

## E-satisfaction in Business-to-Consumer Electronic Commerce

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### Key Words

E-commerce, E-satisfaction, Information satisfaction, System satisfaction, online purchase intention

### Abstract

*E-satisfaction as a construct has gained increasing importance in the marketing literature in recent times. The examination of consumer satisfaction in an e-commerce context follows the growing consensus that in Internet retailing, as in traditional retailing, consumer satisfaction is not only a critical performance outcome, but also a primary predictor of customer online purchase intention. This study developed a model to explore the antecedents and consequences of e-satisfaction. Based on survey data from students of two universities of Chongqing China, e-satisfaction was measured with two components: information satisfaction and system satisfaction. The results identified information satisfaction (relevancy, understandability consistency and currency) and system satisfaction (users' interface, security, personalization, tele-presence and navigability) as significant predictors of e-satisfaction and online purchase intention as behavioral consequences of e-satisfaction. Possible limitations of research are also discussed.*

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### Introduction

The most experienced and successful e-commerce companies are beginning to realize that key determinants of success or failure are not merely web presence or low price but delivering the high customer satisfaction. Research shows that price and promotion are no longer the main draws for customers to make a decision on a purchase. More and more sophisticated online customers would rather pay a higher price to e-tailers who provide high quality e-service (Schneider, 2001). Customer satisfaction has a significant impact on loyalty, retention and purchase decisions and even on company's financial performance. Thus, to build customer trust and loyalty, and customer retention, e-tailers must shift the focus to e-satisfaction.

In an environment characterized by failures for most dotcom ventures, the rapid growth of a few Internet firms, such as Amazon.com and e-Bay as well as the successful transition to the Web by some traditional retail firms, such as Barnes & Noble and Office Depot, have called sharp attention to the strategies that may contribute to a firm's success in its Internet venture. A consensus seems to favor superior customer service and its consequent impacts on customer satisfaction and customer loyalty (Grewal, Iyer and Levy, 2004). Indeed, recent discussions on the loyalty of Internet retail customers as well as the programmatic strategy of customer relationship management, have given a position of central importance to the study of satisfaction of Internet-channel customers (Anderson and Srinivasan, 2003).

Common technological underpinnings (e.g., the TCP/IP protocol), a similar supra-technological infrastructure (e.g., access modes, prevalence of ISPs), and common governance of crucial issues (e.g., domain name assignments), have facilitated the global spread of the Internet and the WWW. Various governmental, nonprofit and for-profit market research organizations, such as the World Economic Forum, Asia- Pacific Economic Cooperation e-Commerce Steering Group, McConnell International, and Metricnet.com, compare the information and communications technology infrastructure worldwide along some common dimensions (Dutta and Jain, 2003). However, several dimensions of e-commerce activity, especially consumer perceptions and attitudes towards Internet use, consumer acceptance and adoption of Internet technologies, and consumer satisfaction and loyalty to Websites, have been less scrutinized in global comparative studies. Part of this neglect could be due to the difficulty in obtaining comparable and equivalent constructs for the assessment and evaluation of various attitudinal and behavioral dimensions and relationships.

This paper makes an important step in the transnational application of one key behavioral dimension of Internet retailing—customer satisfaction with Internet retailing, or e-satisfaction. The e-commerce adoption model embodies the antecedents and consequents of e-satisfaction that determine such other important concepts in e-commerce as information and system satisfaction (Delone and McLean, 2003) intention to purchase online (Venkatesh, Morris, Davis and Davis, 2003). Each of these individual constructs has much research that has been conducted in its unique area, as referenced above. However, the constructs and model of e-satisfaction are applied to the context of Chinese online consumers. Thus, the second goal of this research is to extend the e-satisfaction model to function as a set of antecedents for information and system satisfaction, forming a comprehensive model of factors leading to intention to purchase in e-commerce.

This paper is organized as follows. Section 2 outlines the satisfaction in the e-commerce context that is at the base of the proposed extended model. Section 3 describes conceptual model, theory and hypothesis of the proposed model. Section 4 explains the research methodology for the conceptual model. Section 5 gives the research analysis and results. Finally, section 6 describes discussion and conclusion and possible limitations of study.

