# THE ROLE OF GAMIFICATION TO INTENTION THROUGH ATTITUDE ON MARKETPLACE APP ADOPTION



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#### **ABSTRACT**

This research aims to examine the social influence and shopping motivation in shaping attitudes towards marketplace applications within the context of gamification, as well as to explore how gamification in e-commerce has been shown to increase visitor numbers. The approach used by researchers is a quantitative approach with an associative method, with data collection through distributing questionnaires to 337 respondents who have played marketplace app games in Indonesia. The data were analyzed using SmartPLS. The test results show that social influence, recognition, and reciprocal benefits have a significant influence on attitudes. However, hedonism does not have a significant influence on attitudes. Meanwhile, attitude also shows a strong mediating influence in linking social influence, recognition, and reciprocal benefits to continuous use intentions, but cannot mediate hedonic with continued use intentions and intention to spread WOM. This research explores the relationship between variables such as social influence, recognition, reciprocal benefit, and hedonic value, which are mediated by attitude to continued use intention and intention to spread WOM in marketplace app, which has hardly been discussed in previous research

Keywords: Continued Use Intention; e-commerce; Gamification; Marketplace; WOM

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#### INTRODUCTION

The development of modern times is closely intertwined with the utilization of the internet. With its ubiquitous presence, tasks undertaken by individuals are facilitated, rendering them more efficient and time-saving (Kurniawan et al., 2022). The ubiquity of the internet has enabled the widespread marketing and sale of products through marketplace applications, streamlining the process for sellers (Lady et al., 2023). The conveniences afforded to human life by the advent of the internet, such as online shopping (e-commerce), are noteworthy (Andriani et al., 2021). Online shopping stands as a significant benefit of the internet, greatly enhancing human existence. E-commerce constitutes a segment of business activities that leverage database technology, email communication, and noncomputer based technologies for the dispatch of purchased goods, also involving payment instruments for the acquired products (Satrio, 2021). E-commerce is a marketing of goods or services, as well as electronic trade conducted through electronic systems using the internet (Abdi, 2022).

In the most common way, a marketplace is a platform that provides items and services from tons of sellers for buyers to buy (Kawa & Wałęsiak, 2019). The primary objective of gamification in marketplace is to affect the behavior user of marketplace by giving service design and offering experiences through gaming (Kusumawardani et al., 2023). Gamification incorporated within marketplace is utilized to stimulate users' intent to make purchases on the platform and to maintain the loyalty of users, encouraging them to continue using the marketplace platform (Kusumawardani et al., 2023). Gamification implemented by marketplace platforms typically shares common features with other ecommerce platforms, such as collecting coins that can be exchanged for various rewards (Mustikasari, 2022). Several e-commerce platforms offer gamification services, such as Shopee, Tokopedia, Lazada, and Blibli. However, Shopee, among the marketplace platforms in Indonesia, was the first to introduce gamification (Purwanto et al., 2024). Gamification features on Shopee include Shopee Word Guess, Shopee Planting, Shopee Lucky Prize, and Shopee Bubble. Similarly, Tokopedia's gamification features include Tap-Tap Box, Egg Harvesting, Tokopedia Quiz, and Invite & Earn. Gamification also contributes to word-of-mouth information exchange among users (Kusumawardani et al., 2023). This is valuable as it aids in assessing or evaluating factors that may influence user support and purchasing behavior.

Regarding gamification in the context of online shopping, comprehensive research has yet to be conducted. Therefore, this paper focuses on the effects of social factors and purchase motivations in forming attitudes towards marketplace apps in the context of gamification. Additionally, it seeks to explore gamification in the marketplace, which has been proven to increase visitor engagement within the platform and subsequently boost the number of visitors engaging in shopping activities within the marketplace platform (Dwipradhana & Marsasi, 2024), The study, according to the researchers, will close a gap in the current state of information and add to the literature of information that is still being created, as there has been limited prior research in this area. Another objective of the researchers is to enhance knowledge and recognize the effects of gamification in marketplace applications on users, particularly in fostering intentions to continue usage and to spread word-of-mouth information. The mediating relationship used in this research is a novelty that distinguishes

