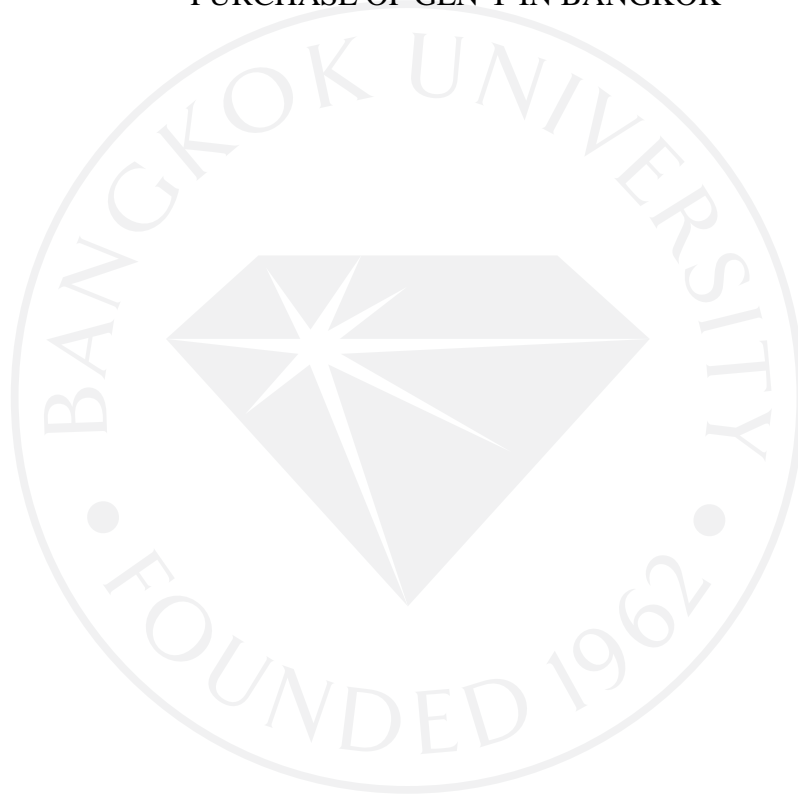


PERFORMANCE EXPECTANCY, HEDONIC MOTIVATION, PERCEIVED  
EASE OF USE, SOCIAL INFLUENCE AND PERCEIVED PLAYFULNESS  
AFFECTING PURCHASE DECISION OF GAMING ITEMS FROM THE IN-APP  
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The background of the page features a large, light gray watermark of the Bangkok University logo. It is a circular emblem with the text "BANGKOK UNIVERSITY" around the top and "FOUNDED 1962" around the bottom. In the center of the circle is a diamond shape with a starburst design inside.

Amornrat Yuensuk

This Independent Study Manuscript Present to  
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Title: Performance Expectancy, Hedonic Motivation, Perceived Ease of Use, Social  
Influence and Perceived Playfulness Affecting Purchase Decision of Gaming Items  
from the In-app Purchase of Gen Y in Bangkok

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### **ABSTRACT**

The purpose of this study was to examine performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of generation Y (gen Y) in Bangkok. The survey questionnaires were applied for data collection. The results found that the majority of 140 respondents were males with the ages between 25-28 years old. Most of them completed a bachelor's degree and earned monthly incomes of 40,001-6,000THB. Additionally, the results revealed that hedonic motivation, social influence, and perceived playfulness were the three significant factors that affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok at the significance level of .05. On the other hand, performance expectancy and perceived ease of use did not affect purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.

*Keywords: Performance expectancy, Hedonic motivation, Perceived ease of use, Social influence, and Perceived playfulness*

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Amornrat Yuensuk

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## **CHAPTER 1**

### **INTRODUCTION**

This chapter provides background and rationales for the study of performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. Moreover, the purpose and significance of the study will be described in this chapter.

#### **1.1 Rational and Problem Statement**

Recently, Thailand was one of the nations that most populace could access to the internet. As per the report of Hootsuite (2019), over 82.6 percent of the Thai population was the active users. The primary explanation of utilizing the internet of Thai population were associated with friends in social networks for example, Facebook, Line, Instagram, playing mobile games, listening to music, or shopping online (Hootsuite, 2019). Kemp (2015) stated that 628 million, 10-nation state of mobile social users, there were more than 233 million active mobile social users, compared to a total of 253 million active internet users within ASEAN. From these totals, Siam Commercial Bank Economic Intelligence Center (2015) discovered that Thai gen Y (generation Y) or millennial shoppers (who was born between 1980 – 1997) would probably be the largest generation of consumers on the world, who were additionally the biggest section of Thai smartphone owners which had a lifetime consuming through potential of over USD \$5 trillion.

The study found that Thais spent approximately 160 minutes a day on smartphones which were the second highest in Southeast Asia. Mobile game was the one in the study identified as a steady demand of the consumption over the smartphones (Leesa-nguansuk, 2016). In addition, The Electronic Transactions Development Agency (Public Organization), Ministry of Information and Communication Technology (2021) had reported the percentage of gen Y in Thailand's Internet access categorized by devices in 2021 as illustrated in table 1.1.

Table 1.1: The Percentage of Gen Y in Thailand of Devices Used to Access the Internet in 2021

Generation	Desktop Computer	Laptop Computer	Tablet Computer	Smartphone	Smart TV
Gen Y	63.7	52.1	24.3	90.5	15.9

Source: The Electronic Transactions Development Agency (Public Organization), Ministry of Information and Communication Technology (2021). *Thailand internet user profile report*. Retrieved from <https://www.etcha.or.th/th/Useful-Resource/2021-Strategic-Indicators.aspx>

Similarly, The Electronic Transactions Development Agency (Public Organization), Ministry of Information and Communication Technology (2021) also had illustrated the percentage of gen Y in Thailand carried out on mobile devices categorized by online activities in 2021 as revealed in table 1.2.

Table 1.2: The Percentage of Gen Y in Thailand of Online Activities Carried Out on Mobile Devices in 2021

Online Activities	Percentage
Watching TV, film /listening to online radio	95.5
Playing online games	41.0
Downloading software/music/dramas/games	58.4
Booking/buying public transport tickets	49.7
Selling goods and services	28.4
Purchasing goods and services	58.9
Carrying out financial transactions	62.7
Checking out news on stocks	33.6
Reading e-books	75.2
Search for information	79.3
Email correspondence	80.4
Social Network	95.5

Source: The Electronic Transactions Development Agency (Public Organization), Ministry of Information and Communication Technology (2021). *Thailand internet user profile report*. Retrieved from <https://www.etcha.or.th/th/Useful-Resource/2021-Strategic-Indicators.aspx>

As a mobile phone gained wide popularity, various new applications and services were constantly being presented and turning out to be increased and more convenient, provided valuable enjoyable to different needs currently. Programming industry and e-commerce were additionally depended on application service to make impressive benefits (Tsung, Wei, Tzu, & Enkhzul, 2019). To date, the application

was categorized into two types which were mobile game applications and general applications. Besides, these applications were isolated into free applications and paid applications (Hsin, Peng, & Yi, 2016). Mobile game applications were currently provided by App Store and Google Play downloads. As indicated by gaming research firm, Newzoo (2018), mobile gaming was produced more than USD \$70 billion of every 2018, which was more than 75 percent of all out-application store income, and there would be more than 2 billion worldwide players (Newzoo, 2018).

Thailand's mobile games income market exceeded USD \$485 million in 2018. The in-app purchase led rapidly to 86% of the income in 2018 and the revenue was increased annually and surpassed \$211.8 million in 2019 (Kerri, 2016). Additionally, Sahni (2015) showed that Thailand mobile games revenue was continuously and gradually growing in last decade from 2014-2017 as illustrated in figure 1.1.

Figure 1.1: Thailand Mobile Game Revenue in 2014



Sources: *Asian beat #6: Five insights into the Thai mobile games market.* (2015).

Retrieved from <https://applift.com/blog/thai-mobile-games-market>

The mobile devices enabled users to consume various additional contents through the utilization of mobile applications. Mobile applications were listed in application markets such as Apple's App Store or Google Play. It was evaluated that there were more than 1,000,000 mobile applications listed in the application market, and the number were expanded regularly (Apple, 2014). Mobile game developers took advantage with different procedures to maximize the benefits. Although there were numerous unmistakable methodologies, 'freemium procedure' was the most common. In the App Store, about 90% of the whole assortment of mobile games was subjected to freemium methodology, these freemium-based mobile game applications offered limited features or limited game items only. Mobile game developer attempted to exploit the freemium system anticipate that users should spend money on the in-app purchase during future use (Schoger, 2013).

The in-app purchase were an extra contents or subscriptions provided by application owners to users for some hidden special items on mobile devices, but not for all applications offered the in-app purchase. Users would identify the in-app purchase offers if the application appearing the remark of 'in-app purchase' together with download button in the App Store or Google Play. Users would or would not be charged for downloading the application at the first download, but the in-app purchase would be the optional feature to be charged after installing and using the application. Some free applications offered the in-app purchase or subscriptions to users for accessing more features and unlocking more abilities in the application (Apple, 2014).

However, the types of the in-app purchase with distinctive characteristics (Apple, 2014) were described in table 1.3.

Table 1.3: The Types of App Features with the In-app Purchases and Subscriptions

Type of the In-app Purchase	Example Contents	Descriptions
Consumable	<ul style="list-style-type: none"> <li>- Game currency</li> <li>- Game hints</li> <li>- Extra health</li> <li>- Extra experience points</li> <li>- A package of exports to a new file format</li> </ul>	Users would have to purchase these items each time when they needed and could not download the items again for free. If the users removed and reinstalled an application, or installed an application on other devices, then the system could be losing a consumable purchase.
Non-consumable	<ul style="list-style-type: none"> <li>- Upgrade to pro edition</li> <li>- Remove ads</li> <li>- Full game unlocks</li> <li>- Unlimited hints</li> <li>- Extra characters</li> <li>- Extra accessories</li> <li>- Bonus game levels</li> <li>- City guide maps</li> </ul>	Users purchased the items once, and you could transfer them to different devices that were related with the Apple ID. In case that users lose a non-consumable purchase, they might be able to download the items again for free.
Non-renewing subscriptions	<ul style="list-style-type: none"> <li>- A sports season pass</li> <li>- Subscriptions for a set period of time (for example, one, three, or six months)</li> </ul>	Users could use the content for a fixed period of time, depending on the application, and they could purchase the items again after a membership ends.

