

THE EFFECT OF PERCEIVED VALUE, CUSTOMER ENGAGEMENT, AND SOCIAL INFLUENCE ON PURCHASE INTENTION OF VIRTUAL ITEMS IN MOBILE LEGENDS: BANG BANG AMONG GENERATION Z

THE EFFECT OF PERCEIVED VALUE, CUSTOMER ENGAGEMENT, AND SOCIAL INFLUENCE ON PURCHASE INTENTION OF VIRTUAL ITEMS IN MOBILE LEGENDS: BANG BANG AMONG GENERATION Z

By:
Prilly F. C. Tene¹
Willem J. F. A. Tumbuan²
Emilia M. Gunawan³

¹²³International Business Administration, Management Department
Faculty of Economics and Business
Sam Ratulangi University Manado

E-mail:

¹prillyferent@gmail.com

²alfa.tumbuan@unsrat.ac.id

³emilia_gunawan@unsrat.ac.id

Abstract: Despite its popularity, Mobile Legends has experienced a decline in in-app purchase revenue since 2021, emphasizing the need to understand the factors effecting purchase intentions among players especially Z Generation as the primary target market due to their high engagement with gaming and prone to spending on virtual items. This study aims to know the effect of perceived value, customer engagement, and social influence on purchase intention of virtual items in Mobile Legends among Gen Z. Utilized a quantitative research method through an online questionnaire targeted at Generation Z used purposive sampling method with a sample of respondents 107 Mobile Legends players across Indonesia and were analyzed using multiple linear regression. This study indicated that perceived value, customer engagement, and social influence had a significant positive effect on the purchase intention of virtual items Mobile Legends among Generation Z, both partially and simultaneously.

Keyword: Perceived Value, Customer Engagement, Social Influence, Purchase Intention

Abstrak: Terlepas dari popularitasnya, Mobile Legends telah mengalami penurunan pendapatan pembelian dalam aplikasi sejak tahun 2021, menekankan perlunya untuk memahami faktor-faktor yang mempengaruhi niat membeli di kalangan pemain khususnya Generasi Z yang menjadi target pasar utama karena tingginya keterlibatan mereka dengan game dan cenderung mengeluarkan uang untuk membeli barang-barang virtual. Penelitian ini bertujuan untuk mengetahui pengaruh nilai yang dirasakan, keterlibatan pelanggan, dan pengaruh sosial terhadap niat membeli item virtual di Mobile Legends di kalangan Gen Z. Menggunakan metode penelitian kuantitatif melalui kuesioner online yang ditargetkan pada Generasi Z dengan menggunakan metode purposive sampling dengan sampel responden sebanyak 107 pemain Mobile Legends seluruh Indonesia dan dianalisis menggunakan regresi linier berganda. Penelitian ini menunjukkan bahwa nilai yang dirasakan, keterlibatan pelanggan, dan pengaruh sosial berpengaruh positif signifikan terhadap niat pembelian item virtual Mobile Legends di kalangan Generasi Z, baik secara parsial maupun simultan.

Kata Kunci: Persepsi Nilai, Keterlibatan Pelanggan, Pengaruh Sosial, Niat Membeli

INTRODUCTION

Research Background

In mid-2016, Shanghai Moonton Technology Company from China, a subsidiary of Bytedance released a mobile version of the Multiplayer Online Battle Arena (MOBA) game called Mobile Legends: Bang Bang (MLBB) aka Mobile Legends played by 2 teams consist of 5 members for each team based on heroes killing enemy heroes and focus destroying the enemy turrets to win the game. In 2023, Mobile Legends generated revenues of around \$32 million US dollars in Indonesia, making it the most popular MOBA online multiplayer battle arena game program based on revenue during 2023. But since 2021 Mobile Legends in-app purchase

revenue worldwide has decreased cumulatively to 180.41 million U.S. dollars in 2023 (Statista.com 2024). This underscores the significance of competition for attracting the purchase intention of Generation Z as the primary target market in today's gaming landscape. Generation Z has grown up in a digital era characterized by technological advances so they have a high interest in playing games. This makes them a potential audience for MOBA games and also this situation affects their character who easily loses focus and easily distracted by new things.

Mobile Legends operate on a "Free-to-Play" (F2P) model, where the game itself is free to anyone who wants to download and play it, but players can spend money on optional items. This model can attract a larger player base, as entry is barrier-free, and players can choose to invest money based on their engagement level and preferences. Virtual currencies, such as diamonds in Mobile Legends, create virtual economies within the game. The virtual economic phenomenon in online games has become a significant business model in the video game industry including Mobile Legends, where virtual items are no longer only useful in games but also become promising assets to be traded between players.

Purchase Intention in general is a person's desire or awareness to purchase a product or service. Purchase Intention in virtual items is the intention or desire of an online game player to buy special items used in cyberspace to play online games themselves or ones called virtual comes from being satisfied with an object and trying to get the items with money or sacrifice (Bastian, 2015). The existence of purchase intention for virtual items is an important thing for game developers and marketers to pay attention to because the higher the purchase intention, the greater the possibility of players buying virtual goods and strengthening their gaming experience (Lengkong, Ogi, and Kawet, 2024).

