JRSSEM 2026, Vol. 5, No. 12, July
E-ISSN: 2807 - 6311
P-ISSN: 2807 - 6494

The Influence of Gamification on Purchase Decisions on the Shopee Platform: A Case Study of Shopee Games Users in West Java

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Keywords:
gamification, purchase decision, Shopee Games, e-commerce, consumer behavior.

Abstract
Shopee introduced Shopee Games as a form of gamification that integrates game elements into the online shopping experience. Through this feature, users can obtain various rewards that can be used during transactions, potentially influencing their purchase decisions. This study aims to identify the implementation of gamification and analyze its effect on the purchase decisions of Shopee Games users in West Java. This research employed a quantitative approach using descriptive and verificative methods. Data were collected through an online questionnaire distributed to 100 respondents who had used Shopee Games and made purchases on Shopee. Data analysis was conducted using descriptive analysis, instrument testing, classical assumption testing, simple linear regression, t-test, and coefficient of determination analysis with the assistance of SPSS software. The results indicate that the implementation of gamification in Shopee Games is categorized as good. The simple linear regression analysis produced the equation Y = 22.702 + 0.382X, indicating a positive effect of gamification on purchase decisions. The t-test results show that the calculated t-value of 13.162 is greater than the t-table value of 1.984, with a significance value of 0.000 < 0.05. Furthermore, the coefficient of determination (R^2) value of 0.639 indicates that gamification explains 63.9% of the variation in purchase decisions. Therefore, gamification through Shopee Games has a positive and significant effect on the purchase decisions of Shopee users in West Java.

INTRODUCTION

The development of digital technology has brought changes in various aspects of people's lives, including in buying and selling activities (Farliana et al., 2022; Jula et al., 2024; Setiawan et al., 2023; Suparno & Kamuli, 2023). The ease of internet access supported by the use of smartphones has made people more accustomed to doing various activities online, ranging from looking for information, communicating, to making purchase transactions. These developments have indirectly changed people's consumption patterns, which were previously more conventionally carried out, to digital-based (Wiranata et al., 2021).

These changes in people's behavior have also encouraged the growth of electronic-based trade or *e-commerce* (Fachrurazi et al., 2022; Pana et al., 2024; Paul et al., 2024; Teguh et al., 2023). According to Harmayani et al. (2020), *e-commerce* is an activity of distribution, marketing, sales, and purchase of products and services that are carried out through electronic media connected to the internet. The presence of *e-commerce* provides convenience for consumers because the process of searching for products, ordering, and paying can be done without having to come directly to the store. In addition, the development of *e-commerce* also

encourages companies to create various more innovative digital marketing strategies to improve user experience and maintain customer loyalty (Rowi et al., 2024).

The development of *e-commerce* in Indonesia is inseparable from the high use of the internet and digital media by the public (Adinugraha et al., 2024; Jula et al., 2024; Setiawan et al., 2023; Suparno & Kamuli, 2023). According to We Are Social data in 2024, Indonesia is a country with a fairly high level of internet use. This condition shows that people are increasingly actively utilizing digital technology in various daily activities, including meeting needs and making online purchase transactions.

Figure I. 1 Indonesian Digital User Data in 2024

Source: We Are Social (2024)

Based on the data in Figure I.1, Indonesians spend an average of 7 hours and 38 minutes per day accessing the internet and 3 hours and 11 minutes per day using social media. When compared to other digital media such as television, radio, and podcasts, the internet and social media are the most widely used media by the public. The high intensity of internet and social media use shows that people's activities are increasingly integrated with digital platforms in daily life (Ahmed et al., 2024; Antczak, 2024; Chemnad et al., 2023; Cui et al., 2024; Purnama & Asdlori, 2023; Shanmugasundaram & Tamilarasu, 2023). This condition provides a great opportunity for digital-based companies to develop various services and marketing strategies that are able to attract attention and increase user engagement in a platform (Lubis et al., 2025).

The findings are also supported by the We Are Social and Meltwater (2025) reports which show that the number of social media users in Indonesia has reached around 180 million users or equivalent to 62.9% of the total population. In addition, the number of social media users increased by 26% compared to the previous year. The data shows that the use of digital platforms and social media continues to grow from year to year. This growth further strengthens the development of digital economic activities, including electronic-based trade, which is currently one of the fastest-growing sectors in Indonesia.

