

Uncertainty in Online Environment: Examining the Mediating Effect of Trust and Relative Advantage in E-Commerce

Abstract

Using the concept of trust from Information Systems and marketing disciplines and theory of relative advantage in electronic commerce literature, we propose a research model to examine (1) the role of trust in mediating the relationships between risk, image, store reputation and behavioral intention; and (2) the role of relative advantage in mediating the relationships between perceived usefulness, perceived value and behavioral intention. An empirical data collected from a field study using surveys is used to empirically test the proposed research model. Online shopping malls in South Korea were selected as the subject of the study. A total of 312 responses were collected. The results show that perceived image is the main predictor of trust, followed by perceived risk. Furthermore, perceived website usefulness and perceived value are the main predictors of relative advantage. The testing results of mediating effect also reveal that there are significant mediating effects of trust and relative advantage on behavioral intention. The paper discusses the implications for theory and practice, and makes several suggestions for future research.

Keywords: e-commerce, perceived risk, perceived trust, relative advantage, behavioral intention

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INTRODUCTION

With the rapid development of communication and information technologies, e-commerce and online markets are becoming more sophisticated (Kim et al. 2011). According to Gartner (2011), by 2015, companies will generate 50 percent of Web sales via their social presence and mobile applications. Customers are clamoring for new and easy ways to interact with the organization via their online presence. In online market, however, organizations not only need to attract new customers, but also must retain them to ensure profitable repeat business (Anderson and Srinivasan 1998). Attracting new customers and retaining existing ones will not be easy. Thus, it is important to understand what drives customers' behavioral intention to re-use and continue to purchase from that website at the post-adoption stage (Devaraj et al. 2002).

Increasing use of the WWW as a B2C commercial tool raises interest in understanding the key issues in building relationships with customers on the Internet. Trust is believed to be the key to these relationships (Corbit et al. 2003). Trust has a vital influence on customer activities and thereby on e-commerce success. In general, consumers refuse to engage in transaction if the risks or uncertainty associated with the transaction are high. Although risks in e-commerce can be partially reduced by providing encrypted transactions, installing firewalls, and ensuring privacy seals, behavior uncertainty still arises because web retailers have the chance to behave in an opportunistic manner by taking advantage of the virtual nature of e-commerce (Pavlou 2003). Thus, perceived risk is the major inhibitor of trust in e-commerce. To this extent, a considerable effort has been invested in examining trust in e-commerce and showed that trust can be increased by establishing a positive image about the web retailers along with a reliable reputation (e.g., Choudhury and Karahanna 2008; Gefen and Pavlou 2012). However, none of these studies investigate the integrated effect of perceived risk, perceived image, and store reputation on trust. This paper is a complementary to the existing studies in exploring the trust relationship along with perceived risk, image, and store reputation in B2C context.

Furthermore, consumers are likely to adopt electronic channels if they perceive a relative advantage (RA) over traditional channel (Choudhury and Karahanna 2008). Although the relationship between relative advantage and behavioral intention is well established by previous studies, the effect of multiple dimensions of relative advantage in mediating the relationship between perceived usefulness, perceived value and behavioral intention has not been tested. In this study, we proposed two core variables: (1) Trust and (2) Relative Advantage as the mediators in e-commerce adoption model. Using the trust concept from Information Systems and marketing disciplines and theory of relative advantage in electronic commerce literature, we propose a research model to examine (1) the role of trust in mediating the relationships between risk, image, store reputation and behavioral intention; (2) the role of relative advantage in mediating the relationships between perceived usefulness, perceived value and behavioral intention.

A mediation analysis will provide a multidisciplinary view of e-commerce behavioral intention. The core contributions of this paper are twofold: (1) examining the roles of trust and relative advantage as mediators; and (2) investigating how these different variables influence behavioral intention (i.e., repurchase intention and intention to re-use the website). Below, we provide the theoretical foundations of the frameworks and make the case for integrating them in assessing behavioral intention in e-commerce context.

