Concept of Trust

Trust is considered by many researchers as a construct difficult to define and measure (Rousseau et al., 1998). While Stewart (Stewart, 1999) defined trust as a belief in an attribute of the trustee while Fung (Fung & Lee, 1999) defined trust as a willingness to believe the trustee. For the present study, in an e-Commerce context, trust is a set of beliefs held by a consumer about the characteristics and possible behavior of the seller (Flavián & Guinalú, 2006). Trust consists of mainly three characteristics: competence, benevolence and integrity (Mayer et al., 1995; McKnight & Chervany, 2002; Suh & Han, 2003). In an e-Commerce context, competence refers to the consumer's belief that seller has the ability to do what they need done. Benevolence refers to the online consumer's belief that the online vendors want to do good for them. Integrity refers to the consumer's belief that the online vendors act ethically and fulfill their promises (D.H. McKnight & Chervany, 2001).

Security and privacy are the two important aspects most often related to trust in online relationships (Flavián & Guinalú, 2006; Schmidt et al., 2009). Lack of security and lack of privacy as perceived by the online users are considered to be the main obstacles to the development of e-Commerce (Chou et al., 1999; Flavián & Guinalú, 2006). Perceived security is defined as "a threat that creates a circumstance, condition, or event with the potential to cause economic hardship to data or network resources in the form of destruction, disclosures, modification of data, denial of service, and/or fraud, waste and abuse" (Kalakota & Whinston, 1997, p.853). Perceived privacy refers to the ability of the users to control the terms and conditions by which their personal information is acquired and used while engaged in online transactions (Chen & Barnes, 2007; Flavián & Guinalú, 2006).

### DeLone and McLean Model of IS Success

In 1992, DeLone and McLean (DeLone & McLean, 1992) proposed a framework and guide for measuring IS success after having reviewed the literature published between 1981-1987 in leading seven publications. They identified six interrelated variables of systems success, which are System Quality, Information Quality, Use, User satisfaction, Individual impact and Organizational impact. The model was not empirically tested and authors called upon other researchers to test and validate their model for measuring IS success. Since then more than 1000 publications have referenced (Petter et al., 2009) their work

and at least 150 empirical studies have referenced their work based on DeLone and McLean model of IS success. Seddon (P.B. Seddon, 1997) respecified and extended the model by including perceived usefulness as an IS success measure. Molla (Molla & Licker, 2001) suggested that variables such as Trust, Support and service to be included in the IS success model to make the model richer and suitable for measuring IS applications like e-commerce. After reviewing all the validation and respecification attempts on their initial model, later in 2003, DeLone and McLean (DeLone & McLean, 2003) proposed a refined and updated version of IS success measurement model (See Figure 1). According to the updated model, authors proposed that three quality constructs such as Information quality, System quality and Service quality influence User's intention to use and ultimately their satisfaction. Net benefits to the organization and individuals can be attained by the use and user satisfaction.

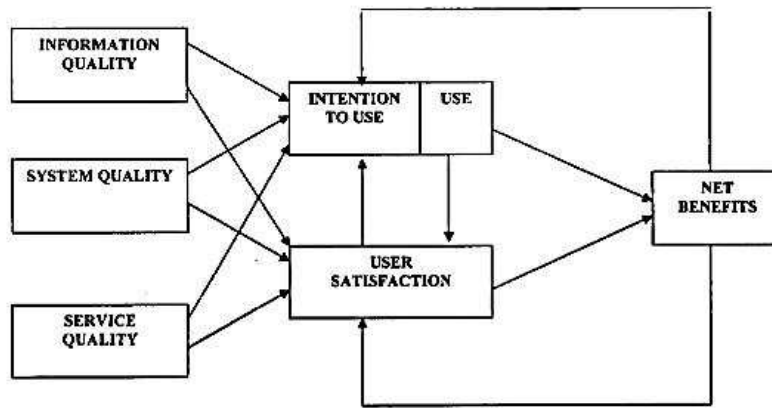


Figure 1: Updated DeLone and McLean model of IS Success (DeLone & McLean, 2003)