# LITERATURE REVIEW, RESEARCH FRAMEWORK, AND HYPOTHESES Gamification

Introducing the playfulness and excitement of game processes into non-game contexts is at the essence of what is usually called gamification; an approach to business design that applies game features to many types of systems and services, with the purpose of delivering an entertaining game experience (Koivisto & Hamari, 2019). Once the customer is more strongly involved in gamification, it can cause a variety of effects or impacts such as satisfaction, brand affection, brand loyalty, and a positive word-of-mouth promotion. This is made possible because gamification is capable to educate customers and attract them to have a more active involvement within it (Kusumawardani et al., 2023). The key features and mechanics of gamification are consist of the points, badges, milestones, trophies, a level, a scoreboard, and virtual rewards (Lu & Ho, 2020). Gamification is a type of system that brings the game design elements into a non-game related environment to change people's behavior. (Yang et al., 2017). Despite the proven benefits of gamification, it remains relatively non-explored in the context of marketplace apps compared to many other businesses. Gamification, used to engage the users and to digitally motivate them due to the devices used to operate the game, such as computers, smartphones, tablets, and others. As more business and individual clients benefit from gamification, it can increase their loyalty, and ultimately drive sales. Similarly, users can use gamification to determine the worth of a service (Kusumawardani et al., 2023)

#### **Social Influence**

Social influence leads to an individual's choice to use the product and services influenced by family, relatives, or the surrounding environment. People tend to believe that certain behavior is sensible when they observe many others doing it (Vahdat et al., 2020). A person responds to social pressure by altering his or her emotions and actions (Kurniawan et al., 2022). Social influence impacts a particular individual's behavior if emotions are influenced by the advice of other individuals and social influence is an individual's trust in the advice of other individuals to use a new app or not (Kurniawan et al., 2022). In a gamification context services, usage behavior is closely related to and heavily influenced by the provided facility conditions and social influences (Marpaung et al., 2021). People are surrounded by social networks in their societies friends, family, and coworkers rather than living in isolation, and this does have an impact on how they behave (Abima et al., 2021). Social influence is the social impact that influences one's perception of the importance of the opinions of people they trust on a particular matter (Fauziah & Ashfiasari, 2021). Social influence is one of the primary influences on the consumer decision-making process, and consumer action behavior is also influenced by society or social factors (Umiyati et al., 2021). In a gamification context, social influence has a significant positive impact on attitude.

### Recognition

Status, incentives, and feedback are a few ways that someone can show recognition. Feedback can be used to increase peer influence over the social incentive by creating opportunities for mutual acknowledgment, which may include badges, ranking positions, or rating systems (Kusumawardani et al., 2023). Recognition is a depiction of social feedback received by users regarding their exhibited attitudes (Hamari & Koivisto, 2013). Recognition can be felt by consumers when their expectations align with their judgment of how well a product or service is delivered (Toyama, 2020). Recognition is the ability of an individual consumer to identify a product just from its brand cues; the consumer will

immediately identify it (Permana, 2019). Furthermore, when someone receives recognition, during a service, they will feel compelled to give others the same recognition, thereby enhancing social interactions even further (Kusumawardani et al., 2023). In the gamification context, recognition has a significant positive impact on attitude.

## **Reciprocal Benefit**

Reciprocal benefit is a gain sought by individuals from actions taken in the present for future outcomes. Reciprocal benefit is expected to involve the extent to which one believes that they gain reciprocal benefits through various knowledge (Moghavvemi et al., 2017). In the gamification context, reciprocal benefit entails involvement to encourage users to promote the benefits successfully obtained from a system, thus fostering positive cause-and-effect relationships (Kusumawardani et al., 2023). Reciprocal Benefit is a form of mutual benefit perceived when a user has taken an action, thus expecting to receive reciprocal benefits from that action (Dhir et al., 2019). The reciprocal benefit obtained is a form of social utility, namely deriving benefits from the social community. In the gamification context, reciprocal benefits lead to the strategy to motivate other users to spread the benefits of using the system, established through positive cause-and-effect relationships between reciprocal benefits and predicted attitudes to the system (Kusumawardani et al., 2023). In the gamification context, reciprocal benefit has a significant positive impact on attitude.