(Continued)

Table 1.3 (Continued): The Types of App Features with the In-app Purchases and Subscriptions





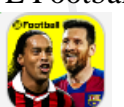
Type of the In-app Purchase	Example Contents	Descriptions
Auto-renewable subscriptions	<ul style="list-style-type: none"> <li>- Newspaper subscriptions</li> <li>- Magazine subscriptions</li> <li>- Ongoing services (Netflix, Hulu Plus, etc.)</li> <li>- Games</li> </ul>	Users could purchase these services or the content for a particular subscription period, and the subscription would automatically recharge a membership at the end of the period. Applications would offer subscription for a various period lengths, for example, weekly, monthly, quarterly, or yearly. Some applications would offer a discount or free trial.

Source: Apple. (2014). *Buy additional app features with the in-app purchases and subscriptions*. Retrieved from <https://support.apple.com/en-us/HT202023>

Phillips (2019) illustrated that some applications like Candy Crush Saga and Pokémon GO, to name two famous ones made it simpler for players to step up, win, or provide extra content any case advance if they spent money in the application through the in-app purchase. These applications were free to download, yet getting high scores, accomplishing new levels, and gaining significant to the rights could be much simpler if players were willing and ready to spend some money toward their objectives. Likewise, there were several top games drive users' enjoyment and gained revenue through continuous game updates, new content, and the in-app purchase event focused to target users (Nelson, 2019). The top 5 mobile game of the in-app purchase in Thailand updated in 2019 were described in table 1.4.



Table 1.4: The Top 5 Mobile Game of the In-app Purchase in Thailand in 2019

Top Games	Developers	Category	Overall Rating
1) Garena Free Fire: Kalahari 	Garana International I Private Limited	Action Games	43,201,314
2) Garana ROV: Mobile MOBA 	Garana Mobile Game Private Limited	Action Games	2,578,495
3) PUBG Mobile 	TentCent Mobile International Limited	Action Games	143,703
4) Ragnarok M: Eternal Love 	Grativity Interactive Inc.	Action Games	106,480
5) E Football PER 2020 	Konami	Sport Games	21,827

Source: SensorTower. (2020). *Top grossing game apps: Thailand*. Retrieved from

[https://sensortower.com/ios/rankings/top/iphone/us/games?app\\_id=11172707](https://sensortower.com/ios/rankings/top/iphone/us/games?app_id=11172707)

Mobile game providers gave away a free version of the game to expected players in order to offer more chances to encounter their game content and advance purchase. If the potential users could play a free version of the mobile game application, the uncertainly level was lowered. This would help actual game utilization to buy the in-app purchase (Donghui, 2015). It facilitated an increase of the

gamer's willingness to pay for playing mobile games, particularly with a great deal of new games was allowed free-to-play models.

There were still many ready to-pay players attempted to put aside time from busy daily life to play mobile game, and this gave game providers opportunities to connect the users who needed to facilitate the game procedure to buy the in-app purchase items. Nevertheless, the effect of recent economy on buying intensity of the mobile game, for the purchasing game things was clearly decreased. Hence, it was fundamental for mobile game provider and user behavior research to better understanding the key factors that promoted and strengthened the purchase intention of mobile game market in current settings (Chieh & Aswin, 2013).

Several previous researches in the field of purchase intention found that the app developers must prepare and investigate a set of factors that affected to purchase intention of the in-app purchase (Saprikis, Avlogiaris, & Katarachia, 2020).

According to Shaikh, Glavee-Geo and Karjaluoto (2018), they explained that performance expectancy was the key predictor to determine the level of technology use that could provide the benefits to users in performing activities over the smartphone. The performance expectancy affected to users' behavioral intention and impacted on mobile payment. Furthermore, in the previous research of Han and Windsor (2013) emphasized that consumers who used smartphone that had the transaction over the in-app purchase could be affected from hedonic motivation because it influenced purchase intention of smartphone users. Moreover, hedonic motivation was considered as a positive influence on behavioral intention of smartphone users and affected purchase intention of the in-app purchase in mobile games (Dholakia, 2006).

Previously, the term of perceived ease of use was explained by Venkatesh (2000) that it was a degree of users' belief toward features use and enhancement of task productivity in the application. It also referred to the level of a person believed that using a system operation would be effortless and quick adaption on using mobile application. This factor was found to have positive effects on users' attitude and intention of making the transaction of the in-app purchase. However, the recent study of Wei, Zhao and Zheng (2019) investigated that social influence was the process of making decision of people that was affected by trust gained from social norms and others' preferences. People tended to change their beliefs, opinions, and behaviors to follow the majority decision against their own personal thoughts. Kim, Shin and Kim (2011) also confirmed that social influence could impact users' attitude and intention to making a purchase over new technology including smartphones. Lastly, perceived playfulness was described by Guo and Barnes (2009) that it was an enjoyment or a positive experience of a player while playing game on smartphone. They believed that virtual world transaction or making the purchase in in-app purchase would be driven by the enjoyment which was the factor influencing users' willingness of purchase the upgrade capacity by getting more character competency or equipment to avoid being bullied by other players.

In conclusion, this research would explore and explain more on performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of Gen Y in Bangkok in Bangkok. Moreover, the research findings also contributed and established new knowledge by identifying the important variables in the in-app purchase for mobile gaming which provided guidance to application vendors in order

to help them launch their new applications to the market successfully and beneficial to other related businesses to generate more market value of mobile game application.

### **1.2 Objectives of the Study**

The overall purpose of this study was to explore and comprehend the performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.

### **1.3 Significance of the Study**

This study contributed to the field of marketing. Users and business owners in both small and large scales would have more understanding on the importance of performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness factors affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. Furthermore, this study would help generating advantage on marketing tools or strategies to increase market value of the service on the in-app purchase sector of mobile game application developers for both domestics and international trading initiatives.

## **CHAPTER 2**

### **LITERATURE REVIEW**

The related issues including the theories and previous researches were reviewed in order to describe the characteristics of the research variables and investigate the relationship among variables. Regarding these concerns, the conceptual framework, the research hypothesis and the questionnaire were generated from this review.

#### **2.1 Related Literature, Theory and Previous Studies**

##### **2.1.1 Performance Expectancy**

Performance expectancy was defined as the degree of using an innovation would give the benefit to consumers, lead to performance gains, and also increase the trust of users to the innovation use in terms of upgrading the task efficiency (Brown, Dennis, & Venkatesh, 2016). Chong (2013) proved that performance expectancy was the most effective factor to the behavioral decision of using mobile applications. If users found the quality of using technology from the mobile applications, the users would be more ready to purchase the addition products or services offered in the applications. Moreover, it could be the significant measurement of the intentional behavior of users toward using the technology. Performance expectancy was directly impacted and concerned to the person's decision regarding the innovation task performance depended on their expected advantages (Monzuwé, Dellaert, & Ruyter 2004).

Bogart and Wichadee (2015) uncovered that performance expectancy directly influenced the expectation among application users in Thailand. This factor was likewise affected by three fundamental sub-factors which were helpfulness, outward inspiration, and result expectation (Venkatesh, Morris, Davis, & Davis, 2003). The research from Lee, Choi, and Kim (2013) proved that the performance expectancy was related to the customers' purchase decision upon choosing the offers in mobile commerce industry. Hence, performance expectancy had also been found that it could be the factor using to predict for driving consumers' purchase decision in selecting the products or services in technology industries (Lavenia & Johan, 2016). The study of Kang (2014) showed that performance expectancy toward mobile application, which proved as a positive result explaining that users could has a strong need for mobile in-app purchase.

Moreover, the research of D'Antoni (2013) was explained that the users expected the performance expectancy of the option or item they purchased via the in-app purchase whenever they almost reached the point of losing game level in order to continue playing without losing their current score or progress. In addition, Jitprasong and Tarnittakorn (2018) found that the performance expectancy with flexibility access affected the intention to use online payment of mobile application users in Bangkok. Performance expectancy was also referred to the belief of consumers that it could help them to perform their tasks and it was useful than the previous one (Rogers, 1995). However, Seesuk and Tarnittanakorn (2019) found that mobile technology acceptance in terms of attitude, trust, and effort expectancy did not affect mobile banking application adoption of consumers in Bangkok.

### **2.1.2 Hedonic Motivation**

Hedonic motivation was the impacted reinforcement of users to purchase for pleasure or willingness (Tuncer, Alkibay, & Hosgor 2008). It was described as the motives of consumers who had purchase intention on the attitude of expecting an enjoyment and being entertained. Getting fun was one of the indicators to measure it. Hedonic motivation was a direct impact to the behavioral intention which affected the users' purchase decision (Venkatesh, Thong, & Xu 2012). Moreover, hedonic motivation brought users' intention to having enjoyment while experiencing the innovation which it was the significant factor to decide the users' attitude and adapt their thoughts regarding the innovation (Brown & Venkatesh, 2005). Hedonic motivation was considered and outlined in accordance with the consumers' behaviors for determining the enjoyment or pleasure while utilizing the technology that they would use for performing their tasks (Venkatesh et al., 2012). The previous study of Widagdo and Roz (2021) also explained that hedonic motivation was defined as a consumer's emotional pleasure that led to impulse purchases of offers sold online, for example, added-on services, promotional items, subscribed contents, etc., and consumers tended to buy without evaluating the actual benefits of the offers while doing so.

Furthermore, the hedonic motivation could enhance users' implementation. It influenced online purchase acceptability and directly facilitated users in experiencing entertainment while exploring the application (Douthwaite, Keatinge, & Park, 2001). The study of Gray (1981) found that hedonic motivation influenced users' behavior, with users being guided by two factors: a) social inhibition, which was a personality trait in social interaction for the reward or avoidance of punishment, and b) behavioral

initiation which was a practice of seeking pleasure and keeping pain away. The results of these two frameworks led people to expand reward experiences and limit suffering experiences. Several studies showed that hedonic motivation impacted the indulgent inspiration on social goals. Meanwhile, internet use increased more attention to satisfaction and delighting themselves based on using mobile devices were the drivers of hedonic motivation (Bagozzi & Dholakia, 2006). The quality of a mobile game application affected the hedonic motivation regarding an individual behavior by promoting positive experiences and it became a meaningful factor for theoretical improvement and marketing practice (Haghshenas, Ismail, & Mohamed, 2017). Therefore, Khatimah, Susanto and Abdullah (2019) stated that hedonic motivation was an important aspect that drove users' decision to make the purchase of the in-app purchase in mobile games.

### **2.1.3 Perceived Ease of Use**

The previous study of Rogers (1962) explained that the understanding of users' willingness to adapt innovations was described as perceived ease of use. Chen and Barnes (2007) also discovered that perceived ease of use was a key factor in users' purchase decision as it had a positive impact on trust in e-commerce. Perceived ease of use referred to users' acceptance of technological devices and individual acceptance of the ability to utilize the innovative systems where users thought that they would have no trouble using the system and it was easy to understand or use (Davis, 1989).