**Technology Acceptance Model (TAM)**

Technology Acceptance model (TAM) has been widely used by the researchers (Al-hawari & Mouakket, 2010; Fusilier & Durlabhji, 2005; Pikkarainen et al., 2004; Tong, 2010; Van der Heijden et al., 2003) to predict and explain the user acceptance of various technologies ever since its introduction by Davis ( Davis, 1989; Davis et al., 1989). Davis (1989) proposed that perceived ease of use and perceived usefulness are the two important measuring variables for predicting the users' intention to accept or use a new technology. Perceived ease of use refers to the extent to which a user believes that using a new technology is effortless. Perceived usefulness refers to the user's perception to the extent that new technology will enhance the user's workplace performance. Refer Figure 2 for the original model proposed by Davis (1989).

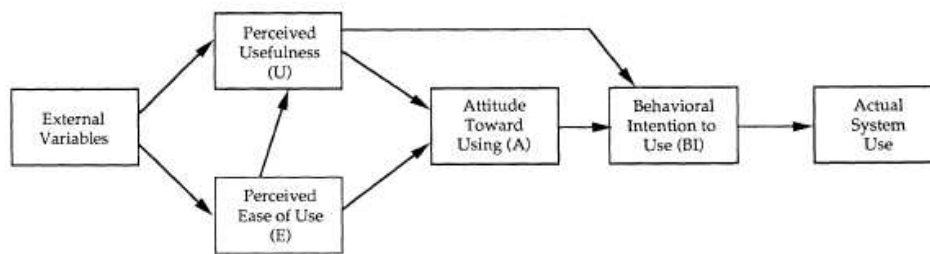


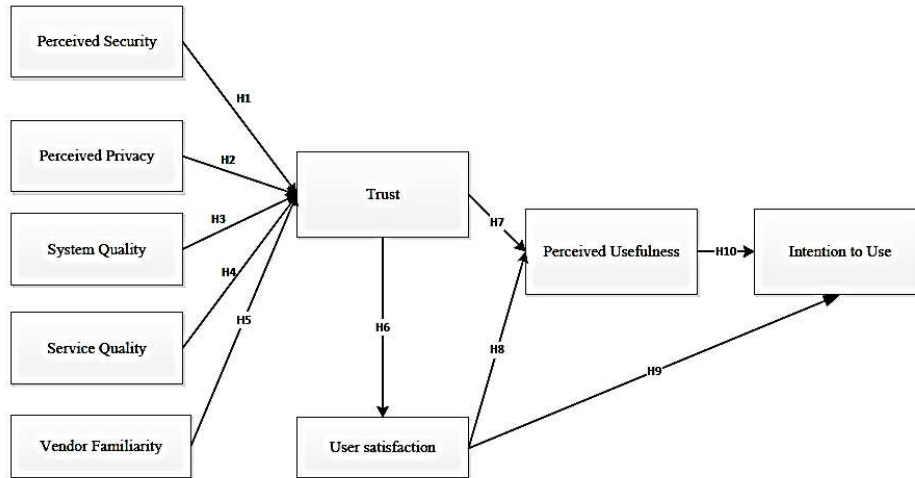
Figure 2: Technology Acceptance Model (Davis, 1989)

The practical utility of TAM for this research originated from the fact that e-Commerce is technology driven. According to Pavlou (Pavlou, 2003, p. 70), B2C e-Commerce is the ability of the consumers to purchase products and services online using internet technologies.

**Proposed framework**

After reviewing and evaluating the previous literature related to IS success, this research paper proposes a comprehensive model and framework for identifying and measuring IS success in e-Commerce context. The proposed model suggests five antecedents of trust, which are perceived privacy, perceived security, vendor familiarity, system quality and service quality. Model proposes that Trust significantly influence perceived usefulness and customer satisfaction which in turn influence

online customer's intention to shop online. Refer figure 3 for the proposed conceptual model for measuring the significance of trust in e-Commerce.



**Figure 3: Proposed model of Trust in B2C E-Commerce**

The relationships between each of the constructs in the conceptual model and the proposed hypotheses associated with them will now be explained each in turn.

