CREATIVE BUSINESS: ANALYSIS OF CREATIVE INDUSTRY VALUE CHAINS FOR APPLICATION AND GAME DEVELOPERS

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ABSTRACT

The research objectives are 1. How is the SWOT analysis from Agate Studio regarding the game sub-sector? 2. How to implement the value chain in Agate Studio. The method used is SWOT analysis. The result of this research is that the Agate value chain begins with the creation stage with the formation of Agate in 2009 in Bandung. After the formation of Agate in 2009, the next stage was followed by the production stage. At the production stage, the idea is the first step that is needed in making a game, then if the idea is approved, then a small team is formed to make a prototype. The small team consists of various positions, from storywriters to animators. When the prototype is finished, the games will be tested first on an internal tester, then if they pass, they will be launched and enter the third stage, namely distribution. In distributing, there is a final stage that Agate does, namely commercialization, namely marketing to increase brand awareness and use of games. Agate itself chooses to use techniques digital marketing in doing its marketing.

Keywords: SWOT Analysis, Game Developer, Bandung, Applications.

INTRODUCTION

Bandung is a city that has much uniqueness and of course keeps many stories. The capital of West Java has many nicknames, one of which is *"Paris Van Java"* which arose because of the beauty of the city of Bandung and the many Bandung people who were considered to be artistic and have a very good taste in dress so that the Dutch colonial community had likened this city to the city of Paris in France. . Apart from these nicknames, the city of Bandung is known for its high creativity. The city planning and innovations carried out by this city cannot be separated from the intervention of Mr. Ridwan Kamil as the Governor of West Java who is also experienced as Mayor of Bandung. He really cares about the development of his city. For example, quoted from Tempo.co in 2015, Ridwan Kamil took part in implementing applications to achieve the *"ecosystem Bandung Smart City"* by launching the Socmed Mapping application and also the application Panic Button for the welfare and safety of Bandung City.

This phenomenon that has occurred in Bandung from 6 years ago can be used as one of the foundations for why the city of Bandung is quite famous for its innovations among other cities in Indonesia. The capital of West Java is even closer to the word creative after officially having a special Regional Regulation (Perda) on *"Structuring and Development of the Creative Economy (Ekraf)"*. Quoted from PRFMNews.id, Head of the Culture and Tourism Office Bandung City, Dewi Kaniasari stated that the impact of implementing regional regulation this

will be to experience the sustainability of programs on the creative economy, protecting the creative results of intellectual actors, creating an economic ecosystem that is highly competitive and of course, the creation of new jobs will have a positive economic impact on local businesses.

Howkins (2001) states that the creative economy is an economic step that develops creativity, culture, cultural heritage, and the environment as a foundation for the future. Then, the Ministry of Tourism and Creative Economy (Kemenparekraf) stated that there are 17 creative economy sub-sectors. Of the 17 sub-sectors listed, there are 2 sub-sectors that are classified as new but their development is very fast and certainly no less respected than the others, namely games and applications. Pratama (2014) argues that games are complex activities that contain rules, games, and culture. Game can also mean a system in which players engage in artificial conflict. Meanwhile, the application according to Widarma & Rahayu (2018) is an applied tool that has a special function and is one unit and is also integrated according to its capabilities. Both applications and games have considerable appeal and influence throughout the world. Both sub-sectors are growing very fast everywhere without exception in Bandung. Besides using and enjoying it, it turns out that the people of Bandung have several times created applications and games that are marketed to the general public, namely the Agate game, Dreadout, Kodelokus application, and so on.

The works of the people of Bandung do indeed often attract public attention, not only in West Java but also throughout Indonesia. One of the many amazing works is the operation of the game development company (created games) by students of the Bandung Institute of Technology (ITB). In 2007, a group of ITB students who really liked games participated in various console game development competitions. From the competition, they failed, but they managed to trust each other and be motivated in developing their potential until finally Agate Studio was officially established in 2009. Agate Studio took the name Agate which is the name of one of the precious stones with a philosophy of "getting more beautiful when sharpened". Departing from this philosophy, they strive to maintain the dynamics of their company in order to continue to be able to present a game that the market loves. They have been successful several times thanks to games theirthat *"exploded"* in the market, but on the other hand they have also almost experienced bankruptcy so that they only pay employees of Rp 50,000 per month. Like the saying *"effort will not betray results"*, that's what Agate Studio is experiencing now. In 2017, they have their own building, 5 company divisions, 300 games, and various prestigious awards, one of which is Forbes under 30 which were obtained by the co-founder of Agate Studio, Arif Widhiyasa.

