

**THE EFFECTIVENESS OF IN-APPLICATION PURCHASES ON MOBILE APPLICATIONS  
(CASE STUDY AT MOBILE GAMES APPLICATION)***EFEKTIVITAS PEMBELIAN DALAM APLIKASI PADA APLIKASI SELULER  
(STUDI KASUS DI APLIKASI PERMAINAN SELULER)*

by  
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**Abstract:** The using of in- application purchases comes with some issues along with risk because of using real money to buy virtual items, this study aims to analyze the effectiveness of in-application purchases business marketing model on mobile applications, in this case mobile games application, which is gained from consumers perception about in-application purchases. The objective of this study is to know the effectiveness of in-application purchases towards mobile games application by analyzing the consumers purchase or buying behavior. This research uses Qualitative Method with In-depth Interview, in order to know more about in-application purchases from consumers perspective. The result of this research is in-application purchases business marketing model are effective for mobile application, especially mobile games applications. This research also found that the consumers purchasing behavior are affected with social influence, hedonic motivation, and habit. For the consumer satisfaction, are determined by effort expectation, price value, and performance expectation. Based from the result gained, the consumers respond are mostly positive, and they become a loyal consumer based on the factors above, which caused an advantages for the company. From the result, the researcher recommended the company to add more various feature to the games and put age limit for purchasers.

**Keywords:** *in-application purchases, mobile applications, mobile marketing, qualitative method, consumer behavior, internet marketing, and consumer perception.*

**Abstrak:** Penggunaan in-application purchases mempunyai beberapa isu dan resiko dalam pemakaiannya, karena transaksi pembelian yang menggunakan uang asli untuk membeli barang atau produk yang fiktif atau tidak nyata. Penelitian ini bertujuan untuk menganalisis keefektifan model bisnis In-application purchases pada aplikasi seluler, dalam hal ini adalah aplikasi permainan seluler. Dimana hasil penelitian diperoleh dari persepsi konsumen tentang in-application purchases. Tujuan dari penelitian ini adalah untuk mengetahui keefektifan dari in-application purchases pada aplikasi seluler dengan menganalisa perilaku membeli konsumen. Penelitian ini menggunakan metode kualitatif dengan cara wawancara mendalam, untuk mengetahui lebih banyak mengenai in-application purchases dari persepsi konsumen. Hasil dari penelitian ini adalah model pemasaran bisnis in-application purchases adalah efektif untuk aplikasi seluler, terlebih khusus pada aplikasi permainan seluler. Penelitian ini juga menemukan bahwa perilaku membeli konsumen dapat dipengaruhi oleh beberapa faktor, yaitu pengaruh sosial, motivasi hedonis, dan kebiasaan. Untuk kepuasan konsumen, dapat ditentukan oleh ekspektasi usaha, nilai harga, dan ekspektasi kinerja. Berdasarkan hasil penelitian yang diperoleh, respon dari konsumen kebanyakan positif, dan mereka menjadi konsumen setia berdasarkan faktor diatas, yang menyebabkan keuntungan perusahaan. Dari hasil penelitian yang diperoleh, peneliti merekomendasikan pada perusahaan untuk menambahkan lebih banyak fitur yang bervariasi di dalam aplikasi permainan dan memasukan batasan usia untuk konsumen yang akan membeli.

**Kata Kunci:** *pembelian dalam aplikasi, aplikasi seluler, pemasaran seluler, metode kualitatif, perilaku konsumen, pemasaran internet, dan persepsi konsumen.*

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## INTRODUCTION

### Research Background

Nowadays, many activities happen digitally or based online. In this increasingly advanced era, wants, needs and also how to get it are different from the old times. With the existence of smartphone, everything becomes easier, faster and more instant of course. Smartphone companies are competing to make and sell better, more eye catching, and sophisticated smartphones from their competitors as smartphone users grow steadily each year making the market tighter and wider for competition for companies that produces smartphones. A smartphone must be connected with the internet, if not it will only look like an original phone that can only be used for calling and texting. Indonesian government started to develop the Internet in early 1980's in the regional university inside Indonesia according to Triastuti (2015). The internet became popular after the fall of Soeharto era in year 1998. At that time, the internet became tools that the student uses to do political movements. Since that time, Indonesian citizen start to do Internet based activity. Less than 10 years the internet start to be noticed by all the citizens not only students, they use it to communicate through social media, internet also became popular ways to promote product and business, and can be used for fun and stress relief like online games.