One of the *e-commerce* platforms that actively takes advantage of the development of digital technology is Shopee. As one of the *widely used e-commerce* platforms in Indonesia, Shopee continues to develop various features that aim to improve the user experience during shopping. Not only does Shopee provide a wide selection of products, but Shopee also presents interactive features designed to increase user engagement in the application (Rowi et al., 2024).

One of the features developed by Shopee is Shopee Games. This feature provides a variety of simple games that can be played by users, such as Shopee Tanam, Shopee Candy, Shopee Pets, and various other games. Through the game, users have the opportunity to get various prizes in the form of coins, vouchers, and discounts that can be used when shopping

on the Shopee platform. The presence of this feature makes shopping activities not only focus on the transaction process, but also provide a more interesting and entertaining experience for users. Similar strategies are widely used by digital platforms to increase user engagement while strengthening the company's marketing activities (Dicky I. et al., 2021).

The giving of prizes in the form of coins, vouchers, and discounts shows that Shopee Games not only functions as a means of entertainment, but also becomes part of the company's marketing strategy. Rewards earned by users through the game can be reused in shopping activities so that it has the potential to encourage users to make transactions. This condition shows that Shopee is not only focused on providing transaction services, but also utilizing a user experience-based approach to improve user interaction with the platform. The elements of prizes, challenges, and game activities contained in Shopee Games show the application of the game concept to non-game activities, namely online shopping activities. This approach is then known as gamification in the context of digital marketing.

Figure I. 2 Game Features on Shopee Games

Source: Documentation through the Shopee Application (2025)

The application of game elements in a digital system is known as gamification. According to Marisa et al. (2020), gamification is an approach that adopts game elements such as points, challenges, and rewards into a non-game context to increase user motivation and engagement. In practice, gamification is not only used as a means of entertainment, but also used as a strategy to encourage users to interact more actively with the platform. The higher the user engagement created, the greater the chance of activities expected by the company, including purchasing activities (Wahab & Wardhana, 2024).

Nonetheless, user responses to gamification features are not always the same. Some users feel interested in playing Shopee Games because of the opportunity to get prizes that can be used when shopping. This condition can encourage users to open applications more often, look for product information, and make purchase transactions. However, there are also users who consider the game features only as entertainment so that it does not affect their decision to make a purchase. These differences in responses show that the effectiveness of gamification in influencing purchasing decisions is still an interesting phenomenon to be researched further.

Several previous studies have examined the application of gamification on digital platforms, particularly its relationship with customer engagement and customer loyalty. Apriana, Elizabeth Taruli (2020) found that the application of gamification has a positive and significant effect on customer engagement in mobile e-commerce applications in Indonesia. Similarly, Sarhan (2024) revealed that gamification has a positive and significant effect on both customer engagement and customer loyalty on the Shopee platform. These findings confirm

that the application of game elements is able to increase user interaction and emotional attachment to a digital platform.

However, most existing studies remain concentrated on engagement- and loyalty-related outcomes, while gamification's direct influence on purchase decisions one of the most concrete indicators of marketing success (Wardhana, 2024) has received comparatively little attention. This gap is further reinforced by the fact that prior research tends to examine gamification as a general concept applied across e-commerce platforms, rather than focusing on a specific feature such as Shopee Games. As a result, empirical evidence on how a specific gamification feature influences users' actual purchase decisions, particularly among Shopee users in West Java, remains limited.

The novelty of this study lies in three main aspects. First, this study positions purchase decision as the outcome variable, an aspect that has received considerably less attention compared to customer engagement and customer loyalty in previous gamification research (Apriana, Elizabeth Taruli, 2020; Sarhan, 2024). Second, rather than treating gamification as a general concept, this study narrows its focus to a specific feature, namely Shopee Games, allowing for a more concrete analysis of how in-app game mechanics affect user behavior. Third, this study is contextualized within the West Java region, an area that has not been specifically addressed in prior gamification-related research on Shopee. This combination of outcome variable, feature-level focus, and regional context differentiates this study from previous research on the topic.

The purpose to be achieved from this study is to find out and analyze the application of gamification through the Shopee Games feature on the Shopee platform and to find out and analyze the influence of gamification through the Shopee Games feature on the purchase decisions of Shopee users in the West Java region.