Research Objectives

1. How is the SWOT analysis from Agate Studio regarding the game sub-sector?
2. How is the value chain applied in Agate Studio?

LITERATURE REVIEW

Definition of Creative Industries

The creative economy is a concept for developing creativity by using available ideas and knowledge from existing resources. Howkins (2001) states that the creative economy is an economic step that develops creativity, culture, cultural heritage, and the environment as a foundation for the future. The term creative industry itself first appeared in the 1990s in Australia

which basically has its roots from the British Government in the 1980s where the British at that time saw the concept of art and culture not seen as a sector that needed subsidies but was designed to support economic growth (Antarctica). Another definition of the creative industry is an industry that has the main elements of creativity, expertise, and talents that have the potential to increase welfare through the offering of intellectual creations. The creative industry consists of two aspects, namely the provision of creative products directly into the hands of customers and supporters of creative value creation that are not directly related to customers (Simatupang, 2007).

Creative Industry Sub-sector

According to the Ministry of Tourism and Creative Economy (Kemenparekraf), there are 17 sub-sectors in the creative industry, namely:

1) Games Development,
2) Architectural
3) Interior Design
4) Music,
5) Fine Arts,
6) Product Design
7) Fashion
8) Culinary
9) Film, Animation, and Video
10) Photography
11) Visual Communication Design
12) Television and Radio
13) Craft
14) Advertising
15) Art Performance
16) Publishing
17) Application

Application

Definition

According to Widarma & Rahayu (2018), an application is an applied tool that has a special function and is an integral and integrated one according to its capabilities. The application is also a computer device that is ready for use by the user. In the Big Indonesian Dictionary (KBBI), an application is a computer program designed to do certain tasks. An application is a use in a computer, instructions, or statements that are arranged in such a way that the computer can process input into output. It can be concluded that the notion of an application is a tool or program that is ready for use by the user which is designed to assist the user in doing his job according to its function.

Application classification

Classification can be divided into 2, namely:

1. Applications software Specialist. A program with bundled documentation created to perform specific tasks in a

2. Package application. It is a program with bundled documentation built for a specific type of problem. The following are the types of package applications:
   a. Source data, a fact that is stored in the
   b. Meta data database, is used to describe the structure of the database
   c. Data dictionary or data repository, is used to store information
   d. Overhead data, contains other data structures used for presents

Game

Definition

Indonesian, game means game. Games are complex activities with rules, games and culture. Game can also mean a system where players are involved in artificial conflicts (Pratama, 2014). According to Mitchell Wade, games are a good training environment for the real world that demands collaborative problem solving. According to Ivan C, Sibero, games are applications that are enjoyed by electronic media users. According to John Naisbitt, the game is a dynamic participatory system. So, games are complex play activities that have rules in them and players engage in artificial conflicts and demand collaborative problem solving.

Game genres

Based on genres, games can be divided into several types, such as:

1) Action: Games that require reflex speed, accuracy, timeliness to get through the challenges in the game
2) Fighting: A game that has the characteristics of one-on-one combat
3) Shooter: Is a subgenre of the action game
4) Racing: Video games that require players to drive in racing competitions
5) Sport: Games based on virtual sports
6) Adventure: Games that combine the action genres and adventure
7) Strategy: Simulation games with clear objectives
8) RPG (Role Playing Game): Games where the player plays an imaginary character