Perceived value is a factor in purchase intention of virtual items in Mobile Legends where players expect to get value or benefits they believe they will get from purchasing virtual items. In this context, Perceived Value is closely related to interest in purchasing virtual items because players assess the emotional, functional and social value obtained from these items when players feel that these values are worth or exceed the costs.

Customer Engagement is the maintenance of marketers' relationships with customers in an effort to create, build and improve relationships involving emotional and intellectual connections so that customers want to participate in product purchases. Customer engagement refers to the level of involvement, interaction, and commitment that players have with the game. Customer Engagement in Mobile Legends is closely related to Purchase Intention because a high level of engagement in the game tends to produce positive experiences that strengthen emotional ties with the game or its community and interaction with fellow players which ultimately can increase their interest in making in-game purchases, both to improve their playing experience and to obtain exclusive prizes or other benefits offered by the provider game.

Social Influence refers to how the actions, opinions, and recommendations of others impact an individual's decision-making process. A social group can influence individuals through information that someone believes, which activates the emotional side of that person. Intense coverage and the attractiveness of various pro players can encourage social considerations of consumers because social influence can shape individual perceptions of something. When someone sees that people they respect or trust own or recommend a product, they are more likely to imitate that behavior, which can increase their Purchase Intention. The social role influences the increase in Purchase Intention related to the perceived value of certain virtual products because they are considered important to generate purchase intention (Tjokrosaputro and Cokki, 2020).

Research Objectives

1. To know the effects of perceived value, customer engagement, and social influence towards purchase intention.
2. To know the effect of perceived value towards purchase intention.
3. To know the effect of customer engagement towards purchase intention.
4. To know the effect of social influence towards purchase intention.

LITERATURE REVIEW

Purchase Intention

Kotler and Keller (2012) defined purchase intention is a decision to buy a product among various other product. Purchase intention arises through a series of processes, including: recognizing needs, searching for information, evaluating information, and finally a buying interest will arise in the customer. Purchase intention of virtual items refers to the players desire to obtain particular items through virtual transactions (Sambe and

Perceived Value

Miao et al., (2021) stated that customer impressions of products and services are known as perceived value and are an important component of trade transactions. In addition, the "difference between what customers provide and what benefits consumers get" is what is meant by perceived value. According to Kotler and Armstrong (2014), Perceived Value is a customer's evaluation of the difference between all the benefits and all costs of marketing an offer relative to other competitors' offers.

Customer Engagement

Mahendra (2021) defined engagement is an effort to create, build and improve relationships involving emotional and intellectual connections so that customers want to participate. Meanwhile So et al. (2016) defined Customer Engagement as a customer's personal connection to a brand as manifested in cognitive, affective, and behavioral responses outside of the purchase.

Social Influence

According to Wang and Chou (2014), social influence refers to how other people influence a person's behavioral decisions. Social influence itself is more likely to be interpreted as the influence that a person has on other people, so that other people are interested in the product that someone has (Cristina and Dwiarta, 2022:305). Guo and Barnes (2007) stated that social influence is a strong predictor of the behavioral intentions of players purchasing virtual items, especially for players new to the virtual gaming community.

Empirical Studies

Purnami and Agus (2021) investigated the effect of perceived value and mobile game loyalty on in-app purchase intention using case study male dominated game and female dominated game Design/methodology/approach: Conslusive descriptive research using Structural Equation Modelling Two-way approach Research Findings: It is found that on male dominated game and female dominated game economic value, social value, and game loyalty significantly influence in-app purchase intention. While on male dominated game loyalty is influenced by emotional values, social values and economic values. On the other hand, loyalty in female dominated game is influenced by emotional value, quality value, social value, and economic

Sambe and Haryanto (2021) generated a new perspective that describes purchase intention on virtual goods in Massively Multiplayer Online Social Games (MMOSG), Audition, in Indonesia. This research is done through a survey by using a questionnaire that acquired 200 Audition players as respondents. The data processing used is structural equation modelling. Results of the study show factors that significantly influence purchase intention on virtual goods are social influence and aesthetics in which purchase intention affects actual purchase behaviour, while price utility and satisfaction do not influence purchase intention.

Annisa and Juwita (2023) identified how perceived price, perceived value, and social influence affect the intention of undergraduate students of Faculty of Economics and Business of Universitas Brawijaya to purchase Spotify's premium service. This explanatory research explains and corroborates the relationship between the dependent and the independent variables. The research samples were selected using purposive sampling; they are 150 undergraduate students of the said faculty who uses Spotify's free application. The data was harvested from Google Forms questionnaires distributed online. The results of the multiple linear regression analysis performed in SPSS ver. 25 have led to findings that perceived price, perceived value, and social influence positively and significantly affect the purchase intention.

Research Hypothesis

H₁: Perceived Value, Customer Engagement, and Social Influence affects Purchase Intention positively.

H₂: Perceived Value affect Purchase Intention positively.

H₃: Customer Engagement affect purchase intention positively.

H₄: Social influence affect purchase intention positively.