### **Satisfaction in the e-commerce context**

Satisfaction, according to Oliver (1997, p13) is the “consumer’s fulfillment response.” Further, according to Oliver (1997, p14), “a fulfillment, and hence a satisfaction judgment, involves at the minimum two stimuli—an outcome and a comparison referent.” In this context, both Szymanski and Hise (2000) and this study conceptualize e-satisfaction as the consumers’ judgment of their Internet retail experience as compared to their experiences with traditional retail stores. Research did not clear if the dimensions used to evaluate satisfaction in a traditional retail or service setting is the relevant dimensions to evaluate satisfaction in the technology mediated encounter (Anderson and Srinivasan, 2003). The most obvious difference between traditional and electronic retail services is the replacement of human-to-human interaction with human to- machine interaction and therefore, new or modified approaches to conceptualizing and measuring satisfaction may be needed for e-commerce settings.

However, the basic importance of satisfaction and its consequent effects appear to remain intact even in e-commerce settings. Anderson and Srinivasan (2003) find that the impact of e-satisfaction on e-loyalty is the greatest in the presence of consumer-level moderator factors, such as convenience motivation and purchase size, and business-level factors, such as trust and perceived value. Azam, Qiang and Abdullah (2012) findings confirm that satisfaction is a statistically significant factor influencing the consumer intention to purchase online. Only one antecedent out of three (non-deception, fulfillment/reliability and third party seal) namely R/F is found to be statistically significant in boosting consumers’ satisfaction in e-commerce. On the other hand, the exploration by Szymanski and Hise (2000) provides an elucidation of the drivers of satisfaction in e-commerce settings. Initial focus group interviews with online shoppers suggested that e-satisfaction was the outcome of online shopping convenience, merchandising (product information and product offerings), site design, and financial security (Szymanski and Hise, 2000). They developed measures for these key constructs and tested them using an online sample of 1,007 respondents, finding that all five drivers of e-satisfaction had positive effects on e-satisfaction, and all but product offerings had a significant ( $p < .05$ ) impact on e-satisfaction. Similar results were also obtained in a different context by Burke (2002), who found that online shoppers were most satisfied with the convenience, product quality, value provided, and product selection offered by the online shopping experience.

### **Conceptual model: theory and hypothesis**

This section describes in detail the theoretical justification for the proposed research model. The model based on e-satisfaction explains the antecedents of information satisfaction and system satisfaction in order to tie research stream together as antecedents for intention to purchase online.

**(1) Intention to purchase (IP)**

Behavioral intention defined as: “Indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform a behavior” (Ajzen, 1991, p181). This intention has been studied in the context of the theory of planned behavior (Ajzen, 1991), which analyzed an individual’s attitude toward a behavior and found it to be a driving factor toward that individual’s actual behavior. Further, intention to purchase online explains a large portion of a user’s actual purchase. Accordingly web consumers’ purchase intention is included as a last dependent variable in our model.

**(2) E-satisfaction**

E-satisfaction can be defined as the contentment of a consumer with respect to his or her prior purchasing experiences with a given retail-oriented website according to Anderson and Srinivasan’s (2003) definition. In the context of e-commerce, IS and marketing researchers have been interested in reexamining customer satisfaction. However, the basic importance of customer satisfaction and its consequent impacts appear to remain intact even in this environment (Evanschitzky, Iyer, Hesse and Ahlert, 2004).

Researchers in the satisfaction literature commonly recognize satisfaction as a quasi-attitudinal construct (Bagozzi and Gopinath, 1999) and often consider it as an attitude (Fournier and Mick, 1999). As a result, e-satisfaction has been investigated as an antecedent to the continuous intention of e-commerce services in technology acceptance (Bhattacharjee 2001). Therefore, e-satisfaction can be recognized as behavioral attitude from the attitudinal and behavioral perspective (Cenfetelli, Benbasat and Al-Natour, 2005). User satisfaction, broken down into the categories of system satisfaction and information satisfaction, has long been measured by assessing specific characteristics inherent in the technology in question (Delone and McLean, 2003). In e-commerce systems it is particularly appropriate to distinguish between the information characteristics and the system characteristics.

