The Influence of Gamification and Rewards on Customer Loyalty in Z Generation with Moderating Role of Gender (Case Study On The Shopee Marketplace)

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Abstract

This study was conducted to determine the effect of gamification and rewards on customer loyalty in Generation Z, moderated by gender. This research uses a quantitative survey method. The sampling technique that the writer uses is purposive sampling with a total sample of 150 respondents. The data collected in this study used an online questionnaire technique, and the data analysis technique was Linear Regression and Moderated Regression Analysis. The results of this study indicate that: (1) Gamification has a positive influence on customer loyalty, (2) The higher the effect of rewards will have a positive effect on customer loyalty, (3) Gamification and rewards each have a positive influence on customer loyalty, (4) There is a positive effect of gender, namely, strengthening the effect of gamification on customer loyalty. It regards the value of the regression coefficient on the interaction between gamification and gender, which has a value of 0.085. (5) There is a negative effect of gender in weakening the effect of rewards on customer loyalty. It regards the value by the value of the regression coefficient on the interaction between rewards and gender, which has a value of -0.076. Therefore, in making gamification, gender can be considered so that the gamification made can be by the wishes of consumers.

INTRODUCTION

Currently, the development of technology is very rapid, as well as internet users around the world are also experiencing an increase. These technological developments certainly affect people's lifestyles in various ways, one of which is trade. At first, people traded face to face between sellers and buyers, but now buyers and sellers can buy and sell goods without meeting face to face. Even sellers can sell their interests even though they do not have physical stores to display products. This is certainly a great opportunity for online traders. Surveyed in 2018 stated that the most internet users in Indonesia are in the 19-34 year age group, 49.52%. Then in the second position is the age group of 35-54 years or 29.55%, the third most users are the age group 13-18 years, namely 16.68%, and internet users in the age group over 54 years are 4.24% (APJII, 2018). Based on that data shows that Generation Z dominates internet users in Indonesia.

Generation Z was born around 1995 to 2010 because they were born in the digital era. Whatever the activities carried out by Generation Z are not far from technology, this makes them have different characteristics from the previous generation (Bakti & Safitri, 2017). Generation Z seems more flexible and multitasking. They are not stuck with the time and can do several jobs simultaneously. This is certainly an opportunity for e-commerce to make Generation Z their target market. In 2016, e-commerce in Indonesia amounted to 26.2 million. To win the competition, online traders must satisfy customers in various aspects. Because it is not face-to-face,
and even buyers cannot touch the goods physically, customer trust in the product is important to foster customer loyalty. Online purchases are increasingly in demand because they have several conveniences, namely, not limited by space and time, comfortable, and having a wide selection of attractive products.

Data from Bank Indonesia (BI) states that e-commerce transactions in Indonesia in 2018 reached 77.766 trillion, and in 2017 it reached 30.492 trillion. Based on data, the number of transactions that have occurred has increased by 5%. Then in 2016, Indonesia was determined to be the country with the largest e-commerce transaction in Southeast Asia, with a total transaction of around 245.86 billion dollars. E-commerce users in Indonesia reached approximately 30 million people in 2017. Even Google and Temasek predict that e-commerce usage will continue to increase to 119 million people by 2025 (Das, 2018; Moore et al., 2018).

Based on a survey conducted by iprice.co.id in 2020, Shopee got the highest number of monthly visitors at 93,440,300, Tokopedia was in second place at 86,103,300, Bukalapak was 35,228,100, Lazada was in the fourth level with 22,021,800, Blibli.com for 18,307,500, JD.ID for 9,301,000, Orami for 4,176,300, Bhinneka for 3,804,800, Zalora for 2,334,400, Matahari for 2,197,200, and Sociolla for 1,986,900. Also, Bukalapak has the highest value in terms of customer loyalty, which is 6.21% from 100%. The next position is occupied by Tokopedia, OLX, Blibli.com, and Lazada. The research statement proves that the number of customers who visit the marketplace does not mean they are loyal to the market. A value of 6.21% from 100% is very low and proves that loyalty is one thing that is not easy to get by marketplace organizers.

