

The Antecedents of Electronic Loyalty in Indonesian C2C E-Commerce

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Abstract—As the number of Indonesian internet users increased significantly in January 2017 compared to January 2016, with additional internet users 51%, was the highest in Southeast Asia and mobile payment users and penetration in Indonesia is expected to more than double by 2017, it has been great opportunity for E-Commerce to grow in this current digital economy as agreed at World Economic Forum 2016 in Switzerland. Currently, there has been quite a number of new e-commerce coming up and it has made the customers having more alternative in choosing products and services to purchase. Tokopedia is one of E-Commerce that run in C2C, which provides free online marketplace for sellers to open their own e-stores and earns revenues from user upgrades, premium accounts and TopAds advertising services. Reference revealed that Tokopedia's bouncing rate is more than 30% and in common, Indonesia's E-Commerce switching behavior is more than 50%. This research is meant to find out the antecedents of electronic Loyalty for C2C E-Commerce. The samples are 169 customers from several cities in Indonesia who have ever made online shopping at Tokopedia.com. The sample collection technique would be done by using nonprobability sampling. The data analysis technique would be done by using multiple linear regression using SPSS statistical software. Based on the result of model feasibility test, it displays that the independent variables have very high significance influence to the electronic loyalty. The partial result of t test reveals that though E-Recovery Service quality does not influence electronic loyalty, but electronic service quality has positive and highly significant influence to the electronic loyalty. Ultimately, in order to create electronic loyalty for Indonesia C2C E-Commerce, it has to focus and boost its electronic service loyalty through its touch point, fulfillment, privacy, efficiency and system availability

Keywords— *Electronic Loyalty; Online Shopping*

I. INTRODUCTION

Reference [1] mentioned that the current economy can be called digital economy. Indonesia as one of the emerging economy has also developing its digital sector as the internet users has been growing rapidly and in 2017 has become the highest users in Southeast Asia. It has created a flourishing market opportunity for E-Commerce market players to grow. One of the top e-commerce market is Tokopedia which runs in C2C platform. But reference [2] revealed that its bouncing rate is more than 30%, which means in 100 customers who browse the e-commerce, 30 customers leave the page at once and Indonesian E-Commerce switching behavior is more than 50% which means five out of ten customers switch e-commerce once they use it. Thus, electronic loyalty is at peril, which could hinder the e-commerce growth. Electronic Service Quality (E-S-Qual) and Electronic Recovery Service Quality (E-RecS-Qual) have high effects on electronic loyalty [3]. E-S-Qual and E-RecS-Qual has positive strong relationship toward Loyalty in online shops [4]. The dimension [4] are similar to [5] for E-S-Qual are efficiency, system availability, fulfillment, and privacy. Where E-RecS-Qual dimension are Responsiveness, Compensation and Contact. This study offer one additional dimension besides the four dimension above to E-S-Qual, which is Touch Point, the emotions and feelings aroused from customers interaction with e-commerce website, and it is also called moment of truth. With this new dimension and the absence of other c2c e-commerce study, it is expected to show originality of this study.

II. ELECTRONIC LOYALTY

To obtain and maintain customer loyalty is the supreme aspiration of many modern online retailers [4] because loyal customers are much willing to purchase and spend more, easy

to access, and even could provide WOM (word-of-mouth marketing) for the e-commerce if they are enthusiasts. [6]

The previous study suggests that online e-commerce enjoy electronic loyalty compared to brick and click e-commerce for half of its sales is from loyal consumer. Reference [7] suggests only a very small number of e-commerce visitors return to make purchases however this small number of loyal buyers are very profitable [8], so that they are worth to be taken best care of [6]. A small increase of percentage of loyal purchasers in e-commerce contributes superior profit in online business [9].

There are two types of loyalty, attitudinal and behavioral loyalty [10]. Attitudinal loyalty shows long-term psychological customer commitment to an e-commerce. It can be seen from the psychological involvement, favoritism, and a sense of goodwill on certain e-commerce. Whereas Behavioral loyalty can be referred to as the purchase of product or service from customers of e-commerce.