Porter in 1985 explained that value chain analysis is a strategic analysis tool used to determine a competitive advantage company's against other companies which makes a company different from other companies (Setiawan & Satyarini, 2015). Value chain is the process of identifying and connecting strategic activities in a company. Rufaidah (2012) states that value chain analysis is a process that refers to determining crocodiles associated with company activities from purchasing raw materials to products reaching consumers. Other research found total quality management, entrepreneurial orientation, and market orientation were significant predictors of performance of small and medium enterprises Asad et al. (2018a). The size of enterprises moderated the relationship between risk taking and performance, pro-activeness and performance as well as innovation and performance, Asad et al. (2018b). There is a significant relationship between nature of the product and supply chain strategy in manufacturing sector of Pakistan, Shabbir et al. (2019). There is no difference between performance of MSEs on the basis of entrepreneurial orientation and innovation. It is proved that the size of the enterprise is not the factor. The linkages found are affected by size of the enterprises. There is significant relation of entrepreneurial networking on the relationship between entrepreneurial orientation and performance of MSEs in Punjab Pakistan, Asad et al. (2016). The concept value chain developed by Porter in 1985 views the company as a series of activity processes that add value to

a product or service. VCA aims to determine the advantages and disadvantages of companies along the chain of business processes. Here is a VCA chart designed by Porter. VCA for games has a slight difference in that this VCA is designed to make game development easier.

METHODOLOGY

This research uses descriptive research methods with a qualitative approach. According to Sugiyono (2017) the descriptive method is a research method that describes, describes or describes the state of a research object in accordance with the situation and conditions of the research. This research also uses a qualitative approach. According to Sugiyono (2017) the qualitative method is a research work mechanism that is guided by non-statistical or non-mathematical subjective evaluation. The standard for measuring the value used in this study is not a score, but a classification of the value or quality of the study.

Data Collection Techniques Data

Collection techniques in research using literature studies. Literature research is related to theoretical research and other references related to values, culture and norms that develop in social situations, besides literature studies are very important to use in research, this is because this research will not be separated from scientific literature (Sugiyono, 2017).

Data Analysis

The data analysis technique used in this research is to use the steps of the SWOT analysis technique with a qualitative approach. SWOT analysis is a systematic identification of various factors that formulate a company's strategy (Rangkuti, 1998). Meanwhile, according to Yunus (2016) SWOT analysis is a systematic analysis of the factors strengths (strengths) and weakness (weakness) with the company's internal opportunities (opportunities) and threats (threats) environment facing the company.

DISCUSSION

The Conditions of Application and Game Industry

Agate Studio is a game developer company from Bandung which was founded in 2009. Currently, Agate continues to grow and become one of the game developer's best in Indonesia. The motto of this company is, Live the Fun Way. The point is the belief that life will be better when there is joy there, while games are one of the means to achieve that joy. Agate Studio has created more than 101 games with multiple platforms and multiple purposes. One of the famous games is Valthirian Arc for the Nintendo Switch, PlayStation 4, and PC via Steam. Game this worked for 2.5 years and claimed Agate has managed to break even within a period of not more than one month from the date of launch

Constraints on the Application and Game

With the rapid development of industry gaming the today, Indonesia seems to still compete. This is because Indonesia is said to be still a market rather than a major player in the industry itself. The CEO and co-founder of Agate game developer local in Bandung revealed that

there are many factors that make it industry game difficult for the local to develop. Among them, due to a lack of investment, there are very few companies gaming and few talent gaming. This is why the industry is game Indonesian difficult to develop and compete with the impact of foreign games. The following SWOT analysis to determine constraints and potential of the company to be developed (Table 1):

Table 1 SWOT ANALYSIS TO DETERMINE CONSTRAINTS AND POTENTIAL OF THE COMPANY		
The condition of External and Internal Condition	**Strengths (Strength)**	**Weakness (Weakness)**
	● Ability consumer analysis were excellent ● platform diversity vast ● amount of effort marketing research	• Media advertising is still small • Level of product differentiation is low • difference in price of its products against competitors
Opportunities (Opportunities)	**Strategy SO**	**WO strategy**
• the development of industrial technology very rapidly • existence of government support • interest consumer to the industry the high • amount of local competitors were slightly Effect of replacement products low	• Doing market development efforts by expanding international markets • Cooperating with other countries in expanding the market	• Conducting market analysis related to determining the right product price • More digging for knowledge and recognizing the characteristics of p as in order to be able to create a new breakthrough
Threats	**ST Strategy**	**TW Strategy**
• influence of Indonesia's economic growth on the local industry is quite high • Dependence on suppliers high low • The influence developers of strong international Competitive opportunities in global markets are low	• Creating new and different innovations so that game products have Superior USP • Increases knowledge about technology in creating products so that they are not left behind with existing products	Market and product penetration

Strengths or strength is a positive thing that a company has in relation to competitive advantage, such as the number of assets, employees, capital, technology, patents, knowledge, networks, strategic location, and good reputation. The strengths or advantages possessed by Agate are having the ability to analyze consumers, platform diversity very broad, a lot of efforts marketing research, can analyze cost/benefit very well, and have a very high level of profit.

