# FACTORS THAT INFLUENCE REPURCHASE INTENTIONS OF GAMERS, A CASE OF MICROTRANSACTION OF GENSHIN IMPACT

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**Abstract**

The repeated purchasing habits on online video games has been shown through news relating towards Indonesian people spending real life money through microtransactions, and with other news like Genshin Impact making a huge profit compared to games that are released earlier. The purpose of this research is to find the unique factors that influence gamers' repurchase intention as they are involved in the microtransactions when playing Genshin Impact. The research has gathered data from 150 gamers who played Genshin Impact, with a majority of 5 high purchasing power cities in Indonesia, with the age of financial dependence, which is conducted using a survey through the Indonesian community. The findings showed that the concept of economic value has an effect towards the loyalty as a mediator variable of the players that will affect the repurchase intention, while emotional value affects the satisfaction of the players, but the satisfaction itself does not have a positive affect towards the repurchase intention. This will be beneficial for the marketers, developers, and investors of online video games to know the key factors of repetitive success when developing a game.

*Keywords: microtransaction, repurchase intention, live service game, satisfaction, loyalty, gacha, Genshin Impact*

## 1. Introduction

In recent years people have become more digitized on their habits, such as how they consume, work, and entertain themselves. Gaming has become a main source of attraction for people to feel entertained, offering things like communities, stories, and a sense of belonging. Infact, games that were once looked down upon by many people, became one of the ways to interact and motivate younger generations to improve a country's GDP and capital.

To prove the massive global impacts of gaming in recent years, Statista (2024d) showed that gaming has become the second highest revenue in the media sector in 2023, after TV and video. This means that games have surpassed other more mainstream media sectors such as magazines, music,

radio, and books. Other sources from Richter (2022) showed that gaming with $192.7 billion even surpassed filmed entertainment such as Hollywood with $99.7bn, at 2021. To back up the claim, Kemp (2022) shows how people spent around $155.5 billion in video games out of $293.9 billion digital media total revenue, showing the massive influx and importance of gaming in digital media. To specify the details, HelpLama (2024) explains that most of the revenue in video games purchases mainly comes from mobile games, with console games being the second platform with the highest revenue.

These revenues can be from various methods, however, they are more likely generated through microtransactions according to the type of top grossings games listed (Statista, 2024a). In the top ten, they are dominated by games that have been released before the year 2020, and they have gained popularity overtime. Nonetheless, a video game called Genshin Impact was released quite recently yet managed to climb and compete with the others. GI (Genshin Impact) is a free-to-play open world style game made by Hoyoverse, a Chinese indie game developer, that has become massive in 2021 up until 2024. Being a game that has become the first of its kind, it's able to surpass $3 billion on mobile, with an average of $1 billion every six months (Chapple, 2022). Their source of revenue comes from people spending their real life money to purchase gacha (receiving a random in-game item system).

The phenomenon of games being a major impact in digital society has spread all around the world, including Indonesia. Recently, there has been news and articles regarding Indonesians who are willing to spend Rp30 trillion in 2021, with 99.5% of the money going abroad (Folkative, 2023). Moreover, according to Statista (2024b) top spenders for the game are topped by the asian countries. Thus, Indonesia can be a fitting candidate for further research towards the behavior, and it will be represented by five major cities which are Surabaya, Jakarta, Bekasi, Depok, and Makassar because of their high purchasing power (Noor, 2023). In addition, the Indonesian president, Joko Widodo has mentioned his eagerness for the people to research further about these gaming industry opportunities no matter big or small the research is (Jordan, 2018).

This study will investigate the factors influencing gamers repurchase intention when being involved in a microtransaction in a gaming process. This paper will try to find out what aspects of players decide to use real money to purchase something within a game, which can only be virtual and non-existent in physical forms. While in the past, purchasing a game considered as waste of money and time, nowadays it can be considered as an investment, with games becomes a work, passion, ways for people to earn for a living, becomes a main sensation on news, especially games like Gensin impact that is able make people to purchase in the game with many factors to reconsider. Perhaps the players felt satisfaction with the games offering great services and characters that they

can choose, or perhaps having a good reward when they purchase is also the way to incentivize their reasonings. Whether this action is a strategy by the developers to create engagements and publicity for the fanbases and the media, it can be beneficial for the marketers to know whether this strategy is viable in practice, as well as if there is any key variable for the games' repetitive success. Variables in question will be economic value, and emotional value and from this analysis ought to show their effect towards satisfaction and loyalty which is hypothesized to increase the repurchase intention.

