The impact of gamification on customer engagement and customer loyalty from users of shopee in Samarinda

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Abstract

The increase in internet users in Indonesia has resulted in a rapid increase in e-commerce transactions in recent years. As a result, e-commerce companies compete with one another to increase customer engagement and loyalty. The gamification strategy is one of the approaches taken. This study aims to determine the impact of gamification on customer engagement and loyalty among Shopee users in Samarinda. The results show that Shopee Indonesia's gamification strategy has a significant and positive effect on customer engagement and loyalty.

Key words: Gamification; customer engagement; customer loyalty

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INTRODUCTION

According to Badan Pusat Statistik (BPS), the number of internet users in Indonesia has continued to increase since 2015. In addition, Indonesia is ranked 3rd as the country in Southeast Asia with the highest number of internet users in April 2021. Meanwhile, the number of internet users throughout Southeast Asia reached 69%. That percentage has already exceeded the global average of 60.1%. With this increase, internet users in Indonesia are predicted to reach 150 million people by 2023 (Databooks, 2021).

According to mediaindonesia.com, as many as 86% of Indonesian internet users do online shopping. This encourages the development of e-commerce in Indonesia which has been accelerating in recent years. With the ease of buying and selling transactions, people can access e-commerce by using only smartphones and internet networks to meet their needs and desires. Indonesia has consistently ranked first as the country with the most significant e-commerce growth in the world, with an average growth of e-commerce globally is 78.6%, according to katadata.co.id and merchantmacine.co.uk.

GlobalWebIndex reports that more than 9 in 10 Indonesian internet users between the ages of 16 and 64 now make online purchases each month, compared to a global average of 75 percent. Almost 80 percent of the Indonesian internet users aged between 16 and 64 reported that they bought something online via a mobile device in the past month (Datareportal, 2019).

With an increasing number of e-commerce users in Indonesia, e-commerce competition is unavoidable. The number of e-commerce that appears, such as Tokopedia, Shopee, Lazada, Zalora, BukaLapak, and Sociolla, makes e-commerce companies compete to attract customers to use their products.

Shopee is a Singaporean multinational technology company that primarily focuses on e-commerce and is the top-ranked e-commerce with the most downloads in the app and play stores. Despite being the most downloaded app in the App Store and Google Play since 2018, Shopee's monthly web visits have only been first since the fourth quarter of 2019. Tokopedia, on the other hand, surpassed Shopee as the Marketplace with the most monthly web visits in the first quarter of 2021 (Databooks, 2021).

Loyalty programs are one of the methods that many e-commerce sites use today. As a result, Shopee offers its users loyalty programs in the form of gamification in the hope of increasing customer engagement and loyalty to e-commerce. Firms can increase profits by 25 to 95 percent with just a 5% increase in customer retention rates (K. et al., 2013). This demonstrates how important user engagement and loyalty are to Shopee.

Shopee launches a strategy in the form of gamification. One of the gamification programs on Shopee is Shopee Tanam, where customers can interact with other customers. This is in accordance with the journal of (Eisingerich et al., 2019), where one of the gamification principles is the ability of an application to keep its users engaged with other users. Another Shopee program is Shopee coin reward that gives coins to the user every time they check-in. With a loyalty program in the form of game elements such as coins, widely adopted companies form relationships with customers in a strategy called gamification (Hwang & Choi, 2019). The application of gamification is considered to increase user motivation for transactions as well as user loyalty (Hsu & Chen, 2018).

Gamification uses game design elements to enhance non-game goods and services by increasing customer value and encouraging value-creating behaviors such as increased consumption, greater loyalty, engagement, or product advocacy. However, gamification may be distinguished from traditional loyalty programs by providing added social and motivational benefits through product usage rather than expenditures (Hofacker et al., 2016). Meanwhile (Lucassen & Jansen, 2014) define gamification as one method that can be used to develop an online transaction system to improve the experience, increase engagement, loyalty, brand awareness, motivation, purpose, and ownership over tasks.

The main variable in this study lies in the relationship between gamification on customer engagement and customer loyalty. This is in line with previous research by (Feng et al., 2020), states that gamification has a positive impact on customer satisfaction and customer loyalty. It means that gamification strategy applied has implication for customer engagement and customer loyalty. Other researchers also provide that there is a positive relationship between gamification with customer satisfaction and customer loyalty (Lucassen & Jansen, 2014; Noorbehbahani et al., 2019).