#### **Hedonic Value**

Hedonic behavior in consumers generally involves purchasing without considering shopping priorities based on needs (Shaleha et al., 2021). Hedonic are the joy, warmth, security, and calmness that come from utilizing a specific brand (Ekawati et al., 2021). Customers experience the excitement and enjoyment of using the services at the same time that they perceive the hedonic value (Hsu & Chen, 2018). Hedonic behavior has also been proven to influence individuals to shop more, resulting in increased spending, and it drives people to make purchases for pleasure (Kusumawardani et al., 2023). Hedonic values emphasize the experiential and emotional aspects of gamification (Sutisna et al., 2024). Hedonic is considered one of the primary determinants influencing an individual's attitude (Marpaung et al., 2021). An individual will derive greater enjoyment from shopping when they feel they are gaining pleasure, fulfilling dreams, or contemplating personal growth opportunities (Nurtanio et al., 2022). Therefore, the presence of hedonic motivation involves purchasing a product where shopping motivation is presumed to have become one of the ways individuals can make spontaneous purchases. Thus, in the context of gamification, it can be observed as a strategy to encourage user behavior to be more hedonic and intrinsically driven, thereby rendering the outcomes of gamification as hedonic techniques for productivity (Kusumawardani et al., 2023). In the gamification context, hedonic has a significant positive impact on attitude.

### **Attitude**

Gamification implemented within an marketplace application serves the purpose of marketing. According to consumer studies, attitudes have an impact on people's moods, ideas, and ways of making decisions (Novela et al., 2020). It is more probable that consumers who are positive about new technology will strongly intend to reflect a particular attitude (Nurfadilah & Samidi, 2021). Therefore, consumers typically engage in attitude formation. Attitudes are simply stated beliefs that result from the individual's evaluation of a service, product, while feelings of satisfaction are the ratings that happen

after using a service or product (Weng et al., 2017). Humans have schemas for evaluating things done through specific behaviors, referred to as attitudes. An individual's attitude refers to the positive or negative emotions they experience when engaging in a specific behavior (Daragmeh et al., 2021). Previous research has found that when gamification is aimed at marketing, individuals tend to exhibit positive attitudes (Kusumawardani et al., 2023). Behavior has a direct function of elements such as behavioral intention, which is shaped through attitude. An individual's level of engagement in gaming will involve the user's positive attitude towards the game (Turan et al., 2022). When someone has used an application, that action becomes a habit that influences one's attitude to continue using the application (Marpaung et al., 2021). Several studies have shown that gamification involves the interplay between attitude and Continued Use Intention. In gamification, it has been utilized to enhance attitude to influence Continued Use Intention and affect the intention to spread word-of-mouth information (Kusumawardani et al., 2023).

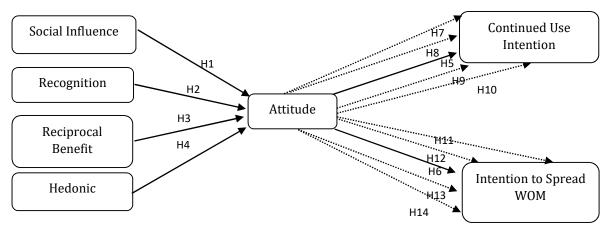
# The Mediating Role of Attitude from Social Influence, Recognition, Reciprocal Benefit, Hedonic Value on Continued Use Intention.

An evaluation of a product's use, whether favorable or negative, is called an attitude (Yasa et al., 2022). Attitude is a behavioral intention and have a positive impact on the intention to use information systems (Chu & Chen, 2019). It also relates to a person's feelings, whether favorable or unfavorable, toward carrying out a specific conduct, whereas behavior intention is a person's intention to carry out a specific behavior (Zhong et al., 2021). When users have previously used gamification, they usually develop routines that encourage them to keep engaging in the same kind of behavior (Tam et al., 2020). Social influence is an individual's decision on the need to embrace the new system (Kurniawan et al., 2022). Social Influence can be observed through how a friend, relative, or family member can influence users to participate in gamification. Recognition of one's abilities and skills can be achieved through gaming in marketplace gamification applications, which can be acknowledged by those around the user. Reciprocal benefit refers to the obligation of reciprocity to return assistance received by an individual. People who expect future gains from their current activities engage in reciprocity, which is a type of conditional gain. Regarding hedonic value, consumers will opt for entertainment and perceive the purchasing process as a pleasurable experience where completing transactions is not necessary (Ozturk et al., 2016). Hedonic users are searching for apps that not only provide secure transactions, protection, intuitive features, and quick and immediate information, but also an engaging experience based on sensory stimulation, impact, and emotional value to increase their enjoyment of playing gamification on marketplace app (Andriani et al., 2021).