- Do emotional value influence the satisfaction of microtransactions in Genshin?
- Do economic value influence the loyalty of microtransactions in Genshin?
- Do satisfaction and loyalty influence the repurchase intention of microtransaction in Genshin?

## 2. Theoretical background and hypothesis

Microtransaction is a form of monetization that is available in video games that can take in different forms, either with a virtual product or random purchases such as loot boxes (a box that contains materials to purchase characters and weapons in the game) where they could either not use real money or they do use real money as a dominant way for a business model within the video game industry (Tomić, 2017). Yokomitsu et al. (2021) further explains loot boxes as a form of microtransaction, where it can provide a random reward that can be worth more than the cost of the loot boxes. In some games, loot boxes don't need real money to be obtained. Zendle and Cairns (2018) agrees with the statement, saying that loot boxes and gambling in video games gives individuals a risk of losing their money with a chance of receiving reward of high value. In this research, the researchers agrees from the three researchers' statement and define microtransaction as a way businesses in video game industry to monetize or gain profit with individuals using real money to purchase virtual products, with methods such as loot boxes or gambling where people would pay in order to get a chance to receive high value of rewards.

### *2.1. Repurchase intention*

Repurchase intention from Hellier et al. (2003) defined as the judgment of a person whether they would buy those services again in the same company while taking into account their current situation and circumstances. From a digital standpoint, Chiu et al. (2009) gives a similar reasoning with Hellier, where it refers to a probability where a person will continue to purchase a product via online vendor. Wang et al. (2019) further supports the claim, saying how repurchase intention is critical since customers will make future purchases that are larger in value than the initial purchase, if

those initial purchase experience is a positive experience. In this research, the researchers agree with the statement from Chiu et al. (2009), and define repurchase intention as a process of probabilities or likelyhood of a customer to make a repeated purchase on online or physical stores.

> Repurchase intention is critical as customers make future purchases that are often larger in value than the initial purchase – if the initial purchase experience is a positive experience (Griffis et al., 2012). However, little is known about the effect of a customer's return experience on their decision to be a repeat customer. Repurchase intention measures whether the customer will purchase goods in the future from the e-tailer. This is distinct from purchase intention, where the customer is considering making an initial purchase. Lee et al. (2011) discuss the purchase intention of customers based on eight factors: perceived value, perceived ease of use, perceived usefulness, firm reputation, privacy, trust, reliability and functionality (Wang and Huscroft, 2019, p. 22).

### *2.2. Emotional value*

Emotional value is the perception of an individual generated from the product or service (Seegebarth et al. (2016) as cited in Watanabe et al., 2020). The perception of feelings or affection that is created after the use of a product or service, which is both agreed by Sweeney and Soutar (2001) along with Lu and Hsiao (2010). According to Rusli & Berlianto (2022), there is a positive effect between emotional value and satisfaction. In this research, the researchers agree to the three papers' definitions and define emotional value as feelings and affections produced from the experience of using the products or services. Thus, the researchers expect that emotional value positively affects on consumer's satisfaction and loyalty. Therefore, the following hypothesis is proposed:

H1. Emotional value has a positive impact on satisfaction.

### *2.3. Economic value*

Economic value is the perceived directness of the value of a product or service to the level of quality and complexity of the features provided, which people then calculate the economic value (low price, good quality, and better benefits) of the product and compares the original to the competitor (Rusli & Berlianto, 2022). Ray et al. (2012), gives another point of view, that the attractiveness of alternative services perceived can be altered by adjusting the price of the service and the quality and breadth of their features. The Marketing Management 15th edition by Kotler (2016), agrees with both of the researchers' statements, adding that a seller must assess the total

customer benefit and total customer cost associated with each competitor's offer in order to know its own offer rates in buyer's mind. According to Rusli & Berlianto (2022) there is a positive effect between economic value and loyalty. In this research, the researchers agree with some parts of past papers, and define economic value as the perception of consumers for a product or service whether the benefits or quality offered outweighs its price compared to the competitors. Thus, the researchers believe that economic value positively affects on customer's satisfaction and loyalty. Therefore, the following hypothesis is proposed:

H2. Economic value has a positive impact on loyalty.

