

The Gamification Influence as Marketing Medium on Intrinsic Motivation, Positive Emotion, Customer Engagement and Repurchase Intention

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ABSTRACT

Since its launch, PT Tokopedia has been one of Indonesia's digital marketplaces that have rapidly expanded with its Gamification reward technique to promote sales. The researchers intend to measure the gamification method carried out by Tokopedia to its customers. This study aims to investigate the impact of Gamification on intrinsic motivation, positive emotion, and customer engagement. This study also examines the effect of Positive Emotion on the Repurchase Intention variable and the Gamification effect on the Repurchase Intention variable. This study employed descriptive-quantitative explanatory research as the research design and Self-determination theory as the framework of this research. The population in this study were Indonesian citizens with a minimum age of 17 years. Two hundred thirty respondents were collected as the sample through E-Questionnaires distributions. The structural Equation Model using the Variances Based SEM approach, well-known as Partial Least Square (PLS) framework, is employed in this study. The results reveal that Gamification has a positive and significant effect on intrinsic motivation, positive emotions, customer engagement, and repurchase intention.

Keywords: *Gamification; Intrinsic Motivation; Positive Emotion; Customer Engagement and Repurchase Intention*

ABSTRAK

Sejak resmi diluncurkan, PT. Tokopedia menjadi salah satu perusahaan digital Indonesia dengan pertumbuhan yang sangat pesat. Salah satu media promosi penjualan yang dilakukan oleh Tokopedia yaitu dengan menggunakan metode *gamification* dengan menggunakan sistem *reward*. Peneliti tertarik melakukan sebuah penelitian dalam mengukur metode *gamification* yang dilakukan pihak Tokopedia kepada pelanggannya. Adapun beberapa tujuan dari penelitian ini adalah untuk mengetahui pengukuran *gamification* terhadap *Intrinsic Motivation*, *Positive Emotion*, dan *Customer Engagement*. Penelitian ini juga menguji pengaruh *Positive Emotion* terhadap variabel *Repurchase Intention* dan menjelaskan pengaruh *Gamification* terhadap variabel *Repurchase Intention*. *Explanatory research* dengan menggunakan pendekatan deskriptif kuantitatif adalah jenis penelitian yang digunakan di penelitian ini. *Self-determination theory* digunakan sebagai konsep dalam penelitian ini. Populasi dalam penelitian ini adalah warga Indonesia dengan minimal usia 17 tahun. Jumlah sampel pada penelitian sebanyak 230 responden. Metode pengumpulan data menggunakan penyebaran E-Kuesioner. Metode analisis yang digunakan dalam penelitian ini adalah *Structurals Equation Model* dengan menggunakan pendekatan *Variances Based SEM* atau lebih dikenal dengan sebutan *Partial Least Square (PLS)*. Penelitian ini memperoleh hasil bahwa Gamifikasi mempunyai pengaruh positif dan signifikan terhadap *intrinsic motivation*, *positive emotion*, *customer engagement*, *repurchase intention*.

Kata Kunci: *Gamification; Intrinsic Motivation; Positive Emotion; Customer Engagement; dan Repurchase Intention*

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1. INTRODUCTION

Information and communication technology has developed at a rapid pace. Information and communication technology establishes a new trend by making it easier to obtain Information that can be accessed at any time and space. The growth of information and communication technologies leads to new media production. The Internet is one example of the new media. The Internet is a communication and information technology product that enables all Information to be swiftly accessed timelessly.

According to the We Are Social and Hootsuite report (2023), the number of internet users worldwide is reckoned to exceed half of the world's population of 8 billion, reaching approximately 5,07 billion people by October 2022. The amount of Internet users will boost steadily over time. As is happening in Indonesia, the number of internet users in Indonesia increases throughout the year. Compared to 2018, the current national internet user population increased by 63.5 percent. In the meantime, 74.2 percent of Indonesia's total population will have Internet access by the middle of 2022. According to the Central Bureau of Statistics data, Indonesia's population is 275.77 million. In 2018, only 49.2% of Indonesia's total population of 264.2 million had access to the Internet.

Kotler & Keller (2016) remarked that sales promotion is a collection of diverse motivating methods to encourage consumers to purchase various services or products quickly. Promotion is a commercial activity generally aiming to increase sales, productivity, and company revenue. Promotional activities aim to notify and enlighten the audience about the existing product or item. Tokopedia employs the gamification method with a reward system as a sales promotion media. Discount coupons, cash back, go-pay coins, and loyalty points are benefits in Tokopedia. Customers can redeem their rewards as they shop on the Tokopedia app.