**(3) System Satisfaction and Information Satisfaction**

In e-commerce context it is particularly appropriate to distinguish between the information characteristics and the system characteristics. The “system” in this case involves the physical structure of the system, including security technologies, speed of page loading, and other mechanisms that operate independently of the information on the site. By contrast, the information inherent in an e-commerce system includes the written text, and in some cases graphical images and/or sound files associated with the system. This information is provided to the user by way of the physical system structure, but is not dependent on the structure in order to exist. A relationship is proposed between information satisfaction and performance expectancy, as well as between system satisfaction and effort expectancy (Wixom and Todd, 2005). The information that an e-commerce website provides, be it to assist a user in purchasing or merely to inform a user on a particular issue, is the main factor behind an e-commerce website’s ability to perform its task as a part of the “information super-highway.” A system which cannot provide an individual with accurate, timely and well-organized information does not fulfill its function as an article of information technology (Kim, Kishore and Sanders, 2005). By contrast, the physical structure of e-commerce website forms the primary determinants of a site’s usability to the individual. Sites containing broken links, sites that are inordinately slow to load, and sites which are not organized in such a manner that they prevent the user from becoming “lost in hyperspace” will detract from the individual’s ease of using the site.

Information satisfaction has been measured in literature through evaluation of characteristics inherent in the information, just as system satisfaction has been measured by characteristics inherent in the e-business physical system (Wixom and Todd, 2005). Four antecedent factors are being used in our model to analyze the information satisfaction: relevancy, understandability consistency and currency. Information relevancy includes relevant depth and scope and completeness of the information. Understandability includes ease of understanding and clearness of the information. Consistency in the representing and formatting the information content. Currency includes updating of the information. Five antecedent factors are being used to analyze the system satisfaction namely users’ interface, security,

personalization, tele-presence and navigability. User interface is related to system layout, navigation sequence, and convenience to search for a product or information, or simply to browse (Szymanski and Hise, 2000). Security is one of the biggest obstacles to e-business. Online consumers do not disclose their personal and financial information until they are convinced the website is secure. Thus websites should implement multiple features (e.g., encryption, third-party affiliations, security statement) to assure secure online shopping (Jarvenpaa and Todd, 1997). Personalization systems could provide online customers an individualized interface, effective one-to-one information, and customized service (Murthi and Sarkar, 2003). Tele-presence refers to sense of reality in a virtual environment created by a computer/communication medium (Steuer, 1992). Navigability provides online users more control in navigation, and helps reach the target web page with less disorientation (Shneiderman, 1998). The research model used in the study is shown in Figure 1.

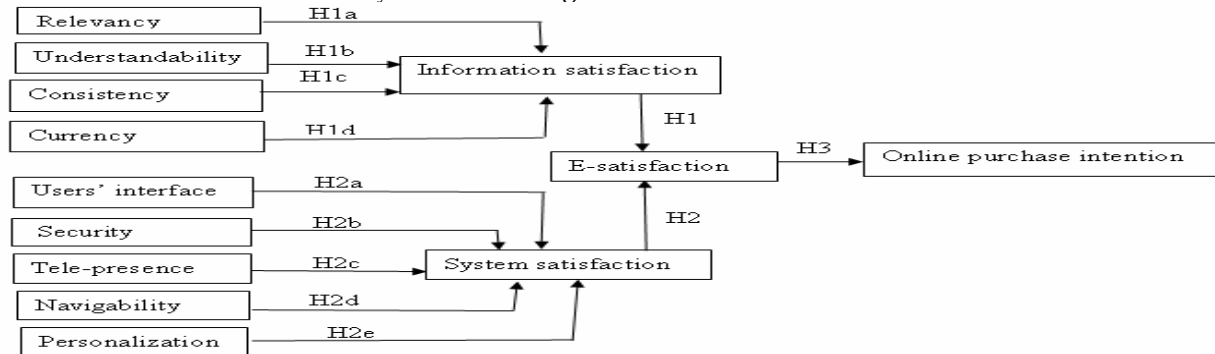


Figure 1 Proposed research model

The hypotheses embodied in the model are listed below.

H1: An individual's increased feelings of information satisfaction directed toward e-tailers website will have a positive effect on the individual's feelings of satisfaction toward online purchasing.

