FACTORS THAT INFLUENCE THAI CUSTOMERS' PURCHASES OF VIDEO GAME MICROTRANSACTIONS

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FACTORS THAT INFLUENCE THAI CUSTOMERS' PURCHASES OF VIDEO GAME MICROTRANSACTIONS

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ABSTRACT

Because of the increasing influence of video game monetization, which provides consumers with an in-game advantage, unique virtual objects that can be purchased with real money. The objective of this study was to discover the correlation between gaming-related features and Thai customers purchasing microtransactions in video games across all platforms. The purpose of this research is to look into and analyze the factors that influence Thai customers' purchases of video game microtransactions. This thematic paper employed quantitative methodology, gathering information from 103 respondents who had recently played video games and purchased in-game items/skins/in-game currency/loot boxes with real money. SPSS factor analysis was used to analyze the collected data. According to the research, four key factors influence Thai customers to purchase video game microtransactions: in-game aesthetic, in-game social status, sale and promotion, and satisfaction. The combination of the four aforementioned components has been shown to encourage Thai consumers to spend money on video game microtransactions. That data could be used by video game developers and marketers to prioritize monetization approach in video games that better serve Thai consumer purchasing behavior.

KEY WORDS: Video games / Monetization / Microtransaction / Purchase intention

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CHAPTER I

INTRODUCTION

1.1 Background

The video games industry has evolved into a type of entertainment and leisure activity that is popular among people of all ages. There are several game genres that will appeal to anybody looking for a way to pass the time. Personal computers, consoles, mobile devices, web browsers, televisions, and even smart watches may now be used to play games. There are several physical and digital storefronts to purchase video games, and new games are released on a regular basis. Aside from the increased number of video games available on all platforms (PC, Console, and Mobile), within-game monetization or so-called micro transactions that provide an advantage over other players, exclusive items, cosmetics, skins, and or in-game currency as it may appear in both free to play and full-priced games, single player and multiplayer.

According to the World Economic Forum, the worldwide gaming video game business will be valued at more than $200 billion in 2021 and will surpass $300 billion by 2026. Microtransactions in video games have produced billions of dollars over the years and will continue to do so as long as people are prepared to pay to improve, strengthen, or just appear different in their favorite video games.

1.2 Research Question

To investigate and analyze the factors that influence Thai customers' purchases of video game microtransactions.

1.3 Research Objectives

- To obtain consumer insights on microtransactions in video games across all platforms.
- To understand the factors influence Thai customers' purchases of video game microtransactions.
- To determine the degree to which customers are willing to pay for microtransactions in order to obtain virtual items, in-game currency, and other in-game benefits provided by game companies.

1.4 Scope of the Study

This research is focused on Thai consumers' purchasing intentions in gaming micro transactions. A survey questionnaire is being developed to collect data from the Thai online community who have recently played video games and purchased in-game items/skins/in-game currency/loot boxes using real money.

The purpose of this study is to determine the association between gaming-related characteristics and Thai consumer purchasing intent. It also gives gaming developers and publishers customer insights.

1.5 Expected Benefits

- Information that might be useful to video game marketers, ways to assist them begin marketing campaigns, and products/services that would be appealing to the Thai consumer.

- The study's findings could be applied to game development and any business that uses similar practices in their products or services to gain a better knowledge of Thai customer perceptions of microtransactions in video games.

CHAPTER II
LITERATURE REVIEW

2.1 Purchase intent

The Theory of Planned Behavior, as described by Azjen (1991), is the correlation of people's attitudes to their actions, which affects a consumer's behavioral intention in three ways: attitude toward the activity, subjective norms, and perceived behavioral control. According to Hamari and Keronen (2016) Purchase intent is a person's evaluation of how strongly they intend to perform a specific action in the near future. Services that allow the purchase of virtual commodities, such as games and social virtual worlds, are mostly utilized for hedonic motives, and it is to be assumed that usage of enjoyment is prevalent. Aesthetics, emotional value, integrated value, and product value are all aspects connected to the design of virtual objects and the perceived value they represent (Hamari and Keronen, 2016). Consumers' preconceived favorable or unfavorable attitude regarding acquiring virtual things in the virtual domain determines their purchase intent, according to Bleize and Antheunis (2019).

Furthermore, purchase intent is influenced by the norm established by others as well as the sense of how simple it is to obtain products in virtual space. According to observations of virtual world purchase intent and perceived interactivity, strong product engagement, improved attitude, desire to acquire virtual objects in the virtual world, and perceived interaction, which means that the more a person is connected to a product, the more likely he or she is to purchase virtual items (Guo & Barnes, 2009). According to Venkatesh and Agarwal (2006), if a consumer feels their experience with the service would be short, the life cycle of the additional goods will also be restricted. As a result, because the adoption and assessment of continuing use intentions occurs prior to the formation of individual purchase intentions, the individual's continuous use intentions correspond to the purchase intentions for virtual objects.

2.2 Monetization in video games

According to Davidovici-Nora (2014), video game business models vary due to the many monetization tactics used. To sell the game itself, video game makers use a premium monetization approach, either digitally or physically. Furthermore, those that use the freemium monetization model, which is based on free game creation and delivery, benefit from in-app purchases, often known as micro-transactions, and/or advertisements. Finally, a hybrid monetization strategy that profits from both premium game sales and in-app purchases. Klimas (2018) observed that freemium games highlight crucial functions associated with customer relationship management, whereas other models identify significant activities associated with game creation and resource management.

