

Factors Influencing Customer Satisfaction and E-Loyalty: Online Shopping Environment among the Young Adults

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Abstract. According to Internet World Stats (2012) about 60.7% of the total population in Malaysia uses the Internet and about more than 11 million people out of that number are young adults. From business and marketing perspectives, according to Nelson (2012), satisfied customers tend to share their experiences about a company or business to other people. Thus, this study aims to examine the factors influencing customer satisfaction, and how customer satisfaction subsequently affects e-loyalty towards online shopping among young adults. A convenience sampling of 193 responses were collected throughout the Klang Valley and it took about three months to complete the whole process of data collection and analyses. In addition, questionnaire survey method was used to collect data from the respondents. All the data gained were analysed by various statistical methods in Statistical Package for the Social Science (SPSS). The reliability of the data was verified via reliability analysis. Furthermore, descriptive analysis was used to describe the basic features of the data in the study; and regression analysis was adopted to test the hypothesised relationships among the variables. Findings show that only e-service quality and information quality have effects on customer's satisfaction. It was also found that customer's satisfaction does positively impact e-loyalty. On the other hand, the findings reveal that website design and security were insignificant towards customer's satisfaction. Overall, the findings of this study would help marketers to formulate and implement effective online marketing strategies, as well as in the decision making process.

Keywords: online shopping, customer satisfaction, website design, security, e-service quality, information quality, e-loyalty.

Introduction

Online business, or e-commerce, has shown a tremendous growth in the past years despite the uncertainty of the world economy today. A research conducted by Ueno in 2012 showed that the online shopping market in Malaysia is expected to increase to over RM1.9bil in 2016 (Ueno, 2012). This will promote an intense competition in the market. In order to remain competitive, online businesses need to know effective ways on how to satisfy their customers' needs and wants. Approximately more than 11 million people from the market are of ages 15 and above, and access the Internet either from home or work locations (comScore Inc., 2011). The high numbers of online customers prove that customer satisfaction in an online business is a key factor to profitability (Guo, Ling & Liu, 2012).

Previous research has shown that when customers are satisfied with a company or service, there is high possibility that they will share their experience to other people (Nelson, 2012). Therefore it is crucial for business to take into account their customers' satisfaction because this will retain customer loyalty, as well as attract potential customers (Guo et al., 2012). There are few crucial factors that determine customers' satisfaction and thus, online businesses should be well revised

with the antecedents of customer satisfaction in the industry (Guo et al., 2012). Once these factors are proficiently understood, customers' satisfaction will increase and consequently improve the business performance.

This study aims to examine the factors that influence customers' satisfaction in an online shopping environment in Malaysia, especially amongst the young adult generation of ages ranging from 18 to 35 years old. Furthermore, this study also examines the relationship between customers' satisfaction and e-loyalty in an online shopping environment. The findings of this study are valuable to marketers to make better decisions on their online marketing strategic plan. Moreover, the outcome of this study adds value to marketers. The available business resources may be utilized to improve the key features that can directly increase customer satisfaction, as well as retaining their loyalty towards the online retailers. Most importantly, the online marketers could avoid spending their valuable resources on online retail features that may not positively influence consumer satisfaction and loyalty. This would give a huge advantage to the online retailers to promote long-term business growth by creating loyal customers.

Literature review

Customer satisfaction

According to Khristianto, Kertahadi and Suyadi (2012), customer satisfaction is commonly viewed as a result of comparison between the consumption expectation and experience; and customer satisfaction is achieved when the final deliverable (i.e., experience) meets or exceeds a customer's expectation. Satisfaction and loyalty are the key elements that determine the success of market concept implementation (Khristianto et al., 2012). Satisfied customers are most likely to have the intention to repurchase if the service provider reached or exceeded their expectation (Alam & Yasin, 2010). Identifying the variables of customer satisfaction is significant as it acts as a benchmark of the business performance, and it also serves as guidelines for future improvement (Alam & Yasin, 2010). Guo et al. (2012) have identified eight determinants of customers' satisfaction, which are website design, security, information quality, payment method, e-service quality, product quality, products variety and delivery services. On the other hand, Mustafa (2011) presents user interface quality, information quality, perceived quality and perceived privacy for his framework. For the purpose of this study, the effects of website design, security, e-service quality and information quality on customer satisfaction are examined. Subsequently, the influence of customer satisfaction on e-loyalty in online shopping environment is also tested.

