



AN INVESTIGATION OF E-SHOPPING QUALITY DETERMINANTS AMONG STUDENTS AT A HIGHER LEARNING INSTITUTION

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Abstract

This study aims to investigate e-shopping quality determinants among students at a higher learning institution in Malaysia. Data was collected from 200 students and analyzed using multiple regressions. Results revealed that privacy/security emerge as the most important determinant of e-shopping quality among students followed by web site design. E-shopping quality does not determine by customer service and atmospheric/experiential factor. The e-retailers may improve or upgrade their e-shopping websites by understand which of the web site attributes influence consumers' beliefs about online shopping. This study provides important implications for e-tailers whose web site developers must keep in mind that customers are not only web users with trust/safety and information needs, but also shoppers with service and experiential needs.

Keywords: E-shopping Quality, Web site Design, Privacy, Security, Atmospheric, Experiential

Introduction

Electronic shopping (e-shopping), also known as online shopping, is the process of buying goods and services from merchants who sell on the Internet. Website service quality is the customer's perception of the shopping website's ability to respond to customer's needs, be concerned about customers and provide a quality shopping environment. Shopper can visit web stores from the comfort of their homes and shop as they sit in front of the computer. Information processing in online shopping environments has presented a challenge, depending upon an individual's level of knowledge, experience and cognitive ability (Li, 2010). The non-store retailer offers an increased level of consumer service that consists of greater product assortment, ease of orders, increased geographical scope, at-home delivery and liberal return policies. Generally, non-store consumers receive more information on features, benefits, and options than store shoppers do. Online shoppers cannot inspect the service environment and see or touch the products. There is more risk when purchasing products from an online store than from a physical store (Chiou & Pan, 2009).

The knowledge this study generates will be useful to e-tailers in two ways. First, the e-retailers can improve or upgrade their e-shopping websites by understand which of the web site attributes influence consumers' beliefs about online shopping. Second, e-tailers could learn more about how to entice purchasers to shop online more frequently, particularly the impact of consumer beliefs about online shopping on attitude and intention, and entice non-purchasers to initiate their first transaction online. The findings should be useful in the development of guidelines for online stores to obtain higher customer satisfaction, greater customer loyalty, and sales. Hence, this study aims is to investigate e-shopping quality determinants among students at a higher learning institution in Malaysia.

Literature Review

E-shopping Quality

E-shopping quality refers to overall consumer perceptions of the excellence and effectiveness of an e-tailer's product and or service offering through its virtual store. Both the quality of web site features or interface performance and the quality of features going beyond web site interface influence a consumer's perception of Internet shopping (Ahn, 2003; Wolfinbarger & Gilly, 2003). From the consumers' perspective, online shopping refers to a number of experiences including information search, web site browsing or navigation, ordering, payment, customer service interactions, delivery, post-purchase problem resolution, and satisfaction with one's purchases (Ha & Stoel, 2008). High quality e-shopping sites may result in the perception that one's e-shopping experience is fun and enjoyable where they do not have to drive, walk, search for merchandise, wait in lines, or carry large items.

Privacy/Security

Privacy refers to the degree to which the online shopping web site is safe and protects the customers' information. Consumers will hesitate to shop online if they do not feel assured that their credit card information is secure and protected from potential hackers (Collier & Bienstock, 2006). Prior research in the online shopping context indicates that consumers' perceptions of privacy have a significant and positive effect on their trust in the online vendor (Bart, Shankar, Sultan, & Urban, 2005; Liu, Marchewka, Lu, & Yu, 2005; Román, 2007). Thus, we propose the following hypothesis:

H1: E-shopping quality has been influence positively by perceived privacy or security.

Web Site Design

Web design is a process of conceptualizing, planning, and building a collection of electronic files that determine the layout, colours, text styles, structure, graphics, images, and use of interactive features that deliver pages to your site visitors. Professional Web design helps to make business appear credible online (<http://www.networksolutions.com/education/what-is-a-web-site-design>). A website is an address which can be server and location on the World Wide Web that contains web pages and can be accessed by anyone on the internet. (http://www.rocketface.com/designing_a_website.html). The quality of web site features or interface performance and the quality of features influence a consumer's perception of Internet shopping. The web site needs to be designed to suit the customer needs and satisfaction. Customers who get treatment and any satisfaction from e-shopping will able help to build a loyalty and quality to the brand. Therefore, we posited that:

H2: E-shopping quality has been influenced positively by perceived web site design.

Customer Service

Customer service is a function of how well an organization is able to constantly and consistently exceed the needs of the customer. Customer service is a wide variety of activities intended to ensure that customers receive the goods and services they require to satisfy their needs or wants in the most effective and efficient manner possible. (http://marketinginformationcentre.ca/marketing_definitions_%28c-d%29.htm). Customer satisfaction is the feeling that a product or service has met the customer expectation. Customer service is normally an integral part of a company's customer value proposition. Customer service adds value to a product and builds enduring relationship is include all the interactions between a consumer and a provider at the time of sale, and thereafter. E-shopping quality always link to the customer services. Customer service refers to the degree to which the online shopping website is a chance to let the customer to trust them beside to satisfy their needs. According to Lee, Pi, Kwok, & Huynh (2007), some variables and customer service are related to satisfaction in traditional stores may not be relevant in online stores, such as interpersonal interaction and the physical environment. In the online shopping, the consumer cannot face to face to meet the producer and enjoy the full customer service beside scare to belief the online website. Thus we hypothesize that: H3: E-shopping quality has been influence positively by customer service.