2.3 Microtransaction /Micropayment in video games

Micro transactions, according to Evers, Van de Ven, and Weeda (2015), are frequently low-cost add-ons to existing games. These expansions might include purchasing more game content or in-game benefits). As a result, users may spend real money to improve their gaming experience, and in some games, they may even spend money to raise their game strength by purchasing upgrades (Evers, Van de Ven, and Weeda, 2015).

Because some players may not have the willingness or time to go through the lengthy gaming process to attain the requisite progression, equipment, or certain in-game conditions, microtransactions provide a way of bypassing for them. As a result of this discontent, corporations have devised solutions such as micro translation (Evans, 2016). Cosmetic (cosmetic micro transactions), in-game bonuses (pay to win micro transactions), or these items as randomized contents of undetermined value are the three most common types of micro transactions (loot boxes).

2.3.1 Cosmetic microtransactions

Cosmetic microtransactions are a form of microtransaction in which players can purchase cosmetic goods and different costumes/appearances that have no in-game incentives and are just cosmetic modifications. Ballou, Zendle, and Meyer (2020). Cosmetic objects in-game, according to King and Delfabbro (2019), are commodities that affect the look of in-game assets (such as skins) but have no influence on the functional experience of play. Assuring that purchases are entirely cosmetic and have no impact on competitive fairness.

2.3.2 Pay to win microtransactions (P2W)

According to Zendle, Meyer, and Ballou (2020), consumers may exchange real-world money for any item that boosts their chances of success in-game as a 'pay to win' microtransaction. Pay-to-win feature that offers in-game bonuses, increases the rate at which the player earns experience points, modifies status effects, or increases the likelihood of a successful in-game outcome (King and Delfabbro, 2018). Whereas gaming companies emphasize that these microtransactions are not necessary to participate or progress in the game, some individuals may rely on the products that give in-game bonuses to help enhance their gaming performance and therefore overspending on these commodities (King and Delfabbro, 2019). Games feature a payment aspect since the underlying factors that stimulate payment in such games are a risk factor in gambling addiction, particularly among adolescents (Lelonek-Kuleta et al, 2021).

2.3.3 Loot boxes

According to King and Delfabbro (2018), loot boxes underline the value that may be purchased recurrently with real money to obtain a randomized variety of virtual commodities. Due to the low likelihood of obtaining a desired item, the player will need to spend an undetermined number of loot boxes in order to get the intended item. Authorities and politicians in some areas have suggested classifying certain in-game purchases that provide randomized items based on a statistical basis as 'loot box' elements as gambling (King et al, 2019).

Previous studies described variables related to consumption value toward acquiring virtual goods including Perceived value, Perceived enjoyment, Timesaving (functional value) and social interaction.

2.4 Perceived value of in-game purchase

The perceived value of virtual items is related to the perceived value of experiences by humans based on emotional, monetary, or a mix of variables influencing purchasing decisions (Hamari and Keronen, 2016). According to Park and Lee (2011), the monetary worth of virtual products as a pricing value is connected to how justifiable the pricing is to customers. According to Lehdonvirta (2009), emotional values are associated with product aspects that influence client feelings.

2.5 Perceived enjoyment of in-game purchase (Satisfaction)

The enjoyment value, according to Park and Lee (2011), is equivalent to the emotional value and refers to the gamer's sentiments of attention, delight, and interest about the game. According to Wired Magazine (2012), businesses may be incentivized to negatively weaken the value of the game by adding artificial obstructions and gaps in the game, which can further reflect in reduced overall satisfaction with the game. The essential concept of this thinking is that the purchased material may then fill in the gaps purposely placed during game progression.

2.6 Social interaction/influence

Modern video games, such as role-playing games and war-strategies, are designed to promote online contact and engagement between players, and game makers utilize that connection to sell virtual products to create profits and enhance user engagement (Ho and Wu, 2012). According to Park and Lee (2012) players purchase in-game stuff to develop their characters because game commodities are unique or difficult to get, allowing them to prosper in the game's social setting.

2.7 Time saving (Functional value)

Ho and Wu (2012) defined functional value as the extent to which it improves the game user's competency by delivering functional advantages to assist in-game characters. Guo and Barnes (2009) claimed that functional attributes allow users to advance faster or spend less time to accomplish identical advancement, which helps players save time.

CHAPTER III
RESEARCH METHODOLOGY

3.1 Research Design

The quantitative research approach was employed to obtain data for this study. The quantitative method is a method of collecting data that employs survey instruments. A large sample size and a range of questions are frequently used in this approach.

The surveys will be used to gather the information necessary for the development of a data collection to identify the Factors influencing Thai consumers' purchasing microtransactions in video games across all platforms. The surveys will be sent online to at least 100 Thai customers who have previously paid microtransactions in video games across all platforms in order to accurately reflect their experiences and what variables influence their purchases.

3.2 Sampling

The population for this study consisted of Thai consumers who had previously purchased microtransactions to acquire in-game merchandise, in-game cash, loot boxes, or other items that needed micropayment within video games on any given platform, including PC, Console, and mobile devices. The most convenient sampling strategy was one that could be used to gather data from respondents who were readily available at the time of data collection, with a minimum research sample of 100 respondents.