Apart from smartphone companies and internet users, there are also mobile applications that existed. A mobile application is an application designed to be installed and used on a mobile device, whether a tablet or a smartphone, and is generally distributed by application stores. From all the other application users, mostly mobile games application users are more loyal than the others once they already stick into the mobile games application. According to Union des consommateurs (2016) at 68% share of applications downloads, gaming continues to be the most favorite application category amongst smartphone users. It is also one of the fastest growing categories. This growth is primarily being led by developing nations such as China, India, Russia, Indonesia and Malaysia. Mobile games generally refer to games that can be played on mobile devices. In here, mobile games refer to game applications that can be downloaded onto smartphones or tablet computers through mobile application markets such as Apple's App Store or Google's Google Play. However, interesting and unique mobile games applications are not enough to attract consumer, it just the based requirements for new applications so it can compete with the others that already entered the market before. A good business model and marketing plan is also needed to promote the application even it is an application and not a tangible product. According to Muhonen (2015), there are some ways of marketing plan that not only the popular or already known mobile applications can use it but also new mobile applications company can use, in this case is using the in-application purchases. In-application purchasing, or billing, is a way to sell virtual content within a mobile application. All major mobile platforms (iOS, Android and Windows Phone) currently offer this functionality for developers to implement in their applications. In games, for example: additional levels, "virtual" money (haystacks, and crystals), items that accelerate or facilitate progress (weapons, and powers), various articles of clothing for the users game character, flavors for a cake he is baking. Also offered through in-application purchases are pictures, music or videos, as well as virtual services, from book rentals to data storage. All those products have in common the fact that they are purchased, in real money, within an application, and that they are all intangible aspects. However, using in- application purchases comes with some issues along with risk because of using real money to buy virtual items.

As what have been explained, the researcher is interested in analyzing the effectiveness of in-application purchases from consumers perspective, also in this case the researcher focusing on the in-application purchases that have been applied on mobile games applications.

### Research Objectives

The objectives of this research is to analyze the effectiveness of in-application purchases on mobile games applications and to know the consumers responses about the using of in-application purchases in mobile games applications.

## THEORETICAL REVIEW

### Marketing

According to Kotler (2009), Marketing concept emerged in the mid 1950s. the concept shifted from product centered philosophy to the consumer centered philosophy and 'sense-and-respond' is consumer centered, also stated that marketing can be found in almost everywhere. People and organizations in a various number of activities that bring them all together called marketing. Currently good marketing is a vital ingredients for a success of a business, and also marketing had profoundly affected our day-to-day activities.

**Internet Marketing**

According to Kotler (2009) internet Marketing is a way to promoting products and services through online based, as an example social media (facebook, twitter, instagram, line) also through website, blog and so on. Internet marketing is the promotion of products via the world wide web.

**Mobile Marketing**

Based on Mobile Marketing Association (2018), mobile marketing is a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through any mobile device or network .

**Mobile Applications**

According to Union des consommateurs (2016), a mobile application is an application designed to be installed and used on a mobile device, whether a tablet or a smartphone, and is generally distributed by app stores. However, mobile apps can also be downloaded on other devices, such as desktop or notebook computers.

**In-Application Purchases**

According to Liu, Yoris and Choi (2012), in-application purchases are the type of purchases that made inside application and usually are virtual even the transaction are using real money. In the in-application purchase model the application itself is free and additional content can be bought within the application. In the advertising model the application is free but contains advertisements to generate income.