THEORETICAL BACKGROUND

Trust in E-Commerce

Trust is characterized by uncertainty, vulnerability, and dependence. These characteristics are reflected in online transaction where customers cannot see the seller face to face, physically examine the merchandise, or collect the merchandise upon payment (Corbitt et al. 2003). The most significant long-term barrier for internet market development was the lack of customer trust, both in the merchant's honesty and in the merchant's competence to fill internet orders (Corbit et al. 2003). Morgan and Hunt (1994) define trust as the "confidence in the exchange partner's reliability and integrity." Trust has been associated with the belief that the trustee will act cooperatively to fulfill the trustor's expectations without exploiting its vulnerabilities (Pavlou and Fygenson 2006). The lack of trust prevents consumers from engaging in online transactions because web retailers fail to convey a sense of trustworthiness (Pavlou 2003). In other words, online consumers usually stay away from web retailers whom they do not trust (Gefen et al. 2003). In this study, our focus is on the adoption of web-based electronic channels in general. Thus, we measured trust as an institutional trust—users' belief about the reliability, credibility, and accuracy of information gathered through the web (Choudhury and Karahanna 2008).

Relative Advantage in E-Commerce

According to innovation diffusion theory, relative advantage refers to a multidimensional construct that captures the benefits of an innovation on various dimensions such as lower costs, saving in time and effort, and decrease in discomfort (Choudhury and Karahanna 2008; Rogers 1995). Adopting this definition, Choudhury and Karahanna (2008) defined relative advantage of electronic channels as multidimensional and involves a cumulative assessment of the perceived relative merits of channels. In this paper, the theory of relative advantage of electronic channel is used as a theoretical background.

Prior studies have proposed different dimensions of relative advantages such as convenience (e.g., Devaraj et al. 2002), trust (e.g., Gefen et al. 2003), and efficacy of information acquisition (e.g., Choudhury and Karahanna 2008). In this study, we measured two dimensions of relative advantage—convenience and efficacy of information acquisition. Convenience was measured using relative advantage of transaction cost (Devaraj et al. 2002) and information acquisition was measured using relative advantage of information price. Although Choudhury and Karahanna (2008) indicated that trust is the third dimension of relative advantage, in this study we suggest 'trust' as an independent trust because trust itself is a complex construct that can be built either offline or online.

Relative Advantage—Transaction

As users move toward web e-commerce, the opportunity to compare and gain information about price is greater than traditional market. The initial arguments to move from traditional market to electronic commerce were based largely on expected reductions in transaction costs (Williamson 1985). In the context of B2C e-commerce, Choudhury and Karahanna (2008) argued that it is more useful to think about RA transaction from convenience perspective. To this extent, individuals are unlikely to measure monetary transaction costs but rather consider how convenient a channel is. Devaraj et al. (2002) and Li et al. (1999) suggested that customers who did an online transaction are convenience oriented in term of time savings, ease of completing the transaction, and price saving.

Relative Advantage—Information Price

Choudhury and Karahanna (2008) defined relative advantage of information acquisition as user perception of a channel's ability to provide information and clear understandable explanations. This factor may be particularly important as web use moves toward more complex transactions, such as the acquisition of price comparison.

CONCEPTUAL DEVELOPMENT

Our theoretical framework, presented in Figure 1, aims to explain the mediation roles of trust and relative advantage. We utilized constructs from a model of risk and trust behaviors in e-commerce and the concept of relative advantage as the lens to examine online customers' behavioral intentions.