# The Mediating Role of Attitude from Social Influence, Recognition, Reciprocal Benefit, and Hedonic Value on Intention to Spread WOM.

Word of Mouth (WOM) is a significant aspect to be researched due to the various activities consumers can engage in on social media to share information and disseminate important messages (Chu & Chen, 2019). With the internet's rapid expansion, e-commerce has steadily elevated to a strategic priority for both businesses and consumers, and WOM has become a new focus for interest in WOM elements (Pang, 2021). WOM also influences many consumer decisions, such as those involving products or services (Kesumahati, 2023). The foundation of word of mouth (WOM) is that information about products, services, and others can spread from one consumer to another, both directly and through communication media (Gharib et al., 2020). Social influence in word of mouth (WOM) is

used as a theory of social exchange or opinion until finally, there is a socially created reputation signal to predict sales. Recognition in WOM is self-image acknowledgment or receiving acknowledgment from someone to enhance the opinions of others. Expected reciprocal benefits referred to an individual's beliefs about the ability of information exchange to produce mutual benefits. The reciprocal benefit relationship is one of the essential constructs for word of mouth (Gharib et al., 2020). Word of Mouth behavior is a sign of personal expression and information sharing to satisfy hedonism. Therefore, when consumers derive satisfaction from a product or service, they are more willing to experience sharing with others (Mishra et al., 2021).



Source: Data Analyzed, 2024

Figure 1 Research Model

# **Development Hypothesis**

Based on the formulation of the objective problem research the theoretical basis and framework of thought above then the hypothesis, which submitted to be tested in this research are as follows:

- H1. Social influence has a significant positive effect on attitude
- H2. Recognition has a significant positive effect on attitude
- H3. Reciprocal benefit has a significant positive effect on attitude
- H4. Hedonic Value has a significant positive effect on attitude
- H5. Attitude has a significant positive effect on continued use intention
- H6. Attitude has a significant positive effect on intention to spread word of mouth
- H7. Social influence mediated by attitude has a significant positive effect on continued use intention
- H8. Recognition mediated by attitude has a significant positive effect on continued use intention
- H9. Reciprocal benefit mediated by attitude has a significant positive effect on continued use intention
- H10. Hedonic Value mediated by attitude has a significant positive effect on continued use intention
- H11. Social influence mediated by attitude has a significant positive effect on intention to spread word of mouth
- H12. Recognition mediated by attitude has a significant positive effect on intention to spread word of mouth

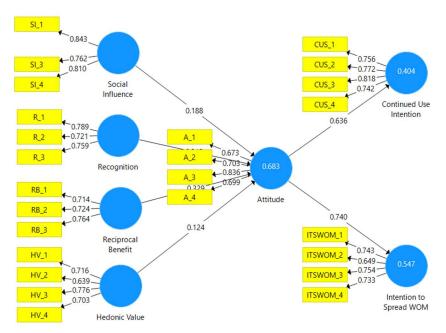
- H13. Reciprocal benefit mediated by attitude has a significant positive effect on intention to spread word of mouth
- H14. Hedonic Value mediated by attitude has a significant positive effect on Intention to spread word of mouth.