METHOD

This study examined the influence of gamification on the purchase decisions of Shopee Games users in the West Java region using a descriptive-verifiable quantitative approach. The independent variable (X) is gamification with six dimensions (goals, progress tracking, rewards, prompts, sense of control, social interaction), while the dependent variable (Y) is a four-dimensional purchase decision (problem recognition, information search, evaluation of alternatives, purchase decision), both of which are measured using a Likert scale of 1–5. The sample was determined using the Cochran formula with a minimum of 100 respondents selected by purposive sampling, namely Shopee users domiciled in West Java who had used Shopee Games and made purchases. Data was collected through online questionnaires and literature studies, then analyzed using SPSS through a series of stages including descriptive analysis, validity and reliability tests, classical assumption tests (normality and heteroscedasticity), simple linear regression analysis, t-test, and determination coefficient (R^2) to determine the magnitude of gamification on purchasing decisions.

RESULTS AND DISCUSSION

Data Analysis and Interpretation

Descriptive Analysis of Research Variables

In this study, descriptive analysis was used to see the characteristics of data on

gamification variables and purchase decisions based on minimum, maximum, *mean*, and standard deviation values. The results of the descriptive analysis can be seen in Table IV-1 below.

Table IV - 1 Results of Descriptive Analysis of Research Variables

Descriptive Statistics					
	N	Minimum	Maximum	Red	Std. Deviation
Gamification (X)	100	54	87	71.25	7.228
Purchase Decision (Y)	100	43	60	49.94	3.458
Valid N (listwise)	100				

Source: Data processed by the researcher using SPSS 27 (2026)

Based on the results of the descriptive analysis in Table IV-1, the gamification variable had a minimum value of 54 and a maximum value of 87, with a mean value of 71.25 and a standard deviation of 7.228. These results show that respondents tend to give a positive assessment of the application of gamification elements on Shopee Games. The standard deviation value obtained also shows a variation in respondents' responses to the experience of using Shopee Games features.

Meanwhile, the purchase decision variable has a minimum value of 43 and a maximum value of 60, with a mean value of 49.94 and a standard deviation of 3.458. These results show that there is a tendency for respondents to make purchase decisions on the Shopee platform. The value of the lower standard deviation compared to the gamification variable indicates that respondents' responses to the purchase decision variable are relatively more homogeneous.

In general, the results of the descriptive analysis show that respondents give a positive response to the application of gamification on Shopee Games and show a tendency to make purchase decisions on the Shopee platform.

Test Research Instruments

Validity Test

The validity test is carried out to determine the ability of each statement item to measure the variables being studied. The validity test in this study was carried out using Pearson Product Moment correlation by comparing the calculated r value and the table r at a significance level of 5% ($\alpha = 0.05$). The results of the validity test of gamification variables and purchase decisions can be seen in Table IV-2 below.

Table IV - 2 Validity Test Results

Variable	Item Code	r-count	r-table	Remarks
Gamification (X)	GL1	0.367	0.196	Valid
	GL2	0.214	0.196	Valid
	GL3	0.398	0.196	Valid
	PT1	0.347	0.196	Valid
	PT2	0.382	0.196	Valid
	PT3	0.461	0.196	Valid
	RW1	0.465	0.196	Valid
	PC 2	0.410	0.196	Valid
	RW3	0.386	0.196	Valid
	PM1	0.345	0.196	Valid
	PM2	0.450	0.196	Valid
	PM3	0.444	0.196	Valid
	SC1	0.390	0.196	Valid
	SC2	0.446	0.196	Valid
	SC3	0.437	0.196	Valid
	SI1	0.406	0.196	Valid
	SI2	0.298	0.196	Valid
	SI3	0.417	0.196	Valid

Purchase Decision (Y)	PR1	0.395	0.196	Valid
	PR2	0.438	0.196	Valid
	PR3	0.338	0.196	Valid
	IS1	0.505	0.196	Valid
	IS2	0.474	0.196	Valid
	IS3	0.497	0.196	Valid
	EA1	0.615	0.196	Valid
	EA2	0.433	0.196	Valid
	EA3	0.503	0.196	Valid
	PD1	0.480	0.196	Valid
	PD2	0.275	0.196	Valid
	PD3	0.417	0.196	Valid

Source: Data processed by the researcher using SPSS 27 (2026)

Based on the results of the validity test in Table IV-2, all statement items on the gamification variable (X) and purchase decision (Y) have a calculated r value greater than the table r of 0.196. The results show that all statement items have met the validity criteria.

Thus, the 30 statement items used in this study were declared valid and feasible to be used as research instruments to measure gamification variables and purchasing decisions.