The term perceived ease of use was also defined by Roger (1962) and confirmed that it was a condition showing the level of users' perception of the difficulty of technology that was not too difficult to understand, learn, or use and



users perceived that the new technology or innovation they were using must be better than the substitutes. Similarly, Zeithaml, Parasuraman and Malhotra (2002) defined that the degree to which users believed that technology must be easy to understand or free from difficulty that was considered as perceived ease of use. Furthermore, the previous study of Mehra, Paul and Kaurav (2020) concluded that the ease of use was a significant factor in customers' decision for purchasing the in-app purchase because it offered solutions to any uncertainties the users had about the products' actual value. Ease of use was also used as an indicator of customer satisfaction and a motivator for customers can make a purchase intention.

In addition, the study of Muhonen (2015) revealed that perceived ease of use in relation to mobile in-app purchase related to consumer's attitudes. Perceived ease of use was found to be the most important aspect in understanding the acceptability of a mobile application that led to consumers' purchase decision (Ismail, 2017). In summary, in terms of users' perceptions of the purchasing process in the final stage, ease of use was a primary driver in achieving effectiveness for online purchase (Monsuwé, Dellaert, & Ruyter, 2004).

#### **2.1.4 Social Influence**

The study of Tiongson (2015) revealed that users were likely to download the applications with recommendations from friends, family members, or companions to share and exchange the opinions with each other. The term of social influence had been described as the level of users' perspective affected by others such as friends or colleagues, and their influences led users to use their behavior of innovation or technology adaptation to match their society. On the other hand, users were persuaded to influence the behavior of individual to obtain or utilize a different system. (Martin

& Herrero, 2012). Venkatesh et al. (2012) also defined social influence as the extent to which users considered what other people who were essential to the individual thought based on their attitude and ability to do so. Abbott (2017) stated that social influence was focused on the observation that took place in a social setting. The social influence was discovered to be gained by individuals from each other in society, including practices of observation, imitation, and demonstration. Social influence was explained in terms of technological use such as personal computers, mobile devices, and the use of software or applications that was outside instruction, such as, the experience, offer, or suggestion of friends or family members, and the review of others and it would be the significant key in the purchase decision of users (Karahanna, Straub, & Chervany, 1999)

In additional, Kiseol (2010) found that the impact of social influence on purchase decision could affect users' attitude. She stated that the use of mobile application services was important because suggestions from purchasers about the use of application services were significant to the attitude of other users' towards the appropriate use of mobile applications. The study of Shabrin, Khandaker, Bin, Kashem, Hie and Susila (2017) showed that the social influence had a strong positive and significant relationship with smartphone purchasing of gen Y. The previous study of Lin and Lu (2015) also confirmed that the use of information technology including applications on smartphones acquired the social influence related to friends, colleagues, or classmates. The social influence in online transaction was described as the activity of online users deciding purchasing choices based on examining others' purchase patterns in obtaining their insights and avoid being viewed as outsider from their virtual communities (Chen, Hsu, & Lin, 2010). The previous study of Silaban,

Silalahi and Octoyuda (2021) explained that social influence was an important factor affecting in-app purchase decision because it was about the trust among users to exchange the information or experience and affected to the impulse of intention for making the purchase of mobile in-app purchase. Therefore, consumers' intention to purchase online items could be mainly influenced by social norms. In addition, based on the findings of Tao and Tarnittanakorn (2018) found that the social influence and perceived usefulness also affected Chinese consumers' online shopping satisfaction.

#### **2.1.5 Perceived Playfulness**

Perceived playfulness was an important factor which related to the person's pleasure, mental stimulation, and interests (Csikszentmihalyi, 1990). Furthermore, perceived playfulness was considered to be a natural trust or inspiration (Lee, Cheung, & Chen, 2005) that arose from the person's excitement (Moon & Kim, 2001). Perceived playfulness was explained as users' attention focused on their interaction when using an innovation (Venkatesh & Bala, 2008). When users were in playfulness, users could find their natural response of fascination as users were engaged in the activity for pleasure and enjoyment (Moon & Kim, 2001).

In addition, perceived playfulness was considered to be the users' perception of practicing the new technology and they found pleasure and curiosity (Venkatesh & Bala, 2008). Atkinson and Kydd (1997) also found that playfulness referred to the web browser or software for both entertainment and learning purposes, it was also outlined the meaning of playfulness as unprecedented convenience and great pleasure. Han and Windsor (2013) discovered that perceived playfulness was a significant positive aspect for the study of smartphone users' in-game purchase. Fang, Chan, Brzezinski and Xu (2006) had also found that perceived playfulness was significant

when users responded to gaming services. The previous study by Zhu and Morosan (2014) asserted that perceived playfulness influenced the users' attitude towards the purchase decision of the items sold, from which application developers could improve users' experiences by developing and implementing users' positive attitude for ease of use without much effort.

Additionally, the recent study of Atmoko and Ellyawati (2021) explained that the perceived playfulness was the emotional values obtained from the use of products or services and it could influence an intention of customers to make the purchase decision especially mobile in-app purchase intention. According to the previous study of Zaidi, Gondal, Yasmin and Rizwan (2014), perceived playfulness was a significant factor in establishing a relationship between in-app purchase and users' attitudes toward online purchasing. They explained that when users engaged with and were delighted by the platform, this might also lead to a positive attitude that affected users' intention to decide to make the in-app purchase.

#### **2.1.6 Purchase Decision**

Belch and Belch (2003) stated that the purchase decision stage was the final goal of a client that began with thinking about of the products or services that the users or consumers wished to make a purchase. The users clarified their questions by meeting their needs and appreciating the difference from other options and making a product selection and eventually making a purchase (Belch & Belch, 2003). Purchase decision had been defined as a practice that occurred through decision-making for the purchase, consumption and elimination of products and services (Kotler & Levy, 1969).

Procedures and activities of purchase decision were confirmed that the customer participated in estimating, acquiring, using, or dealing with products and services. The concept of purchase decision referred to the decision and receipt of goods and services by both the customer and the service provider (Jaakkola, 2007). Meanwhile, the research recognized that the perspectives of people directly affecting the purchase decision and influenced the consolidation or change of a particular attitude (Odabasi & Baris, 2003). The users agreed that the purchase decision of an application depending on their willingness to continue using it and to purchase it when the opportunity was presented (Kotler & Keller 2009). Similarly, Dorsch, Grove and Darden (2002) found that purchase decision of technology followed a similar purchasing process, such that the purchasers were influenced by preferred representatives identified with specific brands. Many researches confirmed that the business channel, online store, mobile application and social media could be decided based on the data obtained through the purchase decision (Brynjolfsson & Rahman, 2013). Finally, Samarhan (2016) revealed that there was a change in the shopping behavior of consumers in stores who made their purchase decision on mobile devices based on reviews and it influenced the purchase decision by making users making the selection in search engines first to complete the online purchase.

## **2.2 Research Hypotheses**

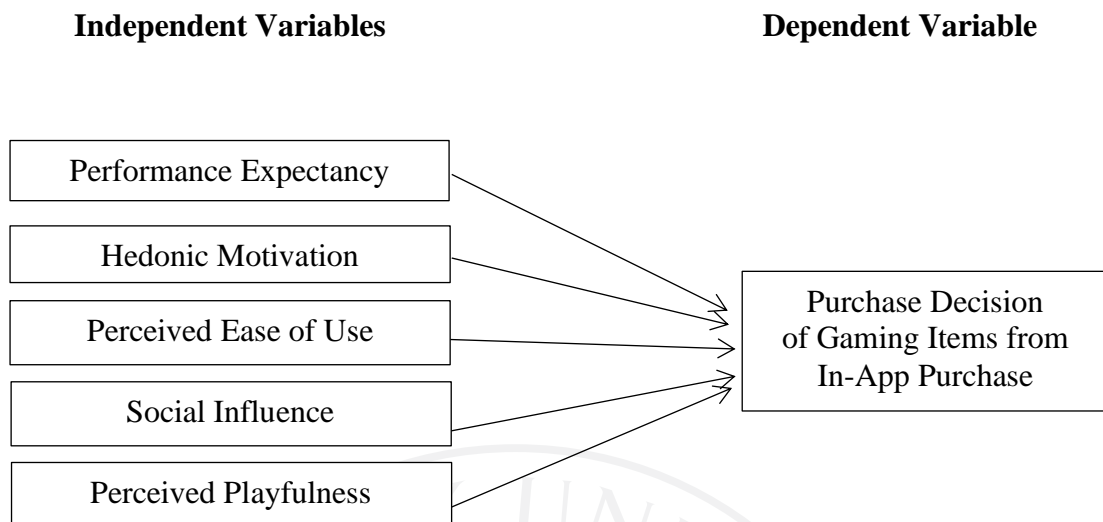
The hypotheses in this study were developed to assess the relationship between the independent and dependent variables. These hypotheses were derived from the related theories and previous studies. They were proposed as follows:

- H1:** Performance expectancy affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.
- H2:** Hedonic motivation affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.
- H3:** Perceived ease of use affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.
- H4:** Social influence affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.
- H5:** Perceived playfulness affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.

### 2.3 Conceptual Framework

Based on the literature review of performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok, the conceptual framework of the study was illustrated in figure 2.1.

Figure 2.1: The Conceptual Framework of Performance Expectancy, Hedonic Motivation, Perceived Ease of Use, Social Influence and Perceived Playfulness Affecting Purchase Decision of Gaming Items from The In-App Purchase of Gen Y in Bangkok



The conceptual framework in this study was portrayed the relationship between the independent variables: performance expectancy (Kang, 2014), hedonic motivation (Khatimah et al., 2019), perceived ease of use (Ismail, 2016), social influence (Lin & Lu, 2015), perceived playfulness (Zhu & Morosan, 2014), and dependent variable of purchase decision (Hee et al., 2016).

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

The present research had applied the technique of quantitative research to attain the purposes of the study. The questionnaire, which was used as the research instrument, was constructed by applying the related theories and was approved by the expertise. The details of the research methodology procedure were described as follows:

#### **3.1 Research Design**

This research study has adopted quantitative approach to study relationship of performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of generation Y (gen Y) in Bangkok. The primary source of data and information in this study was gathered from survey questionnaires (Rowley, 2014) and other reliable secondary sources such as relevant journals, articles, and online database.