### **METHOD**

This research is conducted using a quantitative method. This study employs an associative approach, which elucidates the relationship among independent, mediating, and dependent variables (Suasana & Warmika, 2023). The independent variables are measured by four variables: Social Influence, Recognition, Reciprocal Benefit, and Hedonic Value was borrowed by (Kusumawardani et al., 2023). The mediating variable is measured by one variable: Attitude was borrowed by (Kusumawardani et al., 2023). Meanwhile, the dependent variables are measured by two variables: Continued Use Intention and Intention to Spread WOM (Word of Mouth) was borrowed by (Kusumawardani et al., 2023). The research respondents are individuals who have played game features within the marketplace application. Respondents who have filled out the survey are those who understand the concept of gamification. Sample selection is conducted using a non-probability sampling approach (Suprapto & Wijaya, 2023). The targeted sample size in this research was determined based on (Hair et al., 2019) is 210 respondents. Respondents were obtained through the distribution of a Google Form. The questionnaire contained 25 questions that were asked of the respondents. Measurement was conducted using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Additionally, the study utilized secondary data from previous research such as books, articles, and websites to support its findings. The collected research data were analyzed using SPSS version 26 and SmartPLS version 3.0 as statistical techniques in this study.

# **RESULTS AND DISCUSSION Data Analysis**

In accordance with the questionnaire dissemination activity implemented over approximately 4 months from December 2023 to March 2024 to the respondents, data from 351 respondents have been collected. In the context of this research, there are 14 invalid data points, thus 337 data points can be utilized for this study.



Source: Data Analyzed, 2024

Figure 2
Outer Loading Measurement Model

### **Outer Loading**

These scores can serve as indicators of the validity of questions in the questionnaire, where a question is considered valid if the outer load score is> 0.6 (Hair et al., 2019). Based on the evaluation results listed in Table 1, it can be concluded that all questions related to the variables of this research show scores above 0.6 (Shiau et al., 2019), That indicates their validity, and no indicator needs to be removed. All of these questionnaire items can be used for the next step in testing their reliability.

## **Average Variance Extracted (AVE)**

The convergent validity test is considered to meet the criteria if the obtained AVE value is> 0.5 (Hair et al., 2019). According to these provisions, it can be concluded that this research is considered to meet the convergent validity criteria because the overall AVE values are > 0.5, as presented in Table 1.

# **Reliability Test**

Reliability testing uses Composite Reliability, with the standard that the instrument is considered reliable if the Composite Reliability value  $\geq 0.7$  (Hair et al., 2019). As presented in Table 1, it can be observed that the overall scores for each variable from Composite reliability are already greater than 0.7. This means that all questionnaire items are deemed reliable, and further data processing can be conducted.

Table 1 Validity and Reliability Result

Variable	Variable Questions	Outer Loading	AVE	Composite Reliability	Conclusion	
C : 1	SI_1	0.843		0.847		
Social Influence	SI_2	0.762	0.649		Reliable	
Illiuence	SI_4	0.810				
	R_1	0.789		0.801	Reliable	
Recognition	R_2	0.721	0.573			
	R_3	0.759				
D : 1	RB_1	0.714		0.778	Reliable	
Reciprocal Benefit	RB_2	0.724	0.539			
Dellellt	RB_3	0.764				
	HV_1	0.716			Reliable	
Hedonic	HV_2	0.639	0.504	0.820		
Value	HV_3	0.776				
	HV_4	0.703				
	ATT_1	0.673		0.802	Reliable	
Attitude	ATT_2	0.703	0.534			
Attitude	ATT_3	0.836	0.554			
	ATT_4	0.699				
Continued Use Intention	CUS_1	0.756		0.855	Reliable	
	CUS_2	0.772	0.596			
	CUS_3	0.818				
	CUS_4	0.742				
Intention to	ITSWOM_1	0.743		0.812	Reliable	
	ITSWOM_2	0.649	0.520			
Spread WOM	ITSWOM_3	0.754	0.320			
VV OIVI	ITSWOM_4	0.733				

Source: Data Analyzed, 2024

## **Discriminant Validity**

It is based on the requirement that the indicators accumulated within each variable must have a minimum value of 0.7 (Hair et al., 2019). According to the results listed in Table 2, it is found that all indicators show strong correlation with their respective variables, as their values exceed 0.7.

In this study, only cross loadings were used for discriminant validity. This was done because it is important to note that to meet discriminant validity, only one valid approach is required. Therefore, with two methods showing validity, it can be inferred that the data has met the conditions for discriminant validity.