**Consumer Behavior**

Consumer behavior involves the psychological processes that consumers go through, in recognizing needs, finding ways to solve their needs, making purchase decisions, interpret information, make plans and implement these plans and according to Engel and Blackwell (1982) Consumer Behavior is the act of individuals directly involved in obtaining and using economic goods and services including the decision process that precede and determine these acts.

**Consumer Buying Behavior**

According to Kotler (2009) the buying behavior consumers-individuals and house holds who buy goods and services for personal consumption. In the definition, the consumer are the person who search goods and services and then purchase it for self satisfaction.

**Consumer Perception**

According to Blank (2013), consumer perception theory attempts to explain consumer behavior by analyzing motivations for buying and not buying particular items. Two factors that shaped price perception were the perceived quality of the merchandise or service in question and price comparisons with merchants offering similar merchandise or services, and perception of a benefit to quality of life.

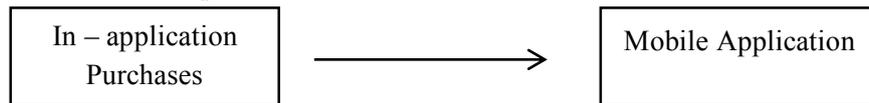
**Previous Research**

Muhonen (2015) researchs clarify what in-application purchasing on a mobile device is, what is the in-application purchasing process and what are the factors affecting it from the consumers perspective. The research also studying about the consumer buying process in in-application purchasing and what are the factors that affect it. Cho (2015) investigates the determining factors of users behavioral intention to use in-application purchase in mobile games by applying Unified Theory of Acceptance and Use of Technology. It examines the effects of five exogenous constructs (i.e., effort expectancy, social influence, hedonic motivation, price value, and habit) on one endogenous construct, behavioral intention to use in-app purchase.

Nordlund and Larsson (2012) studys is aimed towards further gathering knowledge about how the freemium model is received amongst players and whether in-application purchases are affected by any kind of social control. The study was conducted through a triangulated method consisting of an online questionnaire, forum observations and in-game observations. Union Des Consommateurs (2016) research purposes is to know the problems reported by consumers, how does the in-application purchase mechanism (downloading, authorization, notices, and collection of fees) operate from consumers point of view, to know the value of in-application purchases, do consumer protection laws regulate this new phenomenon of in-application purchases well or not.

### Conceptual Framework

Conceptual framework explain about the relation between the variables in this research.



**Figure 1. Conceptual Framework**

The figure above show the relation between in-application purchases and mobile application.

## RESEARCH METHOD

### Research Approach

This research use qualitative methodology to discover the consumers response and behavior towards the in-app purchases on mobile games application. This research uses descriptive type of research. Simelane (1998) said that a descriptive study provides a detailed description of an event under study. Descriptive study in this research are used to describe more detail from consumers point of view or users of the mobile games apps that use the in-app purchases on mobile games applications.

### Population, Sample and Sampling Technique

According to Spradley in Sugiyono (2007) qualitative research there is no population term but only social situation, which consists of three elements: place, actors and activity. The respondents are those who have downloaded a mobile application, especially a mobile games applications and already experienced in-app purchases in order to know their reactions.

This research use purposive and snowball sampling technique in order to get more valid and detailed result. This research sampling size are 15 respondents. The sampling size can change at time after the research already conducted because if the researcher are not gaining new answer, the research can stop doing interview and make a conclusion.

### Data Collection Method

The data used in this research consist of two types of data, which is primary and secondary data. Primary data are gained from in-depth interview and secondary data are taken from books, journals and relevant literature from library and internet.

### Instrument Testing

The instrument testing are the tools that the researchers prepare for measurement while conducting the research. In an interview the instrument can be interview schedules, performance checklist, observation forms, attitude scales, and so on.

### Data Analysis Method, Validity and Reliability

In this qualitative data analysis there are explanations in detail of the process after collecting data till getting conclusions, According to Miles and Huberman in Sekaran and Bougie (2010) there are generally steps in qualitative data analysis: Data Collection, data reduction, data display, drawing and verifying conclusion. Creswell (2007) defined validity as validation in qualitative research to be an attempt to assess the “accuracy” of the findings, as best described by the researcher and the participants. Reliability is a tool to produces stable and consistent result. In qualitative research, “reliability” often refers to the stability of responses to multiple coders of data sets. Reliability can be enhanced if this study obtains detailed field-notes by employing a good-quality tape for recording and by transcribing the tape.

