Article

The influence of Shopee's e-service quality towards customer loyalty

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Abstract – The increase in online marketplaces requires online platforms to create solutions or form relationships with customers. Hence, the study examines the roles of electronic service (e-service) quality in Shopee towards customer loyalty. The study used a convenience sampling technique and collected data using questionnaires involving 248 final year students from Universiti Malaysia Kelantan (UMK), Pengkalan Chepa. The results showed a significant relationship between the independent variables, reliability and security of Shopee towards customer loyalty, respectively. Ultimately, the findings help the marketers develop e-service quality for customer engagement and customer loyalty. Consequently, business sustainability can be maintained.
Keywords: Convenience sampling; Customer loyalty; E-service; Marketplace platform

1. Introduction

The trend of purchasing products using online platforms has significantly increased yearly, particularly in 2020 during the coronavirus disease (COVID-19) outbreak. Observably, people are more comfortable with purchasing via online platforms (Mohsin, 2020). Research revealed that 55% of the respondents had a high perceived value of online purchases while other respondents stated willingness to pay more online during the pandemic (UOW Malaysia KDU, 2020).

Shopee is a Malaysian marketplace platform that is the country's most visited electronic commerce (e-commerce) site during the fourth quarter of 2020, with approximately 47.3 million clicks, followed by Lazada and PG Mall (Statista, 2021).

Essentially, the e-service quality forms customer loyalty, which impacts behavioural outcomes that positively influence the company's profitability (Younus, 2011). The e-service refers to information services through communication technologies (Terezia, 2016) while e-service quality is the consumer's degree of expectation that must be fulfilled by the online service provider (Santos, 2003).

Numerous studies have discussed customer loyalty, examining multiple determinants in conventional marketing such as service quality (Davis et al., 2009) and trust (Dagger and O'brien, 2010). With the fast-growing economy and advanced infrastructure for digital technologies, customer loyalty towards online platforms has become an interesting topic to be explored (Park et al., 2012). For instance, Yen and Lu (2008) investigated customer loyalty in online platforms such as e-service. Nonetheless, issues in e-services such as lagging due to high traffic have caused the website or application significant loss (Arsenault, 2017). According to Frank (2017), loyalty benefits, namely functional benefits, emotional benefits, and self-expression, can be matched against Maslow's pyramid; functional, psychological, socio-cultural, emotional, and aspirational. Therefore, the study determines the factors (ease of use, reliability, and security) that influence customer loyalty in online platforms, specifically the Shopee platform among UMK students.

2. Literature Review

2.1. Customer Loyalty

Quatrics (2020) stated that when two different companies offer similar products or services, a loyal consumer will repeat purchasing and choose one company over a competitor. Chen et al. (2018) explored the effect of customer loyalty on online retail platforms, whereas Cheung et al. (2014) studied customer loyalty with online shopping platforms. Generally, electronic marketers (e-marketers) must develop loyalty through customer engagement in online shopping. Meanwhile, Kim et al. 2012 added that customer loyalty is an essential prerequisite of successful e-commerce.

Oreku and Mtenzi (2012) stated that e-service is an activity or performance delivery via Information and Communication Technologies (ICTs), which requires technology providing communication and information online such as websites or applications. Businesses accessible by the consumers to shop for 24 hours are called electronic business (e-business), which helps the providers or marketers reduce time and location expenses (Tan, 2012). Thus, e-service can facilitate consumers and marketers compared to conventional services. Furthermore, consumers will be loyal to the online platform when they have a good experience using the website. Conversely, frequent disconnection and low connection speed could ruin online shopping as consumers feel distrust and dissatisfaction with the e-services (Ali et al., 2016).

2.2. Ease of Use

Tu (2012) stated that the ease of use perception is related to the online platform's features as it could increase consumer loyalty. Moreover, website or application users can search for products easily as they browse cyberspace and internal navigation (Johanna, 2004). Besides, offering maximum functionality can optimise the ease of use

(IDF, 2020). Studies have also shown that user interface, website structure, and ease of navigation are the identified factors influencing the ease of use of e-service quality (William and Ephraim, 1992; William, 1988; Manuel and Jose, 2005; Shang et al., 2005; Yang et al., 2005). Hence, the following hypothesis is proposed:

Hypothesis 1: The ease of use of Shopee significantly influences the e-service quality towards consumer loyalty.