### *2.4. Satisfaction*

Satisfaction was first introduced as a state of when the consumer feels the need to assess the products or services' fairness in what it gives back (Cardozo, 1965 as cited in Wolkenfelt and Situmeang, 2020). Other papers acknowledged this statement, which then added that the use of product or service was also highly reliant on its quality to create a satisfaction (Yavas et al., 1997 as cited in Zouari and Abdelhedi, 2021). Rusli and Berlianto (2022) agreed with these statements of what satisfaction is, and summarized it as a pleasure and enjoyment after using the product. There has been use of the relationship between satisfaction and repurchase intention to be experimented (Hellier et al., 2003). In this research, the researchers agree with the three researchers and define satisfaction as the concept of an emotional response to judge the reasonability of the products or services' quality after usage whether it is a positive or negative experience. Thus, the researchers expect that satisfaction positively affects on consumer's loyalty and repurchase intention. Therefore, the following hypothesis is proposed:

H3. Satisfaction has a positive impact on repurchase intention.

### *2.5. Loyalty*

The definition of loyalty from Rusli and Berlianto (2022) is how customers are willing to support a business based on their current mental state. Uncles et al. (2003) give a different perspective of what loyalty is based on an individual's characteristics, circumstances and/or the purchase situations that leads to that relationship with the business. Bowen and Shoemaker (1998, as cited in Kimura, 2022) agrees more towards Rusli and Berlianto's statement, where loyalty is measured from the likelihood of customers returning and willingness to behave as a partner to the organization, where they would cultivate it through repeated purchase. There has been use of the relationship between loyalty and repurchase intention to be experimented (Prasetyo et al., 2023). In this paper, the researchers agree with the statement from Rusli and Berlianto (2022) as well as

Bowen and Shoemaker (1998, as cited in Kimura, 2022) and define loyalty as a process where customers are willing to give back and support a business by creating a partnership relation towards it. Thus, the researchers expect that loyalty positively affects on consumer's repurchase intention. Therefore, the following hypothesis is proposed:

H4. Loyalty has a positive impact on repurchase intention.

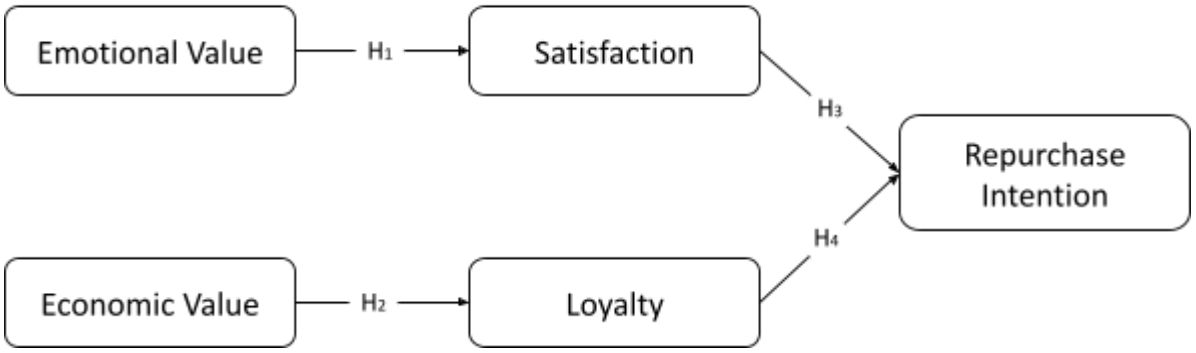


Figure 2.1. Framework & Hypotheses

## 3. Methods

### *3.1. Sample and procedures*

The researchers have found that the number of samples needed to calculate the data is 106. This number of samples is from the calculation sample of Cochran's formula, which calculates the number of population, the confidence level, as well as the margin of error needed to get the researchers' desired result. The researchers' level of confidence is 90%, as it is based on the standard of key research papers for social studies. The population is 900,000 based on the number of Genshin Impact players in Indonesia, which the researchers tried to find data on (Statista, 2024c). The margin of error is 8%, with the reasoning behind it as the researchers found that it is the standard for social study papers.

The researchers select the respondents based on the 5 major cities in Indonesia, their disposable incomes as well as the filtering questions needed for the respondents to answer. The 5 major cities in Indonesia are based on their purchasing power as a consumer being the highest, which consist of Surabaya, Jakarta, Bekasi, Depok, and Makassar. Their disposable income is needed as the researchers' topic is regarding the repurchase intention of the respondents. Furthermore, the researchers' use filtering questions to ensure that the valid respondents they have gathered consist of those who played video games, those who played Genshin Impact, as well as those who purchased something within a game using real life money, in order to get valid respondents of repurchase intention.