### Perceived Security

Security is one of the important challenges faced by online users who like to participate in the B2C e-Commerce (Suh & Han, 2003). Online consumers fear the risk of information theft and the possibility of fraud over internet transactions. Yousafzai *et al.* (Yousafzai *et al.*, 2009) defined perceived security as “customer’s perception of the degree of protection against threats which can damage, reveal, modify, destroy, abuse data or network resources”. Many studies (Chen & Barnes, 2007; Yousafzai *et al.*, 2009) related to online trust revealed that perceived security is significantly influence online trust especially in e-Commerce context. This study suggests that security control for the confidentiality and protection of information is a crucial factor for the success of e-Commerce systems (Suh & Han, 2003). Based on the above, following hypothesis is proposed to test in this study:

**H1: Perceived security positively influence Asian online consumer’s trust in an e-Commerce context.**

### Perceived Privacy

In the context of e-Commerce, perceived privacy can be defined as the consumers’ ability to control the sharing and unauthorized use of personal information over the Internet while conducting an online transaction (Belanger *et al.*, 2002; Wang & Lee, 1998; Yousafzai *et al.*, 2009). Privacy affects various aspects such as obtaining, distribution and non-authorized use of the personal information (H. Wang & Lee, 1998). Perceived privacy refers to the set of good practices with regard to the handling and management of personal data such as prior informing the consumers what data are going to be collected and how they will be used (Flavián & Guinalfú, 2006). Chen & Barnes (2007) and Connolly & Bannister (2008) proved in their studies that perceived privacy directly influencing consumers online initial trust. This study proposes the following hypothesis to test in relation with perceived privacy and trust.

**H2: Perceived privacy will positively influence Asian online consumer’s trust in an e-Commerce context.**

### System Quality

According to Seddon (Seddon, 1997, p. 246), System quality refers to “the consistency of the user interface and ease of use of the system. Generally system quality can be defined as the desirable characteristics of an information system such as ease of use, system flexibility, intuitiveness, flexibility and response times (Petter *et al.*, 2009). DeLone and McLean (DeLone & McLean, 2003, p. 13) suggested that “system quality can be measured in terms of perceived ease of use”. Many previous literature (Brown, 2008; D Gefen & Karahanna, 2003; Lim, Lee, Hur, & Koh, 2009) demonstrated the positive relationship between system quality and trust. Based on the above, following hypothesis is proposed to test in this research:

**H3: System quality will positively influence Asian online consumer’s trust in an e-Commerce context.**

### Service Quality

Service quality in an e-Commerce refers to the support and service received by a customer from an online vendor. DeLone and McLean (DeLone & McLean, 2003, p.26) defined service quality as the characteristics such as responsiveness, assurance, empathy, and reliability of the vendor. Most of the studies (Bei & Chiao, 2001; Molla & Licker, 2001; Petter et al., 2009; Wang, 2008; Zhu, Kraemer, & Dedrick, 2004) in the field of IS success support the positive relationship between service quality and system use as well as users satisfaction. Service quality (Brown, 2008; DeLone & McLean, 2003; Molla & Licker, 2001; Wang, 2008) is considered to be an important factor influencing consumer's trust in B2 e-Commerce. Based on the above literature following hypothesis is proposed to be tested in this study:

**H4: Service quality will positively influence Asian online consumer's trust in an e-Commerce context.**

### Vendor Familiarity

Vendor familiarity refers to the customer's previous experience, interactions with a particular vendor. In the context of B2C e-Commerce, Gefen (David Gefen, 2000, p. 3) suggested that vendor familiarity and trust are compliment to each other since both of these variables are complexity reduction methods. In the same paper, (David Gefen, 2000) author suggested that the higher the vendor familiarity, the higher will be the consumers' trust in conducting online transactions with that vendor. Based on the above, the following hypothesis is proposed to test in this research:

**H5: User's familiarity with the online vendor will positively influence Asian online consumer's trust in an e-Commerce context.**