Website design

Website design plays an important role in online retailing, as it affects customer directly during the purchasing process. The characteristics of the website determine customers' perception towards the online store. This perception is important especially for the first time users, and to impose the website's reliability mind set among users (Guo et al., 2012). Besides, website design has a vital role in assisting customer in locating information. Well-designed websites reduce the time of information search, and avoid the possibilities of mismatch (Luo, Ba & Zhang, 2012). Luo et al. (2012) also point out that an excellent website design adds value to customers' experience and helps the low visibility retailers on post-purchase satisfaction which in turn, increases the customers' satisfaction. In Mustafa's (2011) research shows that the user interface quality such as website design is positively related to customer satisfaction. These results are similar to the research of Park and Kim (2003), who state that website design is important to portray an online marketer's competency in providing customers with a convenient e-commerce environment, which will subsequently influence their satisfaction. Accordingly, the first hypothesis is postulated as below:

H1: *Website design has positive influence on customer satisfaction towards online shopping in Malaysia.*

Security

Security is defined as the ability of the website to protect personal information of the customers from any unauthorized use of information disclosure during the electronic transaction (Guo et al., 2012). Security is considered an important factor that is taken seriously by the online customers (Mustafa, 2011). This is because, security and privacy issues play an important role in developing trust in the online transaction and/or the website (Chellapa, 2002). Security can be divided into two parts: the first part is related to the data and transaction security; and the second part is regarding the authentication of the user (Guo et al., 2012). Chellapa (2002) focuses on issues of privacy and security in his research: about 61% of his respondents would continue with their transactions on the Internet if their privacy and personal information are safely protected. Therefore, this proves the significance of security in online shopping as it is one of the main factors that is taken into account when a customer makes a decision to purchase online. Thus, having a trusted website with exceptional security helps customers to be more confident and eventually, to feel satisfied. To test the influence of security on customer satisfaction, the second hypothesis is developed as follows:

H2: *Security has positive influence on customer satisfaction towards online shopping in Malaysia.*

E-Service quality

Service quality has a direct impact on customer in keeping strong and loyal relationship with the online retailers. Online retailers with excellent service quality have the advantage of learning about their customers' expectation, thus improving their satisfaction (Khristianto et al., 2012). Guo et al. (2012) explain service quality as the level of assistance for online retailers in providing an efficient, as well as effective shopping, purchasing and delivery of products and services. Christodoulides and Michaelidou (2011) state that online retailers that are able to provide and exchange information via formal or informal platform with the customers would most likely increase the customers' satisfaction and add value to the shopping experience. Hence, quality management is important in maintaining the quality of the whole operation of the business to ensure that the best service quality is delivered to satisfy the customers. Khristianto et al. (2012) mention that service quality is a superiority what has been expected and superiority in meeting customers' demand. Therefore, having an overall good e-service quality is important to increase customer satisfaction. In view of that, the following hypothesis is postulated:

H3: *E-service quality has positive influence on customer satisfaction towards online shopping in Malaysia.*

Information quality

E-commerce, or online shopping, has quite few advantages compared to the brick and mortar businesses. Online business gives customers a wider product selection, competitive price and most importantly, an easy access to information (Khristianto et al., 2012). According to Ghasemaghaei and Hassanein (2013), information has a critical role in customers' decision-making process, as it would guide them due to absence of physical interaction with the product in the online environment. Guo et al. (2012) identify four dimensions of information quality, namely accuracy, content, format and timeliness. These four dimensions would give satisfaction to customers, especially to those with time constraints and also to the impulsive buyers (Khristianto et al., 2012). Park and Kim (2003) define information quality based on how customers perceive

the quality of information given by online retailer websites. Customers are more likely to have better judgment when they are given accurate information as much as possible. Therefore, the more quality information provided by the online retailers, the better the decisions could be done by customers with less time and effort, which consequently leads to an increase in customers' satisfaction. Taking heed of this suggestion, the fourth hypothesis is postulated as follows:

H4: *Information quality has positive influence on customer satisfaction towards online shopping in Malaysia.*

E-Loyalty

Loyalty has been a major study by various marketing researchers (Christodoulides & Michaelidou, 2011; Ltifi & Jamel-Eddine, 2012; Mustafa, 2011). Ltifi and Jamel-Eddine (2012) defined loyalty as the continuous relationship between the customer and a brand. It can be interpreted as a resistance to switch brand despite any situation or problem encountered during the business process (Ltifi & Jamel-Eddine, 2012). In addition, Mustafa (2011) described loyalty as repeat purchase behaviour of a same brand. From the perspective of online marketing, Anderson and Srinivasan (2003) defined e-loyalty as customers' preferable attitude towards an e-commerce that leads to a repeat buying behaviour. There are several antecedents that have been suggested by the previous research. Pavlou (2003) stated that satisfaction and trust are two important factors to determine patronage behaviour. This statement is in line with Kassim and Ismail's (2009) study, which reveals that service quality and assurance by online retailers greatly influence the customers' trust as well as their level of satisfaction. Thus, this condition would consequently result in an increase of customers' loyalty. Loyalty in fact is a development process that requires contribution from both parties; in other words, an online retailer and a customer should support and help each other in nourishing their mutual fidelity in a better manner (Dwyer, Schurr & Oh, 1987; Evans & Laskin, 1994). In view of this fact, in order for an online retailer to achieve e-loyalty, customers' satisfaction needs to be gained by providing their customers with an excellent online shopping experience (Christodoulides & Michaelidou, 2011). Thus, the fifth hypothesis is postulated as below:

H5: *Customer satisfaction has positive influence on e-loyalty in Malaysia.*

Based on the review of the aforementioned past studies, the proposed conceptual framework is as shown in Figure 1.

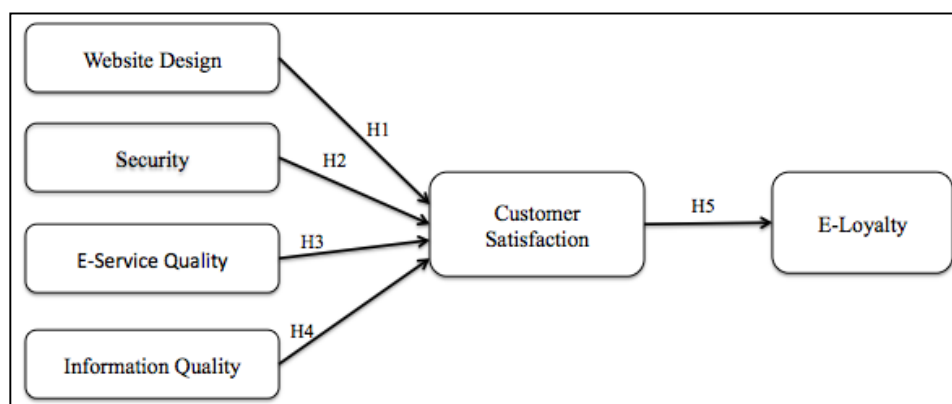


Figure 1. *Conceptual Framework for the Study*

Methodology

Six variables, namely website design, security, e-service quality, information quality, customer satisfaction and e-loyalty, were operationalised in this study to test the hypothesised relationships in the conceptual framework proposed. The items and scales in the questionnaire were adopted from literature related to the scope of this study, to ensure and enhance the validity of the questionnaire. In addition, the scales and measurements adopted from the existing literature were considered reliable, as Cronbach's Alpha values for these scales and measurements are above the recommended threshold value at 0.70 (Pallant, 2007).