Consumers’ loyalty is a commitment to buy a product, namely goods or services, consistently. Loyalty leads to repeated purchases of the same brand, even though the consumer gets situational or marketing influences from competitors to replace other brands (Pearson et al., 2012). Loyalty is a purchase made repeatedly over a certain period followed by several indicators such as the possibility to buy and spread positive feedback to others (Agrawal et al., 2012). Customer loyalty is very important because if the merchants do not have loyalty, they will lose customers over time. E-commerce providers have made various efforts to grow and increase customer loyalty. The organizers try to provide multiple features to make it easier for e-commerce users to find the items they need and want, giving complete things, good quality service, and affordable prices for users or buyers. In addition, e-commerce operators also use gamification and rewards to increase consumer loyalty.

Gamification is one method that can be used to develop an online transaction system that aims to improve the experience, loyalty, brand awareness, and motivation to make buying and selling transactions. Loyalty programs use game features such as points, which many companies adopt to form relationships between companies and consumers with a gamification strategy (Hwang & Choi, 2020). The gamification used by e-commerce providers is almost the same, namely by collecting points and coins that can be exchanged for various kinds of rewards.

Rewards are something that the marketplace organizer gives to its customers. Rewards consist of various kinds, such as shopping vouchers, discounts, cashback, coins, points, and others. Monetary rewards have a stronger influence on customer loyalty with low long-term orientation (Park et al., 2013). Therefore, many marketplace organizers provide rewards in cashback to foster a sense of commitment from their customers.

One of the things that can be considered in creating and implementing gamification and rewards on e-commerce sites is gender. According to Borg (2019), gender has two meanings. First, the word gender is commonly used to distinguish between men and women based on the anatomy of the sexes. Second, according to sociologists and psychologists, gender is more defined as the division of “masculine” and “feminine” through socially attached attributes and social psychology.

According to previous studies, women are more attracted to games that involve long-term relationship building and ease of use (Nakamura & Wirman, 2005; Goh et al., 2019). Male users most often focus on the usability of technology, while female users focus more on ease of use and enjoyment of subjective systems and norms (Venkatesh et al., 2012). Therefore, gender is one of the important things in making gamification designs that will be applied to e-commerce sites. Because of the importance of gamification and rewards in influencing customer loyalty, as well as because Generation Z dominates internet users in Indonesia and the differences in perceptions between women and men in playing games, the authors are interested in conducting a study entitled the effect of gamification and rewards on customer loyalty in Generation Z, moderated by gender.
HYPOTHESIS DEVELOPMENT

Gamification aims to increase users' experience, loyalty, brand awareness, and motivation in making buying and selling transactions (Kardianawati et al., 2016). Based on this research, gamification can be used to increase customer loyalty considering the increasingly rapid development of the marketplace in the world, and marketplace actors must present something that can attract customers and foster a sense of customer loyalty. The average market uses gamification with a coin and points system. To get these coins and points, consumers must use the marketplace application as often as possible to collect many coins and issues that can then be exchanged for various attractive offers, such as shopping vouchers, discounts, and others. Because of this dependence, it is hoped that gamification can foster a sense of customer loyalty to the marketplace.

Monetary rewards have a stronger influence on customer loyalty with a low long-term orientation (Park et al., 2013). According to prior research, satisfied customers prefer delayed rewards, and dissatisfied customers choose direct tips (Keh & Lee, 2006). Based on this research, dividends can be used to measure consumer loyalty. Therefore, marketplace organizers must know and understand the selection of the right time and type of rewards for customers.

Gamification refers to using game design elements in non-game goods or services to encourage behavior value creation such as increased consumption or greater loyalty (Hofacker et al., 2016). The more marketplaces that develop, the more consumers will shop at the market that satisfies them.

However, the many marketplaces cause the Market players to find it difficult to make consumers loyal to their marketplace. To foster this loyalty, marketplace players use gamification and offer several benefits when consumers check in every day and play consistently. Consumers will get rewards in the form of coins and points. Rewards coins and points can be exchanged for various kinds of vouchers, discounts, and cashback. With this, it is hoped to foster a sense of loyalty to consumers. Thus, the researcher creates hypotheses:

H1 : Gamification (X1) has a significant effect on consumer loyalty (Y)
H2 : Reward (X2) has a significant effect on consumer loyalty (Y)
H3 : Gamification (X1) and Rewards (X2) affect consumer loyalty (Y)

Gamification cannot be done haphazardly because consumers from each marketplace have different genders. Existing research consistently shows that each gender has differences in-game motivation, game genre preferences, playing styles, and emotions experienced during games (Hartmann & Klimmt, 2006). Men have been noted to express more achievement-oriented motivation (Williams et al., 2008) and more competitiveness and need to win than women (Hartmann & Klimmt, 2006). Based on previous studies, several things must be considered in making gamification, one of which is gender.