### Trust

Trust construct has traditionally been difficult to define and measure (D. Harrison McKnight et al., 2002; Rousseau et al., 1998). While Stewart (Stewart, 1999) defined trust as a belief in an attribute of the trustee while Fung (Fung & Lee, 1999) defined trust as a willingness to believe the trustee. For the present study, in an e-Commerce context, trust is a set of beliefs held by a consumer about the characteristics and possible behavior of the seller (Flavián & Guinalfú, 2006). Lack of trust is considered to be the most important reason for why consumers are reluctant to adopt e-commerce (Flavián & Guinalfú, 2006). Belanger (Belanger et al., 2002, p.252) defined online trust as "*the perception of confidence in the electronic marketer's reliability and integrity*". Mayer *et al.* (R. Mayer & Davis, 1995) identified three important elements of trust which are competence, benevolence, and integrity. Majority of the previous literature (Belanger et al., 2002; Brown, 2008; D Gefen & Karahanna, 2003; David Gefen, 2000; Molla & Licker, 2001; P. Pavlou, 2003; Suh & Han, 2003) related to online purchase intention identified trust, as an important dimension influencing perceived usefulness, customer satisfaction and purchase intention. Based on the above literature, following hypotheses is proposed to test in this study:

**H6: Asian Online customer's trust in the e-commerce system will positively influence their satisfaction level.**

**H7: Asian Online customer's trust in the e-commerce system will positively influence their perceived usefulness.**

### User satisfaction

In an e-commerce context, user satisfaction is defined by Anderson (Anderson & Srinivasan, 2003, p.125) as "*the contentment of the customer with respect to his or her prior purchasing experience with an electronic commerce firm*". According to Seddon (1997, p. 246), "user satisfaction is a subjective evaluation of the various consequences evaluated on a pleasant-unpleasant continuum". Many of the previous researches (Brown, 2008; Seddon, 1997; Seddon et al., 1999) considered user satisfaction as the closest measure of Information Systems success. DeLone and McLean (DeLone & McLean, 1992, 2003, 2004) proposed in their works and subsequently tested and validated by many researchers that user satisfaction will ultimately lead to more system use. Also previous literature (Brown, 2008; Munet al., 2010; Wang, 2008) gives empirical evidences for the positive relationship between user satisfaction and user's intention to purchase online. Following hypotheses are proposed to be tested in this study with regard to user satisfaction:

**H8: User satisfaction will positively influence Asian online consumer's perceived usefulness in an e-commerce context.**

**H9: User satisfaction will positively influence Asian online consumer's intention to use e-Commerce systems.**

### Perceived usefulness

Davis ( Davis, 1989) defined perceived usefulness as "*the degree to which a person believes that using a particular system would enhance his or her job performance*". Perceived usefulness is considered to be the integral part of Technology Acceptance Model (TAM). Previous literature (Brown, 2008; Davis et al., 1989; Rai et al.,2002; Seddon, 1997; Monsuwé, Dellaert, & Ruyter, 2004) proved that perceived usefulness positively influence user satisfaction and user's intention to use the new information systems. By applying these into B2C e-Commerce context, following hypotheses are proposed:

**H10: Perceived usefulness will positively influence Asian online consumer's online purchase intention in an e-commerce context.**

### Intention to Use

Wang (Y.-S. Wang, 2008, p.538) defined purchase intention as “*the favorable attitude of a customer towards an e-commerce system that results in repeat use/purchase behavior*”. Davis ( Davis et al., 1989) considered purchase intention as a behavior which will lead to system use. DeLone and McLean (DeLone & McLean, 2003) suggested Intention to Use may be considered as a measure of IS success in some contexts. Considering the difficulties in measuring the actual system use, this research considers user's intention to purchase online as a measure of e-commerce system success.

## RESEARCH METHODOLOGY

Survey method was used in this study. Preferential sampling has been adopted since the research is focused only among Asian consumers who are having previous online shopping experience. Only the respondents who have recent (less than 1 year) experience in online shopping were selected as the sample. 320 Questionnaires were distributed to various respondents living in Bangkok, Thailand. Nearly 60% of the respondents were working class people and the rest were post graduate students of a leading Business Management University in Bangkok. Respondents were asked to identify their most familiar retail website and questionnaire requested the respondents to assess the website attributes and ultimately their purchase intention. After the screening of the questionnaire, 300 numbers of questionnaires were selected for further analysis.