3.3 Data Collection

This study will gather data using an online questionnaire administered via Google Forms, which is simple to use and convenient for responders. To increase the

quality of the data acquired, a screening question will be utilized to filter out the non-target group. The data will be gathered via a Google form that was spread throughout social network services such as Line, Facebook, Twitter, and Instagram, as well as other sites with substantial populations of gamers who participate in group chat and conversation.

Questionnaires will be developed in both Thai and English in order to collect quantitative data and better reflect a broader range of population for this study, which will be divided into four groups:

1. Screening questions are used to exclude non-target groups and improve the quality of the data obtained.
2. General questions are used to get respondents to think about the topic
3. Specific questions are used to quantify significant levels for consumer behaviors and influencing variables.
4. Demographic questions include age, gender, status, income, education level

CHAPTER IV
RESEARCH FINDINGS

The obtained data was examined using descriptive statistics (amount, percentage, and mean) and inferential statistics (correlation analysis) to quantify the factors associated with Thai consumer purchase intention toward microtransactions in video games across all platforms. The 103 data sets were acquired using an online Google form from respondents who had recently played video games and purchased in-game items/skins/in-game currency/loot boxes with real money.

4.1 Descriptive Statistics

4.1.1 The sample Characteristics

The descriptive data analysis results begin with the sample profiles, which include gender, age, marital status, education level, income range, platforms used to play video games, number of games currently played, amount of time spent on video games per day, and so on. The frequency, quantity of money, and motive for which samples purchase in-game items/skins/in-game currency/loot boxes are all collected.

Table 4.1: Gender of the respondents

Gender	Frequency	Percentage
Male	60	58.3
Female	43	41.7
Total	**103**	**100**

Beginning with the physical gender of the respondents, males account for 58.3% (60 respondents), while females account for 41.7%. (43 respondents).

Table 4.2: Age range of the respondents

Age	Frequency	Percentage
Less than 15 years	4	3.9
15-25 years	39	37.9
26-35 years	47	45.6
36-45 years	13	12.6
Total	**103**	**100**

In terms of age, respondents were divided into four groups: less than 15 years old, 15-25 years old, 26-35 years old, and 36-45 years old. The respondents aged 26-35 years old made up 45.6% (47 respondents), followed by the respondents aged 15-25 years old. 37.9% (39 respondents), followed by 36-45 years old 12.6% (13 respondents), and less than 15 years old (3.9%). (4 respondents)

Table 4.3: Marital Status of the respondents

Marital Status	Frequency	Percentage
Single	89	86.4
Married	14	13.6
Total	**103**	**100**

The majority (86.4%) (89 respondents) are single, while 13.6% (14 respondents) are married.

Table 4.4: Educational Level of the respondents

Educational Level	Frequency	Percentage
High school or below	16	15.5
Bachelor's degree	65	63.1
Master's degree or higher	22	21.4
Total	**103**	**100**

Respondents are separated into three groups: high school or less, bachelor's degree, and master's degree or above. With 63.1% having a bachelor's degree (65 respondents) and 21.4% having a master's degree or higher (22 respondents) and 15.5 % with a high school diploma or below (16 respondents).

Table 4.5: Income Range of the respondents

Income Range	Frequency	Percentage
Below 15,000 baht	35	34
15,001 - 30,000 baht	27	26.2
30,001 - 45,000 baht	14	13.6
More than 45,000 baht	27	26.2
Total	**103**	**100**

Respondents are classified into four categories: Below 15,000 baht, 15,001 - 30,000 baht, 30,001 - 45,000 baht and more than 45,000 baht. The majority, 34% of the respondents, earn less than 15,000 baht per month (35 respondents) followed by 26.2% of those earning between 15,001 and 30,000 baht and more than 45,000 baht (27 respondents respectively). With the lowest 13.6 % earning between 30,001 - 45,000 baht (14 respondents).
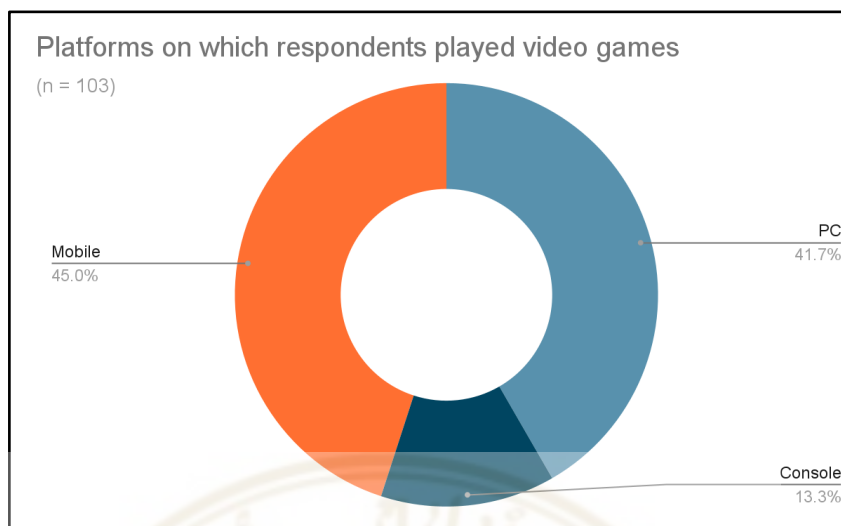
Figure 4.1: Platforms on which respondents played video games

        Respondents were asked to choose various platforms on which they played video games, with 45% playing on mobile (81 responses), 41.7% on PC (75 responses), and 13.3% on consoles such as PlayStation, Xbox, and Switch (24 responses).