A questionnaire survey was used for data collection. According to Forza (2002), questionnaire survey method triggers faster response or decision from the respondents compared to the open ended questions. Furthermore, it is also easier to code the data for a range of statistical analyses. A convenience sampling method was used. 200 questionnaires were distributed to young adults' ages ranging from 18 to 35 throughout the Klang Valley. 193 questionnaires were collected, yielding a 0.96 response rate. After preliminary data analysis, 13 responses were eliminated from the sample. Finally, 180 responses were retained for statistical data analyses.

Results

Table 1 shown below is a summary of demographic profile of the respondents. As presented in the table, 42.8% of the respondents are male, and 57.2% of them are female. In terms of age group, the majority of the respondents are between 24 and 29 (42.2%), followed by age between 18 and 23 (35.6%); while 22.2% of them are aged between 30 and 35. Overall, 57.8% of the respondents obtained undergraduate qualifications (e.g., diploma or degree), 13.3% are respondents with postgraduate qualifications (e.g., master or doctoral degree); and 11.1% with professional and other qualifications.

In response to frequency of online shopping, the respondents of this study are considered quite familiar with online shopping environment, as 46.2% of them have online shopping experience at least 1 to 3 times within a month, and 30% of the respondents have online shopping experience once every 2 to 3 months. Whereas, only 6.1% of the respondents shop online at least once a week.

Table 1. Demographic Profile Respondents

Demographic Variable	Details	Frequency	Percentage (%)
Gender	Male	77	42.8
	Female	103	57.2
Age	18-23 years old	64	35.6
	24-29 years old	76	42.2
	30-35 years old	40	22.2
Education Level	SPM or below	14	7.8
	Undergraduate	104	57.8
	Postgraduate	24	13.3
	Professional Qualification	18	10.0
	Other Qualifications	20	11.1
Frequency of Online Shopping	At least once a week	11	6.1
	1 to 3 times a month	83	46.2
	Once Every 2 - 3 months	54	30.0
	Once Every 4 - 6 months	17	9.4
	Twice a year or less	15	8.3

Table 2 shows the mean, standard deviation and the values of skewness and kurtosis for the respective variables in this study. The mean scores of the variables are ranging from 3.160 to 4.168, and the scores for standard deviation are in the range of 0.193 to 1.371. Generally, the mean and standard deviation values show quite a narrow spread of data points around the mean. In terms of the normality of the data, both kurtosis and skewness statistics are in the range between -3 and 3, the results show that all the items that form the variables are normally distributed (Lawrence, 1997). Moreover, Table 2 also shows the results of the reliability test conducted on all the variables. Cronbach's Alpha values for the variables are: website design (0.870), security (0.923), e-service quality (0.932), information quality (0.873), customer satisfaction (0.700) and e-loyalty (0.750). Obviously, the reliability values fulfilled the recommended cutting point of 0.7 (Pallant, 2007). Collectively, the descriptive analysis showed that all items that make up the variables in this study fulfilled the statistical requirements.

Table 2. Mean, Standard Deviation, Kurtosis and Skewness

Variables	Mean	Standard Deviation	Kurtosis	Skewness	Cronbach Alpha
Website Design	4.168	1.371	0.539	-0.788	0.870
Security	4.066	0.817	-0.122	-0.604	0.923
E-Service Quality	4.079	0.735	0.300	-0.557	0.932
Information quality	3.212	0.659	0.523	-1.203	0.873
Customer satisfaction	3.160	0.193	2.304	-2.902	0.700
E-Loyalty	3.881	0.282	1.710	-1.550	0.750

Based on the Collinearity Statistics as presented in Table 3, all independent variables have tolerance value greater than 0.1: website design (0.452), security (0.426), e-service quality (0.441) and information quality (0.375). According to Bruin (2006), tolerance value exhibits the percentage of variance in the predictor that cannot be accounted for by other predictors. Tolerance values that is more than 0.1 indicates that the variable has a high tolerance level thus the predictors are not redundant (Bruin, 2006). Meanwhile, all independent variables does not display any multi-collinearity problem because all variance inflation factors values (VIF) are not more than 10 (Robert, 2007). The VIF values for these valuables are: website design (2.214), security (2.347), e-service quality (2.265) and information quality (2.664).