The researchers have gathered the answers from 10 pilot respondents as well as feedback from them. The feedback is mostly regarding the usage of Indonesian language that lacks concise grammar and some of the sentences being too complicated where simplicity is better, as well as some vagueness in terms of the word “quality” we used in the questionnaire, which can be interpreted in many ways. Many other pilots have suggested giving detailed explanations on what is in-game purchase, the detailed frequency of people purchasing in-game, more variety on what people can purchase, and others that focus more on the content within the game. The researchers decided to improve their questionnaire based on the feedback the pilots have given to them, because it makes the questions more detailed and less confusing for the respondents to interpret. The feedback the researchers improve on such as the disposable income question into disposable income per month, using italics for unfamiliar terms, emphasizing the word quality into the quality of the design for clarity.

### *3.2. Measures*

After gathering respondents from social media, Populix and connections, the total valid sample that the researchers have gathered is 112. The samples are focusing on those who have played and favored Genshin Impact. Looking at the demographic analysis it is indicated that the majority of the people in the survey are mostly around the age of 20 to 26 years old with 65.2%, while the 2nd most played respondent is at the age of 12 to 19 years old, with 20.5%. 35.7% of the respondents live in Surabay who played the game, while 32.1% are the people from Jakarta. The majority of the disposable income of the respondent is around Rp500,000 to Rp700,000, while the second highest is around Rp300,000 to Rp500,000. The duration of the respondents on playing a game in a day is majorly around 120-150 minutes with 29.5% of respondents, with the 2nd highest playing longer which is 60-90 minutes with 26.8% respondents. The rest of the detail can be referred to Appendix 2 (Figure 1 to 6).

Table 3.2.1. Path coefficients - Mean, STDEV, p values

| | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | P values | Results |
|---|---|---|---|---|---|
| **EMV → S** | 0.668 | 0.675 | 0.086 | 0.000 | Significant |
| **EV → L** | 0.896 | 0.900 | 0.043 | 0.000 | Significant |
| **L → RI** | 0.619 | 0.630 | 0.329 | 0.030 | Significant |
| **S → RI** | 0.152 | 0.147 | 0.343 | 0.329 | Not Significant |

### *3.2.1. Repurchase intention operationalization*

In this study, repurchase intention will be measured using three different questions to understand the customer's willingness or plans to purchase the product again in the future. The digital products in question that can be bought inside Genshin Impact include the costumes, characters, and weapons, as these things will always be available from the new updates and reruns (limited-time products may be offered again in the future). Hence, these questions are created:

- [RI1] How strongly do you agree that you will purchase costumes again?
- [RI2] How strongly do you agree that you will purchase characters again?
- [RI3] How strongly do you agree that you will purchase weapons again?

These questions are measured using the 5-point Likert scale (1 = strongly disagree; 5 = strongly agree), to understand the strength of agreement of the respondents towards each statement. The higher the agreement in this section, will show higher repurchase intention by the players. The reliability of this result was acceptable, as Cronbach's alpha (Cα = 0.744) scored over 0.700, which states that these questions are consistent and accurately measure repurchase intention. Its relationship in the framework will be then mediated through satisfaction and loyalty variables.

### *3.2.2. Emotional value operationalization*

In this study, emotional value will be measured using four different questions to understand enjoyment that as the game Genshin Impact provides to the respondents, which they were able to relive based on past experience. These enjoyments can be triggered with questions regarding if respondents enjoy collecting characters, beating the challenges, exploring the world map which is the location within the game, as well as playing the game with friends. Hence, these questions are created:

- [EMV2] I enjoy collecting the characters
- [EMV3] I enjoy the challenges
- [EMV5] I enjoy traveling around the world map
- [EMV6] I enjoy playing the game with friends

These questions are measured using the 5-point Likert scale ( 1 = strongly disagrees to 5 = strongly agree), to understand the strength of agreement of the respondents towards each statement. The higher the agreement in this section, will show higher emotional value by the players, which indicates the level of enjoyment in the game digital products. The reliability of this result was acceptable, as Cronbach's alpha (Cα = 0.806) scored over 0.700, which states that these questions are consistent and accurately measure emotional value. The connection between emotional value to satisfaction creates a score in which the sample mean scores at 0.675, a positive effect for the

coefficient on the two variables, which creates the *p* value to be significant (see Table 3.2.1.). With a standard deviation of 0.086, future calculations are expected to have a low margin of error from the actual result.