The Multidimensionality of Behavioral Intention

The dependent variable in most technology adoption research is behavioral intention (e.g., Choudhury and Karahanna 2008; Polites and Karahanna 2012). However, most of these studies measured behavioral intention as a unidimensional variable. Although not explicitly labeled, the focus of behavioral intention of these studies varies from behavioral intention to purchase (e.g., Gefen et al. 2003; Gefen and Straub 2000; Jarvenpaa and Tractinsky 1999) to behavioral intention to use (e.g., Moon and Kim 2001; Polites and Karahanna 2012). Due to this reason, we measured behavioral intention as a multidimensional formative construct consisting of two dimensions: repurchase intention and intention to re-use the website. The rationale for a formative construct of behavioral intention is based on the notions that repurchase intention and re-use the website are dynamic concept. As dynamic concept, they are likely to change over time and be manipulated by other factors.

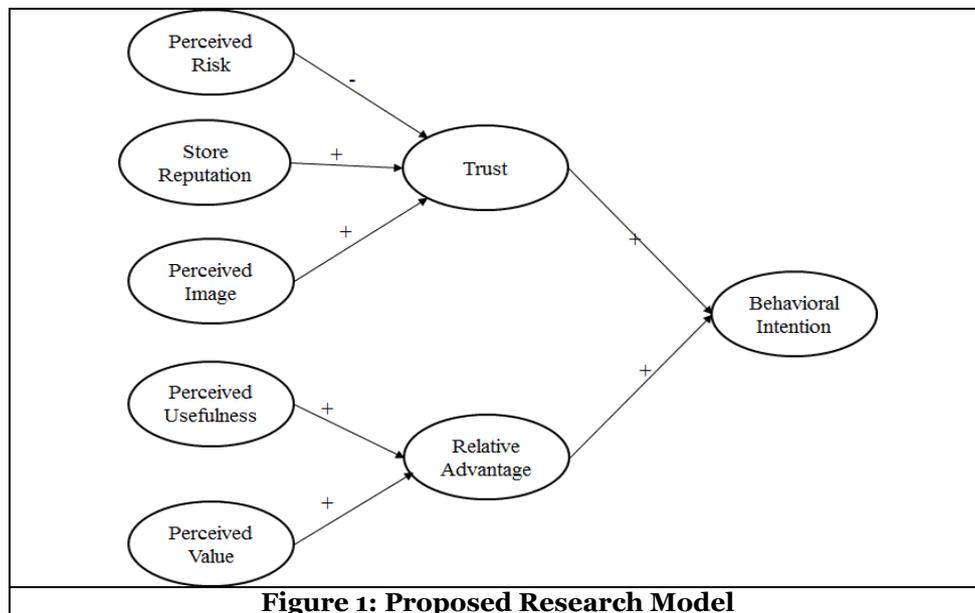


Figure 1: Proposed Research Model

Hypotheses Development

Perceived Risk-Perceived Trust

According to social exchange theory, people form exchange relationships on the basis of trust (Corbitt et al. 2003). The relationships that are likely to cost more than the potential reward will be avoided (Corbitt et al. 2003). Trust and perceived risk are psychological states that are cognitive or affective episodes that fluctuate with situational contexts and may be influenced by an individual's interaction with a situation (Chang and Chen 2008). Thus, trust is a preliminary condition in e-commerce transaction. Successful e-commerce web sites are those which could invoke consumers' trust and lower consumers' risk perception through marketing activity and technology improvement. Risk is defined as a consumer's perceptions of the uncertainty and adverse consequences of engaging in an activity (Jarvenpaa et al. 2006). According to Pavlou (2003), perceived risks can be defined in terms of *economic risk*—the possibility of monetary losses; *personal risk*—potentially unsafe products and services; *seller performance risk*—due to imperfect monitoring; and *privacy risk*—the opportunity to disclose private information. When consumers enter

online environment, they are rightly alarmed about the different types of risks associated with the transactions. If this risk is high, they are unlikely would trust the e-commerce website. Following these arguments, we argued that:

H1: Perceived risk is negatively associated with perceived trust on e-commerce

Store Reputation-Perceived Trust

Jarverpaa et al. (2006) defined reputation as “the extent to which buyers believe that the selling organization is honest and concerned about its consumers.” Store reputation has been shown as a factor that contributes to consumer trust in seller organization (Jarvenpaa et al. 2006). Consumers worry about the trustworthiness of individual web-based vendors, many of whom are unfamiliar to them, as well as about the reliability of the web in general, in light of the much publicized potential for theft of private, sensitive data transmitted over the Internet (Choudhury and Karahanna 2008). Reputation assures that the other party’s ability, integrity, and goodwill are on the consumer’s side. Thus, it helps to increase trust, particularly when the parties have not interacted before and have no knowledge about the web retailers (Jarverpaa et al. 2006). Once consumers believe that the store reputation is high, it will help to establish trust toward the e-commerce vendor. Thus, we posited that:

H2: High store reputation is positively associated with perceived trust

Perceived Image-Perceived Trust

Store image has been referred to as “the way in which the store is defined in the shopper’s mind, partly by its functional qualities and partly by an aura of psychological attributes” (van der heijden and Verhagen 2004, p. 610). Website image is defined as perceptions about a website name as reflected by the website associations held in consumer memory (Chang and Chen 2008). Image dimensions can be categorized into the maker image, the product image, and the users. This image could come from a variety of sources, including consumer experience and word of mouth (Chang and Chen 2008). If consumers assumed that a well-known website has a better capability of fulfill their demand then they are likely to trust that website (Chang and Chen 2008). Because trust serves as a crucial role in attracting customers, we hypothesized that:

H3: Positive image is positively associated with perceived trust

Perceived Trust as a Mediator

Jarvenpaa and Tractinsky (2000) argued that online retailers might increase consumer trust and thereby increase the willingness of prospective customers to shop on the internet. A number of studies have found that trust in the web and web-based vendor positively influence customers’ intent to engage in e-commerce (e.g., Gefen et al. 2003; Jarvenpaa and Tractinsky 1999). Trust is also important for getting information since consumers assess whether the information on a website is valid, credible, and accurate (Pavlou and Fyngeson 2006). In sum, trust for getting information describes a consumer's belief that the Web vendor will provide valid, accurate, and timely information (Pavlou and Fyngeson 2006). Previous research has shown that the impact of store image on intention was weak (e.g., Nevin and Houston 1980; Grewal et al. 1998). It is possibly because there is a mediation between perceived store image and intention. As low perceived risk level increases the level of trust, store image and reputation help building the trust, customers are likely to engage in online transaction. In other word, trust mediates the relationships between perceived risk, store image, reputation and behavioral intention. Thus, we hypothesized:

H4: Perceived trust mediates the relationship between (a) perceived risk and behavioral intention; (b) online store reputation and behavioral intention; (c) perceived image and behavioral intention

Perceived Value-Relative Advantage

Related to perceived value, Zeithaml (1988) defines value as “the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given.” Perceived value is also a function of “a ‘get’ component—i.e., the benefits a buyer derives from a seller’s offering—and a ‘give’ component—i.e., the buyer’s monetary and nonmonetary costs in acquiring the offering” (Anderson and Srinivasan 1998). The importance of perceived value in electronic commerce stems from the fact that it is easier to compare product features as well as prices online (Anderson and Srinivasan 1998) than in traditional market. The reduction in search costs not only increases the likelihood that customers will compare prices, but also enables the customers to compare the array of benefits that they will derive from the products and services that they buy (Anderson and Srinivasan 1998). For this reason, we hypothesized:

H5: Perceived value is positively associated with relative advantage

Perceived Website Usefulness-Relative Advantage

Perceived usefulness is defined as the extent to which an individual believe that using a system could enhance his or her performance (Davis et al. 1989). When it comes to website usefulness, users establish the belief that website is a better alternative to complete their task than other channels. Although previous study indicates that perceived usefulness and relative advantage are similar construct (Karahanna et al. 2002), relative advantage explicitly contains a comparison between the innovation and its competitors (Karahanna et al. 2002). If they are conceptually similar constructs, we would expect a correlation $>.8$. Instead, the correlation score between two variables is also relatively low. Thus, we posit that because usefulness leads to one’s effectiveness on the job, it will enhance the relative advantage of the system. Thus, we hypothesized:

H6: Perceived website usefulness is positively associated with relative advantage

Relative Advantage as a Mediator

Perceived value in this study is related to product value whereas perceived usefulness is related to the effectiveness of the website. Perceived value of a product refers to the ability of a product to offer an attractive combination of quality and price. For example, price discounts offers, where the consumer can save money by getting a product at a lower price, and they have been shown to influence purchase intentions (Pavlou and Fygenson 2006). Researchers have established a positive relationship between perceived value and intention to purchase/repurchase (e.g., Anderson and Srinivasan 1998). Meanwhile, empirical evidence has shown that relative advantage is one of the best predictors of technology adoption (e.g., Karahanna et al. 1999; Moore and Benbasat 1991). From a consumer behavior standpoint, getting product information and purchasing products are generally viewed as the two key online consumer behaviors (Gefen and Straub 2000). While most e-commerce studies have largely focused on product purchasing, online consumer behavior is not monolithic since consumers must first engage in getting product information before purchasing (Pavlou and Fygenson 2006). Getting information involves the transfer of information from the Web vendor to the consumer through browsing the vendor’s website (Pavlou and Fygenson 2006). For this reason, the relative advantage to gain information from website will likely to mediate the relationship between perceived value and perceived website usefulness and intention. Thus, we hypothesized:

H7: Relative advantage mediates the relationships between (a) perceived website usefulness and behavioral intention; and (b) perceived value and behavioral intention

RESEARCH METHOD

Survey Administration and Measurement Development

A field study using surveys for data collection was used to empirically test the research model. Online shopping mall in South Korea was selected as the subject of the study. According to the OECD’s 2008

statistics (Seoul Finance Internet News, 2009), Korea was ranked number one in terms of the percentage of homes with Internet access, at 80.6% of the total population (Kim et al. 2011).

All of measures employed in this study are adapted from extant literature on relative advantage and trust in e-commerce. As discussed, relative advantage and behavioral intention are conceptualized as second-order formative constructs, whereas the other constructs are conceptualized as reflective constructs. While reflective structures assume that the latent second order construct causes the first order factors, formative structures assume that the second order construct is caused by the first order factors (MacKenzie et al. 2005).

Participants were asked to recall their most recent shopping activity and specify the name of online shopping mall. A total of 312 responses were collected. On average, respondents spent around 20 minutes on the website. The majority of these respondents had done more than one transaction on the online shopping mall. 72.4 percent of the respondents (226 participants) were females; 63.1 percent (197 respondents) reported that they had a college degree and 12 percent (38 respondents) had a graduate degree. 51.3 percent (160 respondents) were at their 30s and 39.4 percent (123 respondents) were at their 20s. The rest of it varied from 40s to 50s. From these demographic respondents, we believed that my sample represents the online shopper population in South Korea.

RESULTS

The Measurement Model

First, an exploratory factor analysis was conducted to determine the underlying relationships between measured variables of reflective constructs. The EFA results showed that all of the items loaded on their intended factors. We used partial least squared (PLS) (Ringle et al. 2005) to analyze the data. PLS employs a component-based approach for estimation purposes and can handle formative factors, unlike LISREL. PLS places minimal restrictions on measurement scales, sample size, and residual distributions (Chin et al. 2003; Pavlou and Fygenson 2006). PLS was thus chosen to accommodate the presence of formative factors.

Next, a CFA was conducted in PLS to assess item loadings, discriminant validity, and internal consistency of all scales of reflective constructs. Item loadings and internal consistencies greater than 0.70 are considered acceptable (Fornell and Larcker 1981). The final CFA results in Table 1 and composite reliability scores in Table 2 indicate that the scales largely meet the guidelines. All items exhibit high loadings ($> .70$) on their respective constructs except for one item in store reputation. Also, an examination of the statistical properties of the scales in the survey yielded a Cronbach's alpha value over 0.80. Thus, the developed scales demonstrated reliabilities above the recommended threshold range of 0.60–0.70.