Table 4.6: Number of game that respondents currently play

Number of games currently play	Frequency	Percentage
1 - 2 Games	48	46.6
3 - 4 Games	31	30.1
More than 5 game	24	23.3
Total	**103**	**100**

        The majority of respondents (46.6%) presently play 1 – 2 games on any particular platform, followed by 30.1% who play 3 – 4 games and 24% who play more than 5 games.

Table 4.7:Time spend on video game per day

Time spend on video game per day	Frequency	Percentage
No more than 1 hour	7	6.8
1 - 2 Hours	33	32
3 - 4 Hours	36	35
More than 4 hours	27	26.2
Total	**103**	**100**

35% of respondents spent 3 - 4 hours per day on video games, while 32% spent 1 - 3 hours per day. And 26.2% spent more than 4 hours each day on video games, while just 6.8% spent less than 1 hour.

Table 4.8: Frequency of in-game purchase per month

Frequency of in-game purchase per month	Frequency	Percentage
Less than 1 time per month	35	34
1 time per month	28	27.2
2 - 3 times per month	28	27.2
More than 3 times per month	12	11.7
Total	**103**	**100**

All responders were validated, and all responses were required to have played the game and made in-game purchases during the previous three months. With 34% of the money spent on in-game purchases, less than once per month was followed by once and 2 - 3 times per month at 27.2%, with a minority of 11.7 spending more than three times per month.

Table 4.9: Amount of money spend on in-game purchase per month

Amount of money spend on in-game purchase per month	Frequency	Percentage
Less than 500 THB	36	35
501 - 1,000 THB	41	39.8
1,001 - 3,000 THB	17	16.5
More than 3,000 THB	9	8.7
Total	**103**	**100**

The majority of respondents (39.8%) spent between 501 and 1,000 THB each month on in-game purchases, with 35% spending less than 500 THB per month. 16.5% of respondents spent between 1,000 and 3,000 THB per month on in-game purchases, while 8.7% spent more than 3,000 THB per month.

Reasons for making in-game purchases
(n = 103)

Category	Value
Perceived enjoyment	71
Aesthetic appeal	60
Perceived value	54
Support the develper	28
Time saving	24
Gaming community	9

Reasons for making in-game purchases
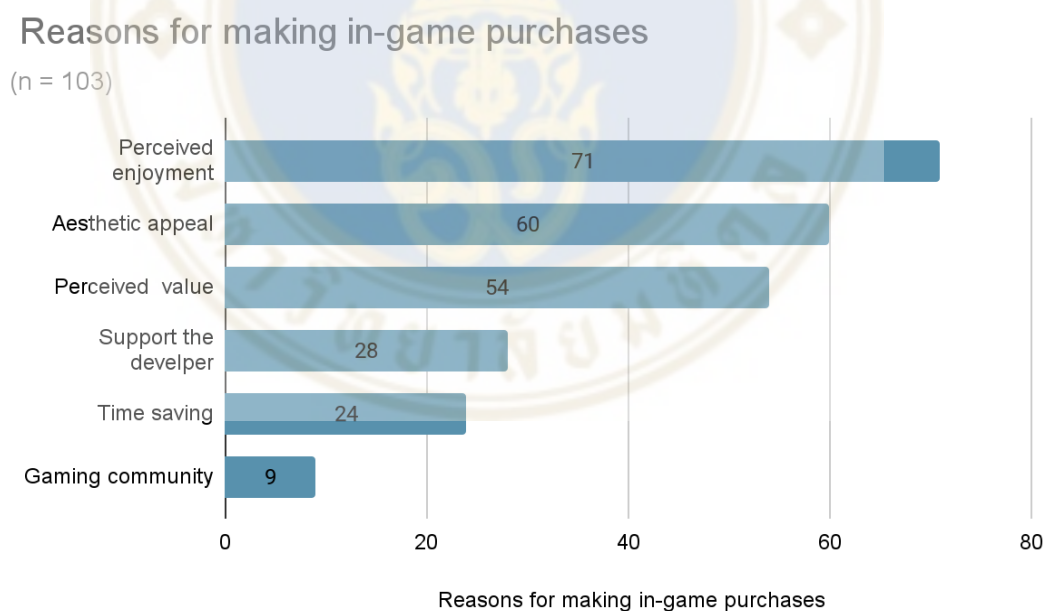
Figure 4.2:Reasons for making in-game purchases

The questionnaire asked the respondents to select many items to select those that fulfilled their criterion for making in-game purchases for items/skins/in-game currency/loot boxes. There were 71 responses to Perceived enjoyment from 103

respondents, 60 responses to Aesthetic appeal, and 54 responses to Perceived value. There were 28 responses to support game developers, 24 responses to save time, and just 9 responses to interaction with the gaming community.

4.1.2 Descriptive data analysis among Key Constructs

Six constructs were presented to evaluate how customers perceive the association with Thai consumer purchase intentions toward microtransactions in video games across all platforms. This data was utilized in a descriptive analysis to calculate a mean score.