Conceptual Framework

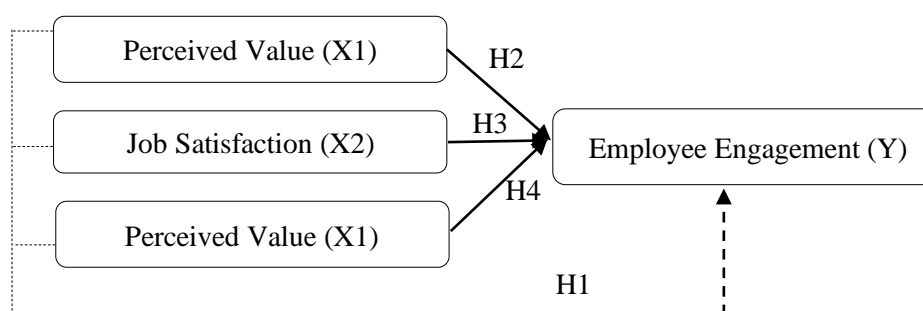


Figure 1. Conceptual Framework

Source: Literature Review

RESEARCH METHOD

Research Approach

This study uses quantitative research methods specifically a survey approach. The survey approach utilizes a questionnaire as the research instrument and the researcher does not manipulate the research conditions during its implementation. The questionnaire is a document featuring a standardized structure with multiple questions (Kusumastuti, Khoiron, and Ahmadi 2020).

Population and Sample Size

In line with the research focus, the researcher concludes that the population meeting the criteria is generation Z who play Mobile Legends and interested in making a purchase on virtual items. However, the exact number of this population is not yet known, so the researcher employs the Lemeshow formula to determine the required sample size. Based on the calculations, the sample size is 96, however, the researcher will take 107 respondents as the sample for research purposes.

Data Collection Method

This study is using primary data. Primary data refers to newly collected and original information obtained by the researcher from its source, which has not been previously gathered (Duli, 2019). The primary data was collected by distributing a questionnaire containing a set of questions aimed at gathering information from the participants that is pertinent to the research topic.

Operational Definition and Measurement of Research Variable

Table 1. Definition of Research Variables

Variables	Definition	Indicators
Perceived Value (X_1)	Perceived Value is a customer's evaluation of the difference between all the benefits and all costs of marketing an offer relative to other competitors' offers. (Kotler and Armstrong, 2014)	1. Emotional value, 2. Price value, 3. Performance/Quality value, 4. Social Value (Sweeney and Southar, 2001)
Customer Engagement (X_2)	Customer Engagement is a customer's personal connection to a product as manifested in cognitive, affective, and behavioral responses outside of the purchase (So et al., 2016).	1. Enthusiasm, 2. Attention, 3. Absorption, 4. Interaction, 5. Identification (So et al., 2016)
Social Influence (X_3)	Social influence tends to be defined as the influence that a person has on other people, so that other people are interested in the product that someone has (Cristina and Dwiarta, 2022).	1. Influence of significant others, 2. Influence of society/community, 3. Influence of preferred opinions (Venkatesh et al., 2003)

Purchase Intention (Y)	Purchase intention is a consumer's willingness or desire to purchase a particular product or service based on one's need, choice, or attitude towards a product and the evaluation made by the individual (Tjokrosaputro and Cokki, 2020).	<ol style="list-style-type: none"> 1. Transactional interest, 2. Referential interest, 3. Preferential interest, 4. Explorative interest (Ferdinand, 2002:129)
------------------------	--	--

The measurement scale that used in this research to understand the respondents' attitudes toward statements or questions in the questionnaire, the researcher used the Likert scale. It is a 6-point scale that is considered to measure the degree of agreement.

Testing of Research Instruments

A validity test is used to measure whether the questionnaire is valid or not. A questionnaire is considered valid if the questions can reveal something that will be measured by the questionnaire. The questionnaire is considered valid if the r_{count} greater than the r_{table} value and the P-value/significance value is less than 0.05 (5%) (Duli, 2019). The r_{table} value used depends on the number of respondents and the level of confidence established in the research.

Reliability refers to the accuracy and precision of a measurement procedure, indicating its consistency in producing reliable results. Cronbach's Alpha value is used to assess this consistency. A variable is said to be reliable if it provides a Cronbach Alpha value of more than 0.60. The closer the alpha value is to 1, the more reliable the data reliability value (Duli, 2019).

Data Analysis

Data analysis is the process of transforming data into a simpler and readable. Data analysis involves transforming data into a simpler, more readable, and interpretable format. The collected data will undergo analysis, employing classical assumption tests such as normality, multicollinearity, and heteroscedasticity tests. Following these tests, the data will be subjected to multiple linear regression analysis.

Classical Assumption Test

Normality Test

The normality test is a statistical assessment that aims to test whether in the regression model the observed dependent and independent variables are normally distributed or not (Sunyoto 2012). If significance is $> 5\%$ then the data is considered normal, and if significance $< 5\%$ then the data is not normally distributed (Sunyoto, 2012).

Multicollinearity Test

The multicollinearity test aims to test whether there is a correlation among the independent variables. To determine the presence of multicollinearity symptoms in a regression model, the evaluation is typically carried out through measures such as tolerance value and variance inflation factor (VIF). If the tolerance value is > 0.1 and the VIF value is < 10 , then multicollinearity does not occur.

Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is inequality in the variance of residuals from one observation to another. A good regression model exhibits homoscedasticity, meaning the variance of residuals is the same across observations. According to Sunyoto (2012), heteroscedasticity does not occur if the scatter plot of data points between ZPRED and SRESID is spread below and above the origin (value 0) on the Y axis and does not show a regular pattern. On the other hand, if the scatter plot of data points shows a systematic pattern, either narrowing, widening, or forming waves, then heteroscedasticity occurs.