Reliability Test

The reliability test was carried out to determine the level of consistency of the research instrument in measuring the variables studied. The reliability test in this study used the Cronbach's Alpha method with a minimum reliability value of 0.60. The results of the gamification variable reliability test and purchase decision can be seen in Table IV-3 below:

Table IV - 3 Reliability Test Results

Variable	Value Cronhbach Alpha	Reliability Standards	Criteria
Gamification (X)	0.677	0.60	Reliable
Purchase Decision (Y)	0.634	0.60	Reliable

Source: Data processed by the researcher using SPSS 27 (2026)

Based on the results of the reliability test in Table IV-3, the gamification variable (X) obtained a Cronbach's Alpha value of 0.677, while the purchase decision variable (Y) obtained a Cronbach's Alpha value of 0.634. Both variables have Cronbach's Alpha values that are greater than the standard reliability value of 0.60.

These results show that the research instruments used have met the reliability criteria and have a good level of consistency in measuring the variables studied. Thus, all statement items on gamification variables and purchase decisions are declared reliable so that they can be used in the next data analysis process.

Classic Assumption Test

The classical assumption test is performed as one of the stages before a simple linear regression analysis. This test aims to ensure that the research data has met the necessary assumptions so that the results of the regression analysis can be used and interpreted properly. In this study, the classical assumption test carried out included the normality test and the heteroscedasticity test. The results of the test are presented as follows.

Normality Test

The normality test was performed to find out whether the residual data in the regression model was normally distributed or not. In this study, normality testing was carried out using

the One-Sample Kolmogorov-Smirnov Test. The results of the normality test can be seen in the following Table IV-4:

Table IV - 4 One-Sample Kolmogorov-Smirnov Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters[a,b]	Red	.0000000
	Std. Deviation	2.07840734
Most Extreme Differences	Absolute	.059
	Positive	.059
	Negative	-.039
Test Statistic		.059
Asymp. Sig. (2-tailed)[c]		.200
a. Test distribution is Normal.		

Source: Data processed by the researcher using SPSS 27 (2026)

Based on the results of the normality test in Table IV-4, it is known that the number of data tested was 100 respondents with a Test Statistical value of 0.059 and an Asymp value. Sig. (2-tailed) is 0.200. The significance value is greater than 0.05 (0.200 > 0.05), so it can be concluded that the residual data in this study is normally distributed. Thus, the regression model used has met the assumption of normality.

In addition to using statistical tests, the normality of the data can also be seen through the Normal P-P Plot graph presented in the following Figure IV.5:

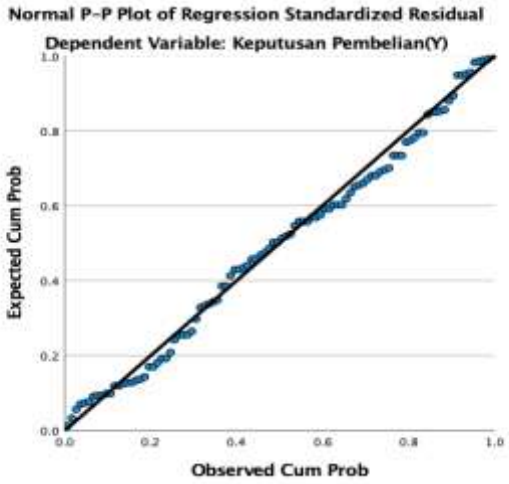

Figure 1. 3 P-P Plot Diagram of Normality Test Results

Source: Data processed by the researcher using SPSS 27 (2026)

Based on Figure IV.5, it can be seen that the data points are spread around the diagonal line and follow the direction of the diagonal line. There are no significant deviations from the pattern, so it can be concluded that the residual is normally distributed. The results of observations on the P-P Plot graph support the results of the Kolmogorov-Smirnov test which shows that the data has met the assumption of normality. With the fulfillment of normality assumptions, the regression model in this study can be used for further analysis.