One thing that is done to involve consumers consistently is the gamification features. By playing the game with this, consumers will get rewards in coins and points that can be exchanged into shopping vouchers, discounts, and much more. According to Barlow (1996) and Harris (2000), rewards are divided into hard and soft rewards. In general, hard rewards are more tangible elements such as discounts and prizes. Meanwhile, soft rewards are more emotional, and the goal is to make customers feel special compared to other customers. On average, women are more emotional than men. Therefore, in determining the rewards, one must also consider gender. If the rewards are following the wishes, there will be a sense of loyalty over time. Thus, the researcher creates hypotheses:

H4 : Gender affects the relationship between gamification and customer loyalty.
H5 : Gender affects the relationship of rewards to customer loyalty

METHOD

This survey method was used as the primary data source. According to the level of explanation, this research includes associative research. This study consists of four variables: two independent variables, gamification and rewards, one dependent variable, namely loyalty, and a moderating variable, namely gender. In this study, customer loyalty can be measured by several indicators: willingness to pay, commitment, satisfaction, and recommendation (Pihlström & Brush, 2008). Gamification is measured through enjoyment, ease of use, engagement (Yang et al., 2017), and entertainment (Kim et al., 2013). Rewards are measured through enjoyment, benefits, and satisfaction (Kim & Ahn, 2017). Gender, in this case, is male and female.

The population in this study are internet users in Lampung (especially generation Z) who have used gamification and received rewards in
the marketplace. The sample used in this study was the general public in Lampung with the following criteria: a. Age about 18 to 25 years. b. The user used the gamification feature on the Shopee marketplace more than three times. c. User ever received rewards from gamification carried out on the Shopee marketplace. The sample size used as a reference in this study was based on (Hair, 2013). This study used 23 questions, and the sample used was 150 people. All variables used in this study were measured using a Likert scale of 1-4 to avoid neutral answers.

The validity test results on the above variables show that the loading factor value is greater than 0.5. The reliability test results of each variable indicate that the above instrument is reliable because it has a Cronbach's alpha value greater than 0.60 (Ghozali, 2011). The gamification Cronbach alpha value is 0.920, the rewards are 0.934, and customer loyalty is 0.921.

The data analysis technique used is Descriptive Analysis, Regression Linear and Moderated Regression Analysis (MRA) or interaction test which is a special application of multiple linear regression where the regression equation contains interaction elements (multiplication of two or more multiplication of two independent variables) with the following equation formula (Liana, 2009).

\[ Y = a + b_1X \] 
\[ Y = a + b_1X + b_2M \] 
\[ Y = a + b_1X + b_2M + b_3XM \]

Note:
X = Independent variables.
M = Moderating variables.
XM = Interaction between independent variable and moderating variables.

### RESULTS

Respondents in this study were Generation Z aged 18-25 years. Respondents aged 18-20 years amounted to 9 people, and respondents old 21-25 years amounted to 141 people. Then, respondents who have a male gender as many as 83 people while respondents who have female sex as many as 67 people.

Multiple linear regression analysis was used to determine the effect of gamification and reward on customer loyalty either partially or simultaneously.

**Table 1. Multiple Linear Regression Analysis**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient</th>
<th>T-count</th>
<th>Sig.</th>
<th>Hypothesis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamification</td>
<td>0.221</td>
<td>2.152</td>
<td>0.033</td>
<td>H1 accepted</td>
</tr>
<tr>
<td>Reward</td>
<td>0.121</td>
<td>1.500</td>
<td>0.000</td>
<td>H2 accepted</td>
</tr>
<tr>
<td>Constanta</td>
<td>14.333</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>0.290</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.281</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Test</td>
<td>30.075</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td></td>
<td></td>
<td>H3 accepted</td>
</tr>
</tbody>
</table>

The regression analysis results of the impact of gamification and reward on customer loyalty are shown in Table 1 above.