Multiple Linear Regression

Regression Equation

Multiple linear regression aims to measure the effect of two or more independent variables (X) on dependent variable (Y). This analysis is conducted to determine whether positive or negative, and to predict the value of the dependent variable when the independent variable is increase or decrease. The results of the multiple linear regression test can be taken from the standardized beta coefficient value, where the data has been standardized with the standard deviation of each variable. In this research, multiple regression analysis is used because the study includes four independent variables. The regression equation in this study is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_n X_n$$

- Y : Purchase Intention
 α : Constant, the value of α indicates the value of Y when X= 0
 X_1 : Perceived value
 X_2 : Customer Engagement
 X_3 : Social Influence
 $\beta_1, \beta_2, \beta_3$: Regression coefficients of each independent variables
 $\beta_n X_n$: The regression coefficient (β_n); and the nth independent variable (X_n)

Hypothesis Testing

T-Test (Partial Test)

The t-test is utilized to determine the extent of influence that independent variables have on the dependent variable in a regression analysis, with a significant level of 0.05. The hypothesis acceptance criteria are as follows:

- H_0 : Probability > significance level of 0.05, indicating that the independent variables do not have an impact on the dependent variable.
- H_a : Probability < significance level of 0.05, indicating that the independent variables have an impact on the dependent variable.

F-Test (Simultaneously Test)

The F-test is used to test the significance of the overall equation that determines the combined influence of the independent variables on the dependent variable in a regression analysis with a significant level of 0.05. The result of the test is as follows:

- H_0 : Probability > significance level of 0.05, indicating that the independent variables do not have an impact on the dependent variable.
- H_a : Probability < significance level of 0.05, indicating that the independent variables have an impact on the dependent variable.

RESULT AND DISCUSSION

Result

Validity and Reliability Test

Table 2. Validity Test Result

Variable	Item	r_{count}	r_{table}	Result
Perceived Value (X_1)	x1.1	0.815	0.1900	Valid
	x1.2	0.727	0.1900	Valid
	x1.3	0.769	0.1900	Valid
	x1.4	0.642	0.1900	Valid
Customer Engagement (X_2)	x2.1	0.739	0.1900	Valid
	x2.2	0.743	0.1900	Valid
	x2.3	0.727	0.1900	Valid
	x2.4	0.694	0.1900	Valid
Social Influence (X_3)	x2.5	0.696	0.1900	Valid
	x3.1	0.789	0.1900	Valid
	x3.2	0.916	0.1900	Valid
	x3.3	0.901	0.1900	Valid
Purchase Intention (Y)	Y1	0.824	0.1900	Valid
	Y2	0.762	0.1900	Valid
	Y3	0.841	0.1900	Valid
	Y4	0.806	0.1900	Valid

Source: Data Processed using SPSS 29, 2024

In this study, the questionnaire data consists of 107 samples. The formula $df = n - 2$ is used to find the data point, resulting in $df = 107 - 2 = 105$. Based on this degree of freedom calculation, the r-table value for this study is 0.1900. Using a significance level (α) of 5% or 0.05, the validity testing results show that the r-count is > the r-

table. Therefore, it can be said that each item of the Perceived value (X1), Customer Engagement (X2), Social Influence (X3), and Purchase Intention (Y) variables are valid for use as measurement instruments in this study.

Table 3. Reliability Test Result

Variable	Cronbach's Alpha	Critical Value	Annotation
Perceived Value (X1)	0.700	0,60	Reliable
Customer Engagement (X2)	0.768	0,60	Reliable
Social Influence (X3)	0.840	0,60	Reliable
Purchase Intention (Y)	0.818	0,60	Reliable

Source: Data Processed from SPSS, 2024

By using Cronbach's alpha coefficient value (> 0.60), the results obtained from the reliability testing for the Perceived value (X1), Customer Engagement (X2), Social Influence (X3), and Purchase Intention (Y) are considered reliable as the cronbach's alpha > 0.60 .

Classical Assumption Test

Normality Test

Table 4. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		107
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.27275978
Most Extreme Differences	Absolute	.054
	Positive	.028
	Negative	-.054
Test Statistic		.054
Asymp. Sig. (2-tailed) ^c		.200 ^d

Source: Data Processed from SPSS 29, 2024

In this research, One-Sample Kolmogorov-Smirnov Test indicates the significance value (p-value) is 0.200. According to the criterion $0.200 (20\%) > 0.05 (5\%)$, it can be concluded that the data in this study is normally distributed.

Multicollinearity Test

Table 5. Multicollinearity Test Result

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Perceived Value (X1)	.498	2.009
Customer Engagement (X2)	.294	3.400
Social Influence (X3)	.407	2.458

Source: Data Processed from SPSS 29, 2024

If the tolerance value (α) is > 0.1 and the VIF < 10 , then there is no multicollinearity issue with the independent variables in this research. The tolerance value for Perceived Value (X1) is 0.498, Customer Engagement (X2) is 0.294, and Social Influence (X3) is 0.407. Meanwhile, the VIF value for each variable is 2.009 (X1), 3.400 (X2), and 2.458 (X3). With the tolerance values (α) of each independent variable > 0.1 and VIF < 10 , it can be concluded that there is no multicollinearity issue in this study.