### *3.2.3. Economic value operationalization*

In this study, economic value will be measured using four different questions to understand the customer's comparison perception of Genshin Impact's product such as characters from its competitors, as well as what they are offering for the players to purchase. The questions that the researchers provided are focused on whether the costumes and characters they are getting truly worth the value. Additionally, the researchers would like to know what will be the purchasing items the players get, in order to compare the worth of those products compared to other games. Hence, these questions are created:

- [EV1] The price of the costume is worth the quality of the design
- [EV2] The price of the characters is worth my joy in getting them
- [EV4] This game offers more beneficial paid items compared to other games
- [EV5] This game offers more various paid items compared to other games

These questions are measured using the 5-point Likert scale (1 = strongly disagree; 5 = strongly agree), to understand the strength of agreement of the respondents towards each statement. The higher the agreement in this section, will show higher economic value by the players, which indicates that the game digital products are better than other similar games. The reliability of this result was acceptable, as Cronbach's alpha (Cα = 0.755) scored over 0.700, which states that these questions are consistent and accurately measure economic value. The connection between economic value to loyalty creates a score in which the sample mean scores at 0.900, considerably a positive effect for the coefficient on the two variables, which creates the *p* value to be significant (see Table 3.2.1.). With a standard deviation of 0.043, future calculations are expected to have a low margin of error from the actual result.

### *3.2.4. Satisfaction operationalization*

In this study, satisfaction will be measured using four different questions to understand the players' opinion of the products or services' quality after using them whether it is a positive or negative experience. Some things that can be measured from the respondents' expectations are the game's characters, weapons, along with scenery and background music which are the things that players frequently encounter. The reasoning behind the questions is to provide the respondents a judgment on the things they can obtain such as weapons and characters, and whether they felt a

better result of performance from their initial view. Not only that, the researchers hope that they can judge the experience they will have from visualizing the world they travel as well as the music they heard within the game. Hence, these questions are created:

- [S1] The character's design exceeded my expectations
- [S2] The weapon's design exceeded my expectations
- [S3] The in-game scenery exceeded my expectations
- [S4] The in-game background music exceeded my expectations

The questions are measured using the 5-point Likert scale (1 = strongly disagree; 5 = strongly agree), to understand the strength of agreement of the respondents towards each statement. The higher the agreement in this section, will show higher satisfaction by the players, which indicates that the game digital products and services provided have exceeded the players expectations. The reliability of this result was acceptable, as Cronbach's alpha (Cα = 0.753) scored over 0.700, which states that these questions are consistent and accurately measure satisfaction. However, the connection between satisfaction to repurchase intention scored low in the sample mean at 0.147, which is considered a very minimum effect for the coefficient on the two variables, which creates the *p* value to be not significant (see Table 3.2.1.). With a standard deviation of 0.343, future calculations are expected to have a high margin of error from the actual result.

### *3.2.5. Loyalty operationalization*

In this study, loyalty will be measured using seven different questions to understand the customer's willingness to actively support the game and developer through their habits and plans for the game. The habits are measured with the players' prioritization, frequency, and positive opinions. Future plans will consist of whether they will continue to play the game for long, and if they will spread good things about the game to better the image which can create more players for the game. Hence, these questions are created:

- [L1] This is the first game I play in everyday life
- [L2] This is the game I played the most this month
- [L3] I encourage the people around me to play this game
- [L4] I share positive things about this game to others
- [L5] I will continue to play this game for the next few years
- [L6] I prefer this game than other games in the same category
- [L7] I will refute the bad words about the game

These questions are measured using the 5-point Likert scale (1 = strongly disagree; 5 = strongly agree), to understand the strength of agreement of the respondents towards each statement. The

higher the agreement in this section, will show higher loyalty, willingness to support the game by the players. The reliability of this result was high, as Cronbach's alpha (Cα = 0.887) scored over 0.700, which states that these questions are consistent and accurately measure loyalty. Its relationship in the framework will be then mediated through economic value. The connection between loyalty and repurchase intention creates a score in which the sample mean scores at 0.630, which is considered a positive effect for the coefficient on the two variables, which creates the *p* value to be significant (see Table 3.2.1.). With a standard deviation of 0.329, future calculations are expected to have a high margin of error from the actual result.