The primary objective of promotional activities is to inform and communicate the existence of products to the public (brand or product awareness). Tokopedia integrates the gamification technique with a reward system as one of its sales promotion channels. The rewards include discount vouchers, cash back, go-pay coins, and loyalty points. When consumers shop

on the Tokopedia application, they can redeem their earned rewards.

This gamification technique encourages visitors or customers to play and psychologically affects motivation. Sailer et al., (2013) believed behavioral learning, cognition, self-determination, interests, and emotions are among the psychological effects of gamification. Similarly, Blohm & Leimeister (2013) stated in this context that "Gamification seeks to influence user behavior by activating individual motivations via game design elements." In general, gamification design elements increase user motivation and provide a memorable experience.

Based on what prior research revealed, researchers aim to undertake a study that employs Self Determination Theory (SDT) by assessing gamification and repurchase intentions using intrinsic motivation characteristics. Bravo et al., (2021) affirm that gamification can boost psychological satisfaction and control human motivation. Gamification can also promote utilitarian and hedonic motivations. According to several experts, this technique for analyzing gamification refers to the psychological perspective. Indeed, Hawkins & Mothersbaugh (2010) proposed that using relevant neuroscience literature to offer the viewpoint of two areas of study may help in the research of gamification and psychological systems. Hawkins & Mothersbaugh (2010), positive emotions can arise when consumers are stimulated through positive brand experiences or associations. Furthermore, Lazzaro (2009) suggested that companies should be at the forefront of lines of digital goods that may generate powerful psychological responses to reach the positive relationship between gamification and positive emotion. Consequently, by understanding the relationship between positive emotion and gamification as a marketing medium, everybody can create more effective campaigns.

Creativity is one of the key factors in determining the success of e-marketplace companies by providing the right features to engage and retain their customers to increase repurchase intention. Chiu & Ko (2008) admitted that high service quality could increase the feeling that the seller is trying to build a customer relationship. To provide good service quality, Tokopedia, in this case, offers special

prizes for its users by using the games feature. One of the sales promotion media carried out by Tokopedia is the *gamification* method using a *reward* system. Some *rewards* can be obtained with discount *vouchers*, *cash back*, *go-pay coins* and *loyalty points*. The *rewards* obtained can be redeemed when consumers shop on the Tokopedia application. The following is an image of Tokopedia *games*.



Figure 1. Tokopedia Games
Source: Tokopedia.com

Tokopedia games provide a variety of rewards based on the chosen game played. Customers can get different rewards depending on the game they play. Customers can use rewards when they shop at Tokopedia. The method for obtaining rewards from Tokopedia games is also simple, and all games are enjoyable.

Elgarhy, S.D et al., (2023) examined how to determine Gamification's impact on repurchase intentions. Those researchers investigated the impact of Gamification on repurchase intentions at travel agencies and hotels. Through the development of research, Elgarhy, S.D et.al (2023), the researchers added positive emotion as a variable in this study. Tokopedia game objects measure repurchases intentions to entice customers to make online purchases. Indonesia was chosen as the research site due to the yearly enhancement of internet users and digital media platforms. According to We Are Social and Melwater's "Digital 2023" research, Indonesia's total internet users reached 212 million in January 2023. In Indonesia alone, 205 million people used the Internet in January 2022. It demonstrates that Indonesia's internet penetration has reached 77% (212.9 million people).



Figure 2: Internet users in Indonesia
Source: We are social, 2023

Based on data explained by We Are Social (2023) in Indonesia Digital 2023. Tokopedia is one of the most visited websites by Indonesians. The data shows that 141 million people are visiting the Tokopedia website, with an average number of 39.9 million monthly visitors. It also indicates that Tokopedia is one of the most exciting E-Commerce by the Indonesian people.

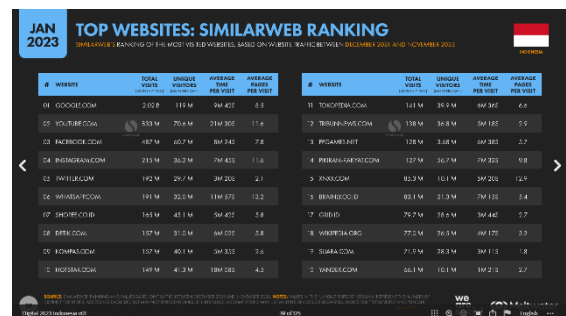


Figure 3. Most visited websites
Source: We are social, 2023

Elgarhy, S.D et al., (2023) also highlighted a particular set of circumstances or limitations constraining the outcomes of their investigation. Elgarhy, S.D et al. (2023) study disclosed that it was conducted solely on travel and hotel agencies and no other objects. Since Elgarhy, S.D et al., (2023) have yet to investigate e-commerce, especially Tokopedia, and positive emotion as an additional variable. Thus, this study can fill the gap and support the previous research. The objectives of conducting this study are as follows:

1. To explain the influence of Gamification on Intrinsic Motivation variables
2. To clarify how Gamification affects the Positive Emotion variable.
3. To describe the impact of Gamification on the variable Customer Engagement.