Heteroscedasticity Test

The Scatterplot Graphtest is applied in this research. According to Sunyoto (2012), heteroscedasticity does not occur if the scatter plot of data points between ZPRED and SRESID is spread below and above the origin (value 0) on the Y axis and does not show a regular pattern. On the other hand, if the scatter plot of data points shows a systematic pattern, either narrowing, widening, or forming waves, then heteroscedasticity occurs.

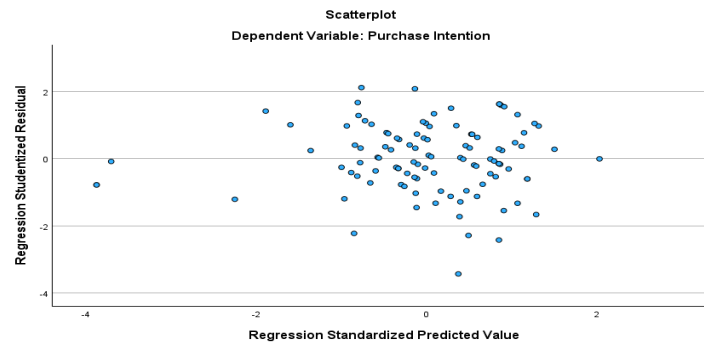


Figure 1. Heteroscedasticity Test Result

Source: Data Processed from SPSS, 2024

Multiple Linear regression

Table 6. Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
1 (Constant)	1.964	1.203	
Perceived Value (X ₁)	.518	.090	.474
Customer Engagement (X ₂)	.178	.088	.218
Social Influence (X ₃)	.237	.100	.217

Source: Data Processed from SPSS, 2024

The structural equation model we can draw several conclusions:

$$Y = 1.964 + 0.518X_1 + 0.178X_2 + 0.237X_3$$

1. The constant value (α) before the influence of independent variables is 1.964.
2. The regression coefficient value for the Perceived Value (X₁) is 0.518, meaning that if X₁ increases, Y will increase by 0.518.
3. The regression coefficient value for the Customer Engagement (X₂) is 0.178, indicating that if X₂ increases, Y will increase by 0.178.
4. The regression coefficient value for the Social Influence (X₃) is 0.237, indicating that if X₃ increases, Y will increase by 0.237.

Hypothesis Testing

T-test (Partial Hypothesis Testing)

Table 7. T-test (Partial Hypothesis Testing)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.964	1.203		1.633	.106
Perceived Value (x ₁)	.518	.090	.474	5.749	<.001
Customer Engagement (x ₂)	.178	.088	.218	2.030	.045
Social Influence (x ₃)	.237	.100	.217	2.380	.019

Source: Data Processed from SPSS, 2024

The calculation results indicate that the t-table value is 1.98326. As seen in Table 9, the partial hypothesis test results show a significance value for the Perceived Value (X₁) of $<0.001 < 0.05$ and t-value = 5.749 > 1.98326 t-table. It can be concluded that Perceived Value has positive and significant effect on Purchase Intention (Y). The hypothesis test for Customer Engagement (X₂) shows a significance value of $0.045 < 0.05$ and t-value = 2.030 > 1.98326, indicating that Customer Engagement has positive and significant effect on Purchase Intention (Y). The

hypothesis test for Social Influence (X3) shows a significance value of $= 0.019 < 0.05$ and $t\text{-value} = 2.380 > 1.98326$, indicating that Social Influence has positive and significant effect on Purchase Intention (Y).

F-test (Simultaneously Hypothesis Testing)

Table 8. F-test (Simultaneously Hypothesis Testing)

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1025.660	3	341.887	64.314	<.001 ^b
Residual	547.536	103	5.316		
Total	1573.196	106			

Source: Data Processed from SPSS, 2024

These results indicate that the f-count is greater than the f-table and has a significance value of <0.001 which is less than 0.05. Consequently, this leads to the rejection of the null hypothesis (H_0) and acceptance of the alternative hypothesis (H_a). This indicates that Perceived value (X1), Customer Engagement (X2), and Social Influence (X3) together have a significant influence on Purchase Intention (Y) as indicated by the results of the F-test. So it can be concluded that Hypothesis 1 accepted which means that Perceived Value, Customer Engagement, and Social Influence simultaneously affect Purchase Intention.

