

MARKETING STRATEGY FOR GAME DEVELOPER BASED ON MICRO AND MACRO ENVIRONMENT IN INDONESIA

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Abstract: *Indonesia is the 17th biggest market in the world and the most significant game market in South East Asia. However, the size of the game market cannot be utilized by local developers. The evident come from the small number market share of local games, small annual revenues of game developers and the small role of the Indonesian game industry in the Indonesian creative industry. Therefore, this study will analyses the game industry with micro and macro environmental analysis methods. With micro-environmental analysis, it will be obtained who is a business actor and how the relationship between business actors. Porter Five Forces analysis is used to analyses the relationship between business actors. The macro environment will provide a state and global picture that can affect the game industry. The macro environment will be analyzed with the general environment. From these two analyses, the result showed that many opportunities could be used for game developers for increasing their market, introducing new games, increasing their profit and for promotion. Therefore, a marketing strategy using Segmentation, Targeting, Positioning, and Marketing Mix are proposed for Indonesian game developer to utilize the opportunity. By applying this strategy, Indonesian game developers could increase their revenue and their increase their market share.*

Keywords: *Developers, Game, Indonesia, Industry, Marketing*

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1. INTRODUCTION

It has been more than half a century since Thomas T. Goldsmith Jr. and Estle Ray Mann made the first video games in the world. Today the video game industry is growing very fast. Newzoo.com mentions that the Compound Annual Growth Rate of this industry is 11% and estimated revenue from the global Games market would reach \$ 180.1 Billion or about 2,5214 Quadrillion Rupiah in 2021. Also, they predicted that mobile games would dominate the game market by 59%.

In 2016, BEKRAF and BPS (Central Bureau of Statistics) surveyed 8M creative business in Indonesia. Only 0.15% or about 12,441 is the subsector of application and game developers. The distribution of business entity in this sub-sector, 9.81% is PT, 3.44% is CV, 3.44% is another business entity, and 83.31% is not a business entity. When viewed from the income of 0.66% already have more than IDR 50 billion incomes, 3.5% have income between 2.5 billion to 50

billion, 8.3% have revenues of 300 million-2.5 billion. The remaining 87.54% have revenues of less than 300 million of them. (Bekraf & BPS, 2017).

Indonesia as the largest country in ASEAN placed in the 17th largest market games in the world, with a market value of \$ 1.130M. This result makes Indonesia the largest market in Asia defeating Thailand with a market value of \$ 692M, Malaysia with a market value of \$ 654M, Vietnam with a market value of \$ 490M, the Philippines with \$ 478M and Singapore with \$ 330M. (Newzoo, 2018). the keywords of manpower, capital, competitiveness, sales system, innovation, finance, bureaucracy, and government are the important keywords for the challenge category for micro-small and medium business owners in Indonesia (Rahadi, 2016). Unfortunately, for gaming industry, this vast market was dominated by foreign games. In 2016, Indonesia held 9.5% of market share (Pratama, 2018). It is still small compared to Vietnam which 42% of the market is held by local game developers (Widiartanto, 2018). Also, during 2017, the local gaming market declined to only 5%. AGI is targeting in 2021; the market share could increase by 10% (Pratama, 2018).

On the other hand, there are only 600 programmers specialized in a game programmer in Indonesia and five companies that have employees of more than 50 people. It is still far below Vietnam who has about 6000 people and about 30 companies that have employees of more than 50 people (Widiartanto, 2018).

The description above shows that the Indonesian games industry is still tiny compared to the creative industry. Also, Indonesia's game industry is still lagging. Therefore, this study will try to map who are the business actors of Indonesian game industry and to find out the opportunity and the threat faced by game developers. Then based on the opportunity and threats this study will formulate the strategy for Indonesian Game developer so they can improve their performance especially their revenue and market.

Research Question

Research Questions that formed from the above business issues is:

1. How is the business environment condition of Indonesian game developers?
2. What is the strategy for the Indonesian game developer to improve their performance based on the condition of the business environment?

Research Objectives

The purpose of this research is:

1. To understand the current business environment condition of Indonesian game developers.
2. To find the strategy that improves the Indonesian game industry based on the condition of the business environment.