Heteroscedasticity Test

A heteroscedasticity test was performed to find out whether there was an unevenness of residual variance from one observation to another in the regression model. A good regression model is one that does not experience symptoms of heteroscedasticity or has a relatively constant residual variance. In this study, the heteroscedasticity test was carried out using scatterplot graphs. The test results are presented in the following Figure IV.6:

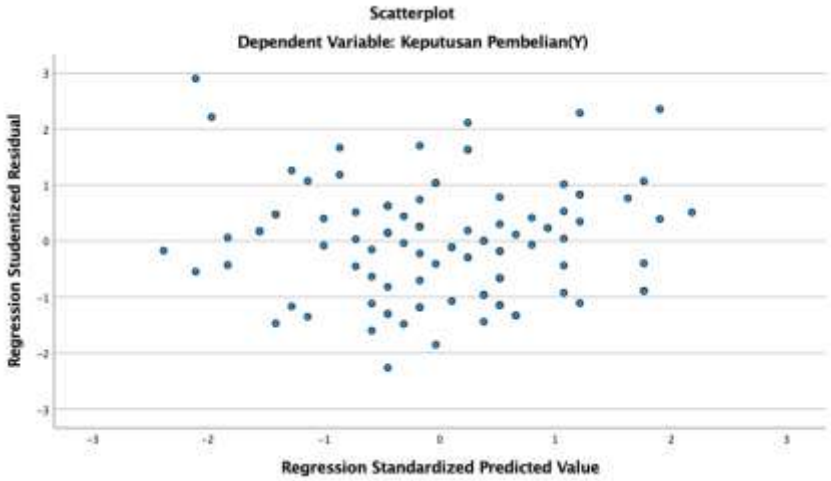

Figure 1. 4 Heteroscedasticity Test Results

Source: Data processed by the researcher using SPSS 27 (2026)

Based on Figure IV.6, it can be seen that the data points are randomly spread above and below the number 0 on the Y axis and do not form a specific pattern, such as constricted, widening, or wavy patterns. The random point spread shows that the residual variance tends to be constant at various predicted values.

It can be concluded that the regression model in this study did not experience symptoms of heteroscedasticity. These results show that one of the classical assumptions of regression has been fulfilled so that the simple linear regression model used is feasible to be used at the next stage of analysis.

Simple Linear Regression Analysis

Simple linear regression analysis was used to determine the relationship and direction of the influence of gamification variables (X) on purchasing decisions (Y). The results of simple linear regression analysis can be seen in the following Table IV-5:

Table IV - 5 Results of Simple Linear Regression Analysis

Coefficient						
		Unstandardized Coefficients		Standardized Coefficients		
	Models	B	Std. Error	Beta	t	Sig.
1	(Constant)	22.702	2.080		10.914	.000
	Gamification (X)	.382	.029	.799	13.162	.000

Source: Data processed by the researcher using SPSS 27 (2026)

a. Dependent Variable: Purchase Decision (Y)

Based on Table IV-5, the value of constant (a) was 22.702 and the value of the regression coefficient of gamification variable (b) was 0.382. Based on these values, a simple linear regression equation can be formulated as follows:

$$Y = 22{,}702 + 0{,}382X$$

The regression equation shows that a constant value of 22.702 indicates that if the gamification variable does not increase or is considered constant at zero, then the value of the purchase decision is estimated to be 22.702. Meanwhile, the value of the regression coefficient of 0.382 shows that every one unit increase in the gamification variable will increase the value of the purchase decision by 0.382 units.

A positive regression coefficient value indicates a one-way relationship between gamification and purchasing decisions. In other words, the higher the level of gamification that users feel, the tendency to make purchase decisions on the Shopee platform will also increase. On the other hand, if the level of gamification decreases, then purchasing decisions also tend to decrease.

Hypothesis Test (t-Test)

The t-test was performed to find out whether the gamification variable (X) had a significant effect on the purchase decision (Y). The results of the partial test (t-test) can be seen in Table IV-6 below:

Table IV - 6 Partial Test Results (t-test)

Coefficient						
		Unstandardized Coefficients		Standardized Coefficients		
	Models	B	Std. Error	Beta	t	Sig.
1	(Constant)	22.702	2.080		10.914	.000
	Gamification (X)	.382	.029	.799	13.162	.000

a. Dependent Variable: Purchase Decision (Y)

Source: Data processed by the researcher using SPSS 27 (2026)

Based on the test results in Table IV-6, the t-value of gamification variables was obtained at 13.162 with a significance value of 0.000. Meanwhile, the t-value of the table at a significance level of 5% with a degree of freedom (df = n – 2) is 1.984.

The test results showed that the calculated t-value was greater than the table t (13.162 > 1.984) and the significance value was smaller than 0.05 (0.000 < 0.05). Thus, H_0 is rejected and H_1 is accepted.