H1a: There is a positive relationship between information relevancy and information satisfaction.

H1b: There is a positive relationship between information understandability and information satisfaction.

H1c: There is a positive relationship between information consistency and information satisfaction.

H1d: There is a positive relationship between information currency and information satisfaction.

H2: An individual's increased feelings of system satisfaction directed toward e-tailers website will have a positive effect on the individual's feelings of satisfaction toward online purchasing.

H2a: There is a positive relationship between users' interface quality and system satisfaction.

H2b: There is a positive relationship between security measures and system satisfaction.

H2c: There is a positive relationship between tele-presence and system satisfaction.

H2d: There is a positive relationship between navigability and system satisfaction.

H2e: There is a positive relationship between personalization and system satisfaction.

H3: An individual's satisfaction beliefs toward an online purchasing will have a positive effect on the individual's intention to purchase online.

## Research Methodology

### (1) Sample

The study was conducted in 2011 by surveying 220 undergraduate students from two universities in Chongqing PR China. University students were considered appropriate for this study because they represent the first generation to grow up with the Internet (Howard, Rainie and Jones, 2001). The young generation is the major group participating in e-shopping because university students are amongst the adult population to whom internet is easily accessible and is a daily routine. Addressing the two demographic attributes on which college students may differ from the Internet shopper norm, Jarvenpaa and Todd (1997) have concluded that age and household income do not significantly influence attitudes toward internet shopping. Respondents were requested to choose one of the retailing-oriented websites at which they had frequently made a purchase and they were asked to write down its name. Then, they were

requested to complete the questionnaire with regard to the last purchasing experience with that website. Most respondents were between the ages of 18 and 30, and 51% of the respondents were female.

**(2) Measures**

The measures used to evaluate the constructs included in the proposed model were mainly modified from pertinent previous studies to fit them to the targeted context and researchers also added new statements related to the constructs, see Appendix A for statements in full. Respondents were instructed to signify their perceptions of the e-satisfaction and the online purchase intention, which included the information satisfaction (relevancy, understandability consistency and currency) and the system satisfaction (users’ interface, security, personalization, tele-presence and navigability), all elicited by using a seven point Likert scale ranging from 1 “strongly disagree” through to 7 “strongly agree”. After the questionnaire was prepared, a pilot study was conducted using nine researchers, six professors. This pre-test study enabled the researchers to improve the questions quality and to test respondents’ conception and clearness before the administration of actual survey. The pilot testing resulted in the removal of nine questions and modification to few questions. The reliability of the measurement tool (questionnaire) was calculated by Cronbach alpha coefficient method, which gives satisfactory value. The questionnaire was administered to 300 students taking different courses. From 300 questionnaires distributed, 250 responses were received. Of the 250 returned and received questionnaires, 30 questionnaires were useless (because the respondents selected more than one choices) and many questions were not answered. As a result, a sample of 220 questionnaires was used for all subsequent analysis.

**Analysis and Results**

Table 1 shows that the correlation among proposed research constructs the correlations were sizable, significant, and appeared in the expected directions. As indicated in the Appendices, those items that measure each construct tend to contribute uniquely to each underlying concept and are distinct from items measuring the other construct.

