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The Genesis and Self-Reliance of Indonesian Local Game Developers as the National Creative Workers in Contemporary Indonesia

Abstract

This study examines the contemporary condition of Indonesian local game developers as a part of the national creative workers. The case study method is applied in parallel with the participant's observation and the results were retrieved by exploring and comparing interviews and observation findings. The subjects of this study include state-related ministries (The Ministry of Manpower and The Ministry of Tourism and Creative Economy), 12 founders of the Indonesian first-generation local game developer studios, 10 experienced local game workers, and two representatives of the Indonesian Game Association as a labor union. The results figured out the characteristics of Indonesian local game developers as youth-subcultural movements and recent challenges of state patronage, incentives, and human resource issues. The situation forced them to survive and organize a supportive labor union as a major incubator platform and crowdfunding scheme in developing local games.

Keywords

Creative workers, creative industry, Indonesia, video game, youth subcultures.

1. Introduction

The video game industry has transformed into one of the trending global commodities in the 21st century (O'Donnell, 2012; Marchand & Hennig-Thurau, 2013; Boyd, Pyne & Kane, 2019). As media and communication become vital entities on a daily basis, interactive games and entertainments have also adhered to the disruption of media convergence, information, and popular culture.

Furthermore, as the creative economy becomes the latest medium to advance a nation, video games are well known as the most contemporary products. A sophisticated virtual playground combining physical and cognitive techniques, along with a fascinating visual screen has made the industry one of the most potential economic sectors especially in Southeast Asia (Riggill, McAllister, Nichols & Kaufman, 2017, p. 36). The majority of the people in the region possess personal computers, smartphones, and internet access, hence they can use gaming products. Numerous countries across the globe compete to gain profit with this contemporary creative economy product. Also, artists and game developers have become the newest potential occupation and career.

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Theoretically, creative economy means the involvement of an individual or group's ideas that trigger job creation and potential economic development (Roodhouse, 2011, p. 25). The economy shapes the entertainment industry in the 21st century as it thrives well with media disruption (Merkusen, Wassall, DeNatale & Cohen, 2008). It is also related to the rise of the culture industry (Moore, 2014). Globally, every country emphasizes its distinctive traits of creative industry sectors as the soft power to attract and increase GDP (Schlesinger, 2017).

For instance, Southeast Asian nations are progressively shaping their local game environment by benchmarking China and South Korea's success stories of fostering their local game products as the champion in the native countries (Fung, 2016). Being a creative worker, a game developer faces numerous challenges as they are primarily young, work under precarious conditions, and lack in financial stability in the amid of the issue of property rights as immaterial labor (Bulut, 2015). Numerous local game studios are forced to close due to economic setbacks, but more will be soon established.

This phenomenon can be traced back since Southeast Asian local game developers have just begun in the last 10–15 years (Chung, 2016). Countries like Singapore, Malaysia, Thailand, Indonesia, Philippines, and Vietnam used to be the marketplaces for Japanese and Western game products, but currently, they are able to develop their own game products, as well as to employ native game workers and resources. The dynamic of how Southeast Asian countries embrace their local game through the examination of talents then, is exciting contemporary topics.

Since 2014, Indonesia has recognized game or video games as one of their national creative economy sectors. This was the first movement and recognition made by a Southeast Asian country for their local game existence. The recognition resulted in the status of the national creative workers for local game developer talents, thereby making them deserve a special state budget and policy within their existence. Furthermore, it is interesting to explore the interplay between state and game developers as creative workers and state instruments. The interplay involves numerous issues of state patronage, the infancy condition of the local game industry, and the enforcement to carry out self-procreations.

2. Literature Review

It is impossible to explore creative industries without examining the role of the youth (Budziewicz-Guzlecka, 2018). Historically, they have a strong contribution in creating new values through arts like music, fashion, mural or street arts, crafts, and video games (Towse & Handke, 2013). The youth subculture movement in comparison to the mainstream culture consists of old-fashioned values, aesthetics, lifestyles, and customs (Hebdige, 1979). Numerous youth subcultures which have emerged as fragmented youth identities and accentuations (Jenks, 2005) are subsequently commodified and commercialized by the industrial power, such as media, entertainment industry, and the state (Dymek, 2012).