Atmospheric/Experiential

Atmospheric may affect the consumer whether want to decide online shopping or not. Experiential means that one of the five things that makes adult learning different from pedagogy is that adults learn better when they can experience what they are learning. Experiential learning refers to the types of education that allow adults to be active, to do whatever it is they are learning. A consumer determined the quality of an e-shopping by considered atmospheric or experiential because of the expectation that they from the e-shopping might need to meet their needs. In order to emphasize it, the atmospheric of a website, buying process and experience of e-shopping is critical. The customer that goes through might learn something different that would bring effects on e-shopping quality. Accordingly, we hypothesized that: H4: E-shopping quality has been influence positively by atmospheric/experiential.

Methodology

Two hundred questionnaires were completed by students 200 students at a higher learning institution in Malaysia with 80% response rate following simple random sampling technique; a technique that each element in the population has a known and equal probability of selection. Respondents answered by agreeing or disagreeing with the statement using a Likert scale from 1 = strongly disagree to 7 = strongly agree. Questionnaire items, as stated in Appendix 1, were adapted from Ha & Stoel (2008). A seven-point Likert scale ranging from 1 – strongly disagree, to 7 – strongly agree was used for the questions to indicate a degree of agreement or disagreement with each of a series of statements related to the stimulus objects. The data were analyzed using multiple regression analysis via the Statistical Package for Social Sciences (SPSS) program version 17.0 for windows, with the aim of studying the relationships between the independent variables and the dependent variable.

Data Analysis

Profile of Respondents

The descriptive statistics of the sample are listed in Table 1. Of the 200 participants, 27.5% are males, 72.5% are females, and 85% are between 20-40 years old. Most of them are young people. More than 50% of the respondents have a bachelor's degree or higher education level. Table 2 depicts respondent's e-shopping experiences. 63.5% express that they have e-shopping experience. More than 60% of them prefer to purchase apparel fashion via the Internet and only 8.5 % attracted for jewellery. 13% is the frequent buyer. Further investigation of the descriptive finding reveals that enjoyment led the factor that made e-shopping is more acceptable among the consumers, followed by quality element. They are encouraged to purchase online because of two main reasons: (1) secure and trust, and (2) convenience. 77% has spent more than RM 101 for e-shopping transaction and chosen e-banking as form of making payment.

Reliability

The research instrument was tested for reliability using Cronbach's coefficient alpha estimate. The degree of consistency of a measure is referred to as its reliability or internal consistency. A value of 0.70 or greater is deemed to be indicative of good scale reliability (Hair, Black, Babin, Anderson, & Tatham, 2010). The Cronbach's alpha for the five factors range from 0.811 to 0.973, suggesting that the constructs measures are deemed reliable (Table 3).

Correlation Analysis

Correlation analysis is performed is to examine the level of strength between the relationships of all the variables that have been stated. Table 4 summaries the results. As cited in Wong and Hiew (2005), the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8 to avoid multicollinearity. Since the highest correlation coefficient is 0.711 which is less than 0.8, there is no multicollinearity problem in this research.

Multiple Regression Analysis

Multiple regression analysis was conducted to test the significance of each hypothesis in the research. Four hypotheses were proposed and results were enumerated in Table 5. The significant level was set at 0.05. Among the factors shown in the table, web site design and privacy/security have positive effects on e-shopping quality and are significant at the 0.05 level. Variances in e-shopping quality and independent variables are 86%. Detail findings are presented below. Hypothesis 1 postulates the relationship between perceived privacy/security and e-shopping quality. Results show that e-shopping quality is significantly affected by perceived privacy/security ($\beta = .13$, $t\text{-value} = 2.24$), shopping enjoyment ($\beta = 0.415$, $t\text{-value} = 3.722$). Thus, Hypothesis 1 is supported. Ones found that the web site has adequate security features. Therefore, they feel like their privacy is protected at the visited site and feel safe in their transactions

Hypothesis 2 explicates the relationship between perceived web site design and e-shopping quality. Significant relationship exists in Hypothesis 2. Hence, e-shopping quality is affected by perceived web site design ($\beta = 0.279$, $t\text{-value} = 2.577$, $p < 0.05$). The organization and layout of the web site facilities searching for products. The site gives enough information to identify the item to the same degree as if in the store as it allows browser to go exactly to what they want quickly. Hypothesis 3 posited that e-shopping quality has been influence positively by customer service. Results revealed insignificant result ($\beta = 0.071$, $t\text{-value} = 0.647$, $p > 0.05$). Thus, Hypothesis 3 is not supported where respondents find that customer service does not influence e-shopping quality. They have less concern that their inquiries are answered promptly and customer service personnel are always willing to help out. The empirical result by Shih (2004) shows that the web security did not direct affect the e-shopping quality.