## RESULT AND DISCUSSION

### Result

The interview is conducted from the informants who ever bought in-app purchases in any games applications. The second part of this chapter explains about the discussion after the interview.

### Informant 1

Informant 1 is a new gamer that experienced in-application purchases less than a month, she have some games application but only do purchases on Mobile Legend games application. Her first and latest transaction

are in early May 2018. She bought the character at the first time because she wants to have the character she likes. After once experiencing in-app purchases, now she is saving for a new item she likes to buy. She feel satisfied with the purchases she made, she think the character are useful in the games and fulfill her likes. At her first transaction she spend Rp. 80.000,- by buying voucher.

### **Informant 2**

The second informant is a new gamer that play and do in-application purchases a month ago (April). Mostly in her phone, she have games and social media applications. The game that she play and do in-application purchases is Mobile Legend games application. Her first purchases are in April 2018, this is her first and latest purchase, she did not made a purchases yet, because there are no new characters or items that she likes so far that made her like to purchase again, but while waiting on a new interesting character or item, she is saving her money for a new purchase she will made when the character or item she like show up. She made an in- application purchases because she wants to have the character she likes also wants to experience in-application purchases, her budget are Rp. 250.000,- for a month. After experiencing in-application purchases at the first time, she feel satisfied and the character she purchase are really useful, she decide that she wants to do another purchases, not only because she get what she likes but also because the purchases process are easy for her.

### **Informant 3**

Informant 3 is a beginner mobile legend game player, but a long time pc game player, he start to do in-application purchases early this year, he made purchases frequently every month. He is excited and happy after his first purchase experience. He likes to purchase his favorite character and the items (skin) he likes, he said that he do purchases also because he is a starlight member, his budget usually for paying the membership. He uses mobile voucher for in-application purchases, because he thinks it is easy to get and to use. His budget average is Rp. 150.000,- but depends on what he wants to buy, it can be more. He frequently do purchases because based on his experience he is satisfied because he gets what he wants and likes, also what he purchase are useful for the game he plays.

### **Informant 4**

Informant 4 are a frequent in-application purchasers that do purchases once in a month. He play mobile legend and purchase using google play account, his first time using google play account are in February 27th, 2018 because he want to try in- application purchases by himself, and his latest purchase are in May 1st, 2018. He frequently do in-application purchases based on his wants and likes. Even if he frequently doing purchases, he always consider about his financial so he will not spend too much. As a student, he save his own money for doing purchases and did not ask money to purchase in a game from his parents. His monthly budget for in-application purchases are Rp. 50.000,-. He said that he always control his outcome especially when purchasing in a game because he is not working yet, so he can not spend too much on purchasing. He also feel satisfied every time doing purchases because he already control his outcome and set his budget, for him doing purchases using google play also really easy just buying mobile voucher and then one click away, and the items and character that he purchase always fits his likes and expectation.

### **Informant 5**

This informant are an expert game player that mostly have games application on his phone, he usually play AOV games. Informant 5 are an active gamer that already experience in-app purchases almost one year, his latest purchases are in April 2018. He did not do purchases frequently once in a month but once in a couple of months. For him the process or procedure to purchase are easy, he usually bought an in-game voucher that cost Rp. 90.000,- each purchase using atm. Based on his experience with in-application purchases, before doing purchases he make sure the items or characters he wants to purchase, so after to purchase process he feel satisfied and he also wait for a new characters or items that usually out in a couple of weeks or once in a month.