Table 2 Cross Loadings Test Result

Variable	Social Influence	Recognition	Reciprocal Benefit	Hedonic	Attitude	Continued Use Intention	Intention to Spread WOM
SI_1	0.843	0.535	0.564	0.615	0.600	0.566	0.582
SI_3	0.762	0.566	0.543	0.615	0.549	0.619	0.505
SI_4	0.810	0.492	0.502	0.567	0.551	0.545	0.527
RGN_1	0.614	0.789	0.503	0.636	0.584	0.608	0.508
RGN_2	0.392	0.721	0.405	0.529	0.502	0.441	0.478
RGN_3	0.476	0.759	0.436	0.538	0.554	0.475	0.511
RB_1	0.454	0.431	0.714	0.462	0.524	0.441	0.478
RB_2	0.464	0.409	0.724	0.418	0.525	0.446	0.448
RB_3	0.549	0.469	0.764	0.544	0.536	0.556	0.549
HV_1	0.590	0.540	0.484	0.716	0.500	0.587	0.537
HV_2	0.436	0.491	0.415	0.639	0.519	0.471	0.487
HV_3	0.576	0.591	0.471	0.776	0.501	0.580	0.535
HV_4	0.506	0.508	0.463	0.703	0.491	0.545	0.536
A_1	0.508	0.475	0.498	0.516	0.673	0.356	0.488
A_2	0.425	0.489	0.525	0.470	0.703	0.493	0.531
A_3	0.601	0.635	0.610	0.566	0.836	0.552	0.614
A_4	0.518	0.502	0.459	0.527	0.699	0.439	0.520
CUS_1	0.567	0.537	0.481	0.611	0.459	0.756	0.479
CUS_2	0.470	0.509	0.515	0.570	0.452	0.772	0.518
CUS_3	0.675	0.565	0.573	0.640	0.541	0.818	0.572
CUS_4	0.483	0.473	0.453	0.556	0.504	0.742	0.592
ITSWOM_1	0.559	0.522	0.508	0.577	0.557	0.527	0.743
ITSWOM_2	0.376	0.417	0.451	0.442	0.453	0.437	0.649
ITSWOM_3	0.521	0.488	0.463	0.553	0.567	0.541	0.754
ITSWOM_4	0.458	0.471	0.512	0.551	0.548	0.513	0.733

Source: Data Analyzed, 2024

## **Path Coefficients**

This test aims to identify the influence of independent variables on the dependent or outcome variables directly. Based on the Table 3, the significance of the influence between variables can be observed from the T statistics column and P Value. A relationship can be considered significant if it has a value of p < 0.05, and T value > T table 1.96 (Hair et al., 2019). The testing results for H1 indicate that SI has a significant influence on ATT. This is because the T statistics value is 3.441 and the P Value is 0.001. The testing results for H2 indicate that RGN shows a significant influence on ATT. This is because the T statistics value is 5.059 and the P Value is 0.000. The testing results for H3 indicate that RB shows a

significant influence on ATT. This is because the T statistics value is 5.856 and the P Value is 0.000. The testing results for H4 indicate that HV does not have a significant influence on ATT. This is because the T statistics value is 1.898 and the P Value is 0.058. The testing results for H5 indicate that ATT has a significant influence on CUS. This is because the T statistics value is 13.485 and the P Value is 0.000. The testing results for H6 indicate that ATT shows a significant influence on ITSWOM. This is because the T statistics value is 19.488 and the P Value is 0.000.

Table 3
Path Coefficients Test Result

Path	Mean	T Statistics	P Values	Hypotheses	Conclusion
SI ->ATT	0.191	3.441	0.001	H1	Positive Significant
RGN -> ATT	0.307	5.059	0.000	Н2	Positive Significant
RB -> ATT	0.326	5.856	0.000	Н3	Positive Significant
HV -> ATT	0.128	1.898	0.058	H4	Positive No Significant
ATT -> CUS	0.635	13.485	0.000	Н5	Positive Significant
ATT -> ITSWOM	0.738	19.488	0.000	Н6	Positive Significant