4. To explore the relationship between the Positive Emotion and Repurchase Intention variables.
5. To describe the relationship between the Customer Engagement and Repurchase Intention variables.
6. To demonstrate how Gamification impacts the Repurchase Intention variable.

2. LITERATURE REVIEW

a. Self-Determination Theory

Self-determination theory (SDT), proposed by Ryan & Deci (2017), is a concept that emphasizes the importance of individual freedom in acting on their choices, as well as the existence of intrinsic motivation within individuals. Vandebos (2008) argued that when individuals are extrinsically motivated and expect external rewards, the results obtained are negative (Vandebos, 2008). Thus, self-determination is vital since humans need to feel competent, as well as a sense of freedom over the decisions they make. In Elgarhy, S.D (2023), intrinsic motivation becomes prominent, boosting control over individuals' repurchase intention. Intrinsic motivation can be used to investigate individual repurchase intentions. Herewith, Self-determination conveyed through Intrinsic motivation was used in research (Elgarhy, S.D (2023) to discover the direct influence of gamification aspects in analyzing repurchase intention

b. E-commerce

According to Laudon & Laudon (2014), e-commerce is a subset of e-business involving online purchases and selling goods and services. This e-commerce technology has decreased the costs of information collection, storage, processing, and communication while increasing information's currency, quality, and timeliness. According to Kotler & Keller (2016), e-commerce uses an app or website medium as a payment method, which is in line with Laudon & Laudon's (2014) statement. Every consumer is compelled to use online media to search for low prices, and there are three aspects of the fact that online retailers include consumers' ability to interact with the website, product delivery, and the capacity to solve existing issues.

c. Gamification

As a strategy for selling a product or service, the concept of gamification has been

utilized extensively, particularly in the field of online business. Automatically encouraging and activating interested users or customers to use the application to achieve specific target points. Kapp (2012) implied gamification as a concept that integrates games, aesthetics, and critical thinking to attract attention, motivate, encourage learning, and solve problems. In addition, Gartner (Burke & Christensen, 2019, p. 13) acknowledged that gamification uses gaming mechanics and user interface design to convince and inspire people to achieve their digital targets.

d. Intrinsic motivation

Intrinsic motivation is the personal urge that comes from within an individual. This motivation generally comes from a person's hopes, goals, and desires. Someone will have the drive to accomplish everything (Luthans et al., 2021). Under Broer & Poepelbuss (2013), the definition of intrinsic motivation relies on the desire to engage in activities. Hence, intrinsic motivation in gamification is a method to expand user engagement and gamification that can increase personal drives such as participation willingness, curiosity, and similar items.

e. Positive Emotion

Emotion is a cognitive response that expresses an individual's state of mind and behavior provoked by particular stimuli that can influence a person's purchasing decisions. According to Ching & Chan (2020), positive emotions include happiness, happy, cheerful, love, and peace. Positivity can improve a person's workplace performance and other activities. Positive emotions involve pleasure, love, liking, enjoyment, contentment, and awareness (Peter & Olson, 2014).

f. Customer Engagement

The presence of new media channels and the increasing popularity of the internet as a result of technological development enables customers to easily interact with other customers and businesses via social media and other media (Evans, 2010, p. 4). Customer engagement refers to the evidence of the interacting experience by customers (Verhoef et al., 2009; Kumar et al., 2017, p. 4). With the engagement relationship, customers' dissatisfaction with the business's services is believed to decrease (Verhoef et al., 2009). Patterson (2006) signifies customer engagement as the physical, cognitive, and

emotional levels that arise from a company's service.

g. Repurchase Intention

Peterson, discussed in Wilson & Keni (2018, p. 295), indicates Repurchase Intention as the intention, desire, or intention of consumers to make a second or subsequent purchase from the same company. Kotler & Keller (2016) defines repurchase Intention as a post-purchase consumer attitude toward a product that influences how they act afterward. Moreover, Hellier et al., (2015) noted that repurchase intention is the process by which an individual intends to repurchase similar goods or services based on previous purchasing experiences.