### **Informant 6**

In informant 6 smartphone mostly he have games and geology applications because he is studying geology. Games that he like to play right now is mobile legend, RPG and battle royale. At the first time he decide to do purchases is because he got interest with the items and characters in the game, after experiencing

in- application purchases, he said he feel oddly satisfied, so he continue doing purchases. His first purchases happen last year, and his latest purchases are May 2018. He usually do about two purchases in 2 to 4 months, he did not do purchases frequently in a month. Each purchases he made cost Rp. 75.000,-. Since the first time till now he do purchases, he finds it useful when he is in a tournament, he also find it fully fits his expectations and needs.

#### **Informant 7**

Informant 7 likes to play mobile legend games application on his smartphone. His first time doing purchases are a year ago, and his latest transaction are May 2018. He decide to do in-application purchases for the first time because his friends suggest him to do it for a better experience while playing games, and then he decide to try doing purchases by himself. After the first experience, he feel satisfied and decide to continue doing in-application purchases. He frequently doing purchases once in a month, his budget are Rp. 300.000,- each month. Every time he do purchases, he said that all the items and character he purchase fits his expectation and he feels satisfied and it is usefull for him, he did not regret doing in-application purchases.

#### **Informant 8**

Informant 8 is a not so active game player that rarely do purchases but sometimes doing it. His first purchases are a couple of years before 2018, and his latest purchases are early 2018, probably January. He likes to play RPG and MMORPG online games and some games. Since the first time doing in- application purchases, he likes to buy based on his likes and wants. He did not do purchases frequently in a month but once in a couple of months whenever he wants to. Till now his highest purchase cost Rp. 500.000,-. After doing purchases he never regret it because it fits his likes and expectations.

#### **Informant 9**

Informant 9 is a game player, that really likes to play mobile and pc games , after being a game player for a couple of year, he begins to try do in-application purchases last year. After that, he frequently made a purchases every month, his last purchases is last month (April). He uses mobile voucher for in-application purchases also sometimes he do purchases using atm, for him the purchasing process are easy to use. His budget average is Rp. 100.000,- . He started to frequently do purchases because he is satisfied and for him what he purchase are really useful.

#### **Informant 10**

Informant 10 are a long time and expert game player that do his first purchases in high school in Dota game, his latest transaction are May 2018 in Mobile Legend games application. His phone have mostly games application, he also like to play using computer not only using smartphone. Since the first time doing purchases he always feel excited because he do purchases only for an event that he follow in the games, because he only do purchases for an event it means that he did not do purchases frequently once in a month, he only do purchases once in a couple of months. His latest transaction cost Rp. 600.000,-. Till now he always feel satisfied after doing purchases, not only because it is useful for him but when he thinks the items or characters are not useful or fit with his likes he can sell it again and send to his friends that wants to buy it.

#### **Informant 11**

This informant is a long time but seasonal purchaser, he only purchase items and character when he needs it, usually he took event, or sale promotion as the right time to do his purchases, similar with informant 10, informant 11 also like to play using computer sometimes. His first purchase experience are in 2012 when he is in college, he said that at that time in-app purchases he bought only cost ten thousand something, and his latest purchases are in last year, he took the Christmas sale package that cost more than hundred thousand rupiahs in dragon nest mobile. His budget are Rp. 100.000,- to Rp. 500.000,- each purchase, it depends on the promotion or sale price. He likes to do purchases because it is useful for him, and because he only do seasonal purchases based on the sale and promotion it is so beneficial for him because not only he got what he needs, the price are good because of the promotion. Since his first purchases till now, he said he always satisfied with the purchases he made.

**Informant 12**

Informant 12 is an expert game player since 2016 that likes to play games in her phone, of course in her smartphone she have mostly games applications. Her first time doing purchases are in December 13th, 2016 and her latest purchases are in May 2nd, 2018. In her smartphone, mostly she have games applications, she actively doing transaction in RPG toram online games. She usually doing purchases by buying smartphone voucher and her budget are Rp. 150.000,- each month. In a month she can purchase twice in a game application. Based on her experience doing in- application purchases, she likes to continue buying because the process are so easy, after buying voucher than in the game it is just like one click away and it is done. She also satisfied with the purchases she made, the items she bought are useful for her and fulfill her likes, since the first time she do purchases she always feel satisfied because playing games are her hobby.