Source: Data Analyzed, 2024

## **Indirect Effects**

In this context, the influence between variables is considered significant if the p-value is < 0.05 and the T-test value > 1.96 (Hair et al., 2019). Based on the Table 4, the significance of the influence between variables can be determined from the T statistics column and P Value. A relationship can be considered significant if it has a p-value less than 0.05 and the T value is greater than the critical value of 1.96 (Hair et al., 2019). The testing result for H7 indicates that ATT can mediate the relationship between SI and CUS. This is because the T statistics value is 3.177 and the P Value is 0.002, meaning the relationship is significant. The testing result for H8 indicates that ATT can mediate the relationship between RGN and CUS. This is because the T statistics value is 4.981 and the P Value is 0.000, meaning the relationship is significant. The testing result for H9 indicates that ATT can mediate the relationship between RB and CUS. This is because the T statistics value is 5.624 and the P Value is 0.000, meaning the relationship is significant. The testing result for H10 indicates that ATT cannot mediate the relationship between HV and CUS. This is because the T statistics value is 1.831 and the P Value is 0.068, meaning the relationship is not significant. The testing result for H11 indicates that ATT can mediate the relationship between SI and ITSWOM. This is because the T statistics value is 3.359 and the P Value is 0.001, meaning the relationship is significant. The testing result for H12 indicates that ATT can mediate the relationship between RGN and ITSWOM. This is because the T statistics value is 5.097 and the P Value is 0.000, meaning the relationship is significant. The testing result for H13 indicates that ATT can mediate the relationship between RB and ITSWOM. This is because the T statistics value is 5.740 and the P Value is 0.000, meaning the relationship is significant. The testing result for H14 indicates that ATT cannot mediate the relationship between HV and ITSWOM. This is because the T statistics value is 1.850 and the P Value is 0.065, meaning the relationship is not significant.

Table 4
Indirect Effects Test Result

Path	Mean	T Statistics	P Values	Hypotheses	Conclusion
SI -> ATT -> CUS	0.122	3.177	0.002	H7	Positive Significant
RGN -> ATT -> CUS	0.195	4.981	0.000	Н8	Positive Significant
RB -> ATT -> CUS	0.207	5.624	0.000	Н9	Positive Significant
HV -> ATT -> CUS	0.082	1.831	0.068	H10	Positive No Significant
SI -> ATT -> ITSWOM	0.141	3.359	0.001	H11	Positive Significant
RGN -> ATT -> ITSWOM	0.226	5.097	0.000	H12	Positive Significant
RB -> ATT -> ITSWOM	0.241	5.740	0.000	H13	Positive Significant
HV -> ATT -> ITSWOM	0.095	1.850	0.065	H14	Positive No Significant

Source: Data Analyzed, 2024

## **R-Square**

It is conducted by examining the adjusted R-Square, which is the R-Square value adjusted for the degrees of freedom in the model. The coefficient of determination has a range of values between 0 and 1, where values closer to 1 indicate a stronger influence of the model on the dependent variable (Hair et al., 2019).

Table 5 R-Square Test Result

Variable	R-Square	Adjusted R-Square	
Attitude	0.683	0.679	
Continued Use Intention	0.404	0.403	
Intention to Spread WOM	0.547	0.546	

Source: Data Analyzed, 2024

Based on the adjusted R-Square values, the attitude variable has a value of 0.679, indicating that the independent variables (social influence, recognition, reciprocal benefit, and hedonic value) can explain 67.9% of the variance in attitude, while the remaining 32.1% comes from other variables. This indicates a relatively strong influence. Additionally, the adjusted R-Square value for continued use intention is 0.403, indicating that the variables social influence, recognition, reciprocal benefit, hedonic, and attitude can explain 40.3% of the variance in continued use intention. Furthermore, the adjusted R-Square value for intention to spread WOM is 0.546, indicating that the variables social influence, recognition, reciprocal benefit, hedonic, and attitude can explain 54.6% of the variance in intention to spread WOM.

## **Quality Index Test Result**

This testing is conducted to evaluate the overall quality of a research model constructed by the researcher and the assessment of goodness of fit is considered low if the value is > 0.10, moderate if the value is > 0.25, and high if the value is > 0.36 (Hair et al., 2019). The research results indicate that the goodness of fit (GoF) value for the dependent variable is 0.551, indicating a strong quality of the model.