Reference [5] measures loyalty from the behavioral items, like positive word of mouth, recommend, encourage the usage of e-commerce, first choice for future transaction and do more business in the coming months. However, reference [11] measured loyalty by two dimensions, that are word-of-mouth communication (WOM) and repurchase intentions. This study will try to combine the usage of both attitudinal and behavioral online loyalty that consists of three dimensions, which are Purchase Intention, Continued Interaction and Buzz Marketing. Purchase Intention is the willingness to keep using, visit and make purchase at the same e-commerce site. Continued Interaction is the consistency of using the same e-commerce site for a period, two years for instance. Buzz marketing is volunteering will to advocate and share information to family, peers or acquaintances or others about product/ services in an e-commerce.

Electronic Service Quality has been proven to promote electronic loyalty [5] and online customers do not have the interest to make extensive search and with e-commerce which they ever experienced, they have no problem in making transaction with the premium price [12]. Thus, priority of any e-commerce should be winning customer loyalty.

This study tries to fill the gap of the previous studies. Reference [4] shows that there is a significant relationship between E-S-Qual and E-Loyalty in Turkey. However, [13] study resulted opposingly.

H1 : There is a positive and significant relationship between E-Service Quality and Electronic Loyalty

Another research gap is that E-Recovery Service Quality does not influence E-Loyalty [14] whereas reference [4] found the opposite, that they have significant relationship. Thus, the hypothesis is

H2. There is a positive and significant relationship between E-Recovery Service Quality and Electronic Loyalty

Since reference [15] shows there are partially supported relationship among E-S-Qual and E-RecS-Qual toward E-Loyalty, [11] result is not the same. Thus, the hypothesis is

H3. There is positive and significant relationship among E-S-Qual and E-RecS-Qual toward E-Loyalty

III. METHODOLOGY

A. Research Method

The study was conducted from May-July 2017, using online and offline questionnaires. Five likert scales questionnaires is used for the study. Purposive sampling is used in this research. The respondents are Indonesian who have made at least a purchase in tokopedia (c2c) e-commerce in the last six months. The criteria would make the respondents able to recall their experiences when they purchased or browse the e-commerce and also to minimize errors due to memory. The address of online questionnaires was distributed via e-mail and WhatsApp messaging that leads to a structured questionnaires in google form and the offline questionnaires were distributed in Medan city, North Sumatera Province, Indonesia.. A total of 169 respondents are obtained from both online and offline questionnaires.

B. Discussion and Conclusion

The preliminary test of this study was conducted to 30 people to examine the validity and reliability of the questionnaire items before going on the actual sample size. Prior to validity and reliability instrument, an independent sample t-test was conducted to online and offline data, which showed no significant differences between them on the result, which also means both online and offline data can be used in the study.

The summary of the descriptive statistics from Indonesian C2C e-commerce is from Table 1 as follows: Most of respondents are between 17-23 years old, majority is male online shoppers who graduated from bachelor or professional bachelor degree with montly income between IDR 4.001 – 6.000k, and work for others. The purchase behavior profile is as follows, most of them purchased in the recent month with the frequency of once in a few months, who always consider online shopping as alternative. They mostly obtained information of e-commerce from electronic media and in the last six months, they have visited the e-commerce ten to ten times to compare prices among e-commerce sites, with the average time of six to ten minutes and more per one time surfing e-commerce sites.