Discussion

The Effect of Perceived Value on Purchase Intention

Based on the tests that have been carried out, the results show that perceived value has a positive and significant effect on Purchase Intention. This means H_2 is supported which indicates that Perceived Value affect Purchase Intention among generation z. This finding supported with previous research by Farhan and Marsasi (2023) demonstrates that perceived value strongly impacted to purchase intention's customer. Purchase intention will increase if the perceived value of the customer is considered good, this implies that the perception of the customer of the virtual items in Mobile Legends: Bang Bang is very good and in line with customer expectations. Miao et al., (2021) stated that perceived value is a important component of trade transactions because it determines how much a customer is willing to pay for a product or service and whether they will continue to engage with a brand over time. In this study found that there are 74 male or 69.2% while female totaled 33 or 30.8% of the total respondents, it means that the majority of respondents are male gamers totaling who spend more money and time for Mobile Legends: Bang Bang than female gamer. This finding supported with previous research by Purnami and Agus (2021) stated that male gamers spend more money and time for gaming than female gamer and male gamer more experienced in playing game. Based on the responses from the respondents, the highest average score is for question: the virtual item skin Mobile Legends: Bang has an attractive appearance) which is 4.98 in the "very high category". So, this study presumes regarding perceived value, positive emotional experiences such as exclusive skins that provide attractive animations and visual effects can give players feelings of joy due to pride and emotional satisfaction, thereby increasing their desire to purchase. Offering bundles or discounts for purchasing skins or heroes can increase perceived value because it makes players feel like they are getting big benefits at a lower price. Furthermore, skins with an attractive appearance can improve performance in the game because they will make players interested in gaining a competitive advantage so that interest in purchasing virtual items increases. Increased purchasing interest is due to a mindset that encourages players to maintain or increase their status by obtaining more rare or exclusive virtual items because they often gain admiration from other players, thus opening up opportunities to build relationships with other players who admire or respect their achievements. The Mobile Legends: Bang Bang skin with an attractive appearance has a strong appeal, making the performance/quality value indicator in the very high category among other perceived value indicators. The researcher concluded that a customer's purchasing intention increases with how well gen z perceive the value of virtual items.

The Effect of Customer Engagement on Purchase Intention

Based on the results of hypothesis testing, shows that customer engagement has a positive and significant effect on Purchase Intention. This means H_3 is supported, which indicates that Customer Engagement affect positively on Purchase Intention supported with previous study by Khatami Behrouz (2023) which states that engagement of players leads to higher chances of making in-game purchases. Customer engagement is one of the most important things in purchase intention because with good customer engagement, potential customer feel more involved in the brand of a product to be purchased (Clarence and Keni, 2022). Based on the responses from

the respondents, the highest average score is question : the virtual items released by Mobile Legends: Bang Bang suit my interests) which is 4.30 in the “very high” category, it means that in developing virtual items, must consider preferences, trends and values that are appropriate for Generation Z. Customer engagement happens when the customer realizes perceived value from the product or when players get addicted and so entertained by the game that they want to keep playing (So et al., 2016). To drive customer engagement effectively, it is crucial to comprehend the intricacies of the target audience, including their platform navigation habits, preferred content types, and anticipated responses to various content formats (Habib, Hamadneh, and Hassan, 2022). Thus, if people highly engage in MOBA games psychologically and behaviorally, they are more likely to keep playing this game in the future, subsequently, remaining freshness of the game for a long time, and not easily to play alternative games (Kang et al., 2020:86). In researcher opinion, mobile legends has a large and diverse community throughout the world so that customer engagement occurs through various interactions within the community, including discussions about game strategies, sharing experiences, participating in tournaments or community events, and interacting with content created by community. It means that the higher a player's level of engagement, the stronger their sense of affiliation to the game. This can increase their buying interest in obtaining virtual items in Mobile Legends.

The Effect of Social Influence on Purchase Intention

Based on the tests that have been carried out, the results show that Social Influence affect Purchase Intention. This means H₄ is supported Based on Previous research by Sambe and Haryanto (2021) indicates that Social Influence has a positive effect on Purchase Intention. It is found that social interaction in virtual worlds boosts players' intent to purchase virtual items in Audition games, leading them into the purchase process. Given the social nature and technological support across various media, people often influence each other's purchase intentions towards products and services (Annisa and Juwita, 2023). Previous research that has been carried out from Prastio and Rodhiah (2021) also showed that Social Influence has a positive effect on Purchase Intention influenced by friends, family, and preferred opinions. Akbar, Irianto, and Rofiq (2018) also suggests that such interactions are believed to exert social influence, such as competing to become the strongest or wealthiest. With the high number users in online mobile games cause high levels of social interaction in the game, social influence will make users interested in purchasing virtual items in the game to improve their social status (Mäntymäki and Salo, 2013). Researcher presumes that intention in purchasing virtual items affected by social influence because gen z tend to trust recommendations and suggestions from peers and communities who are considered more experienced or have in-depth knowledge of the game, and Generation Z tend to want to fit in with their group and follow what their peers are doing. If the majority of community members use a particular item, there is social pressure such as a direct invitation to buy or an indirect encouragement not to want to lose out on competition or feel behind the trend to participate in purchasing virtual items.

The Effect of Perceived Value, Customer Engagement, and Social Influence on Purchase Intention Simultaneously

Based on the tests that have been carried out, the results shows that Perceived Value, Customer Engagement, and Social Influence simultaneously have an effect on Purchase Intention among generation Z. This means that H₁ is accepted because Perceived value makes virtual items attractive, high customer engagement increases exposure and engagement with the item, and social influence provides the external validation needed to convert interest into purchase. The combination of perceived value, customer engagement, and social influence creates an amplification effect. For example, players who see high value in a particular item and are highly engaged in the game, when encouraged by the community or influencers, will be interested in making a purchase. The combination of these three variables creates a strong incentive for players to purchase virtual items and continue to invest in the game. This means that purchase intention can occur by the effects of perceived value, customer engagement, and social influence through virtual items Mobile Legends: Bang Bang.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the results of research and discussion, it can be concluded that:

1. Based on the results of the study Perceived Value, Customer Engagement, and Social Influence simultaneously have a positive and significant effect, which means Perceived Value, Customer Engagement, and Social Influence affects Purchase Intention to purchase virtual items among Gen Z.