## 4. Results

Table 4.1. Reliability & Validity

| Constructs & Item | Outer Loadings |
|---|---|
| **Emotional Value (EV) (CA = 0.806 / CRa = 0.852 / CRc = 0.869 / AVE = 0.625)** | |
| **[EMV2]** Saya menikmati mengoleksi karakternya | 0.861 |
| **[EMV3]** Saya menikmati tantangan-tantangannya | 0.811 |
| **[EMV5]** Saya menikmati berkeliling di world map | 0.757 |
| **[EMV6]** Saya menikmati bermain game tersebut dengan teman | 0.727 |
| **Economic Value (EV) (CA = 0.755 / CRa = 0.758 / CRc = 0.845 / AVE = 0.578)** | |
| **[EV1]** Harga kostum sebanding dengan kualitas desainnya | 0.797 |
| **[EV2]** Harga karakter sebanding dengan kebanggaan saya saat mendapatkannya | 0.711 |
| **[EV4]** Game ini menawarkan item berbayar yang lebih bermanfaat dibandingkan dengan game lainnya | 0.806 |
| **[EV5]** Game ini menawarkan item berbayar yang lebih bervariasi dibandingkan dengan game lainnya | 0.722 |
| **Loyalty (L) (CA = 0.887 / CRa = 0.891 / CRc = 0.912 / AVE = 0.596)** | |
| **[L1]** Game ini adalah pilihan pertama untuk dimainkan dalam keseharian | 0.800 |
| **[L2]** Game ini adalah game yang paling banyak saya mainkan bulan ini | 0.787 |
| **[L3]** Saya mendorong orang-orang di sekitar saya untuk memainkan permainan ini | 0.738 |
| **[L4]** Saya menceritakan hal-hal positif tentang game ini kepada orang lain | 0.804 |
| **[L5]** Saya akan terus memainkan game ini sampai beberapa tahun ke depan | 0.774 |
| **[L6]** Saya lebih suka game ini dibandingkan game lain dengan kategori yang sama | 0.788 |
| **[L7]** Saya akan membantah perkataan jelek mengenai game tersebut | 0.712 |
| **Repurchase Intention (RI) (CA = 0.744 / CRa = 0.745 / CRc = 0.854 / AVE = 0.662)** | |
| **[RI1]** Seberapa setuju Anda akan membeli kostum lagi | 0.801 |
| **[RI2]** Seberapa setuju Anda akan membeli karakter lagi | 0.835 |

| | |
|---|---|
| **[RI3]** Seberapa setuju Anda akan membeli senjata lagi | 0.804 |
| **Satisfaction (S) (CA = 0.753 / CRa = 0.766 / CRc = 0.844 / AVE = 0.578)** | |
| **[S1]** Desain karakter melebihi ekspektasi saya | 0.855 |
| **[S2]** Desain senjata melebihi ekspektasi saya | 0.675 |
| **[S3]** Pemandangan dalam game melebihi ekspektasi saya | 0.778 |
| **[S4]** Musik background dalam game melebihi ekspektasi saya | 0.721 |

*CA = Cronbach's alpha, CRa = Composite reliability a, CRc = Composite reliability c, AVE = Convergent validity

Standard deviation (STDEV) was first implemented to find the valid responses, the data was left with a total of 112 valid respondents. The purpose was to eliminate responses that have an almost perfect correlation to every other variable (with STDEV of <0.25 for the whole response, and 0 for connecting paths). The researchers use Structural Equation Model (SEM) to find the analytical statistical result on the variables and questions that are being provided. PLS-SEM helps to provide the outer model and inner model of the framework to test the dependency of each variable, as well as the accuracy of the questions in each variable. The result of the outer loadings is detailed in Table 4.1. where the Cronbach's alpha is above 0.7, composite reliability a and c are above 0.7, meeting these criterions will indicate the existence of correlations between the variables through the only assigned indicators. Along with the convergence validity (AVE) is indicating the indicators measure the variables for correlations with low measurement error.

The next method the researchers use is the Heterotrait-Monotrait method, which is to check the discriminant validity and should result under 0.9 for every variable as shown in Table 1 (see Appendix 3). By fulfilling this criteria, the variables' indicators are sufficiently distinct from each other and ensure that each maintains a minimum difference of 0.1 to other indicators. Afterwards, the researchers used the Fornell-Larcker method in order to calculate the connection between the square root of AVE and other variables. Table 2 (see Appendix 3) shows the validity of the data, since the square root of AVE is greater than the connection between each variable. In the table, it shows that each variable has a stronger foundation within their value compared to their connection with other values, thus fulfilling the criteria of the method. The total bootstraps used by the researchers is 5,000 for the consistent PLS-SEM bootstrapping analysis.