To assess discriminant validity (Fornell and Larcker 1981), (1) indicators should load more strongly on their corresponding construct than on other constructs in the model, and (2) the square root of the average variance extracted (AVE) should be larger than the inter-construct correlations. Results showed that all indicators load more highly on their own construct than on other constructs. Furthermore, all constructs share more variance with their indicators than with other constructs (see Table 2). These results point to the discriminant validity of my scales.

Table 1: Confirmatory Factor Analysis Results

	Intent*	P. Value	Image	RA*	Store Rep	Trust	Risk	Web. Usefulness
IntenRepur	0.40							
IntenUse	0.69							
RA1				0.45				
RA3				0.74				
Image1			0.78					
Image2			0.67					
Image3			0.87					
Image4			0.81					
Image5			0.88					
PU1								0.85
PU2								0.92
PU3								0.92
Repu1					0.87			
Repu2					0.78			
Repu3					0.91			
Trust1						0.90		
Trust2						0.91		
Trust3						0.92		
Trust4						0.90		
Uncert1							0.95	
Uncert2							0.96	
Value1	0.81							
Value2	0.89							
Value3	0.89							

* For formative constructs, weighted loadings were reported (Jarvis et al. 2003)

Table 2: Correlation Matrices, Composite Reliability, and AVE

	AVE	CR	α	1	2	3	4	5	6	7	8
1 Intention	-	-	-	-							
2 P. Image	0.65	0.90	0.86	0.58	0.81						
3 Web. Useful	0.80	0.92	0.88	0.48	0.57	0.89					
4 P. Value	0.75	0.90	0.84	0.53	0.50	0.58	0.87				
5 RA	-	-	-	0.51	0.55	0.58	0.44	-			
6 P. Risk	0.92	0.96	0.91	-0.33	-0.31	-0.29	-0.28	-0.33	0.96		
7 S. Reputation	0.74	0.90	0.83	0.48	0.55	0.53	0.41	0.35	-0.20	0.86	
8 Trust	0.83	0.95	0.93	0.58	0.81	0.61	0.51	0.64	-0.35	0.51	0.91

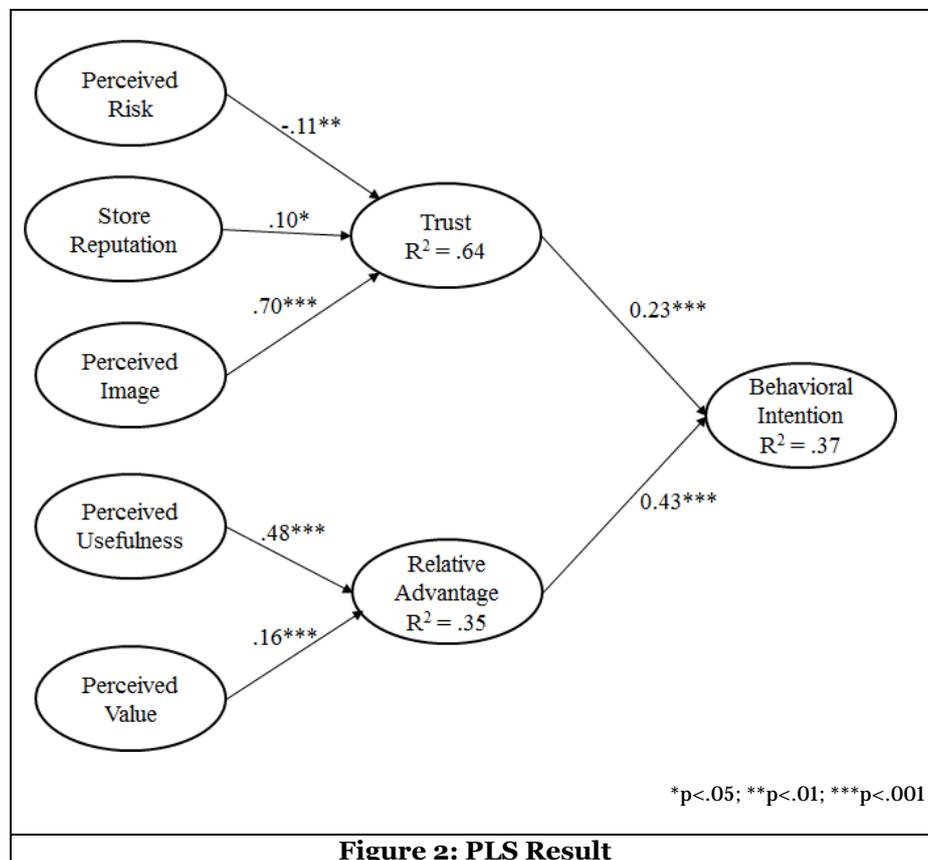
Common method variance can be a potential source of bias in survey research. One of the procedures used to test for evidence suggesting the presence of common method bias in a data set is the Harman's one-factor test (Podsakoff and Organ 1986). An exploratory factor analysis was performed on the variables of interest. If a single factor is obtained or if one factor accounts for a majority of the covariance in the independent and criterion variables, then the threat of common method bias is high. Factor