Research Scope & Limitation

This research was conducted from December 2017 to August 2018. The study focused on game developers in Bandung a city that acknowledged by UNESCO as a Creative city (Damanik, 2015). Therefore, this study is not including local game distributor and publisher who sells international games and products.

In this study involved three key informant game developers such as:

Table 1 List of Game Studios

No	Name	Date Established	Number of the game published
1	Tamatin Studio	May 2016	2
2	Digital Happiness	Mid 2013	4
3	Nightspade Studio	February 2010	15

Source: Author's Analysis

The three studios are chosen due to several reasons, the CEO of Tamatin Studio is also the leader of the community of Game Development Bandung (GDB) which have member more than 3000 people. While Digital happiness is one of the most, successful game studios in Indonesia. Not only their games, which is Dreadout well known in international the game also will be adapted into movies. Last, Nightspade Studio is chosen since they were one of the oldest Indonesian game developers. To obtain data in the form of experience that has been experienced to be analyzed using qualitative methods.

2. RESEARCH METHODOLOGY

This research uses primary data and secondary data. Primary data is data from the first data source. These data sources can be respondents, research subjects, questionnaires, interviews, and observations. While the secondary data is, data obtained from the second source. This data could be obtained from the primary data of previous research (Kriyanto, 2006).

This research is using qualitative methods. Two tools have been used to collect data; there are Observation and Depth Interview. After the business issues are explored, then the interview conducted to find the business actors of the game industry.

3. METHODS

This study will consist of several stages. The first stage is a business issue. At this stage, the problem for this study will be defined. Then from this problem, a research question will be developed which will be answered after this study ends. This stage is essential in directing the purpose of this study so that it is not too full and can be by the objectives. The second stage is the Business Issue Exploration. This stage will describe the micro and macro environment. The microenvironment will discuss the business actors around companies that influence companies to serve customers. Business actors are the Company, Supplier, Marketing Intermediaries, Competitors, Publics, and Customers (Philip T. Kotler, 2018) and Porter Five Forces is a tool for analyzing industry conditions. This method analyses through five factors (Hitt, Ireland, & Hoskisson, 2011). The microenvironment will describe who is the business actor in game Indonesian game industry then analyses their relation using porter five forces. Macro environment discusses the broader power that affects business actors in the microenvironment. (Philip T. Kotler, 2018). This study will use the general environment to analyses the macro environment. General Environment consists of things in society that affect the industry and companies that are in it. These things are group into seven dimensions namely demographic, economic, political/legal, sociocultural, technological, global, and physical environment (Hitt, Ireland, & Hoskisson, 2011) Macro environment will describe the general environment of Indonesia related to Indonesian game industry. The third stage is the Research Findings. At this stage, the conclusion of analysis in business issue exploration will be made and categorized whatever it is an opportunity or a threat

for Indonesian game industry. The fourth stage is the Proposed Solution. This stage will propose a solution based on Research findings to improve Indonesian game developer's performance. The last stage is the conclusion and recommendation. At this stage, the results of this study will be summarized. Also, research recommendations will give future research and for business people who engaged in the gaming industry.

4. RESULTS AND DISCUSSION

Micro Environment: Business Actors

Table 2 Micro Environment: Business Actors

Item	Explanation
The Company	Based on the membership list of AGI there are more than 170 game developers in Indonesia. The average number of members in one team making a game is 1-3 people. With an average developing time of fewer than three months.
Products	AGI estimates that there are more than 1,000 games published by Indonesian game developers; this year alone there are about 40 new games published. Most Indonesian games are included in Mobile games (games that can be played or specifically play on cell phones or Personal Digital Assistant). PC games (Games played on personal computers)
Price	In the Indonesian game industry, game developers usually use two types of price systems (Solusi, 2015): Pay to play, in this system, game developers sell access rights to play. So that gamers need to pay to play the game. For this system, games are usually valued at IDR 8,000 - IDR 165,000. Free to play, In this system, game developers provide access to play for free. In this system game developers profit using one of three ways, first is shareware players given the opportunity to try a small part of the game to convince players to buy the game as a whole. The second is freemium, players can play full games for free, but there is virtual content such as items, which can be used if it is paid. The price of these items usually varies in the range of IDR3000 - IDR 650,000 Third is Freeware, Players can play the full game for free, the company benefits through in-game advertisement.
Place	Indonesian developers sell their products to existing Resellers. Some resellers that are often used are Google Play and the App Store for Mobile games and Steam stores for PC games.
Promotion	Online promotional media that are often used by game developers are online media, social media and events.
Media Social	Facebook, Twitter and Instagram are the most widely used social media by Indonesian game developers.
Online Media	Media Games Online, Facebook ads and Google ads are the most frequently used online media by Indonesian Game Developers.
Event	Besides through Social Media and Online Media, Indonesian game developers usually attend exhibition events. The biggest game exhibition event in Indonesia is Gameprime. In 2017 the event was attended by 13,000