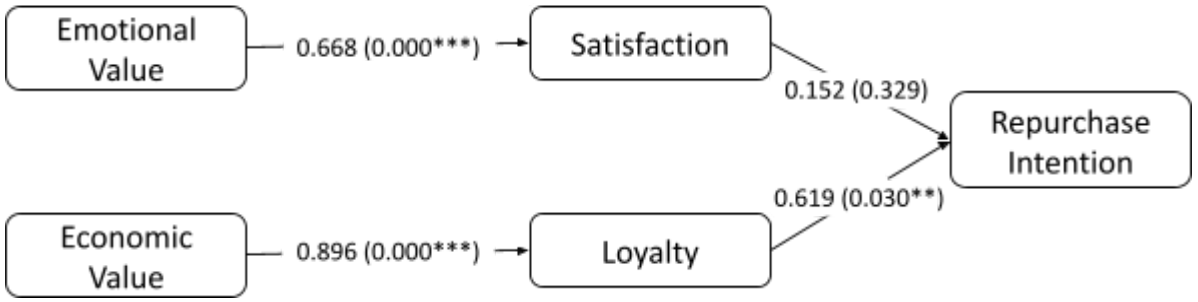


Figure 4.1. Framework Results (Bootstrapping)

### *4.1. The effect of emotional value to satisfaction*

Hypothesis 1 is accepted due to its strong significance of *p* value with a positive influence (ß = 0.668) from emotional value (EMV) towards satisfaction (S). The relationship displayed that more emotions generated from past experience usage of the characters, achievements, world map, and cooperation feature of the game correlate with greater satisfaction, indicating that the game surpasses players' expectations. The outer and inner models such as outer loadings, AVE, Fornell-Larcker, cross loadings, HTMT, and VIF all are in the range of commonly accepted thresholds.

### *4.2. The effect of economic value to loyalty*

Hypothesis 2 is accepted due to its strong significance of *p* value with a positive influence (ß = 0.896) from economic value (EV) towards loyalty (L). The relationship displayed that the more worth of digital offerings, such as characters, costumes, variants, and benefits, provided by the game in comparison to its competitors within the same category, correlate with greater loyalty for these players to support the game and developer by continue prioritize Genshin Impact as their main game to play in the following years along with sharing positive things about it. The outer and inner models such as outer loadings, AVE, Fornell-Larcker, cross loadings, HTMT, and VIF all are in the range of commonly accepted thresholds.

### *4.3. The effect of satisfaction to repurchase intention*

Hypothesis 3 is rejected due to its *p* value not reaching significance, with only really low path influence (ß = 0.152) from satisfaction (S) towards repurchase intention (RI). Although the relationship exists positively in the path coefficient, it is too low and insignificant to decide its correlation, since it might change with a bigger number of sample sizes. The reasoning behind it may be due to the fact that players can get satisfaction from characters, costumes, and weapons while being free from any purchases or not needing to make their first purchase, and thus players don’t

find any significance in purchasing over and over again to feel the same experience, if they are already satisfied with their current conditions. Another issue presented on the S2 indicator's outer loading is below the commonly accepted threshold of 0.5. However the researchers decided not to eliminate this indicator since the satisfaction's Cronbach's alpha value has exceeded the threshold of 0.7, which means the indicator still contributes to the internal consistency while not optimally done. On the other hand, its outer and inner models such as AVE, Fornell-Larcker, cross loadings, HTMT, and VIF all are in the range of commonly accepted thresholds.

### *4.4. The effect of loyalty to repurchase intention*

Hypothesis 4 is accepted due to its significance of *p* value with a positive influence (ß = 0.619) from loyalty (L) towards repurchase intention (RI). The relationship displayed that players who are actively supporting the game and developer by playing more and sharing positive things will be more likely to repurchase costumes, characters, and weapons in the near future. The outer and inner models such as outer loadings, AVE, Fornell-Larcker, cross loadings, HTMT, and VIF all are in the range of commonly accepted thresholds.

## 5. Limitations and future directions

### *5.1. Limitations*

The limitation that the researchers experience is dealing with their research and variables may not be applicable to future researchers due to the niche market. As game journals have not been around long enough compared to other journals such from data, science, and economy, finding credible journals that can reference the gaming industry as well as the specific games to research may take more time. This can be an issue as finding journals that fit with definitions and variables for the researchers' paper creates new benefits and limitations that the researchers experience. In addition, as Genshin Impact's monetization strategy is to use microtransactions, it may be different to other games that need to pay first in order to experience the game. Furthermore, finding suitable and credible respondents to willingly help answer the surveys, since the topic is not something people in daily life would hear or know about.