Table 3. Coefficient Summary

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.059	.089		34.464	.000		
WDi	.024	.029	.089	.828	.409	.452	2.214
Seci	-.027	.026	-.114	-1.034	.303	.426	2.347
ESQuali	-.062	.024	-.287	2.639	.009**	.441	2.265
InfoQuali	.088	.031	.335	2.839	.005**	.375	2.664

Notes: Wdi = Website Design, Seci = Security, ESQuali= e-service quality, InfoQuali = Information Quality. ** = $P < 0.05$.

Referring to Table 3, the t-statistic for website design construct was 0.828 (p -value > 0.05) and Beta is 0.089. Hence, there is sufficient evidence to commence that website design does not influence consumer satisfaction in online shopping environment. **Thus, H1 is rejected.** Besides, the t-statistic for security construct is 1.034 (p -value > 0.05) and Beta is 0.114. Hence, there is sufficient evidence to commence that security does not influence consumer satisfaction in online shopping environment. **Thus, H2 is rejected.**

Furthermore, the t-statistic for e-service quality construct is 2.639 (p-value < 0.05) and Beta is 0.287. The result indicated that e-service quality has a significant influence on consumer satisfaction in online shopping environment. **Thus, H3 is accepted.** Whereas, the t-statistic for information quality construct is 2.839 (p-value < 0.05) and Beta is 0.335. In other words, information quality is found to have a positive impact on consumer satisfaction in online shopping environment in Malaysia. **Thus, H4 is accepted.**

Discussions and implementation of the study

The results for the relationship between website design and customers' satisfaction are in line with a similar research by Alam, Bakar and Ismail (2008) that was also conducted in Malaysia. In the research by Alam et al. (2008), it was explained that younger customers have low involvement in purchasing goods or services online. For example, 46.2% of the respondents in this study shop online at least 1 to 3 times within a month. Their familiarity with online shopping environment might not be as strong as those who were more frequent users in purchasing online. Thus, due to the lack of involvement in e-commerce environment, they did not have much past experience with other websites to compare with. Hence, in Hypothesis 1, there is no significant acceptance in relationship between web design and customers' satisfaction.

Mustafa (2011) has also found a similar result regarding the relationship between security features and satisfaction. In his research, it is reported that the variables are more related towards trust. In other words, service and privacy features would only lead and contribute to the customers' trust towards that respective online retailer. Trust could not be used as an indication towards satisfaction, thus, resulting to the insignificance of the result. This result also is in line with Schaupp and Belanger (2005) who have found security to be insignificance with satisfaction. According to Schaupp and Belanger (2005), online shopping customers perceive security as a standard feature amongst online retailers. It is an undoubtedly an important attribute for customer purchasing decision. However other features that influence the purchasing experience will have an impact on satisfaction (Schaupp & Belanger, 2005).

The results found for e-service quality construct is consistent with previous studies by Luo, Ba and Zhang (2012) and also Chang, Wang and Yang (2009). According to Luo, Ba and Zhang (2009), one of the main challenges in an online or e-commerce environment is that the customers would have low visibility towards the retailer. Therefore, by providing high quality e-service, it could help to bridge the gap between customers and the retailer and consequently, increase the retailer's visibility (Luo, Ba & Zhang, 2009). The e-service quality includes the post and pre purchase stages, as it would improve the confidence level in customers regarding the retailer. In addition to that, Chang et al. (2009) state in their research that online retailer could provide customers with diversified ways of communication channels to increase the efficiency in communicating with the customers. The various communication channels would provide customers with the flexibility and convenience to reach or contact the online retailer and hence influence their satisfaction. Therefore, based on these findings, online retailers should emphasize more on these criteria. E-service of an online retailer should cover both pre-purchase and also post-purchase stage. Thus, by improving e-service quality, it could help to increase the customers' satisfaction.