2.3. Reliability

Parasuraman et al. (2005) mentioned that reliability is the service provider's ability to conduct the services consistently and precisely. Significantly, Iddrisu et al. (2015) mentioned that reliability contributes 28.01% towards consumer loyalty. Moreover, accuracy in delivery, product representation, and other fulfilment issues reflect reliability. Additionally, well-functioning websites contribute to reliability (Valarie et al., 2002). Customers are also influenced to stay in e-banking based on the accuracy in billing systems and timely transaction processing also influences the customers. (Liang and Pei-Ching, 2015; Shankar and Kumari, 2016).

Elements or factors such as prompt delivery, correct order fulfilment, and billing accuracy are significantly associated with reliability (Yang, 2001). According to Wolfinbarger and Gilly (2003) and Blut et al. (2014), reliability is a criterion that affects customer loyalty towards e-banking services. Besides, Pakdil et al. (2012) stated that providing consistent quality services maintains the engagement between customers and service providers. Meanwhile, Saccani et al. (2014) confirmed that error-free and accurate delivery services are elements that form customer loyalty towards e-services. Hence, the following hypothesis is presented:

Hypothesis 2: The reliability of Shopee significantly influences the e-service quality towards consumer loyalty.

2.4. Security

The security terms refer to how the service provider or applications ensure that each transaction made by the customer is completely safe and secured (Younus, 2011). Taherdoost (2017) defined security as the customer's confidence in the website's safety in terms of privacy protection. Anna (2018) added that cyber-security is vital towards customer loyalty.

Regarding privacy and security, Hussien and Abd El Aziz (2013) stated that the safety of the online platform and the protection of personal information are the customers' concerns. Orel and Kara (2014) further mentioned that a clear privacy and security policy increases consumer responses to the online platform. Meanwhile, Thaichon et al. (2014) and Shankar and Kumari (2016) revealed that consumers are more confident in utilising the online platform as it guarantees the privacy of personal information and transactions is safe to use. Therefore, the study proposed the following:

Hypothesis 3: The security of Shopee significantly influences the e-service quality towards consumer loyalty.

3. Methodology of Study

A cross-sectional study design was used to test the hypotheses and respond to research questions more systematically. The method was used to identify the link between ease of use, reliability and security towards customer loyalty in Shopee. The study also applied a descriptive research design to determine the descriptive analysis of the variables. The target population was final year students from UMK's Faculty of Entrepreneurship and Business. Moreover, the study employed the non-probability convenience sampling method on 733 respondents, mainly internet users (Lee and Lin, 2005). From the sample, 248 respondents were selected (Krejcie & Morgan, 1970). The questionnaires were distributed via an online platform using Google Form. Meanwhile, the study used the Likert-type scale based on six points as the measurement, strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), and strongly agree (6).

For the pilot test, the questionnaires were distributed to 30 UMK students. Pilot testing is performed by considering the small number of participants before the main study is conducted (Wright, 2020). There is always a risk in any survey whereby some questionnaires need to be rephrased to improve the instrument readability (Marmaya 2019). Next, Pearson's Correlation coefficient was used to determine the strength and the direction of association between two variables. For the coefficient value between -1 and 1 (-1, 1), 1 indicates a strong positive relationship, whereas -1 indicates a strong negative relationship and zero indicates no relationship. Subsequently, the multiple linear regression analysis was conducted to estimate the relationship between the independent variables (ease of use, reliability, security) and the dependent variable (customer loyalty). Besides, the analysis was used to identify the significant factors influencing the dependent variable, formulating the relationship into a mathematical equation or co-called regression line.