#### **3.2 Population and Sample Selection**

The target populations of the study were people in generation Y who made purchase of the gaming items from the in-app purchase and lived in Bangkok. The sample size was calculated based on 40 sets of pilot test questionnaires (Cohen, 1977). Then G\*Power version 3.1.9.2 (Erdfelder, Faul, & Buchner, 1996) was applied with the Power ( $1 - \beta$ ) of 0.95, Alpha ( $\alpha$ ) of 0.05, number of test predictor of 5, effect



size of 0.1517672. A total sample size of 136 was gained for the field survey. Thus, 140 sets of questionnaire have been collected for more stable results. Then, the multi-stage sampling technique with simple random sampling by randomly selecting 5 districts of Bangkok: Klong Toei, Thawi Watthana, Sathon, Pathumwan and Lat Phrao (Sukkho, 2016) was used. The listed districts were selected by using the non-probability sampling methods called accidental sampling by collecting data only with respondents who were willing to reveal their opinion with the researcher by completing the questionnaires (Saunders, Lewis, & Thornhill, 2012) from respondents in listed areas. In addition, the quota sampling technique was implemented (28 respondents/ district). Finally, convenience sampling technique was utilized by collecting data from the target sample at department stores and office buildings in the randomly selected districts. Areas of field survey and number of sample of each district were illustrated in table 3.1.

Table 3.1: Areas of Field Survey and Number of Sample of Each District

<b>Lists of Districts</b>	<b>Number of Sampling</b>
- Klong Toei	28
- Thawi Watthana	28
- Sathon	28
- Pathumwan	28
- Lat Phrao	28
<b>Total</b>	<b>140</b>

### 3.3 Research Instrument

A close-ended questionnaire was utilized as the research instrument consisting of a series of questions for gathering information from respondents in the study. To explore all independent variables and a dependent variable, the questions to measure the constructs in the study were adapted from performance expectancy (Kang, 2014), hedonic motivation (Khatimah et al., 2019), perceived ease of use (Ismail, 2016), social influence (Lin & Lu, 2015), perceived playfulness (Zhu & Morosan, 2014), and purchase decision (Hee et al., 2016).

Finally, the questionnaire was translated from English and into Thai (as shown in Appendix A & B) to reach all target respondents. This research questionnaire consisted of three sections as follows:

Section 1: Questions on consumer information, closed-end format was used for personal information; gender, age, monthly income, and educational background.

Section 2: Questions on factors affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. There were questions asking about performance expectancy (PE), hedonic motivation (HM), perceived ease of use (PEU), social influence (SI), and perceived playfulness (PP) affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The answers of these questions indicated the respondent's opinions relating to factors affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The interval scale measure was implemented using a five point Likert scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

Section 3: Questions on purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. There were five questions asking about purchase

decision of the in-app purchase (PDI) of respondents who were gen Y and lived in Bangkok. The answers of these questions indicated the respondent's opinion on purchase decision of the in-app purchase. The interval scale measure was implemented using a five point Likert scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

### **3.4 Reliability and Content Validity**

The questions in the questionnaire were derived from the previous studies and academic articles. Then, they were passed the verification of content validity by three experts:

- Mr. Anucha Kunto, IT Manager at ACA Pacific Group Co., Ltd.
- Ms. Nattakaan Waratanapon, R&D Facility Manager at Reckitt Benckiser (Thailand) Co., Ltd.
- Ms. Phakkawat Bangkra, Project Director at Arcadia (Thailand) Co., Ltd

After that, Cronbach's alpha coefficient was utilized for reliability analysis and consistency testing. The value of Cronbach's alpha was between  $0 \leq \alpha \leq 1$  (Nunnally, 1978), the score that closest to 1 was the most reliable as in table 3.2.

Table 3.2: Reliability Analysis of Coefficient Cronbach's Alpha

Variables	Coefficient Cronbach's Alpha			
	Pilot Test		Field Survey	
	Items	n = 40	Items	n = 140
Performance Expectancy (PE)	5	0.875	5	0.719
Hedonic Motivation (HM)	5	0.788	5	0.809
Perceived Ease of Use (PEU)	4	0.736	4	0.859
Social Influence (SI)	5	0.827	5	0.757
Perceived Playfulness (PP)	5	0.825	5	0.735
Purchase Decision of the In-App Purchase (PDI)	5	0.864	5	0.816
<b>Total</b>	<b>29</b>	<b>0.921</b>	<b>29</b>	<b>0.909</b>

According to Cronbach's alpha coefficient value, the reliability for the question items of each variable should be rating between  $0.65 < \alpha < 1$  (Nunnally, 1978). Consequently, 40 sets of the questionnaires were applied for pilot test. The results of reliability test revealed that Cronbach's alpha value of 0.736-0.875 was acceptable. In addition, the results from 140 sets of field survey were ranging between 0.719-0.859 as shown in table 3.2. The Corrected Item Total Correlation for all questions were ranging between 0.532 – 0.675. Therefore, all questions were usable as the scores were above 0.3 (Din, 2011). Thus, the data from the questionnaires could be used for further analysis.

### **3.5 Statistics for Data Analysis**

The data analysis was conducted applying Statistical Package for Social Sciences (SPSS) program version 26. Consequently, the statistical techniques used for data analysis and interpretation included descriptive and inferential statistics as follows:

#### **3.5.1 Descriptive Statistics Analysis**

Section 1: Consumer information such as gender, age, monthly income, educational background, frequency of making the in-app purchase in each month, and money spending when buying gaming items in each month by using frequency and percentage.

Section 2-3: Performance expectancy, hedonic motivation, perceived ease of use, social influence, and perceived playfulness in Likert scale questions were analyzed by using mean ( $\bar{x}$ ) and standard deviation (S.D.).

#### **3.5.2 Inferential Statistics Analysis**

In order to test the hypotheses of the study, multiple regression analysis was conducted to analyze the relationship between the independent variables: performance expectancy, hedonic motivation, perceived ease of use, social influence, and perceived playfulness and the dependent variable of purchase decision (Hee et al., 2016).

## CHAPTER 4

### RESEARCH RESULTS

The research findings which derived from data analysis of 140 questionnaire sets were presented in this chapter.

#### 4.1 Summary of Demographic Data

From the study of 140 samples, all respondents' personal information in terms of gender, age, monthly income, educational level, frequency of making the in-app purchase per a month, and money spending for buying gaming items in each month were presented in frequencies and percentage in table 4.1 as follows:

Table 4.1: Demographic Profile of Respondents (n = 140)

Demographic Data	Frequency	Percent
Gender:		
Male	78	55.7
Female	62	44.3
Age:		
20 – 24 years old	18	12.9
25 – 28 years old	52	37.1
29 – 32 years old	35	25.0
33 – 37 years old	35	25.0
Monthly income: (Baht)		
Less than 20,000	20	14.3
20,001 – 40,000	47	33.6
40,001 – 60,000	50	35.7
Above 60,001	23	16.4

(Continued)

Table 4.1 (Continued): Demographic Profile of Respondents (n = 140)

Demographic Data	Frequency	Percent
Education background:		
High school/vocational	5	3.6
Bachelor's degree	84	60.0
Master's degree	47	33.6
Doctor's degree	4	2.9
Frequency of making the in-app purchase in each month:		
Less than 1 time	56	40.0
1 – 3 times	55	39.3
4 – 6 times	21	15.0
More than 6 times	8	5.7
Money spending for buying gaming items in each month:		
Below 500	64	45.7
501 -1,000	46	32.9
1,001 – 3,000	26	18.6
Above 3,001	4	2.9
<b>Total</b>	<b>140</b>	<b>100.0</b>

Table 4.1 was illustrated the personal profile of the respondents. The majority of the respondents were male (55.7%) out of 140 respondents while the rest of respondent were female (44.3%). The results showed that male had more awareness and interested in purchase decision of gaming items from the in-app purchase than female. Additionally, most of respondents in this survey were 25-28 years old. This showed that this age group was interested to purchase gaming items from the in-app purchase more than other groups. Furthermore, the majority of the respondents earned monthly income between 40,001-60,000 THB (35.7%). Most of them completed a bachelor's degree (84 people with 60.0%). Lastly, most of respondents who

completed this survey made purchase in the in-app purchase less than once a month (56 people with 40.0%) and spent less than 500 THB (45.7%) each month in making purchase in the in-app purchase.

#### 4.2 Results of Hypothesis Testing

The research findings in this part presented relationship of performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The multiple regression analysis (MRA) was used for the hypothesis testing. The findings were presented in table 4.2.

Table 4.2: Results from Multiple Regression Analysis

Factor	Purchase Decision of Gaming Items from the In-App Purchase								
	$\bar{x}$	S.D.	B	S.E.	$\beta$	t	Sig.	Tolerance	VIF
Constant			.458	-	-	1.176	.242	-	-
Performance Expectancy	4.158	.743	.089	.071	.071	.827	.410	.561	1.782
Hedonic Motivation	4.061	.596	.246	.241	.241	2.894	.004*	.603	1.657
Perceived Ease of Use	3.871	.729	.101	.083	-.083	1.050	.295	.670	1.491
Social Influence	3.678	.750	.206	.208	.208	2.711	.008*	.712	1.404
Perceived Playfulness	3.832	.694	.289	.270	.270	3.169	.002*	.576	1.735

$R^2 = .447$ ,  $AR^2 = .426$ ,  $F = 21.373$ ,  $*p < .05$

According to the table 4.2, the findings were found that most of the respondents agreed with performance expectancy ( $\bar{x} = 4.1580$ ), followed by hedonic



motivation ( $\bar{x} = 4.0609$ ), perceived ease of use ( $\bar{x} = 3.8714$ ), perceived playfulness ( $\bar{x} = 3.8319$ ), and social influence ( $\bar{x} = 3.6783$ ) respectively when they had purchase decision of gaming items from the in-app purchase.