Weakness or weakness is a negative thing in a company, such as weakness in business processes, type of material, number and quality of human resources, gaps in the team, and the absence of valuable assets. Apart from its various advantages, Agate still has shortcomings such as a lack of advertising media, a low level of product differentiation, and a high difference in product prices against competitors.

Opportunities or opportunities are external factors that contribute to the success of a business, such as the presence of events or phenomena that can become promotional opportunities, an increase in the number of requests, as well as a supportive market, economic and political situation. Opportunities owned by Agate are the very rapid development of

industrial technology, the presence of government support, high consumer interest in the industry, the small number of local competitors, and the low influence of substitute products.

Threats or threats are external factors that prevent the company or business owner from carrying out their plans or achieving targets. As the influence of Indonesia's economic growth in the local industry is quite high, dependence on suppliers, a high the impact of develop a strong international, and the opportunity to compete on the global market are low.

By looking at the strengths and opportunities that exist (SO), Agate can make market development efforts by expanding international markets and can also cooperate with other countries in expanding the market. With Agate's strengths, there are also various threats (ST), the strategy that can be done is to create new, different innovations so that game products have a superior USP and Agate further increases knowledge about technology in creating products so that they are not left behind with existing products. Besides the strengths possessed by Agate also have weaknesses. Agate can implement several strategies to be able to fix its weaknesses, namely by conducting market analysis related to determining the right product price and also digging more knowledge and recognizing market characteristics in order to be able to create a new breakthrough. In improving its quality and being able to compete continuously with other competitors, Agate is faced with threats that if not corrected will threaten Agate itself. This can be seen from the weaknesses that Agate has (TW), one of the strategies that Agate can do is market and product development.

Application of Creative Industry Value Chain Application and Development Games at Agate

Creation

Is a game developer founded by young people studying informatics engineering and ITB design majors?. This game developer also participated in a competition held by Microsoft. They designed a game for the XBox 360 console. Game called PonPoron received a warm welcome. Although they failed to steal the title, they brought home confidence, passion to become a game developer.

"We are very happy playing games. We want to make games that make people's lives happier too" said Chief Marketing Officer of Agate, Shieny Aprilia on detikX, Tuesday (9/7) at the Agate office, Bandung, West Java.

Finally in April 2009, they finally decided to set up a company. Armed with savings, these 18 young people began executing their dreams. The first game they developed was called English Defender. A flash-based zombie game on a web platform not too successful with his first work, Agate did not stop and continued to innovate. September 2010 released Earl Gray and this Rupert Guy. A simple game with the point and click adventure genre.

"We are very happy. Because within one week after its release there were about 1 million click games", said Shieny who is a graduate of the Faculty of Informatics, Bandung Institute of Technology.

This success sparked enthusiasm. They are motivated to make more games that are of interest to many people. When the era of flash-based games faded and was replaced by ocial games, Agate also adapted by producing the Football Saga game. Likewise, during the explosion of mobile games played via smart phones, tablets, or other mobile devices.

Production

The process of forming games in Agate has several stages that must be passed. The first step in making a game, whether via console, mobile, or other medium, is certainly an idea. At Agate, said Shieny, every employee has the right to convey their ideas and think carefully by their team.

"After the idea is accepted, we will make a feasibility study to measure whether this idea can be sustainable in the field or not" he said.

If it is considered worthy of being marketed, Agate will only create a small team to build the video games starting from the prototype stage. The team consists of several people with their respective professions, from story writers to animators. After the games are finished, Agate will first test them on their internal testers.

Not lulled by the success of the Valthirian Arc, Agate continues to develop new games. Moreover, early last year Agate strengthened its resources by acquiring the Equator Games. Ekuator Games is known as one of the studios that produces games with high quality graphics.

Distribution

In addition, the CEO of Agate, Arief Widhiyasa, collaborated by making a platform to accommodate writers to convey their writings.