4. Findings and Discussion

The study involved 248 final year students from UMK's Faculty of Entrepreneurship and Business. Based on the survey, most respondents were female (88.3%) while 70.2% of respondents were 23 to 24 years old. The demographic profile of the respondents is shown in Table 1, whereby the mean and standard deviation for ease of use ($\mu = 5.02, \sigma = 0.69$), reliability ($\mu = 4.97, \sigma = 0.7$), security ($\mu = 4.84, \sigma = 0.75$), and customer loyalty ($\mu = 4.84, \sigma = 0.75$) were determined.

Table 1: Respondents' Profile

Demographic profile	Number of respondents (n)	Percentage (%)
Gender		
Male	29	11.7
Female	219	88.3
Total	248	100

Demographic profile	Number of respondents (n)	Percentage (%)
Age		
21-22 years old	70	28.2
23-24 years old	174	70.2
25 years old and above	4	1.6
Total	248	100
Ethnics Groups		
Malay	187	75.4
Indian	14	5.6
Chinese	46	18.5
Others	1	0.4
Total	248	100

Cronbach's Alpha analysis was used to test the reliability of the variables whereby each variable consists of five items. The results showed that the Cronbach's Alpha Coefficient for ease of use, reliability, security, and customer loyalty was 0.930, 0.831, 0.859, 0.861, respectively. The values indicated that each variable was good, suggesting that the questionnaire is highly reliable and accepted.

The study next analysed the association between variables (see Table 2) using Pearson's Correlation coefficient. Generally, the results showed that the correlations were positive (Hinkle et al., 2003). Table 2 also demonstrated that all the p-values were less than 0.01 ($p < 0.01$), indicating significance between the variables. Conclusively, the results showed a strong positive association between ease of use and reliability r = 0.799, a moderate positive association between ease of use and security r = 0.641, and a strong positive association between reliability and security r = 0.733.

Table 2: Pearson's Correlation Coefficient

		Ease of Use	Reliability	Security	Customer Loyalty
Ease of Use	Pearson Correlation	1	.799[**]	.641[**]	.587[**]
	Sig. (2-tailed)		.000	.000	.000
	N	248	248	248	248
Reliability	Pearson Correlation	.799[**]	1	.733[**]	.664[**]
	Sig. (2-tailed)	.000		.000	.000
	N	248	248	248	248
Security	Pearson Correlation	.641[**]	.733[**]	1	.781[**]
	Sig. (2-tailed)	.000	.000		.000
	N	248	248	248	248
Customer Loyalty	Pearson Correlation	.587[**]	.664[**]	.781[**]	1

	Ease of Use	Reliability	Security	Customer Loyalty
Sig. (2-tailed)	.000	.000	.000	
N	248	248	248	248

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

Besides, the relationship between independent variables and the dependent variable was analysed in Table 2, which showed a significant relationship between ease of use and customer loyalty towards Shopee ($p < 0.001$). Observably, the r-value is 0.587, indicating a moderate positive correlation between the variables. Meanwhile, the findings revealed a significant relationship between reliability and customer loyalty towards Shopee ($p < 0.05$). The correlation strength between the two variables showed a moderate positive correlation ($r = 0.664$). The results also suggested a significant relationship between security and customer loyalty towards Shopee because the p-value was less than 0.05.

The correlation also showed a high positive correlation relationship between security and customer loyalty ($r = 0.781$). Furthermore, the multiple linear regression analysis determined the significant factors/variables causing the dependent variable. First, a univariable analysis was performed using the Simple Linear Regression as depicted in Table 3, whereby three significant unadjusted factors with p-values less than 0.05 ($p < 0.05$) were determined and included in the variable selection.

Table 3: Simple Linear Regression

Variables	b[a]	t	Sig.	95% CI
Ease of use	.715	13.912	.000	0.614, .816
Reliability	.706	14.670	.000	0.612, 0. 801
Security	.784	19.598	.000	0.705, 0.863

The variable selection was performed using the stepwise method, as shown in Table 4. The findings show that reliability and security were the significant variables with $p < 0.001$. The p-value for reliability is 0.01, which is less than 0.05. Thus, reliability is a significant predictor of customer loyalty. Similarly, the p-value for security is 0.00, which is less than 0.05, proving that security is a significant predictor of customer loyalty.