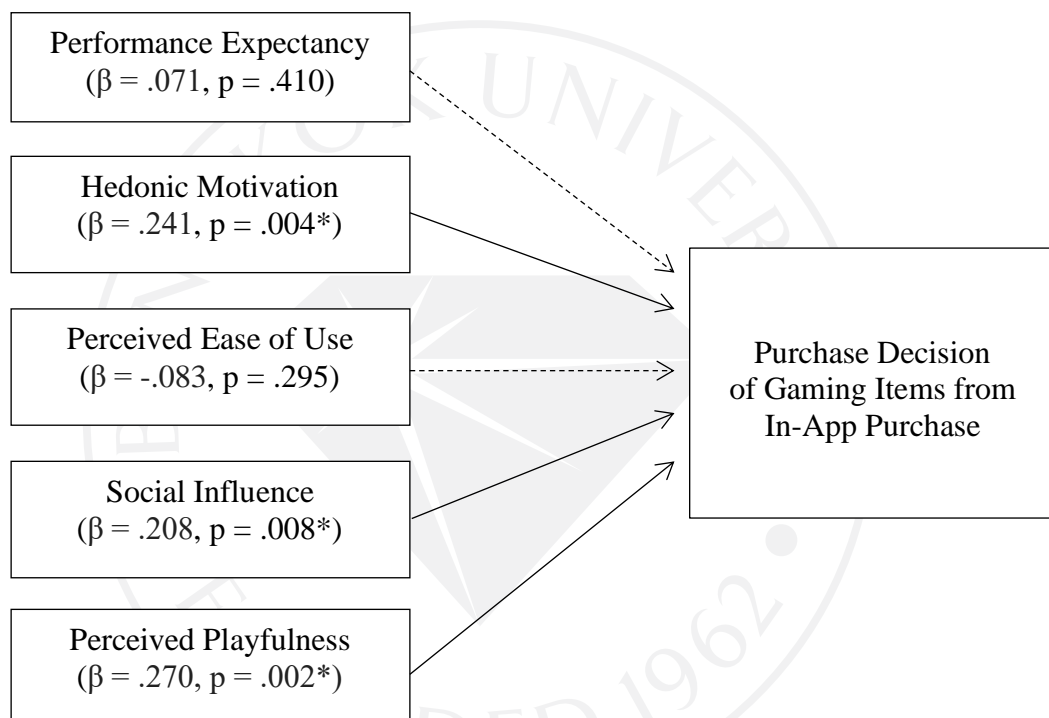
The results of multiple regression analysis showed that the factors affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok with significance level of .05 were hedonic motivation ( $p = .004$ ), social influence ( $p = .008$ ), and perceived playfulness ( $p = .002$ ). In addition, the results showed that perceived playfulness ( $\beta = .270$ ) accounted for the strongest weights affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok, followed by hedonic motivation ( $\beta = .208$ ). On the other hand, performance expectancy ( $p = .410$ ) and perceived ease of use ( $p = .295$ ) did not affect purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.

In addition, the R-square in this study was .447 which explained that hedonic motivation, social influence, and perceived playfulness had 44.7% of the influence toward purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.

Finally, Variance Inflation Factor (VIF) and Tolerance was used for detecting the multicollinearity problem. Multicollinearity was the method for determining multiple correlations among independent variables and uncorrelated assumption of independent variables. It occurred when independent variables in a regression model are correlated. Tolerance value must greater than .2 (Miles & Shevlin, 2001) while VIF value must less than 5 (Zikmund, Babin, Carr, & Griffin, 2013, p.590). VIF is greater than 5 represent critical levels of multicollinearity where the coefficients are poorly estimated, and the p-values are questionable. VIF values of this study were

1.404-1.782 which were less than 5 and the Tolerance values ranged between .561-.712. Hence, there was no multicollinearity problem in this research. The summarized results of the study were depicted in Figure 4.1.

Figure 4.1: Inferential Statistics Analysis for Hypothesis Testing



**Note:**

-----► = No Influence

————► = Has Influence

\* = Significant at level .05

### 4.3 Summary of Hypothesis Testing

Regarding to the inferential statistics analysis, hypothesis testing performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok, the results were summarized in table 4.3.

Table 4.3: Summarized of Hypothesis Testing Results

Hypotheses	Results
<b>H1:</b> Performance expectancy affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.	Not Support
<b>H2:</b> Hedonic motivation affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.	Support
<b>H3:</b> Perceived ease of use affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.	Not Support
<b>H4:</b> Social influence affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.	Support
<b>H5:</b> Perceived playfulness affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.	Support

## **CHAPTER 5**

### **CONCLUSION AND DISCUSSION**

This research was quantitative research which aimed in studying the performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The questionnaires were used for collecting data from 140 respondents in Bangkok. The data were analyzed by implementing SPSS Statistics Version 26. Finally, the research results were summarized, discussed, and yielded the recommendation and further research.

#### **5.1 Research Findings and Conclusion**

From the personal profile of 140 respondents, the findings found that most of the respondents were males with the ages between 25-28 years old. Most of them completed bachelor's degrees with monthly incomes of 40,000-60,000 THB. Most of respondents purchased gaming items in the in-app purchase less than once in each month and spent less than 500 THB in each month on purchase gaming items from the in-app purchase.

The results of multiple regression analysis showed that the factors affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok with a significance level of .05 were hedonic motivation, social influence, and perceived playfulness. In addition, the results showed that perceived playfulness accounted for the strongest weights of influence on purchase decision of gaming items from the in-app purchase of gen Y in Bangkok, followed by hedonic motivation

and social influence. On the other hand, performance expectancy and perceived ease of use did not affect purchase decision of gaming items from the in-app purchase of gen Y in Bangkok.

## 5.2 Discussion

Hypothesis 1: Performance expectancy affected purchase decision of gaming items in the in-app purchase of gen Y in Bangkok. The research results showed that performance expectancy did not affect purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. This was because most of the respondents might think that the in-app purchase was not useful or did not increase the chances of getting rewards while playing mobile games and it did not enable them to accomplish more levels of the game quickly. Therefore, providing features such as extra items, extra solutions, special rewards, or special game characters did not affect purchase decision of gaming items from the in-app purchase.

On the other hand, the research result was contrast with the study of D'Antoni (2013) explaining that the in-app purchase or paid content could make the players to unlock chapters, pass difficult levels, access new chapters, and continue playing without losing their current score or game progress. The result of the study was also contrast with most studies which showed that performance expectancy had a positive effect on users' attitudes toward the in-app purchase decision in terms of the additional extra features enabling players to perform purchasing activities via the in-app purchase (Hew, Lee, Ooi, & Wei, 2015). The result of this study was also in contrast with the previous study of Chua (2018) which postulated that performance expectancy was similar to perceived usefulness and was an important factor

influencing people's attitudes toward using platforms or systems on mobile devices. However, the results of this study were in line with Seesuk and Tarnittanakorn (2019) who found that mobile technology acceptance in terms of attitude, trust, and effort expectancy did not affect mobile banking application adoption of consumers in Bangkok.

Hypothesis 2: Hedonic motivation affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The research result showed that hedonic motivation affected purchase decision of gaming items from the in-app purchase with a significance level of .5. This was because most of the respondents believed that the in-app purchase was a great platform where they could enjoy and satisfy their purchase decision. In addition, the well designed in-app purchase dashboard (for example, the audio-visual and graphic contents) persuaded them to spend more time or immerse in browsing the in-app purchase.

The research result confirmed the study of Chen (2019) that the interface design of the in-app purchase could help users spending more time to browse the items and proceed the in-app purchase. For example, the colors of the interface could express emotions and convey important messages to arouse users. The interface styles and patterns could highlight the options and lead users to buy items in the application. Additionally, the display of best deals showing the discount could positively persuade users to browse more items in the in-app purchase. Hedonic motivation was an emotional pleasure of consumer which led to impulse buying products or services especially the available items sold online, and users tended to purchase without considering the actual benefits of the goods during making the purchase (Widagdo & Roz, 2021).

Moreover, the results confirmed the previous study of Douthwaite, Keatinge and Park (2001) which revealed that hedonic motivation could increase the users' adoption levels. It affected the acceptance of online transaction, and directly helped users to have fun while browsing the application. When purchasing gaming items in the in-app purchase context, hedonic motivation affected behavioral intention and users were encouraged to automatically complete the transaction via the in-app purchase (Guynn & Chang, 2012). Moreover, Venkatesh, Thong and Xu (2012) defined and supported the finding of this study that hedonic motivation was the enjoyment of using the technology platform and drove the majority of purchase decisions for engagement, adoption, and usage. In addition, the result agreed with the research of Fard, Alkelani, Tamam and Feng (2019), they found that hedonic motivation in online purchase behavior was significant factors influencing users' behavior and leading to successful online transactions for application developers.

Hypothesis 3: Perceived ease of use affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The research results showed that perceived ease of use did not affect purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. This was because the purchase decision of gaming items via the in-app purchase might not relate to perceived ease of use such as ease of navigation in the application, and less time required to complete transactions through the in-app purchase.

The result was contrast with the study of Gefen (2003) who described the importance of ease of use in online transactions, that navigation must be easy to encourage users to buy and discover the benefits. The findings from this study in contrast to the previous study of Mehra, Paul and Kaurav (2020) which they

confirmed that customers' decision to purchase the in-app purchase was influenced by the ease of use, which it provided the solutions to whatever issues users had about the applications. Ease of use was also utilized as a predictor of customer satisfaction and a motivation for users to consider making a purchase. In addition, the result was also contrast with the study of Monsuwé, Dellaert and Ruyter (2004) that ease of use was the important factor in terms of users' perception towards the purchasing process in final stage and it was a driver to achieve the best result for online payment.

Hypothesis 4: Social influence affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The research result showed that social influence affected purchase decision of gaming items from the in-app purchase with significance level of .5. This was because most of the respondents tended to make the in-app purchase based on social environment.

The result was confirmed by Bearden and Etzel (1982) that social influence was an indirect pressure on a person based on behavior of others such as friends, family, colleagues that could be seen either in individuals or groups. The study of Aronson (2003) also revealed that the purchase of items on online platforms could be impacted by other users of social media, which stimulated individuals to buy the same thing they bought before. Moreover, the result was aligned with the study of Chen, Hsu and Lin (2010) who defined the social influence in online payment as a practice of online users making purchase decisions based on observing others' purchase histories to obtain their experiences and avoid being judged as outdated or retarded by others in their online community. Additionally, the recent study concluded that social influence affected the in-app purchase intention of players because mobile game was considered as a community where the virtual platform gathering people for social



exchange and users were increased the trust in other users to convey the resource exchange and lead to the transaction of mobile in-app purchase (Silaban, Silalahi, & Octoyuda, 2021).

Hypothesis 5: Perceived playfulness affected purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. The research result showed that perceived playfulness affected purchase decision of gaming items from the in-app purchase with a significance level of .5. This was because perceived playfulness in terms of enjoyment (having fun, stimulating curiosity, entertaining, and increasing users' interest) played an important role in the purchase decision of gaming items from the in-app purchase for most of the respondents.

The result of this study agreed with the study of Zaidi, Gondal, Yasmin and Rizwan (2014) that perceived playfulness was an important factor in making the in-app transaction relation to users' attitude towards online shopping. They explained that if users enjoyed and were impressed by the platform, this could increase good attitude, which affected users' intention to complete the purchase in the in-app purchase. Additionally, the results were aligned with the previous study of Atmoko and Ellyawati (2021) which explained that the perceived playfulness was the factor affecting purchase decision of in-app purchase because it was significantly influenced to users' emotional values obtained from the use of in-app offers and it directed customers to make the purchase of in-app purchase of gaming items on mobile devices. Moreover, the study of Hsu and Lu (2003) also explained that perceived playfulness could be measured by the feeling and reaction of users who felt pleasure or fun in making online payments using mobile devices, and they also confirmed that

pleasure in browsing the items available on the online platform would be the enforcement accelerating users' urge to make a purchase decision.