TABLE I. DESCRIPTIVE STATISTICS

Variable		n	%
Age	Between 17 - 23 years	57	34%
	Between 24 - 30 years	44	26%
	Between 31 - 37 years	35	21%
	Between 38 - 44 years	20	12%
	between 45 - 51 years	6	4%
	Above 51 years	7	4%
Gender	Male	92	54%
	Female	77	46%
Education	Senior High	30	18%
	Undergraduate	101	60%
	Postgraduate	38	22%
Income monthly	Below IDR 2,000t	43	25%
	Between IDR 2,000t - 4,000t	3	2%
	Between IDR 4,001t - 6,000t	48	28%
	Between IDR 6,001t - 10,000t	29	17%
	Between IDR 10,001t - 14,000t	9	5%
	Above IDR 14,000t	37	22%
Occupation	Student	47	28%
	Civil Servant	6	4%
	Employees	54	32%
	Entrepreneur	44	26%
	Professional	14	8%
	Housewife	4	2%
Last online purchase	Less than a month ago	80	47%
	one to three months	40	24%
	more than three months ago	49	29%
Frequency of online purchase	once or more monthly	33	20%
	once in every few months	106	63%
	every year	16	9%
	rarely	14	8%
Consider online purchase as alternative	Yes	149	88%
	No	20	12%
Origin Source of ecommerce information	Friends Family recommendation	49	29%
	Electronic media (internet, tv, etc.)	116	69%
	Print media	4	2%
Frequency of ecommerce visit in the last six months	Once	28	17%
	Two to ten times	81	48%
	More than ten times	60	36%
Purpose of surfing ecommerce	fulfill primary needs	9	5%
	fulfill secondary needs	31	18%
	fulfill tertiary needs	32	19%
	compare prices	64	38%
	window shopping	31	18%
	others	2	1%
Average time per surfing ecommerce	more or less than two minutes	4	2%
	three to five minutes and more	28	17%
	six to ten minutes and more	51	30%
	eleven to twenty minutes and more	35	21%
	twenty one to thirty minutes and more	27	16%
more than thirty minutes	24	14%	

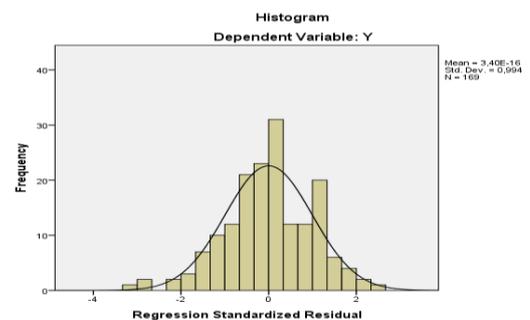
C. Validity and Reliability Tests

For the Validity test, this study use 5% as the level of significance. If the correlation value (pearson correlation is bigger than r table in which the 30 respondents is 0,361. And all the item correlation for variable E-S-Qual, E-RecS-Q and E-Loyalty is bigger than 0,361, so it means all items are valid.

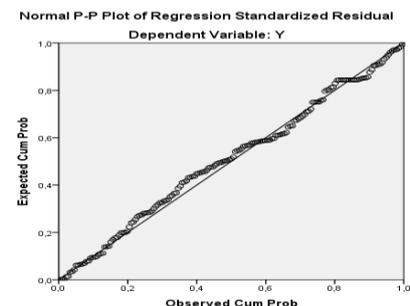
On the reliability test, the value of Cronbach alpha in the reliability analysis must be bigger than 0,6. Since all items in three variables in the study Cronbach alpha is bigger than 0,6; they are all reliable.

D. Classical Assumption Test

1) Normality test

Fig. 1. Normality Curve


Source: Processed primary data (2017)

Fig. 2. P-P Plot of Regression Standardized Residual


Source: Processed primary data (2017)

From the histogram, we could see that the data is distributed according to the curve, so it is normally distributed as the regression requirement. From the P-P Plot also the data is distributed well along the diagonal line, which means it passes normality test for regression.

E. Autocorrelation Test

TABLE II. DURBIN WATSON MODEL SUMMARY

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,636 ^a	,405	,398	6,83366	1,925

a. Predictors: (Constant), E-RECOVERY SQ (X2), E-SERVICE QUALITY (X1)
 b. Dependent Variable: E-LOYALTY

From the Durbin watson table, $k=2$ since there are two independent variables, with 169 respondents as sample, we obtained $DU = 1,7724$. And based on table 2, the durbin watson value is 1,925. It is called free of autocorrelation, if the Durbin Watson is between DU and $4- DU$ to fulfill regression requirement. Since $1,7724 < 1,925 < 3,7724$, it means it passed autocorrelation test.

F. Multicollinearity Test

TABLE III. TABLE OF COEFFICIENTS

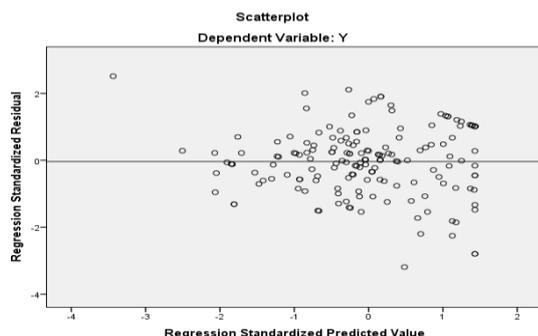
Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	12,248	3,677		3,331	,001		
	E-SERVICE QUALITY (X1)	,340	,055	,587	6,167	,000	,395	2,529
	E-RECOVERY SQ (X2)	,061	,094	,061	,643	,521	,395	2,529

a. Dependent Variable: E-LOYALTY

Since the VIF value is not above 10, it means there is no multicollinearity for each variables.