| (n=220)                        | RE    | UN    | CO     | CU    | UI    | SE    | PE    | TE    | NA    | IS    | SS    | ES    | OP I  |
|--------------------------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Relevancy: RE                  | 1.00  |       |        |       |       |       |       |       |       |       |       |       |       |
| Understandability: UN          | .53** | 1.00  |        |       |       |       |       |       |       |       |       |       |       |
| Consistency: CO                | .29** | .24** | 1.00   |       |       |       |       |       |       |       |       |       |       |
| Currency: CU                   | .34** | .38** | .39**  | 1.00  |       |       |       |       |       |       |       |       |       |
| Users’ interface: UI           | .69** | .67** | .41**  | .53** | 1.00  |       |       |       |       |       |       |       |       |
| Security: SE                   | .61** | .56** | .51**  | .59** | .63** | 1.00  |       |       |       |       |       |       |       |
| Personalization: PE            | .57** | .60** | .61**  | .54** | .58** | .64** | 1.00  |       |       |       |       |       |       |
| Tele-presence: TE              | .41** | .45** | .43**  | .49** | .56** | .51** | .50** | 1.00  |       |       |       |       |       |
| Navigability: NA               | .59** | .61** | .32**  | .38** | .45** | .54** | .63** | .60** | 1.00  |       |       |       |       |
| Information Satisfaction: IS   | .70** | .73** | .68**  | .65** | .71** | .59** | .69** | .60** | .52** | 1.00  |       |       |       |
| System Satisfaction: SS        | .75** | .74** | .67**  | .69** | .61** | .71** | .57** | .55** | .65** | .63** | 1.00  |       |       |
| E-satisfaction: ES             | .78** | .73** | .67**  | .65** | .75** | .68** | .73** | .57** | .59** | .71** | .70** | 1.00  |       |
| Online purchase intention: OPI | .59** | .68** | .62**  | .71** | .49** | .51** | .39** | .56** | .63** | .60** | .53** | .69** | 1.00  |
| Cronbach's Alpha               | .85   | .86   | .95    | .89   | .97   | .90   | .94   | .91   | .88   | .93   | .87   | .94   | .92   |
| Mean                           | 27.01 | 24.00 | 110.48 | 15.21 | 23.11 | 21.30 | 19.88 | 30.19 | 27.83 | 22.32 | 22.89 | 18.61 | 25.77 |
| SD                             | 10.31 | 9.51  | 19.09  | 5.18  | 8.78  | 7.01  | 6.68  | 13.81 | 10.89 | 7.11  | 7.54  | 6.39  | 9.99  |

\*p<.05, \*\*<.01, \*\*\*<.001

Table 1 Correlation matrix

To test the structural model concerning the relationships among the variables, path analysis was performed via LISREL 8 (Joreskog and Sorbom, 1993). The model was appraised with the maximum likelihood method of parameter estimation and used the correlation matrix as the input. The overall fit

indices for the model were acceptable, revealing a moderate fit of the model to the data ( $\chi^2 = 35.37$ ,  $df = 10$ ,  $p < 0.001$ ; GFI = 0.93; AGFI = 0.84; CFI = 0.95; IFI = 0.91; RFI = 0.86; RMSEA = .071) (Table 2).

| Hypotheses | Causal Paths | Standardized Parameter Estimates | Standard Error | t-value   |
|------------|--------------|----------------------------------|----------------|-----------|
| H1         | IS → ES      | 0.482                            | 0.041          | 9.101***  |
| H1a        | RE → IS      | 0.291                            | 0.031          | 4.387***  |
| H1b        | UN → IS      | 0.474                            | 0.057          | 7.275***  |
| H1c        | CO → IS      | 0.410                            | 0.045          | 6.204***  |
| H1d        | CU → IS      | 0.342                            | 0.051          | 6.918***  |
| H2         | SS → ES      | 0.319                            | 0.048          | 7.739***  |
| H2a        | UI → SS      | 0.279                            | 0.039          | 10.001*** |
| H2b        | SE → SS      | 0.547                            | 0.040          | 5.104***  |
| H2c        | PE → SS      | 0.339                            | 0.053          | 6.881***  |
| H2d        | TE → SS      | 0.562                            | 0.047          | 6.018***  |
| H2e        | NA → SS      | 0.409                            | 0.036          | 7.106***  |
| H3         | ES → OPI     | 0.382                            | 0.057          | 5.786***  |

Goodness-of-fit statistics:  $\chi^2(10) = 35.37$ ,  $p < 0.001$ ; GFI = 0.93; AGFI = 0.84; CFI = 0.95; IFI = 0.91; RFI = 0.86; RMSEA = .071

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 2 Parameter estimates for causal paths (n=220)

H1a through H1d stated that relevancy, understandability consistency and currency would be related to information satisfaction. Results showed that information satisfaction had significant relationship with e-satisfaction ( $t = 9.101$ ,  $p < .001$ ). Relevancy had a significant effect on information satisfaction ( $t = 4.387$ ,  $p < .001$ ). Understandability and consistency were found to have a significant relationship with information satisfaction ( $t = 7.275$ ,  $p < .001$ ) and ( $t = 6.204$ ,  $p < .001$ ) respectfully. Finally antecedent of information satisfaction was also found to be significant ( $t = 6.918$ ,  $p < .001$ ). Thus the findings provided strong support for H1, H1a, H1b, H1c and H1d.