Table 4: Multiple Linear Regression

Model	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	Upper Bound	Correlations Zero-order	Partial	Part	Collinearity Statistics Tolerance	VIF
(Constant)	0.696	0.218		3.200	0.002	0.268	1.125					
Security	0.639	0.058	0.636	11.097	0.000	0.526	0.752	0.781	0.578	0.433	0.462	2.162
Reliability	0.212	0.062	0.197	3.438	0.001	0.091	0.334	0.664	0.215	0.134	0.462	2.162

Notes: (a) Dependent Variable: Customer Loyalty

Based on Table 4, the regression equation can be written as;

$$\gamma = \alpha + \beta_1 x_1 + \beta_2 x_2$$

where

γ = Consumer's Loyalty,
x_1 = Reliability,
x_2 = Security.

Hence, the equation becomes
$\gamma = 0.696 + 0.212\ x_1 + 0.639\ x_2$.

For every unit increase in reliability, customer loyalty increases by 0.212, provided the security remains unchanged. Correspondingly, for every unit increase in security, customer loyalty increases by 0.639, provided the reliability remains unchanged. Furthermore, no multicollinearity was detected since the variance inflation factor (VIF) values were below 5. The coefficient of determination is the square of correlation coefficient (r^2) that measures the proportion of variation in dependent variables described by the independent variable. The coefficient of determination is expressed as a percentage. Therefore, r^2 = 0.628 means that 62.8% of the total variation in customer loyalty is explained by reliability and security, as shown in Table 5. The Durbin-Watson statistic was used to test for any serial correlation among the residuals. Additionally, the Durbin-Watson statistic of approximately 2 indicates no serial correlation. Hence, the model is a good fit (p-value = 0.000) since the p-value is less than 0.001, as shown in Table 6.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.792[b]	.628	.625	.46550	2.302

Notes: (a). Predictors: (Constant), Security, Reliability. (b). Dependent Variable: Customer Loyalty

Table 6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.450	2	44.725	206.402	.000[c]
	Residual	53.089	245	.217		
	Total	142.539	247			

Notes: (a) Predictors: (Constant), Security, Reliability. (b). Dependent Variable: Customer Loyalty

Based on the multiple linear regression, the findings showed that Hypothesis 2 (reliability) and Hypothesis 3 (privacy) significantly affected customer loyalty towards Shopee. Nonetheless, Hypothesis 1 (ease of use) did not significantly affect customer loyalty towards Shopee as online platforms are now convenient and easy to use; hence, the factor does not contribute to customer loyalty. Therefore, customers do not face any difficulties in using the online platform.

The relationship between reliability and customer loyalty towards Shopee showed a significant relationship β = 0.212, p < 0.05; hence, Hypothesis 2 is accepted. Furthermore, Wolfinbarger and Gilly (2003) stated that customer loyalty could be predicted from reliability ratings. Kaufaris and Hampton (2004) mentioned that if the atmosphere or interface of online platforms such as a website is aesthetically pleasing, customised and well organised, consumers would consider online retailers as trustworthy. The results are consistent with Amit (2019), whereby reliability had a significant positive impact on customer loyalty towards e-banking.

The results also indicated a significant relationship between security and customer loyalty towards Shopee β = 0.639, p < 0.05; thus, Hypothesis 3 was accepted. The results aligned with Younus (2011), who validated that consumer loyalty is gained if consumers can use the website without feeling uncomfortable as security is directly related to loyalty. Generally, a major concern for customers is the security of e-commerce. A study showed that security is critical in online purchase decisions (Liu et al., 2005). Hence, customers that believe their transaction or any details are protected tend to be more loyal. Besides, Amit (2019) revealed that privacy and security have significant positive impacts on customer loyalty towards e-banking.

5. Conclusions and Recommendations

The research proved that the factors (reliability, security) of Shopee's e-service quality used by UMK students significantly influence customer loyalty. Hence, the factors affecting customer loyalty must not be ignored by marketers in order to sustain e-commerce. Furthermore, the study can be extended by considering other variables related to customer loyalty. As the study only focused on university students, future studies should add control variables such as income and education level. Moreover, initial trust can be considered as a mediating effect of customer loyalty.

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