The research model Elgarhy, S.D (2023) created is also utilized in this study. Researchers use a few of the same variables as Elgarhy, S.D (2023) involving Gamification, Customer Engagement, Intrinsic Motivation, and Repurchase Intention. Researchers use Positive Emotion to measure Repurchase Intention, yet Elgarhy, S.D (2023) did not. Following the theoretical framework and research outcomes derived from prior researchers. This study's theoretical model is illustrated as follows:

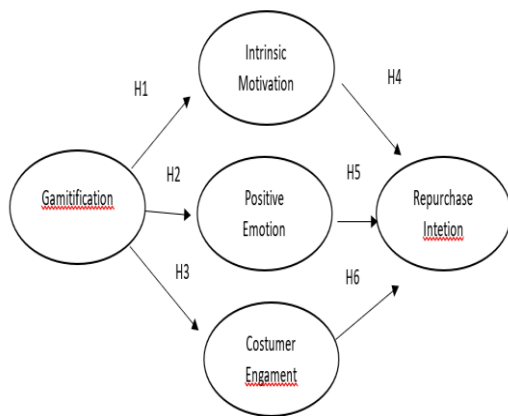


Figure 1. Research Hypothesis Model

Source: Primary data processed, 2023

H1: Gamification Relationship towards Intrinsic Motivation

Mekler et al., (2017) researched the impact of individual game features on user motivation. They investigated the effect of points, levels, and leaderboards on intrinsic motivation while considering users' causal orientation. According to the findings, "game elements did not significantly influence competence or intrinsic

motivation, regardless of the participants' causal orientation" (Mekler et al., 2017). In the context of this study, games in play are games on Tokopedia. It can alter intrinsic motivation regarding an individual's natural desire to play (Bravo et al., 2021; Volchek, 2022). Indeed, gamified apps are regarded as a low-level game mechanism, with the example of its application, namely games based on the tourist concept (Yoo et al., 2017).

H2: Gamification Relationship towards Positive Emotion

Kumar et al., (2022) indicated that emotional design also plays a role in gamification, and aesthetics create positive emotions. Moreover, Positive Emotion emphasizes the role of gamification in providing the same psychological experience as the game's general elements (Huotari & Hamari, 2012). Therefore, this study concludes that gamification affects positive emotions. Myers & Spencer (2004) signified that emotions are complex states that result in physical and psychological changes that influence thoughts and behaviors. Consistent with the findings of Mullins & Sabherwal (2020), who discovered a positive relationship between gamification and an individual's emotions. As a result, the relationship between gamification and positive emotion is broken.

H3: Gamification Relationship towards Customer Engagement

Harwood & Garry (2015), Leclercq et al. (2018), and Eisingerich et al., (2019) investigated prior gamification and customer engagement study. According to the study's findings, a beneficial correlation between gamification and customer involvement was found, meaning that gamification is closely related to customer engagement. Thus, the hypothesis regarding gamification's beneficial influence on customer engagement can be formulated.

H4: Intrinsic Motivation Relationship towards Repurchase Intention

Shang et al., (2005) discovered that intrinsic Motivation is the primary reason customers shop online. Truong & McColl (2011) found that intrinsic Motivation has a negative effect on conspicuous consumption behavior and that

consumers who are primarily motivated by intrinsic values are more likely to avoid acquiring luxury goods. Positive feedback amplifies the dominance of intrinsic Motivation on repurchase intention. It can be used to examine repurchase intent. Intrinsic Motivation is a crucial indicator of emotional engagement through proactive action, which can positively and significantly affect customers' Repurchase Intention to become more frequent (Hon, 2012; Isen & Reeve, 2005; Su et al., 2016). According to the results reported by Hollebeek et al. (2021), gamification programs can significantly affect client purchase intentions through intrinsic Motivation.

H5: Positive Emotion Relationship towards Repurchase Intention

Chebat & Slusarczyk (2005) examined the influence of good and negative emotions on repurchase intentions. The findings of their study revealed that unpleasant emotions indirectly negatively impact consumer loyalty and propensity to repurchase. Further study Jang & Namkung (2009) and Namkung & Jang (2010) found the impact of good and negative emotions. Their findings demonstrated that negative feelings about customer loyalty did not substantially impact customer repurchase intentions. Likewise, Uhrich (2011) found that positive emotional characteristics are good predictors of increased loyalty in his study. Thus, positive emotions have a beneficial impact on the intention to repurchase.

H6: Relationship between Customer Engagement and Repurchase Intention

From Bowden's (2009) Point of View, Customer Engagement comprises commitment, communication, and collaboration in fostering customer loyalty. In line with Pansari & Kumar (2017), the effect of Customer Engagement on repurchase intentions can be measured by the number of interested consumers in the company's offers. One of these experiments is providing rewards for playing games on Tokopedia. Furthermore, Ho & Chung (2020) have also examined the relationship between customer engagement and repurchase intent. The result indicated that consumer engagement has a significant impact on repurchase intent. This

study emphasizes the usage of mobile applications.