### **5.3 Recommendations for Managerial Implications**

In relation to the research findings, the recommendations for management implications were contributed as follows:

According to the findings of the study, perceived playfulness was the factor that had the strongest relative contribution to the purchase decision of gaming items from the in-app purchase of gen Y in Bangkok. Perceived playfulness had a direct impact on the customer's purchase decision. Therefore, the application developers and marketers who conducted business related to gaming applications or related business should put a focus on the relevant target market. They should pay more attention to improve the user experience (UX) in terms of playfulness or enjoyment and they should consider UI design (user interface) in their application in terms of human-computer interaction, communication, and response between the application and the user that had great impact on the customers and provide a smooth interact in the application to improve the overall experience of the user. In comparison, the interfaces of the gaming application helped the users to interact and give them the best experience while browsing items sold in the application. Definitely, the in-app purchases were an important revenue driver that all application developers wanted to achieve with their created application. Perceived playfulness was the factor that increased the enjoyment of users and attracted users' purchase decision for gaming items from the in-app purchases.

The second significant factor that influenced the purchase decision of gaming items from the in-app purchase was hedonic motivation. This was another driver that application creators or developers should consider and focus on this factor as well. Nowadays, many game applications were released in the market and users had many options to purchase. The key factor of hedonic motivation was similar to customer satisfaction with the application. Many game applications also allowed players to try the free version of the game and then appealing users to engage more by offering the in-app purchase. This was an example of a recommendation to application developers to keep users hedonically motivated and encourage them to try new experiences. Therefore, the application developers should focus on hedonic motivation to design the in-app purchase to match with the customers' requirements for being competitive and escalate the sales growth comparing to competitors in the market.

Finally, the significant factor that influenced the purchase decision of gaming items from the in-app purchase was social influence. Most users tend to purchase products or services based on others in their community. Application developers should focus on a good review and rating. They should illustrate the purchase history statistics of other users to encourage players to purchase the same items offered in the gaming application. The result of this study showed that this method influenced other players.

#### **5.4 Recommendations for Future Research**

The researcher would like to recommend the additional interesting topics for the future research to enhance the knowledge that was important for the academic concerns as follows:

This research study was conducted in Bangkok and narrowed down the respondents by focusing on gen Y only. Therefore, there is more opportunities for future research, a larger area in different provinces, regions, or countries should be conducted to get more reliable results and also expand or select a different target group of respondents to study a different group of users who play game applications. Regarding some independent factors, namely performance expectancy and perceived ease of use which did not influence the purchase decision of gaming items from the in-app purchase. The researchers or academicians who were interested in this topic should find the reasons why they had no influence. They should also examine more closely by studying or conducting further research with the factors that were influenced in this study, such as perceived playfulness, hedonic motivation, and social influence, to understand the relationship or discrepancies among these factors. In addition, the researcher could add other relevant independent factors such as privacy policy, online customer service, customer review and testimonial, release date, ranking, game category, or other factors for future studies. The new findings could be useful for application creators or developers to develop strategies to maintain and attract their users or customers.

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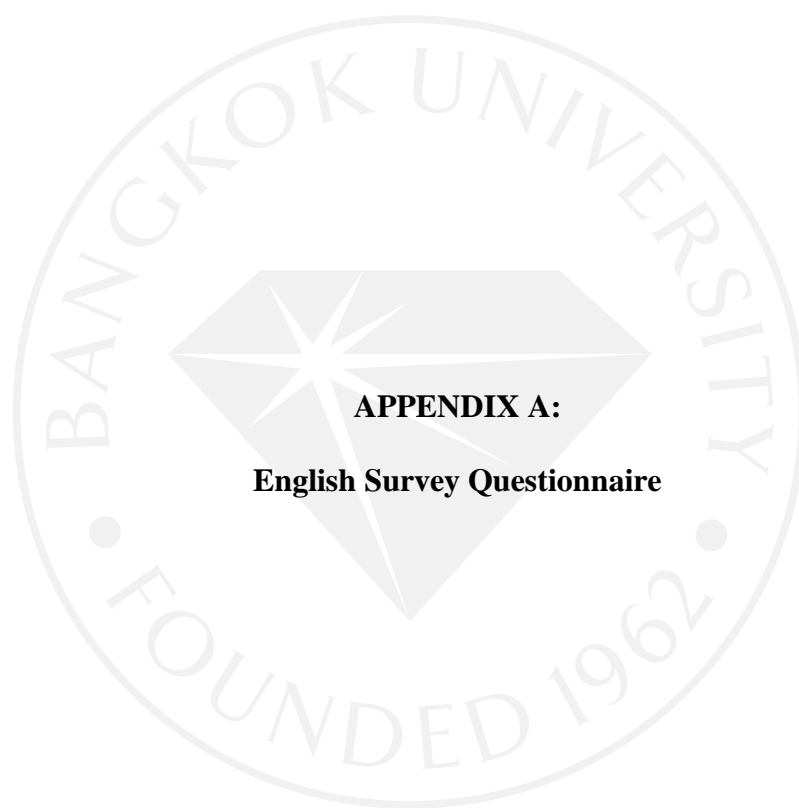
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### **QUESTIONNAIRE:**

**Performance Expectancy, Hedonic Motivation, Perceived Ease of Use, Social  
Influence and Perceived Playfulness Affecting Purchase Decision of  
Gaming Items from the In-App Purchase of Gen Y in Bangkok**

This questionnaire is conducted as a part of the independent study of master's degree in business administration, international program, Bangkok University. It is designed to gather information about the factors affecting purchase decision of gaming items from the in-app purchase of Gen Y in Bangkok. I would be appreciated if you could contribute any fact and useful information truthfully by filling out the questionnaire. The information provided will be treated highly confidential and will be used solely for the purpose of academic resources.

Thank you very much for your kind cooperation.

MBA Student, Bangkok University

**Remark:** In-app purchase refers to the activity of buying extra contents or items that can be bought from mobile applications running on a smartphone. For example, a game application may offer users or players the extra feature with an ability to skip a troublesome level by making the in-app purchase.

**Screening Questions:****1. Were you born in 1980 – 1997?**

- ☐ Yes
- ☐ No (End of question, thank you for your time)

**2. Have you ever played mobile games?**

- ☐ Yes
- ☐ No (End of question, thank you for your time)

**3. Have you ever bought any “in-app purchase” for playing mobile games?**

- ☐ Yes
- ☐ No (End of question, thank you for your time)
- 

**Part 1: Personal Details**

**Explanation:** Please mark ✓ into ☐ that matches your information the most.

**1. Gender:**

- ☐ 1) Male ☐ 2) Female

**2. Age:**

- ☐ 1) 20 – 24 years old ☐ 2) 25 – 28 years old
- ☐ 3) 29 – 32 years old ☐ 4) 33 – 37 years old

**3. Monthly income:**

- ☐ 1) Below 20,000 Baht ☐ 2) 20,000 – 30,000 Baht
- ☐ 3) 30,001 – 60,000 Baht ☐ 4) Above 60,000 Baht

**4. Educational background:**

- ☐ 1) High school / Vocational ☐ 2) Bachelor's degree
- ☐ 3) Master's degree ☐ 4) Doctor's degree

5. How often do you make the in-app purchase per a month?

- ☐ 1) Less than 1 time per a month    ☐ 2) 1 – 3 times per a month  
☐ 3) 4 – 6 times per a month    ☐ 4) More than 6 times per a month

6. How much money do you spend for buying gaming items in the in-app purchase per a month?

- ☐ 1) Below 500 Baht    ☐ 2) 501 – 1,000 Baht  
☐ 3) 1,001 – 3,000 Baht    ☐ 4) Above 3,000 Baht

## Part 2: Factors Affecting Purchase Decision of Gaming Items the In-App

### Purchase of Gen Y in Bangkok

**Explanation:** Please mark ✓ the choices that correspond to your opinions. Indication of your opinion: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree

Factors Affecting Purchase Decision of Gaming Items from the In-App Purchase of Employees in Bangkok	Level of Opinions				
	Strongly Agree	←→	Strongly Disagree		
<b>1. Performance Expectancy: PE</b>					
1.1 I find that the in-app purchase is useful while playing mobile games.	(5)	(4)	(3)	(2)	(1)
1.2 Using the in-app purchase enables me to accomplish more levels of the game quickly.	(5)	(4)	(3)	(2)	(1)

Factors Affecting Purchase Decision of Gaming  Items from the In-App Purchase of  Employees in Bangkok	Level of Opinions				
	Strongly Agree	↔			Strongly Disagree
1.3 Using the in-app purchase enables me to continuously pass a troublesome level without waiting.	(5)	(4)	(3)	(2)	(1)
1.4 Using the in-app purchase increases my chances of getting rewards such as special items, coins, or etc.	(5)	(4)	(3)	(2)	(1)
1.5 I believe that the character in the game will be more skillful from buying extra features sold in the in-app purchase.	(5)	(4)	(3)	(2)	(1)
<b>2 Hedonic Motivation: HM</b>					
2.1 To me, the in-app purchase is not just about buying – it is about being entertained.	(5)	(4)	(3)	(2)	(1)
2.2 Well designed the in-app purchase dashboard (for example, the audio-visual and graphic contents) is the factor that persuades me to spend my time browsing the in-app purchase.	(5)	(4)	(3)	(2)	(1)
2.3 I enjoy being immersed in new items that the application offered and spend a lot of time browsing the in-app purchase.	(5)	(4)	(3)	(2)	(1)
2.4 The in-app purchase is a great platform where I can satisfy my purchase decision.	(5)	(4)	(3)	(2)	(1)

Factors Affecting Purchase Decision of Gaming  Items from the In-App Purchase of  Employees in Bangkok	Level of Opinions				
	Strongly Agree		↔	Strongly Disagree	
2.5 I like browsing new items offered on the in-app purchase.	(5)	(4)	(3)	(2)	(1)
<b>3. Perceived Ease of Use: PEU</b>					
3.1 I find the in-app purchase is easy to use.	(5)	(4)	(3)	(2)	(1)
3.2 The process of making the in-app purchase is easy to navigate.	(5)	(4)	(3)	(2)	(1)
3.3 Using the in-app purchase does not require a lot of skills.	(5)	(4)	(3)	(2)	(1)
3.4 Making the in-app purchase is less time consuming.	(5)	(4)	(3)	(2)	(1)
<b>4. Social Influence: SI</b>					
4.1 I tend to buy items sold in the in-app purchase imitating other winning players that have ever used them before.	(5)	(4)	(3)	(2)	(1)
4.2 I tend to make the in-app purchase if my friends recommend me to buy the items.	(5)	(4)	(3)	(2)	(1)
4.3 I will buy items sold in the in-app purchase if they have been recommended by players.	(5)	(4)	(3)	(2)	(1)