As a community, youth subculture dedicates their leisure time to productive activities using articulated arts as instruments through technology (Bennett, 2004). Globalization and the flow of information have transformed them into immaterial labors. Therefore, they extensively rely on ideas and creativities to sustain themselves within the industry (Lazzarato, 1996; Hesmondhalgh & Baker, 2011). The transformation from leisure to industrial creative works has triggered various studies on their existence related to independence in creations, state patronage, and the issue of universal basic income (Bidadanure, 2019).

The development of video games is still a contemporary movement by the Indonesian young generation. Meanwhile, the Southeast Asian local game environment has attracted academic attention since Anthony Fung (2016) started to examine the vibrancy of the local game industry. One of the interesting conclusions about the game development in this region was how Southeast Asian countries still outsourced on foreign game companies for several years before developing their own from the year of 2000s. However, the local developers have

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attempted to develop a competitive global-style game product with local tastes despite the limitations (Chung, 2016).

Studies show that video game culture and industry are predominantly initiated and enforced by the youth (Steinkuehler, 2006; Zackariasson & Wilson, 2010; Carbone & Ruffino, 2014). This is done by embracing their inner community to craft passion for video game culture and hunt for financial support to survive and sustain. As they develop into small-medium and even bigger enterprises with numerous talents, the urgency to seek bigger patronage, investment, and state support become more important compared to when they were still indie studios. Meanwhile, every local studio has to negotiate with the government's approach towards them as a part of the state's instruments for GDP (Castronova, 2003; Jiang & Fung, 2017; Sotamaa, 2021).

In Southeast Asia, local game talents have initiated their own creations for more than 10 years, while their expansion through the world and the Asian market are relatively slower to China (Cao & Downing, 2008). For more than two decades (1980s-2000s), Southeast Asia was a huge market for the US and Japanese game industry. Countries like Thailand, Singapore, Malaysia, Indonesia, and Philippines are major consumers of foreign games (Ng, 2008; Chung, 2016; Borowy, 2017).

Meanwhile, the condition of local game labors is also an important issue for major Southeast Asian countries. Game labor is the key element of how the country makes a strong local game production with sustainable progress and innovation (Fung, 2016). For instance, the South Korean government has established a strong local game production reducing their reliance on foreign game outsourcing studios. Likewise, China, which deliberately imitates the South Korean method to foster their game, is also less dependent on the foreign studios with collaboration principles following Chinese ideology and pride (Nie, 2013). One phenomenon that distinguishes both countries is the strict Chinese government control over the contents.

The three Southeast Asian countries (Vietnam, Singapore, and Malaysia) examined by Fung (2016) shared the same view as their local game studios were inadequate to emphasize on their signature skill to their own local game environment similar to China and South Korea. Therefore, local game workers have to work for foreign outsource game studios and eventually halt the local products. To continue Fung's research on the Southeast Asian game environment, it is interesting to disclose the contemporary Indonesian local game environment as the biggest nation in Southeast Asia. With state recognition and the emergence of numerous local game studios, the local game workers are no longer dependent on outsource foreign game studios to embrace their talents.

3. Materials and Method

This study applied a case study method with participant observation (Yin, 2018) to explain the characteristics and contemporary condition of Indonesian local game developers as the national creative workers. The objective was to dismantle the thematic conditions of the Indonesian local game workers dealing with workers' rights, precarity problem, and state's patronage as the national creative workers. The theories of youth subculture and creative workers were utilized as major principles and concepts to obtain a deeper understanding about the genesis, characteristics, and persistence of local game workers in Indonesia.

The data were obtained with a snowball sampling technique (Creswell & Poth, 2018, p. 225) involving 12 founders of the first generation of local game studios with more than five years' experience in establishing the studios. Interviews were also conducted with 10 experienced local game workers for positions like programmers, designers and writers. In addition, two representatives of Indonesian Game Association were also interviewed to understand the role of the labor union in local game development, especially in the issue of developers as creative workers in contemporary Indonesia.