The final hypothesis, Hypothesis 4 proposed that e-shopping quality has been influence positively by atmospheric/experiential. Atmospheric/experiential exhibited insignificant relationship with e-shopping quality ($\beta = 0.150$, $t\text{-value} = 1.477$). Its $p\text{-value}$ is > 0.05 , posited that Hypothesis 4 is also not supported. Whether experiential purchases, as opposed to materialistic purchases, are likely to increase well-being but these increases are likely to be due to increased satisfaction of psychological needs and/or decreased social comparison not the e-shopping quality. Participants indicated that experiential purchases represented money better spent, brought more happiness to them, and brought more happiness to others (Howell & Hill, 2009).

Conclusion and Recommendations

In a nutshell, results revealed that privacy/security has a significant relationship with the e-shopping quality and emerge as the most important determinant of e-shopping quality among students followed by web site design. Nonetheless, e-shopping quality does not determine by customer service and atmospheric/experiential factor. As indicated by the study, the majority of the consumers today are very concerns about the web site design while shopping on the Internet; thus customers need to adapt by learning the changes made to the website. If the quality of online shopping can be assured, people will certainly shop online.

The e-shopping quality need to be addressed by all parties including the government, vendors, and organizations. This research can provide knowledge to know which website attribute influence consumer's belief about online shopping. Furthermore, the current findings will help developers design web sites by providing insights on how comprehensive their web site in terms of business activities to make the web site successful. This study surveys students at a higher learning institution in Malaysia that impedes the generalization of findings to older online consumers. Additionally, taking the number of factors in the research model into consideration, this study does not have adequate sample size to generalize the findings. It is recommended that further research should be conducted on a larger population since this study was conducted based on the findings taken only from 200 respondents.

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Table 1 Demographic Profile of Respondents

Demographic	Criteria	Frequency	Percentage
Gender	Male	55	27.5
	Female	145	72.5
Age	Less than 20	21	10.5
	20-40	170	85.0
	40-60	7	3.5
	More than 60	2	1.0
Education Level	SPM	15	7.5
	STPM	83	41.5
	Bachelors	102	51.0
	Masters	17	8.5
	Others	6	3.0

Table 2 E-Shopping Experiences

Question	Criteria	Frequency	Percent
What product do you purchase online?	Apparel Fashion	123	61.5
	Jewellery	24	8.5
	Reading Materials	53	3.0
Have you experience any e-shopping experience?	Yes	127	63.5
	No	73	36.5
Approximately how frequently you have purchased anything through e-shopping?	Frequent	26	13.0
	Seldom	110	55.0
	None	64	32.0
What makes e-shopping more acceptable among the consumers?	Quality	68	34.0
	Enjoyment	79	39.5
	Trust	53	26.5
What factors that encourage consumers to purchase online?	Secure and Trust	72	36.0
	Convenience	71	35.5
	Variety	57	28.5
How much do you spent for e-shopping?	Less than RM100	46	23.0
	RM101-RM350	109	54.5
	More than RM351	45	22.5
How do you make payment for e-shopping?	Credit Card	46	23.0
	e-banking	109	54.5
	Debit Card	45	22.5

Table 3 Reliability Test

Variable	No of item	Cronbach's Alpha
Web Site Design	4	0.973
Customer Service	6	0.842
Privacy / Security	9	0.902
Atmospheric / Experiential	5	0.811

Table 4 Correlations Analysis between Variables

	1	2	3	4
(1) Web Site Design	1			
(2) Customer Service	0.709(**)	1		
(3) Privacy /Security	0.695(**)	0.711(**)	1	
(4) Atmospheric /Experiential	0.653(**)	0.646(**)	0.685(**)	1

** Correlation is significant at the 0.01 level (2-tailed)

Table 5 Influence of the Independent Variables on Dependent Variable

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Web Site Design	0.201	0.078	0.279*	2.577	0.011
Customer Service	0.054	0.084	0.071	0.647	0.519
Privacy/Security	0.273	0.073	0.415*	3.722	0.000
Atmospheric/ Experiential	0.105	0.071	0.150	1.477	0.141
Multiple R		0.294			
R ²		0.86			
Adjusted R ²		0.67			
F		4.597			
Sig. F		0.001			

Note: * denotes a significant value as $p < 0.05$

Appendix 1 Measurement of Items

Web site design

The site doesn't waste my time
 I can go to exactly what I want quickly
 The organization and layout of the web site facilitates searching for products
 The site gives me enough information so that I can identify the item to the same degree as if I am in the store

Customer Service

The company is ready and willing to respond to customer needs
 The web site has reasonable shipping and handling costs
 Customer service personnel are always willing to help you
 Inquiries are answered promptly
 When you have a problem, the web site shows a sincere interest in solving it

Privacy/security

I feel like my privacy is protected at this site
 I feel safe in my transactions with this web site
 I feel I can trust this web site
 The web site has adequate security features
 The company behind the site is reputable

Atmospheric/experiential

It is really fun to shop at this web site
 The site almost says, "come in and shop"
 Buying at this web site is exciting for me