2. Based on the partial result of the research, the Perceived Value variable has a positive and significant effect, this means Perceived Value affects Purchase Intention to purchase virtual items among Gen Z.
3. Based on the partial results of the research, the Customer Engagement variable has a positive and significant effect, this means Customer Engagement affects Purchase Intention to purchase virtual items among Gen Z.
4. Based on the partial results of the research, the Social Influence variable has a positive and significant effect, this means Social Influence affects Purchase Intention to purchase virtual items among Gen Z.

Recommendation

Based on the results of the analysis and discussion and conclusions obtained, there are several suggestions:

1. Developer must continue to create skins and items with detailed designs and stunning visual effects because generation z values aesthetics and uniqueness, so skins that look premium and different will increase the perception of value. And developers must launch skins that match popular themes or current trends to attract players' interest.
2. Developer must continue to ensure there are regular updates that bring new and exciting content, such as skins, events, and new features to keep players interested and engaged. And developers must provide exclusive content, such as sneak peeks of upcoming skins or behind-the-scenes development, to make players more enthusiastic and engaged.
3. Developer collaborates with famous influencers and streamers to promote new skins or events because influencers who are respected by generation Z can increase visibility and purchase interest.
4. Developer use and display positive reviews and testimonials on the official website or social media from satisfied players as part of a marketing strategy to provide strong social proof to attract more players to purchase.
5. Future researchers can do further research related to the variables in this research, and add other variables which was not examined in this study to find out variables that affect Generation Z's interest in purchasing virtual items.

REFERENCES

- Akbar, M.R., Irianto, G., & Rofiq, A. (2018). Purchase Behaviour Determinants On Online Mobile Game In Indonesia. *International Journal of Multicultural and Multireligious Understanding*, 5(6), 16-27. Available at: https://ijmmu.com/public/journals/1/homeHeaderTitleImage_en_US.png. Retrieved on: August 8, 2024.
- Annisa, P., & Juwita, H.A.J. (2023). Pengaruh Perceived Price, Perceived Value, dan Social Influence terhadap Purchase Intention. *Jurnal Manajemen Pemasaran dan Perilaku Konsumen*. Vol. 1, No. 1, 443-453. Available at: <https://jmppk.ub.ac.id/index.php/jmppk/article/view/220>. Retrieved on: August 8, 2024.
- Bastian. (2015). *Pengaruh Kompetensi Karakter, Nilai Virtual Item dan Kepuasan Game terhadap Intensi Pembelian Virtual Item dalam Game Online "Dota II"*. (Skripsi, Universitas Yogyakarta). Available at: https://eprints.uny.ac.id/26428/1/Bastian_11408144047.pdf. Retrieved on: August 8, 2024.
- Clarence, C., & Keni, K. (2022). The Prediction Of Purchase Intention Based On Digital Marketing, Customer Engagement, And Brand Preference. In *Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021)*, 481-486. Available at <https://www.atlantispress.com/proceedings/icebm-21/125974123>. Retrieved on: August 8, 2024.
- Cristina, F.A., & Dwiarta, I.M.B. (2022). Electronic Word Of Mouth dan Social Influenced Yang Berpengaruh Terhadap Minat Pembelian Produk Makeover pada Mahasiswa Fakultas Ekonomi dan Bisnis Universitas PGRI Adi Buana Surabaya. *Journal of Sustainability Bussiness Research (JSBR)*, 3(2), 304-312. Available at <https://jurnal.unipasby.ac.id/index.php/jsbr/article/download/5638/3927>. Retrieved on: August 8, 2024.
- Duli, N. (2019). *Metodologi Penelitian Kuantitatif: Beberapa Konsep Dasar untuk Penulisan Skripsi & Analisis Data dengan SPSS*. Yogyakarta: Deepublish.