**Informant 13**

She is an expert game player that play AOV and Mobile Legend. Mostly, she do purchases on mobile legend. She frequently update her items and character twice in a month. Her budget are Rp. 500.000,- and more, depends on what she wants to purchase, but sometimes if she feels like she want to buy and ordinary items or doing small purchases, her budget decrease to Rp. 100.000,-. Her first time doing in- application purchases are June 2 years ago, on semester exam if she did not mistaken it is not long after the game was released, and her latest purchases are in May 2018. She decide to do purchases because for her it is interesting and depends on the games the top up are also valuable. She usually do purchases by top up with atm. She really likes to play games, that is why she always feel satisfied till now she never regret doing purchases because it is part of her hobby. She never find it not fits her expectation of what she got after doing purchases, there are informations about what she will receive for purchasing before doing it, it depends on her if she wants to play it free or using top up.

**Informant 14**

Similar with informant before, informant 14 is also an expert game player that already doing purchases since high school in dota game, he likes to play Mobile Legend now and as his latest purchases on mobile legend are on march 2018. Since the first time he do in-app purchases are based on his hobby playing games on smartphone and also computer and because he already doing it for a long time, doing purchases in game application become his habit. Once he do purchases his budget are Rp. 200.000,- to Rp. 780.000,- depend on what he wants or like to buy. Usually he do purchases once in a month, but after his latest purchases, he is saving for making a huge purchases that cost Rp. 2.100.000,-. He did not regret doing in- application purchases because it fulfill his likes and wants, it also his hobby to playing games so he is always satisfied with the purchases he made in games applications.

**Informant 15**

Informant 15 is a long time expert gamer that do his first purchases in high school, and his latest transaction are May 2018 in mobile legend games application. His motivation to do in- application purchases for the first time because he is curious and want to have a lot of items more than his friends so he start to purchase items and characters. He usually do purchases once in a month because if he do more than once in a month he will not be able to stop himself buying more and more in a month. His budget for each month are Rp. 500.000,- but it depends on what he wants or likes to buy, sometimes it can be less, sometimes it can be more. Sometimes he regret for spending so much money on virtual items but he can not stop himself because it already become his habit, and playing games is his hobby. Even though he regret spending the money, he also always feel satisfied and happy at the same time, because the items and characters fits his likes and expectations..

**Discussion****In-application purchases value**

From the interview result, in-application purchases not only gaining profit for the company but also giving value to the consumer mostly on consumers mental satisfaction. For consumer, based on the indicator and interview, the consumer got effort expectancy, price value and performance expectancy. Effort expectancy is where the purchase process are easy for the consumer in many ways, as an example, buying voucher, and atm payment, the effort they made are equal with their expectancy because the process are easy. For the price value, one of the informant mention that in some game applications he can gain profit from in-app purchases as a consumer, as an example is sending gift for another player, so even when the consumer buy many items they

can sell it again and after other player already give the payment, the owner of the items can send it as a gift. Performance expectancy is the usefulness of the items and characters that the consumer purchase, all the respondents give a positive answer about the performance expectancy, the items and character are useful not only for events but also for daily games. As from the interview result, all the respondent give a positive review about the effort expectancy and performance expectancy.

### **Indicators of In-application Purchases and Purchase Behavior**

There are six indicators that divided into two which is three indicators for in- application purchases value and three indicators for purchase behavior. The three indicators for in-application purchases value are effort expectancy, price value, and performance expectancy. As for the purchase behaviors indicators, there are social influence, hedonic motivation, and habit.