3. RESEARCH METHOD

In Indonesia, this research applied explanatory research by integrating the descriptive-quantitative approach. The objective of this research is to evaluate and interpret the data or information gathered due to the current state of circumstances. The participants in this research were Indonesian citizens at least 17 years old.

The minimum age of respondents is at least 17 years old based on the opinion of Suleman (2018), namely that the age of 17 years is an adult age and has been considered legally mature so that respondents are considered to be able to take responsibility and make decisions by themselves. In this study, the following characteristics of the population were determined: (1) At least one respondent has made an online purchase on the Tokopedia marketplace. (2) Respondents have an account on the Tokopedia marketplace. Since this research involves testing games exclusive to the Tokopedia app, establishing these criteria is required. The determination of the sample size is then based on the opinion of Supranto (2001). A good sample size can be determined by calculating the number of questions in the questionnaire and multiplying by five (5) to ten (10). The calculation is 23 statements x 10 = 230. The data collection method in this study uses the E-questionnaire distribution method.

The arguments used to examine gamification are taken from the research carried out in 2021 by Chrisnathaniel et al., The five statement items used by researchers to determine Intrinsic Motivation are adapted from the theory of Herzberg (Luthans, 2011), namely Achievement in playing games, Reward motivates playing games, Non-boring games, Free-play game features, and games that make skills developed. Moreover, positive emotion uses 4 statement items developed by Fredrickson & Levenson (2015). The items of positive emotion are Happy in playing games, satisfaction in playing games, comfortable in playing games, and excitement in playing games.

Based on research indicators compiled by Evan (2010), the following five statement items about consumer engagement have been compiled: Interested in-game features, interest in exploring new games, providing feedback and

recommendations, The game is playable, and there is a sense of accomplishment when playing. This study's repurchase intention can be measured using four research items devised by Keller (2009). These statements include Intent to re-play the game, playable in the future, Making the game the first option, and Intent to re-play due to the game's benefits.

This research implements the Structural Equation Model alongside Variances Based SEM approach, known as Partial Least Square (PLS) analysis. Smart PLS 3.3.2 is used for data analysis software. An outer analysis framework aims to examine the compatibility between variables and measurements. This analysis examines the validity and dependability of variable support based on the value of the loading factor.

Convergent Validity is a reflective criterion in the indicator validity measurement model. Convergent validity can be assessed based on the relevance of loading variables on the constructed variable with its indicators. Discriminant Validity is a measurement model using reflective indicators measured based on cross-loading. Composite Reliability can demonstrate the degree to which common implicit (unobserved) variables are identified, which is valuable for displaying block indicators that quantify the internal consistency of construct-forming variables. SEM-PLS inferential statistical tests are termed the structural model (Inner Model). The significance can be seen through the R-square (R²) value, with a value ≥ 0.67 being a strong influence, ≥ 0.33 indicating a moderate influence, and ≥ 0.19 indicating a weak influence.

4. RESULT

a. Research results

Based on the findings of a study of 230 respondents who filled out questionnaires distributed online via social media to those who had made purchases and utilized applications on Tokopedia. An overview of the characteristics of the respondents surveyed is available.

Table 1. Distribution of Respondents Based on Gender

No.	Gender	Respondent amount	Percentage (%)
1.	Male	127	55,2
2.	Female	103	44,8
Total		230	100

Source: Primary data processed, 2023

Referring to the data above, the majority of respondents who completed the research questionnaire were 103 female respondents, with a percentage of 44.8%, and 127 male respondents, with a percentage of 55.2%. Respondents' participation in filling out the research questionnaire, namely persons who have made purchases and used applications on Tokopedia, is higher among males than females.

Table 2. Distribution by age of respondents

No	Age (Years)	Frequency	Percentage
1	19 - 21	5	2,17
2	22 - 24	12	5,21
3	25 - 27	42	18,26
4	28 - 30	139	60,43
5	31 - 33	26	11,30
6	34 - 36	3	1,30
7	37 - 39	1	0,43
8	40 - 43	2	0,86
Total		230	100%

Source: Primary data processed, 2023

Five respondents were between 19 and 21 years old, accounting for 2,17 %. With a proportion of 5.21%, respondents aged 22 to 24 years were 12 persons. There were 42 respondents aged 25 to 27, accounting for 18.26 %. One hundred thirty-nine respondents aged 28 to 30, with a proportion of 60.43 %. There were 26 respondents aged 31 to 33, accounting for 11.30 %. Three respondents aged 34 to 36 accounted for 1.30 % of the total. One respondent aged 37 to 39 accounted for 0.43 % of the total. Two respondents aged 40 to 43 accounted for 0.86 % of the total. It demonstrates that most responses are between the ages of 28 and 30. The respondents with the least number are aged 37-39 years old. Referring to the data above, the majority of respondents who completed the research questionnaire were 103 female respondents, with a percentage of 44.8%, and 127 male respondents, with a percentage of 55.2%. Respondents' participation in filling out the research questionnaire, namely persons who have made purchases and used applications on Tokopedia, is higher among males than females.