Factors Affecting Purchase Decision of Gaming  Items from the In-App Purchase of  Employees in Bangkok	Level of Opinions				
	Strongly Agree	↔			Strongly Disagree
4.4 The reviews from YouTube, Facebook, or Instagram influenced me to try making the in-app purchase.	(5)	(4)	(3)	(2)	(1)
4.5 I will buy best-selling items ranked in the in-app purchase reviews.	(5)	(4)	(3)	(2)	(1)
<b>5. Perceived Playfulness: PP</b>					
5.1 In-app purchase provides me more enjoyable while playing games.	(5)	(4)	(3)	(2)	(1)
5.2 When using items sold in the in-app purchase, I find the game more exciting.	(5)	(4)	(3)	(2)	(1)
5.3 Using items sold in the in-app purchase stimulate my curiosity.	(5)	(4)	(3)	(2)	(1)
5.4 To me, buying the items sold in the in-app purchase arouses my imagination.	(5)	(4)	(3)	(2)	(1)
5.5 I am interested to buy items sold in the in-app purchase.	(5)	(4)	(3)	(2)	(1)

### Part 3: Purchase Decision of Gaming Items from In-App Purchase of Gen Y in

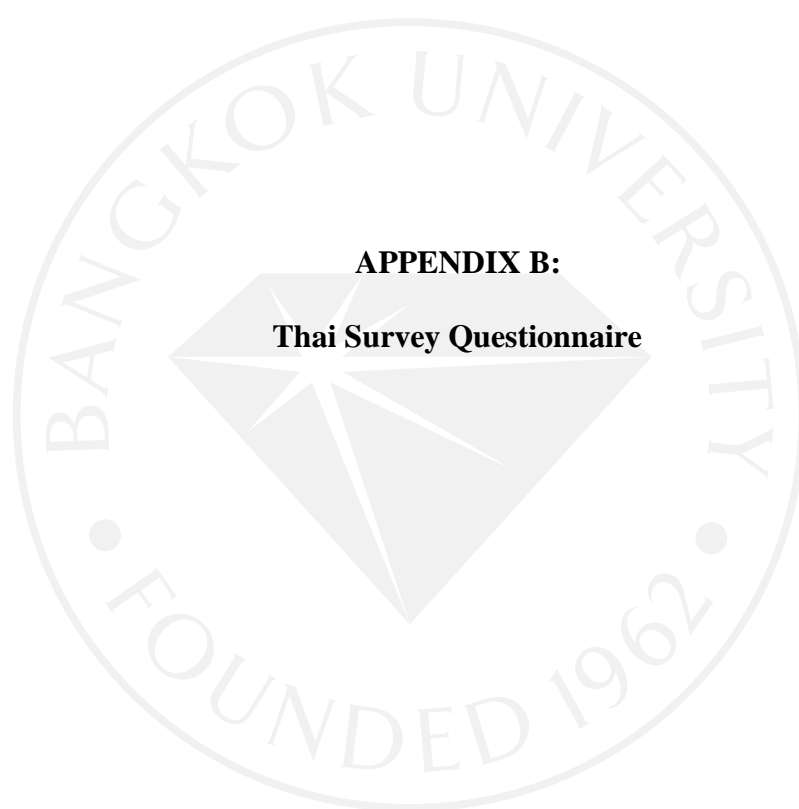
#### Bangkok

**Explanation:** Please mark ✓ the choices that correspond to your opinions. Indication of your opinion: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree

Purchase Decision of the In-App Purchase: PDI	Level of Opinions				
	Strongly Agree	↔			Strongly Disagree
1. I am passionate to buy the in-app purchase in the future.	(5)	(4)	(3)	(2)	(1)
2. I am going to make the in-app purchase.	(5)	(4)	(3)	(2)	(1)
3. I am interested in buying items sold in the in-app purchase when I have a troublesome in any gaming level.	(5)	(4)	(3)	(2)	(1)
4. Making the in-app purchase is one of my favorite kinds of shopping.	(5)	(4)	(3)	(2)	(1)
5. If I have a chance, I would like to try buying items sold in the in-app purchase.	(5)	(4)	(3)	(2)	(1)

**\*\* Thank you for your kind cooperation \*\***





### แบบสอบถาม

ความคาดหวังในการใช้งาน แรงจูงใจด้านความเพลิดเพลิน การรับรู้ความง่ายในการใช้งาน  
อิทธิพลทางสังคม และการรับรู้ความสนุกสนานที่ส่งผลต่อการตัดสินใจซื้อไอเทมในการเล่นเกม  
จากภายในแอป (In-App Purchase) ของเจนเนอร์ชั่นวายในกรุงเทพมหานคร

แบบสอบถามนี้ ได้จัดทำขึ้นโดยเป็นส่วนหนึ่งของการทำวิชาการศึกษาค้นคว้าอิสระของ  
หลักสูตรนานาชาติ มหาวิทยาลัยกรุงเทพ ซึ่งได้ออกแบบมาเพื่อรวบรวมข้อมูลเกี่ยวกับปัจจัยที่ส่งผล  
ต่อการตัดสินใจซื้อไอเทมในการเล่นเกมจากภายในแอป (In-App Purchase) ของเจนเนอร์ชั่นวายใน  
กรุงเทพมหานคร

ผู้จัดทำขอขอบพระคุณเวลาของผู้เข้าร่วมทำแบบสอบถามในการแบ่งปันข้อเท็จจริงส่วนตัว  
โดยการตอบแบบสอบถามนี้ ที่เป็นประโยชน์โดยมีจุดประสงค์ทางด้านการต่อยอดทางการศึกษา

ขอขอบพระคุณในความร่วมมือของผู้ตอบแบบสอบถามทุกท่าน

นักเรียนปริญญาโท คณะบริหารธุรกิจ  
มหาวิทยาลัยกรุงเทพ

หมายเหตุ: การซื้อภายในแอป (In-App Purchase) หมายถึง กิจกรรมการซื้อเนื้อหา (Content) หรือ  
ไอเทม (Item) เพิ่มเติมที่สามารถซื้อได้จากแอปพลิเคชันบนสมาร์ตโฟน เช่น แอปพลิเคชันเกมอาจ  
นำเสนอคุณสมบัติพิเศษให้ผู้ใช้หรือผู้เล่นสามารถข้ามระดับการเล่นเกมที่ยากได้ด้วยการซื้อไอเทมใน  
การเล่นเกมจากภายในแอป

### คำถามคัดกรอง

1. ท่านเกิดในระหว่างปี พ.ศ. 2523 – 2540 ใช่หรือไม่

☐ ใช่

☐ ไม่ใช่ (สิ้นสุดการตอบแบบสอบถาม และขอขอบคุณในความอนุเคราะห์ของท่าน)

2. ท่านเคยเล่นเกมบนโทรศัพท์มือถือใช่หรือไม่

☐ ใช่

☐ ไม่ใช่ (สิ้นสุดการตอบแบบสอบถาม และขอขอบคุณในความอนุเคราะห์ของท่าน)

3. ท่านเคยซื้อ “การซื้อภายในแอป” เพื่อเล่นเกมบนโทรศัพท์มือถือใช่หรือไม่

☐ ใช่

☐ ไม่ใช่ (สิ้นสุดการตอบแบบสอบถาม และขอขอบคุณในความอนุเคราะห์ของท่าน)

### ส่วนที่ 1: ข้อมูลส่วนบุคคล

คำอธิบาย: โปรดทำเครื่องหมาย ✓ ลงในช่อง ☐ ที่ตรงกับข้อมูลของท่านมากที่สุด

1. เพศ:

☐ 1) ชาย

☐ 2) หญิง

2. อายุ:

☐ 1) 20 – 24 ปี

☐ 2) 25 – 28 ปี

☐ 3) 29 – 32 ปี

☐ 4) 33 – 37 ปี

3. เงินเดือน:

☐ 1) ต่ำกว่า 20,000 บาท

☐ 2) 20,000 – 30,000 บาท

☐ 3) 30,001 – 60,000 บาท

☐ 4) มากกว่า 60,000 บาท

4. การศึกษา:

☐ 1) มัธยมศึกษา / อาชีวศึกษา

☐ 2)ปริญญาตรี

☐ 3)ปริญญาโท

☐ 4)ปริญญาเอก

5. ความถี่ในการซื้อไอเทมในการเล่นเกมจากภายในแอปต่อหนึ่งเดือน

☐ 1) น้อยกว่า 1 ครั้งต่อเดือน

☐ 2) 1 – 3 ครั้งต่อเดือน

☐ 3) 4 – 6 ครั้งต่อเดือน

☐ 4) มากกว่า 6 ครั้งต่อเดือน

6. ค่าใช้จ่ายการซื้อไอเทมในการเล่นเกมจากภายในแอปต่อหนึ่งเดือน

☐ 1) น้อยกว่า 500 บาท

☐ 2) 501 – 1,000 บาท

☐ 3) 1,001 – 3,000 บาท

☐ 4) มากกว่า 3,000 บาท

### ส่วนที่ 2: ปัจจัยที่ส่งผลต่อการตัดสินใจซื้อไอเทมในการเล่นเกมจากภายในแอป (In-App Purchase) ของเงินเนอร์ชียในกรุงเทพมหานคร

คำอธิบาย: โปรดทำเครื่องหมาย ✓ บนตัวเลือกที่ตรงกับความคิดของท่าน โดยระดับดังต่อไปนี้:

5 = เห็นด้วยอย่างมาก 4 = เห็นด้วย 3 = เฉยๆ 2 = ไม่เห็นด้วย และ 1 = ไม่เห็นด้วยอย่างมาก