Table 4.10: Summary of Measures

Construct	Overall Mean score	Scale	Question	Mean Score	Std. Deviation
Perceived Enjoyment	3.288	Likert 1-4	I purchase items in games that I enjoy	3.78	0.523
			I can enjoy the game without spending any money on it.	3.31	0.841
			Obtaining in-game items/skins/in-game currency/loot boxes enhances the gaming experience.	3.26	0.896
			I get pleasure from opening the loot box in the game.	3.16	1.007
			My in-game purchases are influenced by my enjoyment of the gaming community.	2.93	1.06
Time Saver	2.966	Likert 1-4	I would play my game for a longer period of time after making an in-game purchase.	3.1	0.985
			Making in-game purchases has helped me in reaching my goal faster.	3.08	1.118
			I make more in-game purchases in multiplayer games.	2.96	1.056
			Buying in-game items make me stronger/better in my game.	2.95	1.051
			I saved time by purchasing items in-game rather than grinding for them.	2.74	1.12
Cosmetic	2.792	Likert 1-4	I like my character/avatar to look unique over other characters.	3.37	0.886
			Unique looking items/costume in game is important to me.	3.09	0.887
			I generally purchase cosmetic items in games.	2.63	1.094
			When new cosmetic items are revealed, I always make an in-game purchase.	2.48	1.128
			I prefer more paid customization for my in game character.	2.39	1.059

Table 4.10: Summary of Measures (cont.)

Power Up	2.522	Likert 1-4	I make in-game purchases to make my character advance faster in the game.	2.84	1.091
			Making in-game purchases makes me feel powerful.	2.71	1.126
			In-game purchases give me an advantage over other players.	2.57	1.117
			I generally purchase power ups/ boost items in games.	2.44	1.177
			I spend money on video games in order to compete with my friends.	2.05	1.088
Perceived Value	3.122	Likert 1-4	I make in-game purchases when there is promotion/discount.	3.66	0.635
			I make in-game purchases when there is promotion/discount.	3.66	0.635
			Making in-game purchases increases my interest in the game.	2.88	1.013
			I prefer to make purchases on bundled game items.	2.79	1.035
			I like to purchase time-limited items.	2.69	1.112
Social interaction	2.596	Likert 1-4	I prefer playing games with many friends.	3.34	0.935
			I like to make game purchases to support game developers that I like.	3	1.019
			I feel like a part of gaming communities after making in-game purchases.	2.32	1.19
			Purchasing in-game items helps me to interact with my gaming friends.	2.31	1.103
			I would make an in-game purchase to follow my favorite game streamer.	2.01	1.08

As a result of the measurement analysis, three out of six constructs, including perceived enjoyment, perceived value, and time saver, were found to have a positive correlation to consumer purchase intentions toward microtransactions in video games across all platforms, with overall average mean scores of 3.288, 3.122, and 2.966,

respectively. This might imply that Thai consumers may purchase microtransactions involving these three constructs.

Perceived enjoyment construct has the highest total mean score (3.288) contained five measures with mean score ranging from (2.93 - 3.76). Three of the highest mean score components include 1. I purchase items in games that I enjoy (3.76), 2. I can enjoy the game without spending any money on it. (3.31) and 3. Obtaining in-game items/skins/in-game currency/loot boxes enhances the gaming experience (3.26)

Following by perceived value, which included 5 components with mean scores ranging from (2.69 - 3.66) and three of the highest mean score components, including 1. I make in-game purchases when there is promotion/discount. (3.66), 2. I make in-game purchases when the game satisfies me. (3.59) and making in-game purchases increases my interest in the game. (2.88).

Time Saver construct is the third positive correlation to Thai consumer purchase intentions toward microtransactions in video games across all platforms, which included 5 components with mean scores ranging from (2.74 - 3.1). Three of the highest mean score components, including 1. I would play my game for a longer period of time after making an in-game purchase. (3.1), 2. Making in-game purchases has helped me in reaching my goal faster. (3.08) and 3. I make more in-game purchases in multiplayer games. (2.96)

4.2 Inferential statistics (Correlation Analysis)

The factor analysis technique began with 30 questions in terms of constructs (six components), and the factor analysis was structured to cut the factors with less than a 0.4 score. Factor analysis was employed in this study to group comparable components. The data may be summarized into meaningful terms and associated direction groups, resulting in the creation of new important constructs.

The components are effectively measured using factor analysis, which identifies items in the questionnaire that stick together and reduces components that are not significant. This study uses factor loading to examine whether there is a link between the original variable and the significant variable to define the significant variable. As a consequence, the criteria for eliminating inconsequential variables have been

incorporated. Low scores indicate that qualities with factor loadings less than 0.4 should be eliminated.

4.2.1 Rotated Component Matrix

Table 4.11: Rotated Component Matrix

Rotated Component Matrix				
Component	Component 1	Component 2	Component 3	Component 4
I make in-game purchases to make my character advance faster in the game.	0.819	In-game Social status		
Buying in-game items make me stronger/better in my game.	0.799			
Making in-game purchases has helped me in reaching my goal faster.	0.792			
I generally purchase power ups/ boost items in game.	0.76			
I saved time by purchasing items in-game rather than grinding for them.	0.719			
I spend money on video games in order to compete with my friends.	0.55			
I generally purchase cosmetic items in games.		0.856	In-game Aesthetic	
I prefer more paid customization for my in game character.		0.854		
When new cosmetic items are revealed, I always make an in-game purchase.		0.766		
Unique looking items/costume in game is important to me.		0.761		
I make in-game purchases when the game satisfies me.	Satisfaction		0.797	
I purchase items in games that I enjoy			0.794	
I make in-game purchases when there is promotion/discount.	Sale and Promotion			0.879
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 5 iterations. n= 103				