Table 3. Distribution of Respondents Based on Education Level

No	Education Level	Frequency	Percentage (%)
1.	Senior/Vocational high School	34	15
2.	Associate Degree	5	2
3.	Bachelor	165	72
4.	Magister	26	11
Total		230	100

Source: Primary data processed, 2023

The table above demonstrates that the majority of respondents who completed the research questionnaire, namely 230 respondents, have a bachelor's degree with a percentage of 72%, while respondents with the lowest level of education, namely an Associate Degree, number as many as five respondents with a percentage of 2 %. In general, respondents' participation level in completing the research questionnaire, i.e., people who have made purchases and used applications on Tokopedia, is highest among those with a bachelor's degree and lowest among those with a master's degree. Inferential statistical analysis In this study, researchers used a structural model equation by analyzing the entire relationship between variables in a complex manner. This work analyzes the data using the Structural Equation Modeling (SEM) approach with the Partial Least Squares (PLS) path. The analytical tool used is SmartPLS 3.0 software. The results of inferential statistical analysis in this study in detail can be explained as follows.

b. Outer Model Evaluation

External model evaluation in this study is used to evaluate the relationship between latent variables and their indicators. The four latent variables in this study are Gamification, Intrinsic Motivation, Positive Emotion, Customer Engagement, and Repurchase Intention. Findings from the research indicate that the loading factor value of the items as a whole is greater than 0.5, demonstrating that it is proper and that each indicator employed can be used as a measurement instrument. The variable constructs studied are the Gamification variable (X1), Intrinsic Motivation (Y1), Positive Emotion (Y2), Customer Engagement (Y3), and Repurchase Intention (Y4).

c. Discriminant Validity

A variable is declared to meet discriminant validity if it has an AVE value > 0.50. The overall AVE value used in this study has value above 0.5. The following are the results of the Average Variance Extracted (AVE) test.

Table 4. Average Variance Extracted (AVE) Results

Variabel	AVE
Gamification (X1)	0.623
Intrinsic Motivation (Y1)	0,565
Positive Emotion(Y2)	0,641
Customer Engagment (Y3)	0,533
<i>Repurchase Intention</i> (Y4)	0,619

Source: SmartPLS Data Processing Results (2023)

d. Structural Model Evaluation (Inner Model)

Structural model evaluation (Inner Model) aims to quantify the relationship between one variable and others. It can calculate how much information is included in the relationship between variables. The R-Square values for each variable represent the outcomes of analyzing the structural model testing (inner model) using SmartPLS.

Table 5. R-Square Test Result

Variable	R ²	Description
<i>Intrinsic Motivation</i> (Y1)	0,719	Strong
<i>Positive Emotion</i> (Y2)	0,559	Medium
<i>Customer Engagement</i> (Y3)	0,535	Medium
<i>Repurchase Intention</i> (Y4)	0,606	Medium

Source: SmartPLS Data Processing Results (2023)

According to Ghozali & Latan (2020), the inferential statistical test is referred to as the structural model (Inner Model) when employing the SEM-PLS. It can be observed via the R-square (R²) value; 0.67 indicates a strong influence, 0.33 is a moderate influence, and 0.19 is a weak influence. Meanwhile, based on research results, the Intrinsic Motivation (Y1) variable has the greatest influence among several other variables. The variables Positive Emotion (Y2), Customer Engagement (Y3), and Repurchase Intention (Y4) have a moderate impact.

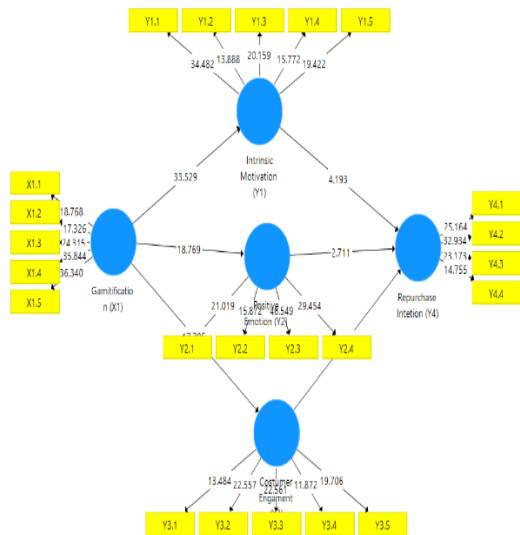


Figure 4. Results of the Hypothesis Model
Source: SmartPLS Data Processing Results (2023)

The probability value and t-statistic are utilized to test the null hypothesis. If the p-value is less than 0.05 and the t-count value is greater than the t-table value of 1.960, the results of these calculations are considered significant. The research findings supported this idea. Hence the research hypothesis can be approved. The findings of using the bootstrapping approach aim to evaluate the study hypothesis derived from the structural model equation.