G. Heteroscedasticity Test

Fig. 3. Heteroscedasticity Test



Source: Processed primary data (2017)

From the figure of scatterplot, we can see that the data is spread at zero line and not forming any pattern, so this data is free from heteroscedasticity.

H. Regression Test

This study uses regression analysis to test the hypotheses and to define relations directions. Multiple regression analysis using SPSS version 23 is applied with the goal of testing if E-S-Qual and E-RecS-Qual have relationship with E-Loyalty. With the confidence level of 95%, the result is shown on table 4.

TABLE IV. RESULT OF REGRESSION TEST

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	12,248	3,677		3,331	,001		
	E-SERVICE QUALITY (X1)	,340	,055	,587	6,167	,000	,395	2,529
	E-RECOVERY SQ (X2)	,061	,094	,061	,643	,521	,395	2,529

a. Dependent Variable: E-LOYALTY

H1. Since partial test is conducted, t table value is 1.97436. If the significance is smaller than 0.05 or t value > t table, there is relationship between variables.

It is found that Sig.value between E-S-Qual and ELoyalty is $0,000 < 0,05$ and t count $6,167 > t$ tabel = 1.97436 so that we can conclude that E-S-Qual has positive and highly significant influence towards E-Loyalty

H2. The result from table 4 has shown the Sig. Value between E-RecSQ and E-Loyalty is 0.521, which is bigger than 0.05. Besides that, the t value is 0.643 which is smaller than t table value 1.97436. Thus, it is concluded Hypothesis 2 is rejected, means that E-RecSQ partially has no influence towards E-Loyalty.

TABLE V. ANOVA TEST

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5269,641	2	2634,820	56,421	,000 ^b
	Residual	7752,028	166	46,699		
	Total	13021,669	168			

a. Dependent Variable: E-LOYALTY

b. Predictors: (Constant), E-RECOVERY SQ (X2), E-SERVICE QUALITY (X1)

H3. From Table 5, it is known that the significance level among E-S-Qual and E-RecS-Qual toward E-Loyalty is very high, which is 0.000, smaller than 0.005. The F count is 56,421, which is much bigger than F table value 3.05. Thus, it is concluded that Hypothesis 3 is accepted, there is a highly positive and significant relationship among E-S-Qual and E-RecS-Qual toward E-Loyalty in simultaneous test.

Therefore, the equation could be made as follows:

$$Y = a + bX_1 + cX_2 + e \quad (1)$$

$$Y = 12,248 + 0.340 X_1 + 0.061X_2 + e \quad (2)$$

Where a is the constant and e is the error term, X1 is E-S-Qual, X2 is E-RecS-Q and Y is E-Loyalty. In order to find out the value of error term, we need to find the coefficient determination.

TABLE VI. MODEL SUMMARY

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.636 ^a	.405	.398	6,83366	1,925

a. Predictors: (Constant), E-RECOVERY SQ (X2), E-SERVICE QUALITY (X1)

b. Dependent Variable: E-LOYALTY

Based on Table 6, the output of R square is 0.405, which means that the influence of E-S-Qual and E-RecS-Qual toward E-Loyalty is 40,5%. The rest, is the error term, 59.5% is influenced by other independent variables which are not observed in this study.

IV. CONCLUSION AND RECOMMENDATION

This study agrees with reference [4], that both E-S-Qual and E-RecS-Qual has positive and significant influence toward E-Loyalty. In order to increase profitability for Indonesia e-commerce, particularly in C2C, is by focusing on its electronic service quality and recovery service quality, in which its dimension of touch point, fulfillment, privacy, system availability, efficiency, responsiveness, contact and compensation play significant role to make online consumer loyal to e-commerce in Indonesia.

It is suggested to add moderating variables of trust, perception onto the future studies, if possible on a different e-commerce type.

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