After removing cross loading and removing non-significant components, the table of component matrix displays 13 questions organized into four components: in-game social status, in-game aesthetic, satisfaction, and sale and promotion

4.2.2 Correlations Analysis

Table 4.12: Correlation Analysis

Correlations		Aesthetic	Sale_Promotion	Satisfaction	Social_Status
Aesthetic	Pearson Correlation	1	0.129	.225*	.404**
	Sig. (2-tailed)		0.195	0.023	0
	N	103	103	103	103
Sale_Promotion	Pearson Correlation	0.129	1	-0.073	-0.017
	Sig. (2-tailed)	0.195		0.463	0.865
	N	103	103	103	103
Satisfaction	Pearson Correlation	.225*	-0.073	1	0.189
	Sig. (2-tailed)	0.023	0.463		0.057
	N	103	103	103	103
Social_Status	Pearson Correlation	.404**	-0.017	0.189	1
	Sig. (2-tailed)	0	0.865	0.057	
	N	103	103	103	103
* Correlation is significant at the 0.05 level (2-tailed).					
** Correlation is significant at the 0.01 level (2-tailed).					

The correlations study table shows the relationship between the variables Aesthetic, Sale and Promotion, Satisfaction, and Social Status. The findings demonstrate that all of the variables have statistically significant positive correlations at the 1% significance level and 5% significance level.

4.3 Mean comparison

Based on the allocation of 103 respondents among four constructs correlate with Thai consumer purchase intentions toward microtransactions in video games across all platforms (in-game aesthetic, sale and promotion, satisfaction, and in-game social status), this study used mean comparison to highlight differences in responses among different demographics of respondents. This section will go deeper into five demographic groups:

4.3.1 Gender

Table 4.13: Gender mean comparison

Gender		Aesthetic	Sale_Promotion	Satisfaction	Social_Status
Male	Mean	**2.4875**	**3.6167**	**3.6167**	**2.4444**
	N	60	60	60	60
	Std. Deviation	0.93476	0.71525	0.60623	0.86883
Female	Mean	**2.8663**	**3.7209**	**3.7791**	**3.0155**
	N	43	43	43	43
	Std. Deviation	0.75662	0.50359	0.41263	0.70318
Total	Mean	2.6456	3.6602	3.6845	2.6828
	N	103	103	103	103
	Std. Deviation	0.88112	0.63483	0.53774	0.84872

This table shows the mean score difference between genders for four constructs (in-game aesthetic, sale and promotion, satisfaction, and in-game social status). Females had a higher mean score than males, with a mean score of 2.8663 for Aesthetic, 3.7209 for Sale and Promotion, 3.7791 for Satisfaction, and 3.0155 for Social Status.

4.3.2 Age group

Table 4.14: Age group mean comparison

Age		Aesthetic	Sale_Promotion	Satisfaction	Social_Status
Less than 15 years	Mean	**3.1875**	3	3.75	2.8333
	N	4	4	4	4
	Std. Deviation	0.74652	0.8165	0.28868	0.59317
15-25 years	Mean	2.6667	3.7179	3.6282	**2.5726**
	N	39	39	39	39
	Std. Deviation	0.79541	0.51035	0.63575	0.80459
26-35 years	Mean	2.6383	**3.766**	**3.7872**	2.6667
	N	47	47	47	47
	Std. Deviation	0.94237	0.59756	0.3722	0.89145
36-45 years	Mean	**2.4423**	**3.3077**	**3.4615**	**3.0256**
	N	13	13	13	13
	Std. Deviation	0.95281	0.85485	0.72058	0.8736
Total	Mean	2.6456	3.6602	3.6845	2.6828
	N	103	103	103	103
	Std. Deviation	0.88112	0.63483	0.53774	0.84872

The table above shows the mean score difference between Age groups for four constructs (in-game aesthetic, sale and promotion, satisfaction, and in-game social status). With 3.18 and 2.44, respectively, those aged 15 and younger had the highest mean Aesthetic score, while those aged 36-45 had the lowest. The age group 26-35 has the highest mean score for Sale and Promotion, while the age group 36-45 has the lowest, with 3.76 and 3.3, respectively. Similarly, the age group 26-35 has the greatest mean Satisfaction construct score, while the group 36-45 has the lowest, with 3.78 and 3.46, accordingly. Lastly, age 36-45 has the highest mean score for social status at 3.02 and age 15-25 has the lowest mean score at 2.27.

4.3.3 Marital Status

Table 4.15: Marital Status mean comparison

Marital Status		Aesthetic	Sale_Promotion	Satisfaction	Social_Status
Single	Mean	**2.6994**	**3.6742**	**3.7079**	**2.6629**
	N	89	89	89	89
	Std. Deviation	0.84794	0.61746	0.49891	0.84274
Married	Mean	**2.3036**	**3.5714**	**3.5357**	**2.8095**
	N	14	14	14	14
	Std. Deviation	1.03858	0.75593	0.74587	0.90784
Total	Mean	2.6456	3.6602	3.6845	2.6828
	N	103	103	103	103
	Std. Deviation	0.88112	0.63483	0.53774	0.84872

The table above displays the mean difference in marital status for four constructs (in-game aesthetic, sale and promotion, satisfaction, and in-game social status). Single respondents have higher mean scores on three constructs: Aesthetic, Sale and Promotion, and Satisfaction, with scores of 2.69, 2.67, and 3.70, respectively. Respondents who are married have a higher mean social status score of 2.8.