	<p>visitors and filled by more than 50 developers who passed the selection from the event makers. (Febrizio, 2017)</p> <p>The event still small; There are plenty of games made by developer Indonesia that success reaches a million downloads. Those successful developers could be a teacher or for a new developer who wants to enter this industry.</p>
Suppliers	<p>In the Indonesian Games Industry, suppliers consist of hardware providers, software providers and talents. Hardware related to physical equipment needed in making a game usually related to Computer / Laptop and its accessories such as Pen tablet and Motion capture. Software commonly used in games is usually in the form of word processing software used to document such as Microsoft Word, Programming software used to create programs from games such as Unity, Graphic software used to create graphics from games such as Adobe Photoshop for 2D graphics and 3D Studio Max to make 3D graphics. Talents are supply because in the gaming industry there are still need many talents who can operate software so that they can produce games. In Indonesia, this talent is born in three ways. Namely, non-formal education where the talents attend courses, seminars and forums related to making games, education informally, the talent learns from the family environment or the surrounding community, and formal education is the talent for attending educational programs that made by private or public universities (Solusi, 2015).</p> <p>There are many hardware and software providers so Indonesian game developers could easily choose which one has better quality, price and can fulfil their needs. Then due to the growth of the internet, people could efficiently study and learn about how to develop games on the internet. This fact is the reason many game developers are self-thought rather than learning from formal education. This finding can provide an opportunity for Indonesian game developer in pressing their money expense when learning new technology need to develop a game. Marketing Intermediaries</p> <p>There are many resellers used by Indonesian game developers to sell their games, such as Google Play, App Store, Steam, Humble Store, Greenman Gaming, Playism, DMM, fanatical and others. However, the three resellers most often used by Indonesian developers are Google play, App store and Steam. Generally, Resellers take 30% of revenue per transaction. However, for Google Play and App store they provide facilities for games that have more than a year cut the game to 15% revenue per transaction.</p> <p>Resellers have high strength in giving a price. For example, if steam decides to increase the price for publishing games into \$500, then the Indonesian game developer can only obey, and the impact is their expenditure is increased. This fact is a threat to Indonesian game developer.</p>
Competitors	<p>Due to the Globalization, the competitors of Indonesian game industry competitors are foreign game developers.</p>
Products	<p>Many games have more than a million downloads for examples in mobile game Mobile Legends, and Garena Free Fire has been downloaded by more than 100 million people, and lord mobile has been downloaded more than 50 million downloads. For pc games Dota 2 has been downloaded by more than</p>

	100 million people, Player unknowns battle Ground had been downloaded by more than 50 million, and counter-strike global offensive has been downloaded by more than 20 million people.
Price	The pricing system of competitors is the same as the company. However, in the range price is different since many massive games are priced more than IDR 500.000.
Place	Just like Indonesian game developer Google Play, App Store, and Steam is the most used reseller.
Promotion	Media social, online media and event also used as media promotion. Here are examples of game event. Here are some examples of an event used for promotion. Electronic Entertainment Expo (E3). E3 is an annual game expo held in Los Angeles, United States. This year the event was visited by 69.200 people and with 200 exhibitors who showcased a collective 3,250 game. (Lemon, 2018) Tokyo Game Show (TGS). TGS is an annual game expo held in Chiba, Japan. In 2017 TGS was visited by more than 254,000 people. (Romano, 2017).