#### **CONCLUSION**

This research shows that from 14 hypotheses, 12 are significant and 2 are not significant. Social influences, recognition, and reciprocal benefits have a significant influence on attitude. This study shows that the greater the social influence, the more it will affect a person's attitude. This is influenced because of the sense of competition in the game that boosts one's adrenaline to be able to achieve more compared to others and where each individual adapts to and values the opinions and recommendations of relatives and friends. This study shows that recognition will greatly influence an individual's attitude to gaming. This can happen because the more famous a person is in the game there will be a feeling of pleasure as a result of recognition in the game. Recognition that occurs in the game world is the result, victory, and greatness of the individual in playing the game.

This study also shows that reciprocal benefit affects the attitude of each individual because by playing the game, each individual expects to get something that can satisfy the individual, the reciprocal benefit when playing games is the feeling of satisfaction and enjoyment in playing games. Individuals can win something in the game make reciprocal benefits can also occur. reciprocal benefit will often happen if the individual often plays the game. However, hedonic value does not have a significant influence on attitude. In this study, gamification not everyone can and is suitable for playing games. The hedonic value will also not affect a person's attitude in purchasing an item.

Meanwhile, attitude also has a positive significance towards continued use intention. According to this study shows that, this finding indicates that attitude plays an important factor in an individual's continued use of gamification applications, when individuals feel comfort, happiness, and positive impact for the users, it will affect individual attitudes to continue playing gamification in marketplace applications. This finding shows that attitude factors are powerful predictors of how gamification is experienced and whether users recommend it to others, attitude have a positive significance towards intention to spread word of mouth, as well as for individuals who feel better service from the application, feel the excitement of playing the game will make individuals to spread word of mouth. This result also shows that the attitude of the users of gamification on a marketplace app, the more they will engage in favorable intentions to spread WOM about the app.

Meanwhile, attitude also shows a strong mediating influence in linking social influence, recognition, and reciprocal benefit to the continued use intention. This study shows that attitude can mediate social influences with the continued use of intention and intention to spread word of mouth. The social influence that occurs in gamification will affect the attitude of individuals in playing the game continuously and spreading word of mouth. This is a main factor in influencing users to generate an intention to use for consumers to play gamification in marketplace applications. This happens due to a sense of competition, a sense of wanting to compete, and the influences of people in the surrounding environment will affect the attitude of individuals in playing the game continuously and intention to word of mouth. This study shows that, attitude can mediate recognition with the continued use intention and intention to spread word of mouth.

Good recognition will influence an individual's attitude in playing the game continuously and have an intention to spread word of mouth. Positive recognition in gamification greatly influences a person's attitude in continued use intention in the game. When someone gets a positive result, they will get recognition from many people so that it will have an impact on the spread of word of mouth. Word of mouth happens when individuals from playing the game win a match or get a prize from the application.

This study also shows attitude can mediate reciprocal benefits with the continued use of intention and intention to spread word of mouth. Positive reciprocal benefits will affect the attitude of the individual. This can happen because the reciprocal benefits will create expectations for game players to get something and this will affect the attitude of the individual to play the game continuously. Reciprocal benefits of play gamification marketplace apps are when someone gets something from the game or feels excitement will spread word of mouth to invite friends or family to play. However, attitude cannot mediate hedonic value with the continued use of intention and intention to spread word of mouth. Hedonic value does not affect because, in gamification that focuses on games, there is no need for hedonic elements that are necessary for continuous gameplay and word of mouth. This is because most gamers are people who only play games for fun. However, in the marketplace application, no element of hedonic value affects attitudes, especially towards continued use intention and intention to spread word of mouth (Lu & Ho, 2020).

The implementation of this research is not without its limitations. The following research limitations expose further opportunities for research. This research only targeted the gamification market. Future studies should include research on other aspects of marketplaces, such as live streaming on marketplace apps, which can boost product sales. This research represents the Indonesian population, so future studies should examine how different demographics and cultures influence recommendations for gamification in marketplace applications.

Furthermore, previous studies indicate that gamification can influence variables such as purchase intention, customer loyalty, and consumer satisfaction. These should be included in future research to quantify continued use intention and promotion through word of mouth (Kusumawardani et al., 2023). These variables can provide insights and improvements for subsequent research on gamification, introducing new variables to support further studies. Future research should also explore gamification in e-commerce platforms from different countries with distinct histories from the Indonesian market.

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