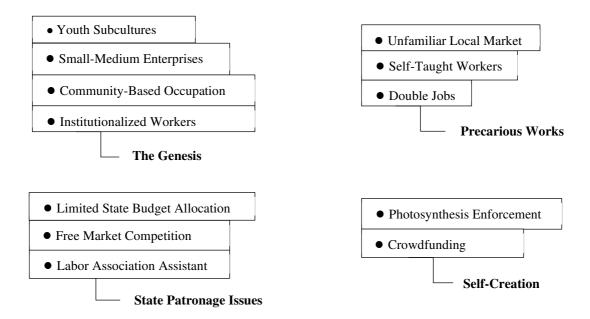
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Other important informants were primarily derived from the government's side and specific ministries (The Ministry of Manpower and The Ministry of Tourism and Creative Industry) which organize both national creative economy and creative workers. These 2 state ministries have several deputies with specific jobs depending on the creative economy sectors they handle. Interviews with two associated government agencies that directly organize game workers were performed to evaluate a cultural perspective of the Indonesian government's policy towards the game as a national creative economy sector.

4. Results and Discussion

Figure 1 shows the result of the contemporary condition of Indonesian local game developers as they embrace their existence and the obstacles as well as overcome the limitation of current state patronage as the national creative workers. Their character as a youth subculture has become the core point for understanding their existence and the step they took to survive in the contemporary Indonesian creative industry field.

Figure 1. The Matrix of Characteristics of Indonesian Local Game Development.



Source: Own elaboration.

The subsequent explanation explored each of these characters by dismantling and revealing the important role of Indonesian Game Association (AGI) as a labor union act as a reference group to the state and the ability of local game developers to survive and sustain their existence amidst the unstandardized human resource skills, and limited state budget allocation.

4.1. The Genesis as Youth Subcultures

It started when urban youth dedicated themselves to shifting their paradigm during their upbringing period as a customer from playing Nintendo, PlayStation and online interactive games, to being producers. Indonesia has been a very lucrative market for foreign game products since the 80-2000s (Ernkvist, 2008; Rakhmani & Darmawan, 2015). The first generation to establish local game developer studios in the country were game nerds. Most of the initiators of the movement were university students from Bandung, Jakarta and Surabaya

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majoring in Computer Science or related programs, who were also vivid gamers at young age. They started as outsource workers for an Australian game studio known as Matahari in Jakarta.

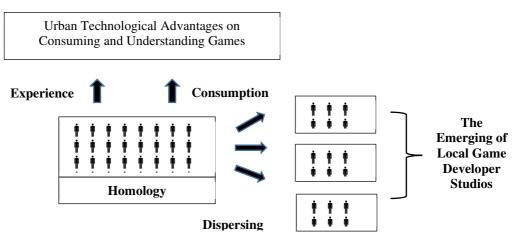
After months and years of work, the alumni began to establish their own game studios with the first being Altermyth in Jakarta, Agate in Bandung and Toge Productions in Tangerang. Only Agate and Toge Productions manage to survive as the first generation of local game developer studios in Indonesia. Despite the destitution, more local studios slowly emerged from the young generation after the 2000s.

Based on the data from The Ministry of Tourism and Creative Economy (2020), there were approximately more than 80 local game developer studios with hundreds of talents. However, only dozens were legally recognized by the state as others were indie studios. At the beginning of the first decade in 2000's, video game worker was the new career option particularly among young people living in urban areas. At this moment, game worker is a possible carrier opportunity in the country. In Indonesia, "game developer" is defined as both game company and individual. As a company, a game developer is defined as the whole team, with infrastructure and crafted game as the product (Bates, 2004, p. 151). Meanwhile, a game developer also refers to someone who works for a game company or develop a video game. Occasionally, in order to distinguish those two, a game developer as a person is called a "talent."

The pioneers of local game studios like Agate, Touchten, Mojiken, Digital Happiness, Own Games and Toge Productions have started establishing indie game studios where talents are mostly recommended by their peer-group circle with semi-professional employment contracts (Styhre, 2020). As the studios developed, they transformed from indie studios into small-medium enterprises (SMEs) with professional budget and legal employment contracts.

They share common ground as vivid gamers from their adolescents with the eagerness to accentuate creativity by establishing game studios. These characters refer to sociological traits since the trailblazer of local game developer studios grew up in an urban area of a middle-upper working-class environment (Young, 1997). In the late of 90s to early 2000s, video game consumption can only be accessed through personal game consoles and internet café. The privilege of living in the urban areas benefited them with massive technological consumption of personal computers, video game consoles and arcade machines.