Informant 2,7,10, and 15 purchase behavior are influenced by their social or environment, their motivation to buy or even playing the games are because of their environment, as an example is informant 15, he purchase because he wants to have more items than his friends. Second is hedonic motivation, it is caused by inner desire that motivate the person to do in-application purchases, because all of the informant have hedonic motivation from informant 1 to informant 15, it means deep down they purchase because they want to, even some of the informant are affect by their environment but at the final decision, they choose to do purchases not because other people force them to do it, but because they decide to do it. Last is habit, in this term habit means that the person already do purchases repeatedly every month, based on the interview, informant 3,4,7,9,12,13,14, and 15 are the informant that do in- application purchases frequently once in a month, they have scheduled their purchases every month.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

From the interview result and discussion in chapter before, can be concluded that in-application purchasing are effective for mobile marketing games application company. In-application purchases allow the application to be free downloaded which means that the consumer can experience, download and try playing the games for free, this is a way of making consumer got attached with the games. When the consumer already experienced playing it, they like to explore and play more and more. The existence of in-application purchases help the company gaining profit continuously from loyal consumer that become expert game player. The loyal consumer that have been attached to the games are willing to purchase what they think is necessary or useful, and what they like or wants, items or character that catch their attention. All respondents give a positive review about in-application purchases, they did not have problems or any bad issues according to in-application purchases existence in the applications. Some of the informant explained that to do purchases is the player or consumers decision, there are choices given inside the games application, to play with purchases or to play with no purchases. If the consumer or player decide to play without doing purchases, the game will still run like usual, the game will not stop because the consumer did not choose to do purchases. If the consumer or player choose to play with doing purchases, they are offered with additional or costumed feature (character and items) that they can purchase based on their own likes, also the consumer can choose their own way of payment (atm, mobile voucher, and google play) which are easy for the consumer or player. Before doing payment or purchasing process, the consumer are able to see all the character or items that they are going to purchase in order to avoid misunderstanding. All the character and items that have been purchase not only useful for tournament, event or other limited time, it is useful in every game season include daily games, that is why the consumer are satisfied after experiencing in-application, it is so useful and have no time limited. Over all, consumers response in general is they are all satisfied after doing in-application purchases and they have no bad issues related with in-application purchases.

### **Recommendation**

This research are conducted in order to know the effectiveness of in- application purchases that have been applied of the application company, and to help guide or giving review for the application company that planned to apply in- application purchases on their application, also for giving the in-application purchases value and its indicator of in-application purchases and consumer purchase behavior. As the result are gained, these are some recommendations for the mobile games application company, consumer or game player, and for the future researcher that would like to make a similar research. These are some recommendations for the

mobile games application company, consumer or game player, and for the future researcher that would like to make a similar research:

1. For the mobile games application company that have applied in-application purchases and the mobile games application company that are planned to apply in-application purchases, first, the research recommend to put age limit for the purchaser not for the whole player but just for the player that decide to do purchases, in order to avoid children who use their parents money without knowing, and to avoid misunderstanding problem between the purchaser and the company. Second, the researcher recommend to giving more various and more interesting feature to the game or the character and items that made the consumer interested to purchase, because if the time range are to long for updating the new feature, the loyal consumer could get bored and stop purchasing, also there are beneficial to put more differences between the player who purchase and did not purchase in order to motivate the non purchase player to do purchases.
2. For the consumer or game player, it is not a problem to do purchases but made sure not to use other peoples money, in this case the parents money, in order to avoid the misunderstanding problem in the future, this is for the player that use credit card, or debit card. Over all, for the consumer, the researcher recommended to make a minimum and maximum fix budget for each month purchases and for special purchases (sale, tournament, seasonal, and event) to avoid over spending money, especially for the consumer who are not working yet. It is good to do saving before making transaction so the budget will not to big or too lavish.
3. For the government, it is good to introduce more about in-application purchases to the citizens, in order to educate them more about internet marketing, mobile marketing, and mobile applications, so the citizens are ready and more aware in this digital era.
4. For the universities, similar with the point before, it is good to educate the student and give them more knowledge about in-application purchases so they can learn more about internet marketing, mobile marketing and mobile application, in order to help them more consider about in-application purchases, not only for the game player that usually do purchases but it will help the student who planned to make an application in the future.
5. For the future researcher that would like to make a similar research with this research, the research recommend to do in more wider population, and more various application, in order to get more sample and to gain more various result and issues about in-application purchases on mobile games applications.

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