### Instrument design

Instruments used to create the questionnaire are shown below as Table 1. All the items were selected from the previous empirically validated literature for ensuring the content validity. However some of them were modified slightly to fit to the e-commerce context. Likert scale ranging from 1-5 (strongly disagree to strongly agree) was used for all questions.

No	Measure	No. of items	Source
1	Perceived Security	5	(Flavián & Guinalú, 2006)
2	Perceived privacy	4	(Yousafzai et al., 2009; Flavián & Guinalú, 2006)
3	Vendor Familiarity	2	(D Gefen & Karahanna, 2003)
4	System Quality	4	(F. D. Davis, 1989)
5	Service Quality	3	(Brown, 2008)
6	Trust	3	(D. Harrison McKnight et al., 2002; Yousafzai et al., 2009)
7	Perceived Usefulness	4	(D Gefen & Karahanna, 2003)
8	User satisfaction	4	(Y. S. Wang, Tang, & Tang, 2001)
9	Intention to Use	3	(P. Pavlou, 2003)

**Table 1: Instruments used to measure B2C e-Commerce success**

## ANALYSIS AND RESULTS

### Measurement Model

Reliability analysis (Refer Table 2) of the multi-item scales resulted favorable results. The Cronbach Alpha values were calculated for each construct. Alpha values were ranging from 0.833 to 0.920 indicate high overall internal consistency among the items under each of the construct. Exploratory factor analysis was conducted using varimax rotation with a

minimum Eigenvalue of 1 used as cutoff value for extraction. Only those items with factor loadings greater than 0.5 were kept for further analysis. A measurement model is developed to verify that 32 measurement variables reflect the nine unobserved variables in a reliable manner. The overall fit of the measurement model, adequacy of the factor loadings, explained variances of the measurement model were determined by the Confirmatory factor analysis (CFA) using AMOS version 18. The results of the CFA ( $\chi^2/df = 2.45$ ,  $p=0.00$ ,  $RMSEA=0.07$   $NFI=0.90$ ,  $RFI=0.9$ ,  $IFI=0.913$ ,  $TLI=0.9$ ,  $CFI=0.912$ ) showed the measurement model a good fit to the data collected. The standardized loading estimates for all the variables range from 0.70 to 0.916 (Hair et al., 2010) suggesting adequate convergent validity. These values indicate that all the 32 measurement variables are significantly represented by their respective latent constructs. After comparing the AVE for any two constructs with the square of the correlation estimate between those constructs, it is found that variance extracted is always greater than the squared correlation estimate (Refer Table 3), thus suggesting adequate discriminant validity. Overall the measurement model exhibited sufficient reliability, convergent validity and discriminant validity.

Construct	Items	Cronbach Alpha
Perceived security	5	0.920
Perceived privacy	4	0.912
System quality	4	0.853
Service Quality	3	0.833
Vendor familiarity	2	0.881
Trust	3	0.859
User satisfaction	4	0.864
Perceived usefulness	4	0.855
Intention to Use	3	0.880

**Table 2: Reliability Test Results**

Factor	PS	PP	SQ	Se Q	VF	TR	US	PU	PI
Perceived Security (PS)	<b>0.70</b>								
Perceived privacy (PP)	0.24	<b>0.72</b>							
System Quality (SQ)	0.16	0.22	<b>0.57</b>						
Service Quality (Se Q)	0.39	0.23	0.23	<b>0.62</b>					
Vendor familiarity (VF)	0.24	0.37	0.44	0.23	<b>0.84</b>				
Trust (TR)	0.49	0.17	0.21	0.49	0.21	<b>0.66</b>			
User satisfaction (US)	0.26	0.46	0.48	0.25	0.55	0.20	<b>0.62</b>		
Perceived usefulness (PU)	0.23	0.45	0.38	0.25	0.44	0.19	0.63	<b>0.63</b>	
Intention to use (PI)	0.19	0.50	0.50	0.25	0.52	0.21	0.68	0.64	<b>0.72</b>