ปัจจัยที่ส่งผลต่อการตัดสินใจซื้อไอเทมในการเล่นเกมจาก ภายในแอป (In-App Purchase)	ระดับความคิดเห็น				
	เห็นด้วย <====> ไม่เห็นด้วย				
1. ความคาดหวังในประสิทธิภาพ: PE					
1.1 ท่านคิดการซื้อไอเทมในการเล่นเกมจากภายในแอปมี ประโยชน์ขณะเล่นเกมบนโทรศัพท์	(5)	(4)	(3)	(2)	(1)
1.2 การซื้อไอเทมในการเล่นเกมจากภายในแอปช่วยให้ท่านผ่าน ด่านต่าง ๆ ของเกมได้เร็วขึ้น	(5)	(4)	(3)	(2)	(1)
1.3 การซื้อไอเทมในการเล่นเกมจากภายในแอปช่วยให้ท่าน สามารถผ่านด่านเกมที่ยาก ๆ ได้อย่างต่อเนื่อง	(5)	(4)	(3)	(2)	(1)
1.4 การซื้อไอเทมในการเล่นเกมจากภายในแอปเพิ่มโอกาสใน การได้รับรางวัลพิเศษ เช่น สิ่งของพิเศษ เหรียญ หรืออื่น ๆ	(5)	(4)	(3)	(2)	(1)
1.5 ท่านเชื่อว่า ตัวละครในเกมจะมีความชำนาญมากขึ้นจากการ ซื้อคุณสมบัติพิเศษที่กำหนดในการซื้อภายในแอป	(5)	(4)	(3)	(2)	(1)
2 แรงจูงใจด้านอารมณ์ความรู้สึก: HM					
2.1 สำหรับท่าน การซื้อไอเทมในการเล่นเกมจากภายในแอป เป็นผลเกี่ยวเนื่องกับความบันเทิงอีก	(5)	(4)	(3)	(2)	(1)
2.2 การออกแบบแอปที่ดี (เช่น เนื้อหา ภาพ และเสียง) เป็น ปัจจัยที่ชักชวนให้ท่านใช้เวลาในการหาสินค้าเพื่อการซื้อไอ เทมในการเล่นเกมจากภายในแอป	(5)	(4)	(3)	(2)	(1)
2.3 ท่านเพลิดเพลินกับรายการใหม่ ๆ ที่แอปพลิเคชันนำเสนอ และใช้เวลาส่วนมากในการเลือกดูสินค้าเพื่อการซื้อไอเทม ในการเล่นเกมจากภายในแอป	(5)	(4)	(3)	(2)	(1)
2.4 การซื้อไอเทมในการเล่นเกมจากภายในแอป เป็น แพลตฟอร์มที่ยอดเยียมที่สามารถตอบสนองการตัดสินใจ ซื้อของท่านได้	(5)	(4)	(3)	(2)	(1)
2.5 ท่านชอบเลือกหาสินค้าหรือไอเทมใหม่ ๆ ที่ขายในการเล่น เกมจากภายในแอป	(5)	(4)	(3)	(2)	(1)
3. การรับรู้ความง่ายต่อการใช้งาน: PEU					
3.1 ท่านพบว่า การซื้อไอเทมในการเล่นเกมจากภายในแอปนั้น ใช้งานง่าย	(5)	(4)	(3)	(2)	(1)

ปัจจัยที่ส่งผลต่อการตัดสินใจซื้อไอเทมในการเล่นเกมจาก ภายในแอป (In-App Purchase)	ระดับความคิดเห็น				
	เห็นด้วย <————> ไม่เห็นด้วย				
3.2 ขั้นตอนการซื้อไอเทมในการเล่นเกมจากภายในแอปนั้นใช้งานง่าย	(5)	(4)	(3)	(2)	(1)
3.3 การใช้งานสำหรับการซื้อไอเทมในการเล่นเกมจากภายในแอปนั้นไม่จำเป็นต้องใช้ทักษะมากมาย	(5)	(4)	(3)	(2)	(1)
3.4 การซื้อไอเทมในการเล่นเกมจากภายในแอปใช้เวลาอันน้อยลง	(5)	(4)	(3)	(2)	(1)
<b>4. อิทธิพลทางสังคม: SI</b>					
4.1 ท่านมักจะซื้อไอเทมในการเล่นเกมจากภายในแอป โดยเลียนแบบผู้เล่นที่ชนะคนอื่น ๆ ที่เคยซื้อใช้มาก่อน	(5)	(4)	(3)	(2)	(1)
4.2 ท่านมักจะทำการซื้อไอเทมในการเล่นเกมจากภายในแอปหากเพื่อนท่านแนะนำให้ท่านซื้อสินค้านั้น ๆ	(5)	(4)	(3)	(2)	(1)
4.3 ท่านจะซื้อไอเทมในการเล่นเกมจากภายในแอป หากได้รับการแนะนำโดยผู้เล่นอื่น ๆ	(5)	(4)	(3)	(2)	(1)
4.4 บทวิจารณ์จากยูทูป เฟซบุ๊ก หรืออินสตาแกรมส่งผลให้ท่านได้ลองซื้อสินค้านั้น ๆ ที่วางขายบนการซื้อไอเทมในการเล่นเกมจากภายในแอป	(5)	(4)	(3)	(2)	(1)
4.5 ท่านจะซื้อสินค้าที่ขายดีติดอันดับในการรีวิว เพื่อการซื้อไอเทมในการเล่นเกมจากภายในแอป	(5)	(4)	(3)	(2)	(1)
<b>5. การรับรู้ต่อความสนุก: PP</b>					
5.1 การซื้อไอเทมในการเล่นเกมจากภายในแอปทำให้ท่านสนุกยิ่งขึ้นขณะเล่นเกม	(5)	(4)	(3)	(2)	(1)
5.2 เมื่อใช้สิ่งของหรือไอเทมที่วางขายบนการซื้อจากภายในแอป ท่านพบว่า เกมน่าตื่นเต้นมากขึ้น	(5)	(4)	(3)	(2)	(1)
5.3 การใช้สิ่งของหรือไอเทมที่ขายในการซื้อจากภายในแอปช่วยกระตุ้นความอยากรู้ของท่าน	(5)	(4)	(3)	(2)	(1)
5.4 สำหรับท่าน การซื้อสินค้าหรือไอเทมที่วางขายบนการซื้อจากภายในแอป จะกระตุ้นจินตนาการของท่าน	(5)	(4)	(3)	(2)	(1)
5.5 ท่านสนใจที่จะซื้อสินค้าหรือไอเทมที่วางขายบนการซื้อจากภายในแอป	(5)	(4)	(3)	(2)	(1)

### ส่วนที่ 3: การตัดสินใจซื้อไอเทมในการเล่นเกมาจากภายในแอป (In-App Purchase)

คำอธิบาย: โปรดทำเครื่องหมาย ✓ บนตัวเลือกที่ตรงกับความคิดของท่านโดยระดับดังต่อไปนี้:

5 = เห็นด้วยอย่างมาก 4 = เห็นด้วย 3 = เฉยๆ 2 = ไม่เห็นด้วย และ 1 = ไม่เห็นด้วยอย่างมาก

การตัดสินใจซื้อไอเทมในการเล่นเกมาจากภายในแอป: PDI	ระดับความคิดเห็น				
	เห็นด้วย		ไม่เห็นด้วย		
1. ท่านหลงใหลที่จะทำการซื้อสินค้าหรือไอเทมที่วางขายบนการซื้อจากภายในแอปในอนาคต	(5)	(4)	(3)	(2)	(1)
2. ท่านจะทำการซื้อไอเทมในการเล่นเกมาจากภายในแอป	(5)	(4)	(3)	(2)	(1)
3. ท่านสนใจที่จะซื้อไอเทมในการเล่นเกมาจากภายในแอป เมื่อท่านมีปัญหาในการเล่นเกแต่ละระดับ	(5)	(4)	(3)	(2)	(1)
4. การซื้อไอเทมในการเล่นเกมาจากภายในแอป เป็นประเภทการจับจ่ายซื้อของท่านชื่นชอบ	(5)	(4)	(3)	(2)	(1)
5. หากท่านมีโอกาสด ท่านอยากลองซื้อไอเทมในการเล่นเกมาจากภายในแอป	(5)	(4)	(3)	(2)	(1)

**\*\* ขอขอบพระคุณสำหรับความร่วมมือในการตอบแบบสอบถาม\*\***

## Letters to Experts





September 13, 2021

MR. Anucha Kunto  
IT Manager  
ACA Pacific Group Co., Ltd.

Dear MR. Anucha Kunto

The Graduate School of Bangkok University would like to request your permission to allow one of our student in the Master of Business Administration Program (English Program), Ms. Amornrat Yuensuk, Student Code 7600200260 to request for reviewing questionnaire (BA 715 Independent Study) entitle “Performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok”

The information gained will be solely used for academic purposes, and we are very certain that Ms. Amornrat Yuensuk will benefit greatly from this practical and engaging activity. We, therefore, look forward to your positive response to our request.

Sincerely yours,

Asst. Prof. Dr. Siriwan Rujibhong  
Dean, Graduate School





September 13, 2021

MS. Nattakaan Waratanapon  
R&D Facility Manager  
Reckitt Benckiser (Thailand) Co., Ltd.

Dear MS. Nattakaan Waratanapon

The Graduate School of Bangkok University would like to request your permission to allow one of our student in the Master of Business Administration Program (English Program), Ms. Amornrat Yuensuk, Student Code 7600200260 to request for reviewing questionnaire (BA 715 Independent Study) entitle “Performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok”

The information gained will be solely used for academic purposes, and we are very certain that Ms. Amornrat Yuensuk will benefit greatly from this practical and engaging activity. We, therefore, look forward to your positive response to our request.

Sincerely yours,

Asst. Prof. Dr. Siriwan Rujibhong  
Dean, Graduate School

Graduate School  
Tel. 02-4073913-4



September 13, 2021

MS. Phakkawat Bangkra  
Project Director  
Arcadia (Thailand) Co., LTd.

Dear MS. Phakkawat Bangkra

The Graduate School of Bangkok University would like to request your permission to allow one of our student in the Master of Business Administration Program (English Program), Ms. Amornrat Yuensuk, Student Code 7600200260 to request for reviewing questionnaire (BA 715 Independent Study) entitle “Performance expectancy, hedonic motivation, perceived ease of use, social influence and perceived playfulness affecting purchase decision of gaming items from the in-app purchase of gen Y in Bangkok”

The information gained will be solely used for academic purposes, and we are very certain that Ms. Amornrat Yuensuk will benefit greatly from this practical and engaging activity. We, therefore, look forward to your positive response to our request.

Sincerely yours,

Asst. Prof. Dr. Siriwan Rujibhong  
Dean, Graduate School

**BIODATA**

Name-surname: Ms. Amornrat Yuensuk

Date of Birth: June 14, 1987

Place of Birth: Samutprakarn, Thailand

E-mail: amornrat.yuen@bumail.net

Address: 58/102 Bangyaparak, Phrapradeang,  
Samutprakran, Thailand

Educational Background: 2009-2012 Faculty of Liberal Arts  
(English Business for Communication),  
Sripatum University,  
Bangkok, Thailand

Work Experience: 2012-2014 Administrative Assistant  
SSL Manufacturing Company Limited

2014-Present Sales Coordinator  
Universal Food Public Company Limited