Table 6. Hypothesis Testing Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O /STDEV)	P Values
X1 ->Y1	0,851	0,851	0,022	38,190	0,000
X1 ->Y2	0,758	0,758	0,035	21,897	0,000
X1 ->Y3	0,731	0,731	0,039	18,928	0,000
Y1 ->Y4	0,302	0,302	0,075	4,030	0,000
Y2 ->Y4	0,159	0,158	0,068	2,348	0,019
Y3 ->Y4	0,397	0,398	0,062	6,371	0,000

Source: SmartPLS Data Processing Results (2023)

The path coefficient value of the Gamification variable (X1) on Intrinsic Motivation (Y1) is 0.851, with a t-count of 38,190 and a p-value of 0.000, based on the findings of this study. This value demonstrates that Gamification (X1) substantially benefits Intrinsic Motivation (Y1). The Gamification variable (X1) on Positive Emotion (Y2) has a value of 0.758, a t-count of 21,897, and a significance level of 0.000. It demonstrated an advantageous and statistically significant effect on the Gamification variable (X1) and Positive Emotion (Y2).

The Gamification variable (X1) on Customer Engagement (Y3) has a value of 0.731 with a t-count of 18,928 and a p-value of 0.000, according to the third set of test results. These results indicate a positive and statistically significant relationship between Gamification (X1) and Customer Engagement (Y3). The Intrinsic Motivation (Y1) variable on Repurchase Intention (Y4) has a value of 0.302 with a calculated value of 4,030 and a p-value of 0.000, as shown in the table above. The results provided in the table above indicate a positive and statistically significant relationship between Intrinsic Motivation (Y1) and Repurchase Intention (Y4). Further research indicates a positive and significant relationship between the Positive Emotion variable (Y2) and Repurchase Intention (Y4) and the Customer Engagement variable (Y3) and Repurchase Intention (Y4). It can be demonstrated when the p-value is less than 0.05, and the t-count exceeds the t-table value of 1.960.

5. DISCUSSION

The discussion of the results of this study includes a more complete understanding and descriptive analysis of each variable. Discussion of the effect of the results of testing the research hypothesis will also be described in more detail. The discussion can be described in detail as follows.

a. The Gamification Effect towards Intrinsic Motivation.

Researchers have found that Gamification (X1) significantly increases Intrinsic Motivation (Y1) after controlling for other variables. The findings of this research indicate that Gamification, taken as a whole, has a large and beneficial impact on individuals' innate motivations. Both Mekler et al. (2017) and Pasca et al., (2021) share the same view on the reliability of the outcomes of the studies. In the context of this study, a game on Tokopedia represents the application of "game thinking" in gaming. Since it has to do with people's innate urge to play, it can have a global effect on the intrinsic drive.

b. The Gamification Effect towards Positive Emotion

Emotions are frequently defined as complex states of emotion that result in physical and psychological alterations that influence a person's thoughts and behavior. The findings of

this study indicate that gamification has a significant and positive effect on positive emotions. Mullins & Sabherwal (2020) reached the same conclusion in their investigation. Gamification has a direct and significant effect on a person's emotional state. Tokopedia will provide consumers with an engaging experience, such as creating a game that evokes feelings of happiness in the player.

c. The Gamification Effect towards Customer Engagement.

In this study, researchers' findings showed a positive and crucial relationship between Gamification variables and Customer Engagement. These findings are consistent with those of Harwood & Garry (2015), Leclercq et al., (2018), and Eisingerich et al., (2019). The findings of these studies revealed that gamification positively influences consumer engagement. The gamification features of Tokopedia are presently utilized and favored by users. Thus, it endeavors to encourage consumers to continue utilizing the Tokopedia application.

d. Effect of Intrinsic Motivation Towards Repurchase Intention

The intrinsic motivation component of Self-determination theory (SDT) states that people have intrinsic motivation that can be manifested in their curiosity-based behavior. The results of this study have shown that Intrinsic Motivation has a positive and significant effect on Repurchase Intention. This study's results align with the results of research (Hon, 2012; Isen & Reeve, 2005; Su et al., 2016). Furthermore, the study coined by Hollebeek et al., (2021) has proven that gamification programs through intrinsic motivation can positively influence customer repurchase intentions.