Source: Author's Analysis

Micro Environment: Public

Table 3 Micro Environment: Public

Item	Explanation
Financial Publics	Because Games are a digital product, the assets produced by Indonesian game developers are usually digital assets, so it is quite challenging to request funds from the bank. Therefore, Indonesian game developers usually seek venture capital to find funds.
Media Publics	The media publics are news media in Indonesia, especially online news media and news media covering games. Here are the top 10 online media covering games Duniaku.net, Jalantikus.com, Duniagames.co.id, GGWP.id, Teknosaurus.com, Game brott.com, Jagatplay.com, Jurnalotaku.com, Kotakgame.com, Upstate.id.
Government Publics	BEKRAF is the government public that regulates with the Indonesian game industry.
Citizen-Action Publics	Youtubers, Reviewers, and Bloggers are people in Citizen-action Publics.
Local-Publics	AGI is the Local-Publics related to industry games. Beside AGI there are many regions based game development community, such as Game Developer Bandung (GDB) which located in Bandung with 3002 followers. The Publics give a big opportunity for the Indonesian game industry to grow. When they need money, there are financial publics such as Digital Nusantara Capital, East Ventures and Maloekoe Ventures. When they need media promotion, plenty of online media cover game such as Duniaku.net, Jalantiku.net, and Duniagames.co.id. When needs feedback there are citizen-publics such as Youtubers, Blogging, and

	Reviewers. Last, when need talent there are many game community such as GDB, GameLan, Gadas.
Customers	Thanks to the globalisation of the customer market and international markets are the target of Indonesian game developers, mainly because the place to sell their games is abroad. Besides customers and international markets, business markets are also the target of developers. This fact becomes an opportunity for Indonesian games developer

Source: Author's Analysis

Porter Five Forces

Table 4 Porter Five Forces

The Threat of New Entrants	<p>The threat of new entrants to enter the game industry is High due to followings:</p> <p>The capital needed to produce the game is low.</p> <p>The internet provides the software and knowledge to develop a game.</p> <p>Did not need complicated steps to distribute games from developer to customer.</p> <p>Points above show that it is easy to enter the game industry. This result could be a threat since foreign game developers tend to have significant capital and could absorb local talents that make the local game developer become lacking talents. On the other hand, the easiness to enter the game industry could be seen as an opportunity for local talent to make their own game development company and an increasing potential partner for the game developer to collaborate.</p>
Bargaining Power of Suppliers	<p>The bargaining power of suppliers is Medium due to the following reason:</p> <p>There are many choices for Hardware and software.</p> <p>High switching cost for hardware and software. Because the Indonesia game developer will need high capital to change hardware, while for software they will need more time to adapt to the new software</p> <p>A talent has their interest; they want a high salary at least to satisfy their needs. Therefore, the game developer needs to negotiate with them</p> <p>The high price from suppliers will be a threat for the game developer because they will need more capital for growth so it will hindrance their competitiveness in developing better games.</p>
Bargaining Power of Buyers	<p>The Bargaining Power of Buyers is High due to followings:</p> <p>Gamers have a low switching cost. Gamers only need to uninstall the games and download the new ones to change the games.</p> <p>Gamers could easily choose similar games that free instead of the one that needs to pay</p> <p>This finding is a threat for the game developer since Game developers depend on the gamers to generate revenues.</p>
The Threat of Substitute Product	<p>Threat of substitute products is High due to the following reasons:</p> <p>People play games to entertain their self, so any entertainment becomes substitutes. Playing games is rank seventh from ten activities Indonesian people do at home (W&S market research, 2016). This result will be a</p>

	threat to the game developer since many other entertainment activities prevent people from playing games.
Competitive Rivalry among Competitors	<p>The Competitive rivalry among competitors is High due to followings:</p> <p>There are more than 700.000 games around the worlds. Therefore, the developer needs to make an innovation to attract more customers.</p> <p>The large numbers of the game around the world mean the developers need to work harder in reaching the customers</p> <p>It is easy to learn from competitors and imitate their games.</p> <p>The game market is growing 11% annually. It means the market will get bigger and the game developer could increase their market share.</p> <p>Low Exit Barriers, due to the developer only need to uninstall the software while the hardware such as laptop could be used for their daily activity.</p> <p>The rivalry among competitors can be a threat for Indonesian game developer against the international game developer, especially international game developer tends to have more significant capital and experience in developing games. This fact could make Indonesian games looks worse compare to foreign games</p>