These results show that gamification variables have a positive and significant effect on purchase decisions for Shopee Games users in the West Java region. This means that the higher the application of gamification elements that users feel, the more purchase decisions on the Shopee platform tend to increase. Thus, the research hypothesis that gamification has a significant effect on purchase decisions in Shopee Games users in the West Java region is acceptable.

Coefficient of Determination (R^2)

The determination coefficient is used to find out how much the gamification variable is able to explain the variations that occur in the purchase decision variable. The results of the determination coefficient test can be seen in Table IV-7 below.

Table IV - 7 Determination Coefficient Test Results

Model Summary[b]

Models	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.799a	.639	.635	2.089

a. Predictors: (Constant), Gamification (X)

b. Dependent Variable: Purchase Decision (Y)

Source: Data processed by the researcher using SPSS 27 (2026)

Based on Table IV-7, the R Square (R^2) value of 0.639 or 63.9% was obtained. These results show that the gamification variable is able to explain 63.9% of the variation that occurs in the purchase decision variable in Shopee Games users in the West Java region.

Meanwhile, the remaining 36.1% was explained by factors other than the variables studied in this study. These factors can be in the form of product price, product quality, promotions, consumer reviews, trust in the platform, or other factors that are not included in the research model.

The determination coefficient value of 63.9% shows that gamification has a considerable contribution in explaining users' purchasing decisions. Thus, it can be said that the gamification variable has a strong role in influencing purchase decisions for Shopee Games users in the West Java region.

Discussion and Evaluation

Based on the results of the research that has been carried out, the formulation of the problem in this study has been answered through descriptive analysis and statistical testing. Based on the results of the descriptive analysis, it is known that respondents gave a positive response to the application of gamification on the Shopee Games feature. These results show that the various gamification elements applied, such as *goals, progress tracking, rewards, prompts, sense of control,* and *social interaction*, are able to create an engaging experience for users and increase their engagement in the Shopee platform. Thus, the formulation of the first problem regarding the implementation of gamification through the Shopee Games feature on the Shopee platform can be answered.

Furthermore, based on the results of the hypothesis test, a calculated t value of 13.162 was obtained, which was greater than the t table of 1.984 with a significance value of 0.000 which was smaller than 0.05. These results show that gamification has a positive and significant effect on Shopee users' purchasing decisions in the West Java region. Thus, H_0 who stated that gamification had no significant effect on the purchase decision was rejected, while H_1 who stated that gamification had a significant effect on the purchase decision was accepted. Therefore, the formulation of the second problem regarding the influence of gamification on purchasing decisions can be answered.

The findings of this study are in line with the gamification theory put forward by Eisingerich et al. (2019), which states that the application of game elements in non-gaming contexts can improve user engagement and behavior. In the context of Shopee Games, various gamification elements are able to encourage users to interact more actively with the application thereby increasing the tendency to make purchases.

In addition, the results of the study also show that gamification has a considerable contribution to purchasing decisions, which is shown by the value of the determination coefficient (R^2) of 0.639 or 63.9%. This shows that users' purchasing decisions are not only influenced by the need factor, but also by the interactive experience obtained through gamification features on the Shopee platform.

As an evaluation, the results of the study show that the implementation of gamification through Shopee Games is an effective strategy to increase user engagement while encouraging purchase decisions. Therefore, the development of gamification features that are more innovative, interactive, and provide relevant benefits for users can be one of the efforts that Shopee makes to maintain and improve user activities in the future.

CONCLUSION

Based on the results of research and discussion on the influence of gamification on purchase decisions for Shopee Games users in the West Java region, the following conclusions can be obtained: The implementation of gamification through the Shopee Games feature on the Shopee platform has been running well and has been accepted by users. Based on the results of the descriptive analysis, respondents showed a good assessment of the application of various gamification elements contained in Shopee Games. These elements include *goals*, *progress tracking*, *rewards, prompts, sense of control*, and *social interaction*. The existence of these elements is able to create a more interesting and interactive experience so as to increase user engagement in using the Shopee application. Gamification through the Shopee Games feature has proven to have a positive and significant effect on the purchase decisions of Shopee users in the West Java region. The results of the hypothesis test show that the research hypothesis is accepted, which means that the better the application of gamification that users feel, the higher the tendency of users to make purchase decisions on the Shopee platform. In addition, the results of the determination coefficient show that gamification has a considerable contribution in explaining users' purchasing decisions. These findings show that the application of gamification features not only serves as a means of entertainment for users, but is also able to encourage purchasing behavior on the Shopee platform.

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