Based on Table 1, it can be seen that the multiple regression equation is as follows: Customer Loyalty = 14.333 + 0.221 Gamification + 0.121 Reward + e. The regression equation shows that the regression coefficient for gamification (b1) and reward (b2) has a positive regression coefficient. The formulation means that gamification and reward positively affect customer loyalty.

Moderation regression analysis is used to determine the effect of gender moderation variables that will strengthen or weaken the impact of gamification on customer loyalty and rewards on customer loyalty.

The moderation test (1) was conducted to answer research questions about gender moderating the relationship between gamification and customer loyalty, as shown in Table 2.
Table 2. Results of Regression of Gender Interaction and Gamification on Customer Loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient</th>
<th>T-count</th>
<th>Sig.</th>
<th>Hypothesis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamification</td>
<td>0.420</td>
<td>4.590</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Gender</td>
<td>-2.724</td>
<td>-3.155</td>
<td>0.002</td>
<td>Significant</td>
</tr>
<tr>
<td>Gamification *Gender</td>
<td>0.085</td>
<td>2.445</td>
<td>0.016</td>
<td>Significant</td>
</tr>
<tr>
<td>Constanta</td>
<td>21.255</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>0.246</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.231</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Test</td>
<td>15.880</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This study indicates that the value of the interaction between gamification and gender shows a positive result, namely 0.085, meaning that there is a positive or direct influence on the interaction of gamification and gender on loyalty. Based on significant value, gamification (0.000 < 0.05), and interaction of gamification and gender (0.016 < 0.05), the hypothesis which states that gender affects the relationship between gamification and loyalty is proven (H4 is accepted).

The moderation test (2) was conducted to answer research questions about the effect of gender moderating the relationship between reward and customer loyalty, as shown in Table 3.

Table 3. Results of Regression of Gender Interaction and Reward on Customer Loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient</th>
<th>T-count</th>
<th>Sig.</th>
<th>Hypothesis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward</td>
<td>0.642</td>
<td>7.861</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Gender</td>
<td>1.692</td>
<td>2.076</td>
<td>0.040</td>
<td>Significant</td>
</tr>
<tr>
<td>Reward*Gender</td>
<td>-0.076</td>
<td>-2.528</td>
<td>0.013</td>
<td>Significant</td>
</tr>
<tr>
<td>Constanta</td>
<td>13.901</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>0.301</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.286</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Test</td>
<td>20.942</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This study indicates that the value of the interaction between rewards and gender of -0.076 indicates a negative result, meaning that there is no positive or direct effect of the interaction of rewards and gender on loyalty. The existence of gender will weaken the relationship of rewards to loyalty.

Based on significant value, reward (0.000 < 0.05), and interaction of reward and gender (0.013 < 0.05), the hypothesis which states that gender affects the relationship between reward and loyalty is proven (H5 is accepted).

Hypothesis testing in this study aims to prove that gamification and rewards affect customer loyalty in Generation Z, with gender as a moderator.

The results show that the gamification regression coefficient of 0.221 indicates that every increase in gamification will increase loyalty. Based on the current results indicate the direction of this model is positive. Also, based on the significant value is 0.033 < 0.05, it can be concluded that hypothesis 1, which states that gamification affects customer loyalty, is proven. The results of this study are consistent with the research of (Hwang & Choi, 2020).

According to the survey, gamification can increase consumer loyalty because, with gamification, consumer retention will increase, and over time loyalty will arise.

This study indicates that the rewards variable has a t-count of 1.500 and a significance
value of 0.000 rewards is smaller than 0.05 (sig 0.000 <0.05), so this study succeeded in proving that hypothesis 2 states that rewards have a proven effect on customer loyalty. Based on prior research, rewards are divided into hard and soft rewards (Barlow, 1996; Harris, 2000). In general, hard rewards are the more tangible elements such as discounts and giveaways. Meanwhile, soft rewards are more emotional, and the goal is to make customers feel special compared to other customers.