METHOD

The research method used in this research is non-probability sampling. The objects studied in this study are gamification, customer engagement, and customer loyalty. The approach used is purposive sampling and is done by taking the subject not based on strata, random or regional but based on the existence of specific objectives and considerations (Ferdinand, 2014).

Table 1.
Variable Type

Variable Type	Variable
Exogenous	Gamification
Endogenous	Customer Engagement
	Customer Loyalty

Table 2.
Research Indicators

Variable	Indicators
Gamification	1. Shopee facilitates social interaction with friends and family
	2. Shopee gives me a sense of control
	3. Shopee sets goals that I want to achieve
	4. Shopee updates me about latest achievements that I have made in the app
	5. Shopee rewards me when I keep using it
	6. Shopee informs me when I have not used the app for some time
Customer Engagement	1. I bring up things I have seen on Shopee in conversations with other people.
	2. Shopee applications provide an intimate shopping experience
	3. Browsing Shopee applications is like a treat for me
	4. I like to browse Shopee when I am eating or taking a break
	5. Shopee applications help me make good purchase decision
	6. Shopee applications give me better deals.
Customer Loyalty	1. I Say positive things about Shopee to others.
	2. I Encourage family and friend to use Shopee
	3 I Choose Shopee even thoughthere are many alternatives available
	4. I am willing to purchase/reuse Shopee in the future
	5. I recommend using Shopee to those who ask for advice

Table 3.
Measuring Scale Type

Scale Type	Description
Linkert Scale	1. SD = Strongly Disagree
	2. D = Disagree
	3. LA = Less Agree
	4. A = Agree
	5. SA = Strongly Agree

The population in this study is Shopee users with the criteria of being domiciled in the city of Samarinda, has shopped using Shopee at least two times, and is at least 18 years old. According to (Ferdinand, 2014), the minimum number of respondents used to be by the item of the instruments inside is five times the indicator number. This study uses a sample of 17 x 5 = 85 respondents. However, to improve the quality of the data collected, the researcher added 100 respondents. This study uses a questionnaire data collection technique which is filled out by respondents online according to the sample criteria, then asks respondents to fill out a questionnaire. Data collection and questionnaire distribution were carried out by spreading the google Form link through the researcher's social media. The steps taken by researchers to obtain data include: (1) creating and compiling a questionnaire instrument, (2) making criteria limits from the intended respondents, (3) screening to get ideal respondents with information according to sample criteria, (4) respondents who have met the criteria are welcome to fill out the questionnaire that has been provided, and (5) the questionnaire that has been filled in by the respondent will be collected again by the researcher for later processing.

The analysis technique used is PLS using the SmartPLS 3.0 program. In this technique, there are two stages carried out by researchers, namely (1) testing the measurement model as measured by internal consistency reliability (composite reliability), convergent validity (AVE), and discriminant validity

(Joseph et al., 2014) and (2) perform a structural model test, to find out how far the endogenous variables can explain the effect of exogenous variables.

RESULTS AND DISCUSSION

Based on table 4, it is known that the number of female respondents was more than male respondents. The number of female respondents was 77 (77%) people, and male respondents were 23 (23%). With the range age in between 18-22 (80%), 23-27 (10%), 28-32 (4%), 38-42 (3%), 43-47 (2%) and 52-57 (1%). It can also be seen that the number of respondents who are an entrepreneur is 2%, student 77%, other are 13% and work in a private company are 8%.

The analysis technique in this study uses the Structural Equation Modeling (SEM) method based on Partial Least Square (PLS) using SmartPLS 3.0. Factor loading cut-off value exceeds 0.70; it is ideally considered as significant and desirable (Joseph et al., 2014). After getting the final indicators, the value of each variable is measured by AVE (Average Variance Extracted). AVE at least has to be 0.5. The rule of thumb for either reliability estimate is that 0.7 suggests good reliability (Joseph et al., 2014). In this case, it shows that each variable has met composite reliability, so it can be concluded that the measurements used in this study are reliable.