Source: Author's Analysis

Macro Environment: General Environment

Table 5 Macro Environment: General Environment

Demographic Segment	<p>Indonesia is the largest country in Southeast Asia. In 2017, there were more than 43.7 million game players with the following chart. The most significant proportion for Indonesian gamer is 21-35 year's old, which are in productive age. These Gamers tend to able to adapt to new technology. It can be an opportunity for a game developer when introducing their new games.</p>
Economic Segment	<p>Some aspects related to economic segments:</p> <p>The growth of GDP, According to BPS, in 2017 GPD of Indonesia reach IDR 13,588.8 trillion, and GDP per capita reach IDR 51.89 million. Indonesian economy grows 5.07% which higher than 2016 that grow 5.03%. In production, highest growth obtained by the information and communication business sector at 9.81%. In expenditure, highest growth obtained by export goods and services at 9.09%. The growth of the Indonesian economy become an opportunity that needs to maximize by Indonesian game developers.</p> <p>Exchange Rate, BPS found in 2017 average exchange rate of United States dollar reach IDR 13,548. This high rate exchange becomes an opportunity for Indonesian game developer to maximize their profit since their reseller located in the United States. It means developer paid in the dollar.</p> <p>Gamer expenditure, In 2017, 25% gamer spend more than IDR 250,000 monthly for gaming expenditure (IDEA Network, 2018). This finding becomes an opportunity for the game developer to sell their games.</p>
Political / Legal Segment	<p>The government of Indonesia is targeting to become the world's largest digital economy in South East Asia by 2020. In order to reach its target, the government made a regulation that could reach its target.</p>

	<p>According to MENKOMINFO Regulation No. 11 of 2016 requires that there be a classification in electronic interaction games. For that, "Asosiasi Games Indonesia" (AGI) along with MENKOMINFO creates Indonesia game rating system (IGRS) that serves to Categorize games that circulating in Indonesia. Nine categories will categories the games. This regulation will be limited to what kind of games that allowed to circulate in Indonesia market. It means a threat for Indonesian developer especially for a game that targets the international market. For examples, if game developers want to create a game about police who were destroying a drug syndicate. Then in the United States market, it is ok since according to ESRB (Entertainment Software Rating Board) Mature player can play that contain cigarette, liquor, and drugs. However, when the game wants to distribute in Indonesia, the developers need to work again to make a sensor so the amount of cigarette, liquor and drugs could decrease. The impact of this is the increase in the production cost of the game developer.</p> <p>Regulation no. 28 of 2014 regulate about copyrights. This regulation protects the copyrights of Computer Program. Since Games is a computer program, the regulation gives protection to Indonesian game developer from plagiarism and piracy. This finding is an opportunity for the game developer to prevent piracy or stop the piracy of their games. Therefore, their sales will not decrease due to gamers playing piracy games.</p> <p>Head of BEKRAF Regulation No. 19 of 2016 state that BEKRAF allows to give incentives to fund capital and improves their capability to work/produce of creative business actors. Have power to gives incentive up to IDR 200.000.000. This result shows an opportunity for Indonesian game developer to gain capital and improve their performance so they could make a better game.</p> <p>Regulation No. 20 of 2008 is regulating about UMKM (Usaha Mikro Kecil dan Menengah) or micro, small and middle enterprise and Ministry of republic economy regulation no. 11 of 2017 regulating the implementation of KUR (Kredit Usaha Rakyat) which is a credit/ financing of working capital for micro, small, and middle enterprise who need more capital or lacking capital. As stated before, 87.54% subsectors of application and game development have revenue less than IDR 300 million and the number of people in developing a game is around one to three people. It means most of the Indonesian game developer can be categorized as Micro Enterprise. It means an opportunity for Indonesian game developer to get more capital for improving and growing their business.</p>
<p>Sociocultural Segment</p>	<p>Some aspects considered as sociocultural segments: The rise of Media Social, Currently, there are 132.7 Million internet Users and 106 Million Active Social Media Users. Which means around 80% of internet users are Active Social Media. (We Are Social, 2018) YouTube, Facebook, and Instagram are the top three media social network used by Indonesian. This fact is an opportunity for Indonesian Game developer to promote their products since those media social network is free.</p>