4.3.4 Education level

Table 4.16: Education level mean comparison

Education level		Aesthetic	Sale_Promotion	Satisfaction	Social_Status
High school or below	Mean	2.7656	3.625	3.6875	**2.625**
	N	16	16	16	16
	Std. Deviation	0.85376	0.7188	0.75	0.8531
Bachelor's degree	Mean	**2.7154**	**3.6154**	**3.7231**	2.6615
	N	65	65	65	65
	Std. Deviation	0.85909	0.62979	0.42418	0.87746
Master's degree or higher	Mean	**2.3523**	**3.8182**	**3.5682**	**2.7879**
	N	22	22	22	22
	Std. Deviation	0.94068	0.58849	0.66	0.78542
Total	Mean	2.6456	3.6602	3.6845	2.6828
	N	103	103	103	103
	Std. Deviation	0.88112	0.63483	0.53774	0.84872

This table displays the mean difference in Education level scores. Respondents with a bachelor's degree got the highest mean Aesthetic and Satisfaction scores, at 2.71 and 3.72, respectively. Respondents with a master's degree or above have the highest mean score for sale and promotion, as well as social status, at 3.81 and 2.79, respectively.

4.3.5 Income level

Table 4.17: Income level mean comparison

Income level		Aesthetic	Sale_Promotion	Satisfaction	Social_Status
Below 15,000 baht	Mean	2.6714	3.7143	**3.6143**	**2.4905**
	N	35	35	35	35
	Std. Deviation	0.89066	0.57248	0.66516	0.77853
15,001 - 30,000 baht	Mean	**2.7593**	**3.5185**	3.7037	**2.9136**
	N	27	27	27	27
	Std. Deviation	0.87289	0.70002	0.39854	0.74732
30,001 - 45,000 baht	Mean	**2.4464**	**3.8571**	**3.8571**	2.6905
	N	14	14	14	14
	Std. Deviation	0.94655	0.36314	0.30562	0.84696
More than 45,000 baht	Mean	2.6019	3.6296	3.6667	2.6975
	N	27	27	27	27
	Std. Deviation	0.87227	0.74152	0.57177	1.00537
Total	Mean	2.6456	3.6602	3.6845	2.6828
	N	103	103	103	103
	Std. Deviation	0.88112	0.63483	0.53774	0.84872

The mean difference in income level scores for four components is shown in this table. Respondents with incomes ranging from 15,001 to 30,000 baht had the highest Aesthetic and Social status mean scores of 2.75 and 2.91, respectively. Respondents with salaries ranging from 30,001 to 45,000 baht had the highest mean sales and promotion ratings, as well as Satisfaction, both of which were 3.86.

CHAPTER V
CONCLUSION & RECOMMENDATION

5.1 Conclusion

The study examined and analyzed the factors that influence Thai customers' purchases of video game microtransactions using quantitative approaches to analyze and explore the components' relationships. There were 103 respondents that participated in the survey who have recently spent real money on in-game items/skins/in-game currency/loot boxes.

The research began with six components that influence Thai consumer purchasing decisions to buy microtransactions in video games across all platforms: cosmetics, perceived enjoyment, perceived value, power ups, social interaction, and time saving. However, following multiple factor analysis and dimension reduction analysis, the final components were reevaluated and classified as In-Game Aesthetic, In-Game Social Status, Sale and Promotion, and Satisfaction. 'In-Game Aesthetic' is the first component. Consumers are more inclined to purchase microtransactions within video games in order to distinguish themselves from other players through cosmetic products, distinctive skins, and decorating items. Second, 'In-Game Social Status' could refer to a prominent level of progression/level/rank within the gaming community; if microtransactions provide an enhancement effect to make in-game characters stronger and help them reach higher levels faster, it would create an appeal to attract consumers to spend money on microtransactions. Third component is 'Sale and Promotion' As the term implies, Thai customers are more inclined to acquire microtransactions when there are appealing discounted products or promotions related with the game they are currently playing. Finally, 'Satisfaction' influences Thai customers to buy microtransactions for video games that they enjoy playing and have a pleasant experience.

The majority of the research sample plays 1-2 games on mobile platforms and is likely to spend 500-1,000 Thai Baht each month on microtransactions, with the

combination of the four aforementioned components having a correlation to encourage Thai consumers to spend on video game microtransactions. That information might be used by video game developers and marketers as a strategy to prioritize their monetization tactics in video games that better serve Thai consumer purchasing behavior within video games.

5.2 Recommendation

To encourage Thai consumers to make more microtransactions in video games, marketers and game developers should always introduce latest items that will entice consumers to buy and distinguish themselves from other players, particularly limited-time cosmetics items that other players may not be able to obtain after a certain period of time, such as seasonality or themed items related to a specific marketing campaign. Especially if such things change the appearance and profile of the character, which might boost in-game social standing.

Game developers and marketers must create progression systems that are accessible to all players while also providing challenges and strategic gameplay that satisfy consumers and make them want to acquire items with boosting effects to support their progression and, as a result, elevate their gaming experiences. In terms of sales on promotion, retailers should not give sales on in-game products on a regular basis, but on special occasions and seasonally, which would also inspire more casual customers to try to buy some of the microtransactions such as things/skins or loot boxes on occasion.