e. The Effect of Positive Emotion towards Repurchase Intention

Emotional reactions play a significant role in buyer-seller communication. Positive Emotion has a positive and significant influence on Repurchase Intention, following the findings of a study conducted by researchers at this time. These outcomes align with those of Jang & Namkung (2009) and Namkung & Jang (2010). In addition, Uhrich (2011) concluded from his research that positive emotion variables

effectively predict brand loyalty, particularly regarding repurchase intentions.

f. The Effect of Customer Engagement towards Repurchase Intention

Researchers applied the game that Tokopedia coined to determine the direct relationship between Customer Engagement and Repurchase Intention. Following Ho & Chung (2020), this study's findings indicate a positive and statistically significant relationship between Customer Engagement and Repurchase Intention. The findings of this study revealed that customer engagement has a substantial impact on repurchase intent, and it focuses on mobile application usage or mobile application usage.

6. CONCLUSION AND RECOMMENDATION

Conclusions

On each study variable, based on the outcomes of the discussion given in the preceding chapter. In this investigation, the following conclusion can be taken:

1. Gamification has a significant and favorable effect on intrinsic motivation. It has demonstrated that games on Tokopedia can directly impact customers' intrinsic motivation. Giving out rewards, in particular, can encourage people to play games. These incentives can be used to make purchases on Tokopedia.
2. Gamification has a direct and significant impact on influencing good emotions. According to this study's findings, Tokopedia can install joy and contentment in customers who play games on Tokopedia.
3. The third conclusion is that the Gamification variable positively and significantly affects Customer Engagement. Tokopedia may directly develop interactions with customers through games. In this scenario, it is about retaining loyalty so that they continue to utilize Tokopedia for online purchasing.
4. Intrinsic Motivation has a strong and favorable influence on Repurchase Intention. Positive feedback reinforces the dominance of intrinsic motivation over repurchase intention. Tokopedia offers users options in using its game elements, particularly when they win matches in a game and receive incentives that may be used to spend at Tokopedia.

5. Positive Emotion has a large and positive influence on Repurchase Intention. Emotional reactions are vital in the communication between buyers and sellers; in this scenario, Tokopedia can generate good emotions to generate repurchase intents for products offered on the Tokopedia storefront.
7. Customer Engagement has a positive emotion and considerable influence on Repurchase Intention. Customers who actively engage through game features tend to make purchases more frequently. They are driven by the challenges and rewards within the game to continue their interactions and make repeat purchases.

Recommendations

Based on the preceding observations, various beneficial recommendations can be made to Tokopedia and other parties. The following is an explanation of the suggestions in this study:

1. Tokopedia can improve customer service once more, especially in the use of increasingly inventive games in the future. Thus, the favorable feelings generated by the Tokopedia game might be even more effective in influencing consumer repurchase intentions.
2. Further researchers can create game-related research models. Since this study did not include key research factors that assess user satisfaction with the game application, thus, future research may be conducted to assess the level of convenience with which games may be played in the Tokopedia application.

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Appendix 1. Measurement Scales

Variabel	Item Code	Item	Source
Gamification (X¹)	X1.1	Collecting coins in the app is highly intriguing	Chrisnathaniel, et al., (2021)
	X1.2	Completing mission by tackling games challenges	
	X1.3	Challenge yourself in the game to reach the leaderboard	
	X1.4	Completing missions by tackling game challenges	
	X 1.5	Playing games can provide reward	
Intrinsic Motivation (Y¹)	Y1.1	The desire to have achievement in playing games	Luthans (2011)
	Y1.2	The provision of rewards can serve as motivation to play games	
	Y1.3	Playing games in the application is not boring	
	Y1.4	Providing flexibility in playing games	
	Y1.5	Playing games in the application can develop skills	
Positive Emotion (Y²)	Y2.1	Feeling interested in playing games	Fredrickson & Levenson (2013)
	Y2.2	Feeling happy while playing games	
	Y2.3	Feeling excitement while playing games	
	Y2.4	Feeling entertained while playing games	
Costumer Engagement (Y³)	Y3.1	Intrigued by the presence of games in the applications	Evan, (2010)
	Y3.2	Enthusiastic about trying out new games released in the application	
	Y3.3	Willing to participate in exciting promotional programs	
	Y3.4	Better understanding costumer needs	
	Y3.5	Frequentl opening the application during leisure time	
Repurchase intention (Y⁴)	Y4.1	Chossing it again as the preferred online transaction platform	Keller (2009)
	Y4.2	Endorsing it as the ultimate online shopping destination	
	Y4.3	Emerging as the choice among other online shopping apps	
	Y4.4	Using the app again due to its abundance of appealing rewards and promotions	