Next, H2a through H2e stated that users’ interface, security, personalization, tele-presence and navigability would be related to system satisfaction respectively. The path coefficients for the relationships between system satisfaction and e-satisfaction ( $t = 7.739$ ,  $p < .001$ ) were significant, thus support H2. Users’ interface ( $t = 10.001$ ,  $p < .001$ ) and security ( $t = 5.104$ ,  $p < .001$ ) had a significant relationship with system satisfaction. The path coefficients for the relationships between personalization with system satisfaction ( $t = 6.881$ ,  $p < .001$ ) and tele-presence with system satisfaction ( $t = 6.018$ ,  $p < .001$ ) were also significant. Navigability ( $t = 7.106$ ,  $p < .001$ ) also found to have a significant relationship with system satisfaction. Thus the results supported H2 through H2e.

In the proposed model, the final path considered the relationship between e-satisfaction and online purchase intention (OPI). The e-satisfaction (ES) – online purchase intention (OPI) was 0.382 with a t-value of 5.786 ( $p < .001$ ), which indicates that online consumers are likely to be satisfied for intending to purchase online.

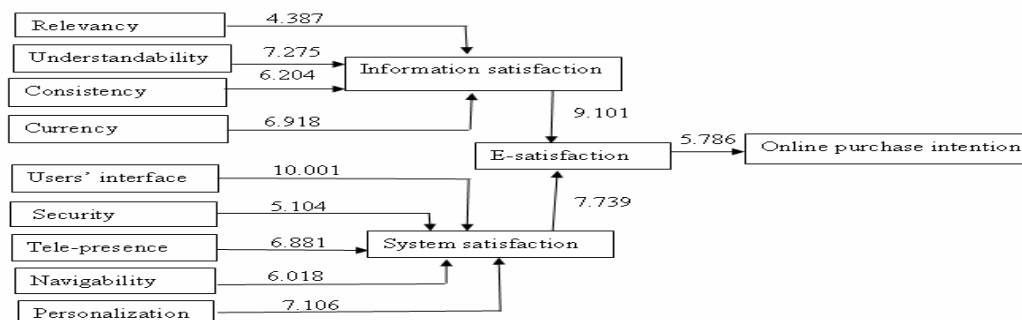


Figure 2 Path Model of proposed research model

Goodness-of-fit statistics:  $\chi^2(10) = 35.37$ ,  $p < 0.001$ ; GFI = 0.93; AGFI = 0.84; CFI = 0.95; IFI = 0.91; RFI = 0.86; RMSEA = .071.

Note: All the above paths represented by solid lines were statistically significant.

## **Discussion and Conclusion**

This study investigated the role of e-satisfaction in an intention to purchase online in the context of Internet-mediated business-to-consumer transaction. Relating studies of the e-satisfaction, information satisfaction and system satisfaction, the study developed and tested a theoretical model accounting for the antecedents and consequences of e-satisfaction. By measuring the underlying concept of e-satisfaction with the two distinct dimensions of information satisfaction and system satisfaction, the study disentangled differential relationships among the antecedents, e-satisfaction, and its resultant behavior (online purchase intention).

The analyses showed several interesting results. First that in order to encourage customers to use the products or services provided by e-commerce websites for the long term, lower corporate budgets and enhance corporate profit, it is necessary to first elevate e-satisfaction levels. It has been proven that when consumers have high satisfaction levels after making online purchases, they will have a higher intention for making repeat purchases. Thus, for e-commerce companies to get consumers to revisit their websites and make repeat purchases, they need to improve consumer satisfaction levels. It means that a customer's satisfaction may be enhanced through the various quality factors of the shopping website, as it is critical for EC companies not only to provide high quality products to consumers, there must be a well designed website portal with right information and high system quality to customers to improve their online buying experiences.