The results of this study are consistent with research by (Rehnen et al., 2017), that the research shows that rewards for customer engagement have a positive effect on customer loyalty. Based on Table 1, gamification and reward significantly affect customer loyalty (H3 is accepted). It is seen by significant value (0.000 < 0.005). Gamification refers to using game design elements in non-game goods or services to encourage value-creating behaviors such as increased consumption or greater loyalty (Hofacker et al., 2016). The more marketplaces that develop, the more consumers will shop at the marketplace that satisfies them. However, many marketplaces make it difficult for market players to make consumers loyal to their marketplace. To foster this loyalty, marketplace players use gamification and offer several benefits when consumers check in every day and play consistently. Consumers will get rewards in the form of coins and points. Rewards coins and points can be exchanged for various kinds of vouchers, discounts, and cashback. With this, it is hoped to foster a sense of loyalty to consumers. The research above is relevant to previous research on (Rehnen et al., 2017), that indicates that the data shows that rewards for customer engagement positively affect customer loyalty and proves that gamification and rewards have consistent research results that can affect customer loyalty.

This study indicates that the value of the interaction between gamification and gender shows a positive result, 0.085, meaning that there is a positive or direct influence on the interaction of gamification and gender on loyalty. The existence of gender will strengthen the relationship of gamification to loyalty. Therefore, hypothesis 4 (H4), which states that gender affects the relationship between gamification and loyalty, is proven. Gender is commonly used to distinguish between men and women based on the anatomy of the sexes. In the second sense, especially the notion initiated by sociologists and psychologists that gender is more defined into masculine and feminine divisions through socially inherent attributes and social psychology, many sociologists emphasize that discourse on gender is used when social divisions are created in society into the categories of who is masculine and who is feminine (Borg, 2019). Gamification is useful for increasing the experience and effect of services on consumers, and women get greater social benefits than men (Huotari & Hamari, 2017). This proves that the research that has been carried out is consistent or has consistent results that gender affects the relationship between gamification and loyalty. In addition, in this study, the influence of the female gender is more dominant in strengthening the effect of gamification on customer loyalty.

This study indicates that the value of the interaction between rewards and gender of -0.076 indicates a negative result, meaning that there is no positive or direct effect of the interaction of rewards and gender on loyalty. The existence of gender will weaken the relationship of rewards to loyalty. Therefore, hypothesis 5 (H5), which states that gender affects the relationship of rewards to customer loyalty, is proven. Previous research conducted by (Hwang & Choi, 2020) shows that gamification can increase consumer loyalty because, with gamification, consumer retention will grow and last longer. Over time, loyalty will arise. However, this study has limitations, so the researcher suggests adding gender as a moderating variable. After adding gender as a moderating variable, it is proven that gender as a moderating variable weakens the relationship between rewards and customer loyalty.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research that has been done and the discussion above, the following conclusions can be drawn gamification has a positive effect on customer loyalty. The impact of gamification on customer loyalty is 22.1%, which means that the greater the result, the greater the level of customer loyalty. Rewards have a positive influence on customer loyalty. This means that the greater the impact of the rewards, the higher the level of customer loyalty. The effect of rewards on customer loyalty is 12.1%.

Gamification and rewards each positively affect customer loyalty, which is 28.1%. The higher the effect of gamification and rewards, the higher the level of customer loyalty. There is a positive effect of gender, namely, strengthening the impact of gamification on customer loyalty. In this case, women are more dominant in enhancing the impact of gamification on customer loyalty. In the process of making gamification, it
is necessary to pay attention to gender factors (especially women) so that the gamification made can be by what is desired by the customer. There is a negative effect of gender, weakening the effect of rewards on customer loyalty. In this case, women are also more dominant in weakening the effect of rewards on customer loyalty. Therefore, in implementing rewards, it is necessary to consider gender factors (especially women) so that the rewards given can satisfy customers.

Based on the research that has been done, it is proven that gamification and rewards affect customer loyalty. In addition, gender also positively affects the relationship between gamification and customer loyalty. Therefore, in making gamification, gender can be considered so that the gamification made can be by the wishes of consumers.

For further researchers are expected to add other variables that affect customer loyalty. Respondents in this study were also limited because they only studied Generation Z. It would be better if further research could examine different generations, such as Generation X and Generation Y. In addition, for further research, other variables can be used as predictors of loyalty, such as brand attitude and brand awareness. Then, further analysis can also be done on other marketplaces, such as Lazada, Tokopedia, Blibli.com, and many more. In addition to being carried out in the market, this research on customer loyalty can also be carried out in retail.

REFERENCES