- Farhan, G. M., & Marsasi, E. G. (2023). The Influence of Information Quality and Perceived Value on Purchase Intention of Game Shop E-commerce in Generation Z Based on Framing Theory. *Jurnal Pamator: Jurnal Ilmiah Universitas Trunojoyo*, 16(3), 620-631. Available at: <https://journal.trunojoyo.ac.id/pamator/article/view/21160>. Retrieved on: August 8, 2024.
- Ferdinand, A. (2002). *Pengembangan Minat Beli Merek Ekstensi*. Semarang: Badan Penerbit Universitas Diponegoro.
- Guo, Y., & Barnes, S. (2007). Why People Buy Virtual Items In Virtual Worlds With Real Money. *ACM SIGMIS Database: The Database for Advances in Information Systems*, 38(4), 9-76. Available at: https://www.researchgate.net/publication/220628024_Why_People_Buy_Virtual_Items_in_Virtual_Worlds_with_Real_Money. Retrieved on October 8, 2024.
- Habib, S., Hamadneh, N. N., & Hassan, A. (2022). The Relationship Between Digital Marketing, Customer Engagement, And Purchase Intention Via OTT Platforms. *Journal of Mathematics*, 2022. Available at: <https://onlinelibrary.wiley.com/doi/full/10.1155/2022/5327626>. Retrieved on: August 8, 2024.
- Kang, K., Lu, J., Guo, L., & Zhao, J. (2020). How To Improve Customer Engagement: A Comparison Of Playing Games On Personal Computers And On Mobile Phones. *Journal Of Theoretical And Applied Electronic Commerce Research*, 15(2), 76-92. Available at: <https://www.mdpi.com/0718-1876/15/2/14>. Retrieved on: August 8, 2024.
- Khatami, B. (2023). *The Effects of Customer Engagement, Loyalty, and Perceived Value on Purchase Intention of Mobile Game Players*. (Master Thesis, University of Turku Finland). <https://www.utupub.fi/handle/10024/174899>. Retrieved on: August 8, 2024.
- Kotler, P. & Keller, K. (2012). *Marketing Management* (14th ed). Global Edition Pearson Prentice Hall.
- Kotler, P., & Armstrong, G. (2014). *Principles of Marketing* (15th ed.). New Jersey: Pearson Prentice Hall.
- Kusumastuti, A., Khoiron, A. M., & Ahmadi, T. A. (2020). *Metode Penelitian Kuantitatif*. Grup Penerbit CV Budi Utama.
- Lengkong, A. R., Ogi, I. W. J., & Kawet, R. (2024). Pengaruh Habit, Atribut Produk dan Perceived Enjoyment terhadap Purchase Intention Virtual Goods dalam Game Mobile Legend: Bang Bang pada Jemaat GMIM Exodus Paniki Dua. *Jurnal EMBA : Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 12(1), 730-738. Available at: <https://ejournal.unsrat.ac.id/index.php/emba/article/view/53601>. Retrieved on: August 8, 2024.
- Mahendra, F. Z. (2021). Pengaruh Content Marketing Terhadap Purchase Intention Pada Fan Apparel Dengan Customer Engagement Sebagai Variable Mediasi (Studi Pada Akun Instagram@ Authenticsid). *Jurnal Ilmiah Mahasiswa FEB*, 9(2). Available at: <https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/7209>. Retrieved on: August 8, 2024.
- Mäntymäki, M., & Salo, J. (2013). Purchasing Behavior In Social Virtual Worlds: An Examination of Habbo Hotel. *International Journal of Information Management*, 33(2), 282-290. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0268401212001715>. Retrieved on: August 8, 2024.
- Miao, M., Jalees, T., Zaman, S. I., Khan, S., Hanif, N. U. A., & Javed, M. K. (2022). The Influence Of E-Customer Satisfaction, E-Trust And Perceived Value On Consumer's Repurchase Intention In B2C E-Commerce Segment. *Asia Pacific Journal of Marketing and Logistics*, 34(10), 2184-2206. Available at: <https://www.emerald.com/insight/content/doi/10.1108/APJML-03-2021-0221/full/html>. Retrieved on: August 8, 2024.

- Prastio, A., & Rodhiah, R. (2021). Pengaruh perceived quality, social influence dan perceived price terhadap purchase intention Brodo. *Jurnal Manajerial Dan Kewirausahaan*, 3(3), 580-590. Available at: <https://journal.untar.ac.id/index.php/JMDK/article/view/13130>. Retrieved on: August 8, 2024.
- Purnami, L. D., & Agus, A. A. (2021). The Effect Of Perceived Value And Mobile Game Loyalty On In-App Purchase Intention In Mobile Game In Indonesia (Case Study: Mobile Legend And Love Nikki). *Asean Marketing Journal*, 9-19. Available at: <https://scholarhub.ui.ac.id/amj/vol12/iss1/2>. Retrieved on: August 8, 2024.
- Sambe, A. H. N., & Haryanto, J. O. (2021). The Development Of Social Influence And Aesthetic On Purchase Intention. *Jurnal Manajemen*, 25(1), 1–19. Available at: <http://www.ecojoin.org/index.php/EJM/article/view/700>. Retrieved on: August 8, 2024.
- So, K. K. F., Sparks, B. A., King, C., & Wang, Y. (2016). *The Role of Customer Engagement in Building Consumer Loyalty to Tourism Brands*. *Journal of Travel Research*, 55(1), 64–78. Available at: <https://journals.sagepub.com/doi/abs/10.1177/0047287514541008>. Retrieved on: August 8, 2024.
- Sunyoto, D. (2012). *Analisis Validitas & Asumsi Klasik*. Yogyakarta: Gava Media.
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: *The development of a multiple item scale*. *Journal of Retailing*, 77(2), 203-220. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0022435901000410>. Retrieved on: August 8, 2024.
- Tjokrosaputro, M., & Cokki, C. (2020, June). The Role Of Social Influence Towards Purchase Intention With Value Perception As Mediator: A Study On Starbucks Coffee As An Environmentally Friendly Product. *In 8th International Conference of Entrepreneurship and Business Management Untar (ICEBM 2019)*, 183-189. Available at: <https://www.atlantis-press.com/proceedings/icebm-19/125941548>. Retrieved on: August 8, 2024.
- Venkatesh V., Morris M.G., Davis G.B., & Davis F.D., 2003, User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3). Available at: https://www.researchgate.net/publication/248251150_User_Acceptance_of_Information_Technology_Toward_a_Unified_Model. Retrieved on: August 8, 2024.
- Wang, E. S.-T., & Chou, N. P.-Y. (2014). Consumer Characteristics, Social Influence, and System Factors on Online Group-Buying Repurchasing Intention. *Journal of Electronic Commerce Research*, 15(2). Available at: <http://www.jecr.org/sites/default/files/Paper3.pdf>. Retrieved on: August 8, 2024.