analysis did not indicate a single-factor structure that explained significant covariance, suggesting that common method bias is not a cause for concern in my sample.

The Structural Model

To test the theoretical model we used PLS, a latent structural equations modeling technique (Fornell and Bookstein 1982). The formative constructs are modeled as such since their underlying dimensions do not necessarily covary (Jarvis et al. 2003). Since PLS does not directly support second order factors, for the formative constructs, factor scores were calculated for each dimension and used in the structural model (Choudhury and Karahanna 2008).

The results of structural model are presented in Figure 2. The results show that H1-H3, and H5-H6 were all supported. Perceived risk had a negative effect perceived trust, supporting H1. Both store reputation and perceived image had a positive effect on trust. Thus, H2 and H3 were supported. Together, these three variables accounted 64% of variance in trust. Perceived website usefulness and perceived value were also positively associated with relative advantage, supporting H5 and H6. Together, these variables accounted for 35% of variance in relative advantage.



Testing the Mediating Effect

To test the predicted mediation effects (Baron and Kenny 1986), hypothesized in H4 and H7, Sobel tests were conducted (Sobel 1982) on the factors obtained for the independent variables, the dependent variable, and the mediators. The test statistic Z was calculated according to the following formula:

$$z = \frac{ab}{\sqrt{(b^2SE_a^2) + (a^2SE_b^2)}}$$

In this equation, *a* represent the unstandardized coefficient for the relationship between the independent variable and the mediator, *b* is the regression coefficient for the relationship between the mediator and the dependent variable, SE_a is the standard error of the relationship between the independent variable and the mediator, and SE_b is the standard error of the relationship between the mediator variable and the dependent variable. The mediating effects of trust and relative advantage on behavioral intention are presented in Table 3. As can be seen from the table, trust significantly mediated the relationship of perceived risk and image, but not store reputation. Thus, H4 was partially supported. Furthermore, the indirect effect of perceived usefulness and perceived value were significant, supporting H7.