	<p>The phenomenon of Celeb-gram, With the rise of media social, there a phenomenon in Indonesia called Celeb-gram (Instagram Celebrity). Celeb-gram is a title given to a personal account on Instagram that has many fans and followers. They become famous due to many people likes picture or video they upload (Salha, 2016). This Celeb-gram become an opportunity for Indonesian game developer to promote their games to fans and followers of Celeb-gram. E-sport, in 2014 IeSPA (Indonesian E-Sport Association) officially become part of FORMI (Federasi Olahraga Rekreasi Masyarakat Indonesia) which is under Ministry of Youth and Sports. It means Professional Gamers treated equally as a sports athlete. (Wisesa, 2015). In 2018, six games were included in ASEAN Games. Unfortunately, none of the games is developed by local developers. This result is an opportunity for Indonesian game developers to develop a game that can be registered in eSport.</p>
<p>Technological Segment</p>	<p>Some aspects considered as sociocultural segments: The Internet is an integral part of both game developers and gamers. For gamers internet required to download the games and sometimes to play it if the games have online features. For developer's internet needed for downloading the software required for creating games, sharing a file, finding information or tutorial related to developing games, and others. It means high speed and a stable internet is required for this industry. Fortunately, internet provider in Indonesia could provide internet speed up to 100 Mbps (Megabytes per Second). This is an opportunity for Indonesian game developer if they want to develop a large-scale game. However, the High Price of the internet can be a threat for Indonesian game developer in optimizing their expense. Payment Method, there are two ways for gamers to buy a game. First, is by connecting their credits card into their account in the reseller website. Second, by purchasing, reseller's voucher then redeems it in the reseller website. By doing so, the client account's money will increase. With the growth of e-commerce, gamers could easily buy a voucher from the e-commerce website. The easiness for gamers to buy reseller's voucher become an opportunity for Indonesian game to reach Indonesian market when they put their games in international resellers.</p>
<p>Global Segment</p>	<p>Some aspects considered as sociocultural segments: Global Market, As stated before the international game market is growing with an 11% annual rate. It means each year the market will get bigger. This fact is an opportunity for Indonesian game developers to increase their sales by capturing the international market. The number of games published, With the low barriers entry, it is easy for a new game developer to enter the industry. This result will make many new games produced each year. For examples, steam publishes 7,672 games in 2017 (Statista, 2018) while Google plays released 110,511 games in 2017 (Statista, 2018). These large numbers of the game published become a threat for Indonesian game developers since those games could quickly come to the Indonesian market. Become an obstacle for Indonesian game developer to obtaining sales.</p>

	Video Game Live Streaming, In 2011, there is a live streaming video platform called twitch.tv. The focus of twitch is on video game streaming, especially live-streaming. In 2013, there are 45 million viewers. Then in 2015 twitch had over 100 million viewers and more than 1.5 million live broadcasters. There are other live-streaming videos such as YouTube and Facebook. Video Game Live streaming become an opportunity for Indonesian game developer. If legendary broadcasters play a game, then their follower will watch the broadcaster playing it. It will significantly help the promotion of game by increasing the awareness and knowledge of the games.
Physical Environment Segment	Indonesia has regulations regarding the environment. However, this regulation does not have an impact on the digital industry that focused on digital things.

Source: Author's Analysis

Business Solution

Many of the findings are an opportunity mostly related to marketing. That is why the proposed solution will be marketing Strategy to maximizing the opportunity especially in collaborating with Celeb-gram. This strategy will consist of STP and Marketing mix (4p.)

STP (Segmentation, Targeting, Positioning)

a. Segmentation

Through market segmentation, companies divide large, diverse markets into smaller segments that can be reached more efficiently and effectively with products and services that match their unique needs (Philip T. Kotler, 2018). Due to the advancement of the internet and globalisation, geographic segmentation becomes not effective. The proposed Segmentation can be seen in table 3.