Figure 2. The Origin of Indonesian Local Game Developers as Youth Subcultures.



Source: Own elaboration.

At this particular period, the generation started the crucial phase of learning and experimenting with knowledge through leisure time activities. They had a structural homology to share and later synchronized each other with mutual understanding (Barker, 2004, pp. 87-88). As a product of creative mind, youth subculture developed video games as

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their cultural materialisms in everyday life (Williams, 1965). This autonomous art movement distinguishes them from superior arts or elite-made creations. Culture as ordinary as accentuated by Raymond Williams (1965) is defined by youth subcultural group into technological platform of video games with local contexts such as local mythologies in *Pamali* (2019) developed by Storytale, culinary in *Selera Nusantara* (2021) developed by Gambir Studio, politics in *Adventure Jokowi* (2020) developed by Rio Games, horror folklore in *DreadOut* (2014) developed by Digital Happiness, and urban coffee shop culture in *Coffee Talk* (2020) developed by Toge Productions.

The emergence of young local game developers cannot be separated from the productive leisure aspect and its relationship with communality issues (Spracklen, 2015). Indonesia as the biggest video game market in Southeast Asia transforms the experience from consuming foreign game products as hobbies to artworks production that represent their youth identity and national distinctiveness. It has transformed the means of production from solely mechanical tools into all aspects of individual wellbeing (Smith & McKinlay, 2009) and contemporary occupational community in Indonesia (Weststar, 2015).

As the creative class increases (Florida, 2012), the youth between 17-35 years old in the first decade of the 21st century had another opportunity to work in the creative industry with less rigid bureaucratic environment and more supportive to innovation. They're now able to choose to be game developers in the local game industry to accomplish their talents on programming and love towards video games. Local game products in Indonesia provide both Indonesian and English languages to embrace local and international markets. Even Indonesian biggest selling games such as the *Dreadout* series (2014–2020) from Digital Happiness also provide indigenous Sundanese language to accentuate their origin.

4.2. State Patronage Issues

There are major differences after the state recognition through The Ministry of Tourism and Creative Economy. All developer's talents are included into a specific area called The National Creative Workers. This means that those working as a game creator are in the same position as other 17 creative workers categories like musician, dancer, painter, chef, sculptor, animator, actor, fashion designer, and film director. According to the Indonesian national legal standing (Constitution Number 24, Year 2019), creative workers who work in the 18 national creative sectors are professionally recognized with the fulfillment of the universal basic income such as incentive with regional-standard basic salary, health, security insurance and property rights.

Nevertheless, the policy is implemented when the labor works in a legal local game developer studio, not an indie one. Besides being a daily full-time labor, numerous developers work as part-timer or outsource workers under project-based circumstances. According to the new policy, Indonesian Ministry of Manpower emphasizes that the regulation and policy for outsource and contract workers are now organized under a new labor law famously known as *The Omnibus Law* (Number 35, Year 2021). This law is meant to comprise the previous complicated regulation of the Indonesian working-class. Furthermore, based on the *Omnibus Law*, the private companies or individuals have more capacity to recruit outsources and contract workers under the consent mutual agreement between workers and companies.

This particular system is widely applied to all creative economy sector, including the game industry, which refers to the strong state support of free market competition (*laissez-faire*), zero-state intervention, private ownership, the enrichment of market-driven price, limitless creativities, and the deliberation of individual access to the property rights and possession (Baalam & Dillman, 2015).

Market-driven price and open market environment suggest that state authority leave the market to control the price of products and basic income (Menger, 2015). There is no standard price for selling local game products to the public or local gamer in particular. For instance,

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Mojiken, Toge Productions, Agate and Digital Happiness sell their games around IDR 100.000,00 to IDR 200.000,00 (from USD 7.02 to USD 14.04) per item on Steam platform. Other prominent studios, such as Own Games, release their products at no cost to purchase on the mobile Playstore platform and rely on advertising, downloading or purchasing items on the games from the players for revenue. The state through The Ministry of Tourism and Creative Economy and The Ministry of Communications and Informatics, hand over the release platform to developers and does not ban any digital platforms for game release.