The significant relationship between information quality and customer satisfaction is supported by a prior research of Lin (2007), who explains that online retailers should be informative and at the same time provide valuable information because this can reduce the time searching for information. Furthermore, information that is provided must match the customers' needs in order to increase its effectiveness. Online retailers should provide an up-to-date, accurate, useful and complete information on their websites to ensure customers' needs are fulfilled and thus,

resulting in satisfaction. Delarosa and Susilo (2013) also agree with this result. They explain that information quality is very important in the information search and evaluation stages. This is because the information provided in a website influences customers' purchasing decision. In addition to that, information presented should be relevant and straightforward with the products offered because customers definitely do not want to be puzzled nor confused with information. Therefore, the quality of information leads to better purchasing decision, which nurtures the purchasing habit, subsequently increases customer's satisfaction (Szymanski & Hise, 2000).

The findings about the relationship between customers' satisfaction and e-loyalty is in agreement with previous studies that also found that a high level of customers' satisfaction would lead to greater e-loyalty (Morgan & Hunt, 1994; Zins, 2001). When customers' needs are fulfilled, it leads to satisfaction; a satisfied customer has the tendency to repeat purchase or become loyal to the online retailer (Lin, 2013). This happens because satisfied customers believe that they will experience excellent and satisfied service on their next purchase. In addition to that, satisfied customers will also spread the positive word of mouth to others once they are happy or satisfied with the online purchase. Satisfactions usually arise when customers develop trust toward the online retailers and thus, a positive influence on an action or behaviour, which is the e-loyalty.

It is very important for online retailers to enhance their business features, as it would help to increase customers' satisfaction. Based on the findings, customers' satisfaction does positively affect e-loyalty. When customers are happy and satisfied with the services provided, they will tend to come back to the same online retailer to have the same experience again. Therefore, online retailers should pay more attention to factors that might help them to improve their customers' satisfaction.

Limitations and future studies

The present study has few limitations and one of them is the sample size. The sample size for this study is small thus it might demonstrate less validity in its results. Other than that, this study might be context specific. The respondents for this study were mainly from Klang Valley areas where future research is advised to increase the sample. The research should also cover other states in Malaysia to increase the validity and generalization level as mentioned by Mustafa (2011).

In collecting the data, this study eluded the possibility of respondents of whom might not have the experience of the variables suggested, for example, the e-service qualities. Therefore, respondents who have never used or encountered e-service during their online shopping experience might answer the question under this section based only on their assumptions. In addition, while reporting about the e-service quality, they may have been primed by the general idea of e-service quality, which will affect the results of this study.

Another limitation is that this study only provides questionnaires in one language that is English. Respondents who are not familiar with the language might not thoroughly understand the questions given in the questionnaire survey, which could lead to misunderstanding of the questions, resulting in a less reliable data set. Thus, future research is suggested to include other languages such as Malay, Mandarin and Tamil in the questionnaire design to suit multiracial respondents in the study area.

Conclusion

Two variables of online shopping features provide positive effects towards customers' satisfaction, and these variables are the e-service quality and the information quality. In addition to that, it has also been found that customers' satisfaction does positively influence e-loyalty in online shopping environment. Therefore, marketers or online retailers can use this information in their decision making process in order to achieve customers' satisfaction and consequently sustain the business. On the other hand, website design and security do not show a significant relationship towards customers' satisfaction. Thus, it is suggested that online shopping customers in Malaysia, particularly the young adults, do not perceive website design features as well as security to be important factors that would influence their overall satisfaction. The results for this study have proven that there is a difference in preference amongst the young adult generation. In conclusion, the rising number of online business in the market shows how important it is for business retailers to understand the business environment, to target customers in order to strive better and above the competitors, as well as to sustain their businesses in a longer run.

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