Table 3: Mediating Effects of Trust and Relative Advantage on Intention (z-value)

	Trust	RA
Perceived Risk	-2.10*	
Store Reputation	NS	
P. Image	3.19***	
P. Usefulness		4.92***
P. Value		2.14*

*p<.05; **p<.01; ***p<.001

DISCUSSION

This paper aims to shed light on the phenomenon of customer adoption of B2C e-commerce using an integrated model of trust and relative advantage in e-commerce. The study draws upon theories from information systems and marketing to propose, operationalize, and examine the comprehensive model. By operationalizing relative advantage and behavioral intention as formative constructs, the results indicated that relative advantage and perceived trust are the main mediators of behavioral intention (to repurchase and reuse the website). Given that there are many studies that have offered various variables to predict e-commerce adoption, this study identified the mediating effects of trust and relative advantage that haven't been investigated previously. It is shown that relative advantage to receive price information and conduct easier transactions than on traditional market contribute to users' intention to repurchase products from the website.

Implications for Theory and Practice

The results have implications for e-commerce theory, relative advantage and trust literature. Most of e-commerce studies focused on the adoption stage and followed the established theories such as theory of reasoned action (TRA) and theory of planed behavior (TPB). However, in a highly uncertain environment, online customers face a new constrains such as whether they should trust the online shopping or not based on their prior experience. The results showed that perceived image is the main predictor of trust, followed by low perceived risk. Therefore, web retailers should be able to deliver the message to their consumers that they have a positive image out there. It can be established by revealing good reviews from the existing customers. Moreover, managers could reduce perceived uncertainty by sending a signal that they really are reliable in fulfilling the consumers' needs.

The relative advantage in this study was also important at this stage because customers seem to distinguish the sources of value added by electronic channel in the purchase process. We conceptualized relative advantage as a multidimensional construct with two dimensions—transaction process and information price. Whereas Choudhury and Karahanna (2008) proposed three dimensions of relative advantage (i.e., convenience, trust, and efficacy of information acquisition), we argued that perceived trust need to be measured as an independent construct because trust I was interested to examine how

important trust is in e-commerce (independent from traditional market). The results suggested that trust and relative advantage are interrelated, while at the same time are independent. Relative advantage can be increased by enhancing the value of the products on the website and improving the usefulness of the websites, whereas trust can be increased by reducing uncertainty and building a positive online store image. The significant mediating effect of relative advantage on intention suggests that most of the technical aspects such as perceived value and perceived website quality are at the initial stage. Increasing these values will not automatically increase intention. However, it helps building the trust level among the consumers, which is a long term asset for online companies.

Furthermore, how consumers behave online cannot be fully assessed with one variable. Therefore, this study proposed multiple dimensions of behavioral intentions—repurchase intention and intention to re-use the website. Future research could examine additional behavioral intention dimensions (e.g., intention to recommend the website) and measure its direct relationship with actual behaviors.

The proposed e-commerce post-adoption model discussed in this paper also describes a set of factors that managers might find important to facilitate customer purchase experience. It also suggests that managers should examine relative advantage of electronic channel to improve customers' repurchase intention. Furthermore, to establish a long-term relationship with the customers, online marketing managers need to take the 'trust' aspect into account. Past studies have examined the factors that lead to customers' trust in e-commerce. This current study confirmed that companies need to reduce the risk associated with online transaction and integrate customers' trust with other factors such as relative advantage and perceived value to enhance customers' online experience.

LIMITATIONS AND CONCLUSION

Despite the comprehensiveness of the proposed model and the empirical support for it, we acknowledge some theoretical and empirical limitations, which call for additional research. First, data used in this study was collected in South Korea, which may entitle to some of characteristics of Korean population. Future research is encouraged to collect data from different countries and compare the results with my current study. Second, there may be other dimensions of relative advantage that are not fully captured by two dimensions used in this study. Thus, future research is needed to investigate other potential dimensions of relative advantage. Another limitation is the possible presence of social desirability bias due to the self-selection of products and online shopping mall. While this may result in relatively high means for the variables, there was enough variability in my measures to make hypotheses testing possible. However, further research is required to test this assertion.

In conclusion, this study represents a mediation model in e-commerce environment to understand and predict online customer behavior using theories from information systems and marketing. The results suggest that behavioral intention is a multidimensional construct, affected by several core factors including trust and relative advantage.

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