At some point, it can be assumed that the state recognition of the local game industry is a good initiative for the developers as the creative workers gain the new status. It also leverages their position from ordinary youth subcultural private small-medium enterprises' workers into the state's instruments in the creative economy sector. However, the recognition as a part of creative workers in Indonesia is not supported with an adequate state patronage system. Instead, the workers must organize and support themselves by organizing their own labor union, initiating sustainable programs, and collecting funds. The state through The Ministry of Tourism and Creative Economy technically appears as a follow up of the initiatives from the labor union.

In contrast, countries with a solid local game environment like China and South Korea are established to live up with initiatives from the state as the main patron, and not the other way (Ernkvist & Strom, 2008). At first glance, Indonesian state recognition of the local game industry seems as if the country promises annual programs such as special funds, overseas exhibition, incubation, and workshop. But in reality, these programs occur as a transactional activity. Therefore, the state patronage through related-ministries appears as ordinary annual activities to spend a mediocre state budget with a confusing regulatory compliance emphasizing that local game studios have to generate a significantly high GDP to receive more funds from the state.

The flow of sustainability programs relies heavily on the perspective and initiatives of the labor union as the major reference since the state does not process in-depth understanding on how the video game industry works. The incubation, workshop and annual events of sustainability are designed and initiated by Indonesian Game Association due to their familiarity and knowledge on video game issues. The association consists of local game talents (predominantly founders, CEO, COO and senior members) who are familiar with the video game environment. Meanwhile, the state's ministries are led by senior chiefs who are unfamiliar with the issues facing the video game industry.

Since the recognition, every local game studio is strongly urged to transform themselves from indie to Limited Company and thus, required to pay tax. This is a mandatory for the studios to gain financial support from the state. Numerous indie game studios are reluctant to transform themselves into Limited Company status due to complicated system of tax bureaucracy and fees to register. Long and time-consuming administration flows are common in Indonesia's bureaucracy. It is often found at almost every public service institution, such as school, healthcare facilities, and social security system and technology. This complex chain of legal administration along with rigid senior bureaucrats, becomes major obstacle for a creative economy sector, including video games. Local game developers as creative workers have managed a long list of paperwork in order to secure their minimum wages as a part of national labors.

At the same time, limitless creativities and zero-state intervention also act in accordance with zero limitation towards foreign game penetration. It is impossible to limit the foreign game products since Indonesia has always been an open market for any foreign game products. The state allows the studios and talents to compete in the open market area. The next consequence after the government recognized game as the national creative economy sector is the provision of a state investment fund. The Indonesian government through The Ministry of Tourism and Creative Economy and National Creative Bureau had invested

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approximately IDR 500.000.000 or USD 34.393,25 from the year of 2014 for the chosen local game developer studios.

Local studios like Mojiken and Digital Happiness had received the state financial investment during the 2014–2018 periods to enhance their financial resilience. The state conducts the special financial investment for studios through competition. As a result of the pandemic in 2020, the chosen and legal local game developer studios received IDR 60.000.000 (USD 4.200).

In principle, despite the fact that the state has recognized games as a national creative economy sector, the development of local production is not supported by sufficient budget and grand design plan. Instead, major initiatives emerge as an organic bottom-up policy from the labor association submitted to The Ministry of Tourism and Creative Economy. This phenomenon occurred as the local game workers through their labor association gained a strong bargaining position from the state authority and constantly developed with the video game issues since their early days.

4.3. Precarious Works

The local market's unfamiliarity with their own local game products is another important issue. The studios prefer to sell their game products to overseas markets rather than local ones. For instance, local game studios like Toge Productions, Digital Happiness, Agate, and Mojiken prefer to sell their game products to foreign markets. Based on the recent collaborative study led by Indonesian Ministries of Communication and Informatics (2020), China and USA are two biggest markets for local games in Indonesia.

Since Southeast Asia has been a huge foreign game market for a long time, the effort to dominate local game products has been difficult. Foreign countries are the champions for local game customers as the Indonesian market contributes only 1% of the local game revenue. Every local game strives to attract players in order to make revenue and keep their studios sustainable. Despite considerable contribution from venture capitalists and government, the market stability remains the responsibility of every local game developer. Local game talents have to manage their minimum wages when their game sales figures fail to meet their expectation or even below the initial capital. Another pressure issue emerges from clients when they take a project-based gamification. The pressure brings them into a "crunch" situation as they have to deal with long working hours with limited budget. This is a common situation, especially for a new indie studio as they want to grow and scale up.