**Note:** Diagonal elements represent the average variance extracted while off diagonal elements are the shared variance

**Table 3: Discriminant validity test results**

### Structural Model

Further analysis utilized the structural equation modeling (SEM) techniques via AMOS 18 program. Once the fit of the measurement model has been confirmed, the fit of the structural path were evaluated. The SEM helped to identify the efficacy of the model and proposed hypotheses. Results exhibited good fit ( $\chi^2/df = 2.746$ ,  $p=0.00$ ,  $RMSEA = 0.076$ ,  $IFI=0.87$ ,  $TLI=0.90$   $CFI=0.9$ ) of the structural model. Overall the structural equation parameter estimates provide empirical support for the entire ten hypotheses proposed. Results of the hypotheses tested are given as Table 4.



Hypothesis	Independent variable	Dependent variable	Standardized regression weights	p level	Hypothesis supported?
H1	Perceived security	Trust	0.23	0.000	Yes
H2	Perceived privacy	Trust	0.28	0.000	Yes
H3	System Quality	Trust	0.15	0.014	Yes
H4	Service Quality	Trust	0.24	0.000	Yes
H5	Vendor Familiarity	Trust	0.21	0.000	Yes
H6	Trust	User satisfaction	0.60	0.000	Yes
H7	Trust	Perceived usefulness	0.20	0.001	Yes
H8	User satisfaction	Perceived usefulness	0.65	0.000	Yes
H9	User satisfaction	Intention to use	0.58	0.000	Yes
H10	Perceived usefulness	Intention to use	0.34	0.000	Yes

Table 4: Hypotheses test results

**Trust model for measuring B2C e-Commerce success**

This study presented and validated a research model for measuring the effects of various antecedents of online trust based on the various previous IS literature. The study also achieved its objective of integrating trust and its antecedents into the Technology Acceptance Model (TAM) in order to predict the online user’s intention to use online transaction systems. Factors such as perceived security, perceived privacy, system quality, service quality, and familiarity and previous experience with online vendors were found to be the significant antecedents of user’s online trust in the e-Commerce systems. The final validated model for predicting the intention to use of an e-Commerce system and also for explaining role of online trust in e-Commerce is shown as Figure 4.