It is safe to say that all game developers want to create gaming experiences that entice consumers to keep playing their games. In order to keep consumers playing their games, game developers must constantly provide updates, campaigns, and changes to keep the player base engaged or competing among themselves, either competitively or collectively. Consumers who are consistently satisfied with the products and spend more time with the game are more willing to spend money on microtransactions in order to continue to improve their experience.

When developing a gaming progression system and implementing monetization features into the game, the goal should be to support the progress so that customers may enjoy the complete gaming experience without spending money on

video games. When a consumer is satisfied with their gaming experience, they are more likely to spend more time and money to purchase special things that appeal to them from the in-game microtransaction area.

5.3 Limitation and future research

As for the study's limitations, there are many that need to be addressed in order to get a more thorough understanding of additional variables that may be significant to investigating and analyzing the elements that impact Thai customers' purchases of video game microtransactions. Because of the study's duration and breadth, a random convenience sample was chosen, which may not reflect the entire population. The survey was solely administered online, and there should be diverse ways for collecting information to accurately represent a larger range of responders and the entire community.

For research consideration, I suggest that a qualitative technique be used to establish relevant constructs connected to the matter before doing quantitative research to better reflect Thai consumers' motivation to purchase in-game microtransactions.

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APPENDICES

APPENDIX

Screening questions included

1. Have you ever used real money to buy or obtain items/skins/in-game currency/loot boxes in-game?

   ( ) Yes

   ( ) No, thank you for your response

2. How many games are you currently playing?

   ( ) Yes

   ( ) No, thank you for your response

General questions included

3. What platforms are you using to play video games?

   1. PC
   2. Console (PlayStation, Xbox, Switch)
   3. Mobile

4. How many games are you currently playing?

   1. 1 - 2 Games
   2. 3 - 4 Games
   3. more than 5 game

5. How long do you normally spend on video games per day?

   1. No more than 1 hour
   2. 1 - 2 Hours
   3. 3 - 4 Hours
   4. More than 4 hours

6. In a month, how often do you purchase in-game items/skins/in-game currency/loot boxes?

   1. Less than 1 time per month
   2. 1 time per month
   3. 2 - 3 times per month
   4. More than 3 times per month

7. How much you normally spend on in-game purchase per game in 1 month

   1. Less than 500 THB
   2. 501 - 1,000 THB
   3. 1,001 - 3,000 THB
   4. More than 3,000 THB

8. What is the main reason that you decide to purchase in-game items/skins/in-game currency/loot boxes ? (Can choose more than 1 choice)

   1. Value

2. Enjoyment

3. Aesthetic

4. Time saving

5. Gaming community

6. Support game development

Specific questions included a range of statements to determine the degree of agreement (Assessment scale: 1= Strongly disagree, 2= Disagree, 3=Agree, 4= Strongly agree) with the constructs included.

I. Perceived Enjoyment

    1. I purchase items in games that I enjoy

    2. I get pleasure from opening the lootbox in the game.

    3. Obtaining in-game items/skins/in-game currency/loot boxes enhances the gaming experience.

    4. I can enjoy the game without spending any money on it.

    5. My in-game purchases are influenced by my enjoyment of the gaming community.

II. Time saver

    1. Buying in-game items make me stronger/better in my game.

    2. Making in-game purchases has helped me in reaching my goal faster.

    3. I make more in-game purchases in multiplayer games.

    4. I saved time by purchasing items in-game rather than grinding for them.

    5. I would play my game for a longer period of time after making an in-game purchase.

III. Cosmetics

    1. I like my character/avatar to look unique over other characters.

    2. Unique looking items/costume in game is important to me.

    3. When new cosmetic items are revealed, I always make an in-game purchase.

    4. I prefer more paid customization for my in game character.

    5. I generally purchase cosmetic items in games.

IV. Power ups

    1. I spend money on video games in order to compete with my friends.

    2. I make in-game purchases to make my character advance faster in the game.

    3. In-game purchases give me an advantage over other players.

    4. I generally purchase power ups/ boost items in games.

    5. Making in-game purchases makes me feel powerful.

V. Perceived Value

    1. I make in-game purchases when the game satisfies me.

    2. I make in-game purchases when there is promotion/discount.

    3. I like to purchase time-limited items.

    4. I prefer to make purchases on bundled game items.

    5. Making in-game purchases increases my interest in the game.

VI.   Social interaction

    1.   I prefer playing games with many friends.

    2.   I like to make game purchases to support game developers that I like.

    3.   I would make an in-game purchase to follow my favorite game streamer.

    4.   Purchasing in-game items helps me to interact with my gaming friends.

    5.   I feel like a part of gaming communities after making an in-game purchase.

Demographic questions included

1.   Could you please provide us with your physical gender?

    1.   Male

    2.   Female

2.   Could you please provide us with your age?

    1.   Less than 15 years

    2.   15-25 years

    3.   26-35 years

    4.   36-45 years

    5.   More than 45 years

3.   Could you please provide us with your status?

    1.   Single

    2.   Married

4.   May I ask which education degree you fall with?

    1.   High school or below

    2.   Bachelor's degree

    3.   Master's degree or higher

5.   Could you please advise us on your personal income?

    1.   Below 15,000 baht

    2.   15,001 - 30,000 baht

    3.   30,001 - 45,000 baht

    4.   More than 45,000 baht