Table 4.
Outer Model Test Result

Variable	Indicators	Outer Loading value	Composite Reliability	Cronbach's Alpha	Convergent Validity (AVE)
Gamification (X1)	X1.1	0.743	0.847	0.760	0.581
	X1.2	0.779			
	X1.3	0.809			
	X1.6	0.714			
Customer Engagement (Y1)	Y1.2	0.812	0.846	0.729	0.647
	Y1.5	0.766			
	Y1.6	0.833			
Customer Loyalty (Y2)	Y2.1	0.792	0.899	0.860	0.642
	Y2.2	0.831			
	Y2.3	0.814			
	Y2.4	0.708			
	Y2.5	0.854			

The inner model test or structural model represents the variables (Joseph et al., 2014). It is evaluated by looking at the percentage of R Square for the dependent variable, the research model using the Q-Square test measure, and the magnitude of the structural path coefficient (Joseph et al., 2014).

Table 5.
R Square

Variable Y	R Square
Y1	0.209
Y2	0.294

The value of R Square is 0.209 and 0.294, which means gamification has 20.9% influence on customer engagement and 29.4% influence on customer loyalty. Customer engagement and customer loyalty may be influenced by other variables, which are not included in this study as much as the rest value of R Square, which is 79.1% and 70.6% (Joseph et al., 2014)

Table 6.
Path Coefficient and T-Statistic

Variable	Path Coefficient	T-Statistic
X1 -> Y1	0.458	6.190
X1 -> Y2	0.542	9.288

The value of path coefficient proves that the hypothesis has a positive or negative influence. The range of path coefficient is only -1 to 1. So if the value is below 0, it means the hypothesis is negative and the other hand. Therefore, both hypotheses have a positive influence (Joseph et al., 2014).

The T-statistics (bootstrapping) value shows the relationship between dependent and independent variables is significantly influencing or not. If the value is greater than 1.96, the hypothesis is

significantly positive (Joseph et al., 2014). As a result, both hypotheses have a significantly positive influence (Joseph et al., 2014).

The impact of Gamification on Customer Engagement

Based on research, the result shows that gamification has a positive influence and significant effect on customer engagement. This result shows that gamification is affecting customer engagement.

It can be concluded that gamification is one of the main indicators that affecting customer engagement in the application. The impact of gamification on customer engagement was explained with several factors such as social interaction, sense of control, goals, progress tracking, rewards, and prompts. With second loading factor using PLS found that strong indicators are social interaction, sense of control, goals, and prompts which means that those indicators have a substantial impact on customer engagement.

The result of this study is in line with research conduct by (Eisingerich et al., 2019), which states that the gamification principle on its own can be leveraged to enhance customer engagement. (Taruli et al., 2020), the gamification strategy in Shopee Indonesia has a positive influence and has implications for changes in specific consumer behavior patterns such as spending time and engagement in e-commerce applications.

The impact Gamification on Customer Loyalty

The impact of gamification on customer loyalty was explained with several factors, namely goals, social interaction, prompts, and a sense of control. Based on the result of statistical calculation, it can be concluded that gamification has a positive and significant effect on customer loyalty. This can be seen from the t-statistic value, which is bigger than 1.96, which is 9.288. thus, hypothesis 2 in this study is accepted. This shows that the gamification of Shopee gives high customer loyalty to the people of Samarinda City.

It can be concluded that Gamification is one of the main indicators that affect customer loyalty always to use Shopee application when the customers want to buy goods or services online.

This result of the study is in line with research conducted by (Hwang & Choi, 2019), which state that gamified loyalty programs increased customer loyalty toward loyalty programs which in turn enhanced customer participation intention and application download intention. (Al-Zyoud, 2020) also stated that gamification is a predictor to enhanced customer loyalty.

CONCLUSION

According to the findings of this study, Shopee's gamification through games features can be measured through six dimensions, namely social interaction, sense of control, goals, rewards, progress tracking, and prompts, which has a positive and significant impact on customer engagement. This demonstrates the success of Shopee's loyalty program, which employs gamification, in increasing customer engagement with the app. Gamification also has a positive and significant influence on customer loyalty, which allows the customer to keep loyal to the Shopee application despite the availability of many other e-commerce options. Aside from that, the use of different variables can also be considered as a suggestion to measure the effect of gamification, especially for an application in future research.

The limitations of this research are because this study only collected samples from residents of Samarinda City, the next researcher is likely to expand and cover a broader range, and because the data was collected through an internet questionnaire, it is certainly possible that the results are subjective. It would be preferable to include interview and direct survey methods in order to achieve more complete research results.

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