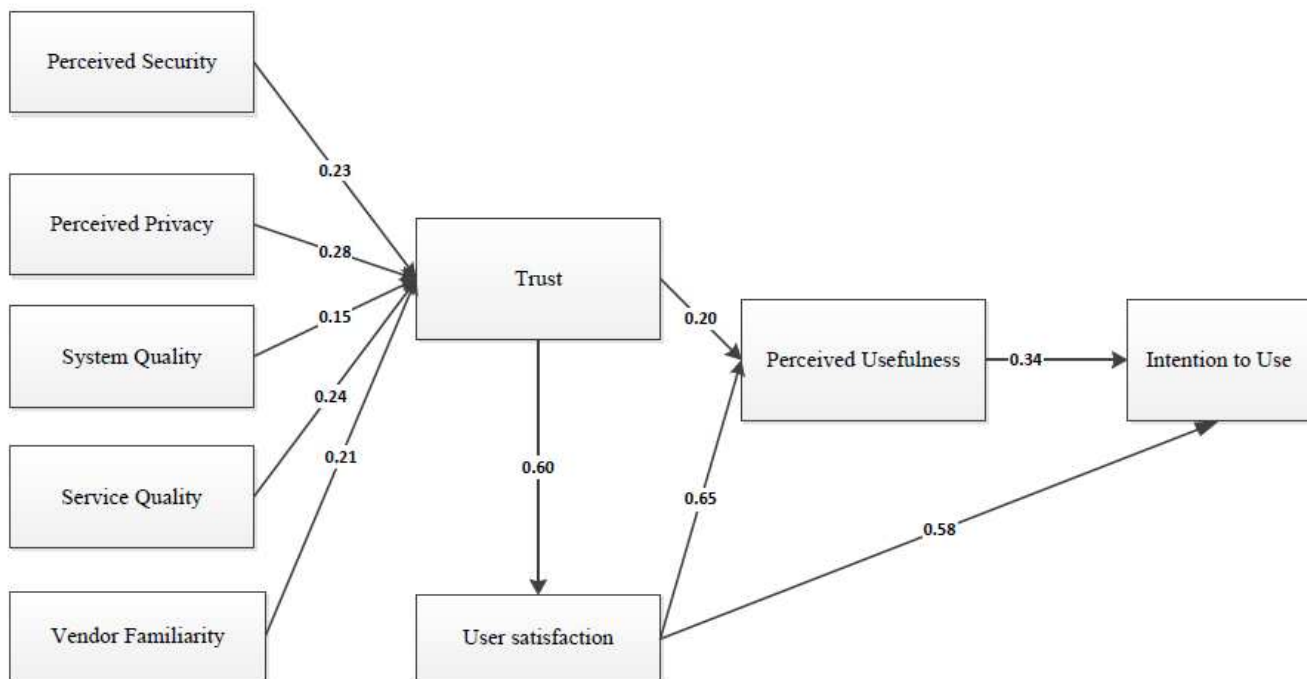


Figure 4: Trust Model for measuring B2C e-Commerce success

## Discussion

One of the important objectives of this study is to examine the differences in online user's behavioral intention to use e-commerce systems across Asian cultures. The results of the study are consistent with those of the previous studies done at other cultural backgrounds.

Results of the analysis show that Asian online user's intention to use an e-Commerce system is highly influenced by perceived usefulness and user satisfaction. User's trusts in the system characteristics positively influence their perceived usefulness and their satisfaction levels. These results are quite consistent with many of the previous studies conducted in this field. Brown (Brown, 2008), based on his research among 166 online consumers in South Africa, proved that system quality, perceived usefulness and user satisfaction are the three important variables influencing users intention to use an e-Commerce system. The role of trust among Asian online users is also found to be consistent with results from non-Asian online shoppers. Previous study conducted among a group of online consumers in Netherlands (Van der Heijden et al., 2003) revealed that user's trust in online store and perceived usefulness directly affect their attitude toward online purchasing and indirectly influence their online purchase intention.

The results also show that perceived privacy, perceived security and service quality are the three important factors that strongly influence Asian consumer's online trust in e-Commerce systems. Previous shopping experience and familiarity to online shopping and system quality features also affect online user's trust significantly. We can see the consistency of these results while comparing it with the results of another study among non-Asian online shoppers. According to a study conducted among 466 University students in United Kingdom (Jun Chen, 2010), user's trust in an online retail context is influenced by factors such as website usability, security and privacy, familiarity with the website, product information quality, service information quality and aesthetic aspects. Antecedents of online trust and online shopping intention are found to be similar among both Asian and non-Asian online users.

## IMPLICATIONS

This research works contributes equally for both academics and practitioners. Firstly for practitioners, this research identifies the significance of five important antecedents of online trust. Online vendors have to improve the security and privacy features of their e-market places. Steps should be taken to convey the improved security features to online shoppers to give them more confidence for giving their personal and financial information to unknown vendors over the internet platform. Service qualities of the vendors are equally important in improving consumer's trust.

Secondly for the academics, this research is an attempt to integrate two well-known theories of Information technology adoption which are DeLone and McLean model of IS success and Technology Acceptance Model in order to provide a simple but comprehensive model for measuring the significance of trust in e-Commerce success. Though the importance of trust has been examined by many previous studies, most of them were fragmented in nature. This paper can be considered to be an attempt to overcome that gap.

## LIMITATIONS

This research has an important limitation which should be addressed and avoided in the future studies. Exploratory Factor Analysis results showed that three factors: purchase intention, perceived usefulness and online customer satisfaction were loaded on to the same factor. This may be due to the strong interrelations between customer satisfaction and customer loyalty. Marketing literature shows that perceived value of the products and services lead to high customer satisfaction which in turn lead to repurchase intention and customer loyalty. However to ensure better discriminant validity, the instruments for measuring these three constructs may be revised in the future.

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