Secondly, online customers considered information quality as the most important factor. Our research showed that for information satisfaction, information presented by online stores should support customer service and product search. Such information should be helpful and relevant in predicting the quality of a product or service. To satisfy customers' information needs, such information should be up-to-date in presenting products and services, sufficient to help customers make a choice, represent in right format and easy to understand.

Thirdly, our research showed that system satisfaction was also shown to have a significant influential on satisfaction of online customers. Results showed that purchasing transaction can be adversely influenced by the poor online store design, therefore it is essential to understand the effects of different layouts, and organizational, browsing and navigation features on customers' purchase behavior. Security is another concern of online customers and is a critical factor in acquiring and retaining consumers as online shopping service users and in satisfy the consumers. Security concerns in electronic commerce can be divided into financial security and identity security. As the perception of security risk decreases, satisfaction with the services of online stores is expected to increase. Significance of tele-presence confirmed that online consumers are known to want, to feel and touch the products, and communicate with retailers like in physical markets. They are inclined to use their real-world experience as a standard for assessing their online experience. Finally the result indicates that online customers have different preferences for the same website quality factors as the type of website changes. This provides empirical support for the value of website personalization. With heavy information overload experienced by online customers to find and select the best product or services, there has been substantial demand for personalized systems to treat each customer individually (Riecken, 2000).

In conclusion, evaluating e-commerce success is a challenging issue, but should be undertaken to examine payoffs of investment in e-commerce systems.

### **(1) Limitations**

The emphasis of the current study is on the factors influential on e-satisfaction and finally on online purchasing intention. In order to grasp a further understanding of the formation process of online consumers' satisfaction and repurchase behavior, it is of interest to consider other individual differences such as product involvement and online purchase experience (Elliott and Speck, 2005). Furthermore, we may need to explore the condition under which the effects of website information and system satisfaction on e-satisfaction may vary.

Finally, in order to test causal relationships among constructs, a longitudinal study may be an alternative. In addition, future researchers may be able to survey respondents from different countries and carry out cross-cultural comparisons.

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## Appendix A

|                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Online Purchase Intention (OPI) items by Pavlou and Fygenson (2006)                                                                                                                                                                                                                                                                                                                                                                       |
| <ol style="list-style-type: none"> <li>1. During the last two months, I purchased a product from an e-commerce website</li> <li>2. I frequently purchase product from e-commerce website.</li> </ol>                                                                                                                                                                                                                                      |
| E-satisfaction items                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ol style="list-style-type: none"> <li>1. How do you feel about your Internet-shopping experience?</li> <li>2. I am sure it was right to make my most recent online purchase.</li> <li>3. I have truly enjoyed purchasing</li> <li>4. My choice to purchase online was a wise one.</li> <li>5. I am satisfied with my most recent decision to purchase online.</li> <li>6. I am happy I made my most recent online purchasing.</li> </ol> |
| Information Satisfaction items                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ol style="list-style-type: none"> <li>1. I am very contented with the information from online store.</li> <li>2. I am very pleased with the information from online store.</li> <li>3. I am very delighted with the information from online store.</li> <li>4. Overall, the information I get from online store is very satisfying.</li> </ol>                                                                                           |
| System Satisfaction items                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <ol style="list-style-type: none"> <li>1. Technical things considered, I am very satisfied with this online store system.</li> <li>2. Overall, my interaction with system is very satisfying.</li> <li>3. I am very pleased with using the interface of online store</li> <li>4. I am very contented with using the interface of online store.</li> </ol>                                                                                 |
| Information satisfaction Antecedents items                                                                                                                                                                                                                                                                                                                                                                                                |
| <ol style="list-style-type: none"> <li>1. Are you satisfied with information relevancy of online store?</li> <li>2. Are you satisfied with information understandability of online store?</li> <li>3. Are you satisfied with information consistency of online store?</li> <li>4. Are you satisfied with information currency of online store?</li> </ol>                                                                                 |
| System satisfaction Antecedents items                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ol style="list-style-type: none"> <li>1. Are you satisfied with users' interface of online store?</li> <li>2. Are you satisfied with security system of online store?</li> <li>3. Are you satisfied with tele-presence system of online store?</li> <li>4. Are you satisfied with navigability system of online store?</li> <li>5. Are you satisfied with personalization system of online store?</li> </ol>                             |