### *5.2. Future directions*

As the gaming industry became a widely known media over the years, this became an opportunity for future gaming researchers as they are able to find more opportunities to find more resources and information on why people purchase something within a game, with lesser limitations to build their variables and frameworks. Future researches that will do research on the uniqueness of

microtransaction needs to emphasize on how games being a popular industry in the current era became a critical factor for the majority of people, which meant that having different perceptions from parents, other gamers, as well as content creator is important on the normalization of purchase in games. For the demographics section, it can be further researched to pinpoint which traits of the person that strongly affects the response of different variables measured. With this information, the framework will not be only limited to just one game in specific, but can be replicated to different categories of games, as long as the measurements and definitions are still the same.

Another variable that might affect the repurchase intention will be key opinion leaders (KOL) or influencers opinions and perceptions to the game. The gamers' judgment can be clouded with this variable, their trust and support might directly influence the repurchase intention, regardless of the variables that come beforehand since there is another set of existing variables coming from the key opinion leaders. Moreover, the researcher's test subject, which is Genshin Impact, is very rare in terms of competitors with the same category. This might make the framework behave differently in the future (the significance might change, and other variables should be included), if more games with the same type are being developed. One last direction that perhaps new researchers need to be aware of is to familiarize with the community of the game you want to focus on. It is important to choose the community that can have great potential as a respondent, in order to decrease the chance of invalid answers from them.

Another factor that game researchers need to consider when using the economic value's operationalization is to add an additional filtering question regarding whether they have played another game within the same category as their main game for research. This is important in order to reduce ambiguity in comparing the value of each game, as different games have different ways to monetize their businesses and thus the respondent may be confused on how they should compare. Adding those filtering questions would help the respondents to know if they should compare the games whether they are microtransaction games or paid games or games that have downloadable content. If a researcher wants to use Genshin Impact as their main reference, they would asked whether the respondents have played other microtransaction games.

## 6. Conclusions and implications

### *6.1. Theoretical implications*

With the completion of the study, these studies can assist the researchers and academics by adding references and literature to the variables of economic value, emotional value, satisfaction, loyalty, and repurchase intention for the gaming industry, which has aligned with past researchers such as Rusli and Berlianto (2022). It will also provide evidence that each variable between economic

value, emotional value, satisfaction, and loyalty are connected to one another. However, this paper has a minor readjustment for the dependent variable, where Rusli and Berlianto's (2022) research used purchase intention, the researchers decided to use repurchase intention to align with the study's purpose to help create the game's repetitive success.

In addition, the repurchase intention variable was referenced from another journal by Hellier et al. (2003), that also includes satisfaction and loyalty relationships in the framework. The result was shown that in the past paper, the relationship between satisfaction and repurchase intention was unsupported, as in the respondents' answers are not significant enough to display a correlation. This was proven true again in this paper as the result for satisfaction is not significant enough to influence repurchase intention variable. Future researchers may use this research and framework as additional references for their own research in topics regarding the game industry.

### *6.2. Practical implications*

The practical implication of this research aims towards the marketing team, developer, as well as investors for gaming businesses. For the marketing team of Genshin Impact, this research benefits them by focusing on how their selling points will be, which is offering better design for characters and costumes to advertise their game. For the game developers, this research gives references and ideas on how it is important for them to consistently develop the services and products within the game in order to meet the values of the players and customers, as well as maintaining those qualities for the loyalty and enjoyment of those players. In addition, game developers can try to create and update contents, such as interesting events or daily missions. This will help to attract potential players and keep their current customers in order to increase their loyalty and make them able to play the game more consistently on a daily basis. Adding multiplayer content will also keep the engagement of the game higher, as players are able to build communities within the game. Developers could pursue the loyalty of customers and justify their actions on supporting the game. While for investors, analyzing games with a good business model for their microtransaction and comparing it with the value of the product and services the games give, as better economic value where customers find the characters and weapons are worth the price, will yield higher chance of repurchase intention happening, and thus creates higher dividend for the investors.

### *6.3. Conclusion*

With the results of the studies conducted, the conclusions and reasoning behind the studies shows that there is a positive influence towards the idea that emotional value has an affect towards

satisfaction, economic value has an affect towards loyalty, and loyalty can affect the repurchase intention of Genshin Impact players. However, this research shows that satisfaction is unable to become the mediating variable between emotional value and repurchase intention, thus satisfaction towards repurchase intention can be considered as insignificant. The way to reach a higher repurchase intention is through economic value which leads to higher loyalty in which it can increase the repurchase intention of players. Thus, it is important to give players a sense of worth on purchasing characters and costumes in game, and giving them a variety and effective paid products to incentivize them.