Table 6 Proposed Segmentation

Segmentation	Criteria	Value
Demographic	Age	3-6 years
		7-12 years
		13-17 years
		Above 18 years
	Gender	Male
		Female
Psychographic	Own electronic device	Android Device
		IOS Device
		PC/ Laptop

Source: Author's Analysis

b. Targeting

The firm now must evaluate the various segments and decide how many and which segments it can serve best. (Philip T. Kotler, 2018). From the business exploration, the largest demography in Indonesia is for male age 21-35 second is woman age 21-35. That is why the proposed targeting is for Male and Woman age above 18 years that Mobile Device.

c. Positioning

A position is a way a product is defined by consumers on essential attributes the place the product occupies in consumers' minds relative to competing products. Products are made in factories, but brands happen in the minds of consumers. (Philip T. Kotler, 2018). There is four kind of positioning that used by the game developer which is Gameplay, Game Art, Game Sound, and Game Story. (KEMKOMINFO, 2015). The positioning is game art since the game will need good art to make the Celeb-gram looks iconic inside the game.

Marketing Mix

a. Product

The suggestions related to the products are below:

- Make a collaboration with a Celeb-gram
- Make the Celeb-gram as the core of the game by using customers' knowledge about the related Celeb-gram.
- Give the features for character customisation so that the play can customise the Celeb-gram, for examples changing their costume, and hairstyle
- Give the achievement system and link to social media. So the player could share their achievement with their social media.

b. Price

The proposed price system is using pay to play with price IDR 25.000. While the price is low if the Celeb-gram has large follower than the revenue could big. For examples using Awkarin as the Celeb-gram who have 3.6 million followers. Potential revenue such as follows

Table 7 Potential Revenue

No	Case	Percentage of the follower who purchases	Revenue
1	Worst	1% or less	Less than IDR 0.9 billion
2	Medium	1% to 5%	IDR 0.9 billion – 4.5 billion
3	Good	More than 5%	More than 4.5 billion

Source: Author's Analysis

While the proposed price system for the Celeb-gram is profit sharing with the developer 70% and Celeb-gram 30%.

c. Place

To maximise the marketplace the location to sell the games will be Apps Store and Google Play.

d. Promotion

The suggestion related to promotion as such follows: Using the Celeb-gram to promote the game. Using online news media, since it involves a Celeb-gram there is a good chance mainstream news media will cover the games. Using developer's media social to promote the game Using media social ads such as Facebook ads to reach targeted customers.

5. CONCLUSIONS

In just a few decades the global game industry has grown so big that able to reach \$137.9bn and annual growth rate 11%. This industry predicted to reach \$180.1bn in 2021. Also, the economic impact of this industry in the United States, United Kingdom and Canada is providing Work opportunity for more than 10,000 people and give the contribution to GDP more than \$2Bn. Indonesia as the largest country in South East Asia also become the most significant game market in South East Asia with a market value of \$1,130m. On another hand, the Indonesian game industry only contributes to 0.15% of Indonesian game industry, the revenue of most game developer is less than IDR 300m, also in 2016 Indonesia only hold 9.5% of the Indonesian market moreover in 2017 it decreased to only 5% this is shown the poor performance of Indonesian game developers.

Then using micro and macro environment analysis shown there are many opportunities and threats faced by Indonesian game developers. Therefore, Indonesian game developers' needs strategy to able to utilizes the opportunity. The proposed strategy based on the environment is using STP and Marketing Mix. The Segmentation is based on the demographic, which the age is based on IGRS, gender, and the electronic device they owned. For Targeting, it suggests targeting both male and female, age above 18 years old and owned android and IOS device. For Positioning, suggest using the game arts. While the marketing mix, the product is to collaborate with Celeb-gram which make the Celeb-gram as the core of the games. The price is suggested to a low price, the place is in Apps Store and Google Play, and the promotion is using online media and social media especially utilizing the Celeb-gram to help promote the games. Using this strategy, Indonesian game developers could increase their revenue and increase their markets.

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