"Memories are a visual novel game application that contains a combination of fictional interaction stories", he said in Jakarta, Tuesday (21/1). Based on these reasons, collaboration was formed between Agate and Ciayo to develop a local visual novel game in Indonesia.

At that moment, Agate collaborated with Chillingo to release a game called Up in Flames. Chillingo, a game publisher that has been acquired by Electonic Arts (EA), has brought two games to become popular games, including Angry Birds and Cut the Rope. *"Although the sales are not very successful, being able to cooperate with such a big game company is a proud achievement"*, said Shieny.

"There are four mobile games and one new game console being worked on. We are also preparing Valthirian Arc for the Southeast Asian market with steel box packaging", he said. One of the mobile games has a soft launch in collaboration with Intellectual Property Dilan.

Consideration of the market potential has also driven Agate to sell some of its products abroad. Valthirian Arc: Hero School Story, which was released in October 2018, is only marketed in Europe and northern America working with game publisher PQube games sold for platforms console and personal computers (PCs) that managed to penetrate the sales figures of the second highest in the UK.

Commercialization

Based on the research, Agate makes the process of digital marketing in the marketing game visual novel. There are 4 stages that must be followed, namely:

Setting Goals

In this stage, Agate has set 1 million users as the goals main in marketing the visual game novel

Conducting Market Research

The purpose of conducting market research is to make the target more clear what kind of target market is really analyzed, starting from gender, age, hobbies, regional origin, etc.

Determination of Content Advertising

Determination of ad content made according to the age and gender of the target audience.

Validation Market

Ad content that has been previously created is disseminated through various social media, especially Instagram, and then Agate will look at developments in whether awareness is public increasing and whether many users end up installing visual novel games marketable. If the results of digital marketing turn out to be fruitful, then the ad content created is valid and correct.

Some of the other strategies that Agate does in the commercialization stage to market its products are through:

Use of influencers as a strategy digital marketing

Agate uses influencers as one of the commercialization strategies, namely because the use of influence is felt to be the most effective in gaining awareness of the product being promoted. Moreover, every influencer must have their own followers which Agate has calculated with the target user they want. The second reason is because the budget or expenditure of funds is more affordable. Because Agate has prepared a budget in advance and this budget has a limit because it is predetermined, that's why the most effective way that Agate chooses to promote its products gameis through influencers.

Collaborating with various parties

Agate collaborates with the Australian government to develop an educational game titled Next Door Land. This is done to expand the target market abroad. With this latest collaboration, Agate is increasingly convinced that his business can be accepted by the market. General Manager Agate LevelUp Aprilia Shieny said, it increasingly serves client businesses and governments to use the game for purposes of promotion, training (training), and education. Last March, Agate also participated in the exhibition Centrum for Boroautomation, Informations technologie und Telekommunikation (CeBIT) 2016 in Hannover, Germany.

CONCLUSION

Application and game developer as a sub-sector of the Creative Economy in Indonesia is a sub-sector that is growing very rapidly, including in the city of Bandung, especially with the current high digital development. Bandung, as one of the cities that actively participates in advancing the sector application and game developer has several times created applications and games that are marketed to the general public. However, even though the industry continues to develop, Indonesia still tends to be a market and connoisseur rather than being a major producer and player.

Agate, a game developer from Bandung, is one of the companies that has made a move by becoming a producer of games/games. As a company that is still developing, Agate certainly

still has various weaknesses and strengths, as well as opportunities and obstacles which are then continuously evaluated as steps to continue to grow. Agate also has a value chain that is implemented in its company which consists of several stages.

The Agate value chain began with a creative stage with the formation of Agate in 2009 in Bandung. After the formation of Agate in 2009, the next stage was followed by the production stage. At the production stage, the idea is the first step that is needed in making a game, then if the idea is approved, then a small team is formed to make a prototype. The small team consists of various positions, from story writers to animators. When the prototype is finished, the games will be tested first on an internal tester, then if they pass, they will be launched and enter the third stage, namely distribution. In distributing, there is a final stage that Agate does, namely commercialization, namely marketing to increase brand awareness and use of games its. Agate itself chooses to use techniques digital marketing in doing its marketing.

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