According to Anthony Fung's (2016) idea on dependency on most Southeast Asian local game talents, the "crunch culture" in Indonesia and other ASEAN occurs due to their high dependency on state's assistance and outsource foreign studio games. This has also led into the antithesis of *technobohemians* concept (Gill, 2009) which is a common pattern found on game talents who spend their career creating aesthetic works but neglecting contract and money. This concept is only applicable to talents residing in a country where a game industry has grown-up and sustained for years like the US and Japan.

Infancy conditions force the game talents to take a "crunch culture" as they have to adapt into a situation where they cannot choose between working under paid or looking for another secure and stable job. However, as the talents don't want to lose their creativity and passion, they are willing to do a-double job. In other words, they engage in other work to earn sufficient income to live. The situation compels them to take IT services like B2B, software maintenance and gamification for office. All CEO and Chief Operating Officer of prominent local game studios in Indonesia do not prohibit their talents as long as they deeply understand the consequences. Taking a double job means they should engage in outsource work, no matter how poor the legal protection of the Indonesian outsourcing system is (Tjadraningsih, 2012).

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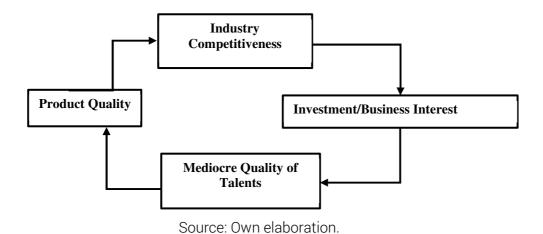
With the state applying liberal market system, precarity conditions become a natural excess to the working-class society especially for youth working in the private companies under a lucrative contract system. Political economy perspective examines this particular condition as the way capital adapts to labor-market logic (Bessant, Farthing & Watts, 2017). Creative workers are seen as the instruments for national global identity while at the local level, there is no difference with other manufacturing factory workers. According to Oli Mould (2018, pp. 27–30), creative workers' independence is a myth, since they are not capable of fulfilling their creativities due to several reasons, including unsupportive government policy, precarious working-class environment, mediocre salary, and political climate.

As Indonesian local studios cope with a liberal and unstable working-class environment, they subsequently take a project-based job with a mediocre salary. Every studio needs game talents to run their creative enterprises even though they are not stable enough to pay according to standardized salary. They are compelled to take other projects other than games to rationalize financial conditions. Furthermore, according to the recent state's data (2020), the growth of game developer studios continuously showed a significant growth from 2018 (143 studios) to 2109 (225 studios) and 2020 (332 studios). This number indicates a great future ahead of the new creative sector, especially in the contribution of national foreign exchange. Toge Productions provided the best example, with their latest game called *Coffee Talk* (2020), generating IDR 7.6 billion (USD 522.816) in its first month of release, with 99% of their consumers being foreign gamers.

Despite its huge economic potential for the contemporary creative economy sector, the number of local talents/workers are still very limited in Indonesia. According to The Ministry of Manpower (2020), the population of local game workers was only 1.136 workforces, compared to other sectors like culinary, fashion, and craft. The Indonesian game sector is still in the bottom three in spite of its largest number of game customers in Southeast Asia (Newzoo, 2017). In addition, the issue isn't just only about the number of game workers but also the quality of local game skill in crafting decent games.

There are not enough game studies or game science departments at the local universities to provide institutional knowledge on the game industry. Such condition triggers another issue of local game developer talents. Most of the workers are self-taught since they do not graduate from game major or science as their formal educational experience. In Indonesia, there are only five game college departments and most of them just accept submission for less than 10 years. This accentuates the classic circle problem called "chicken and egg" where the upstream and downstream problems are intertwining.

Figure 3. Egg and Chicken Problem of Indonesian Local Game Environment.



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Due to the lack of standard for local game workers and the shortage of game college degrees at the universities, the worker's quality doubts investors as they are not sure about investing the stimulus to local game developer studios. Hence, there will be no financial support to develop the games. It eventually reaches a point where either no game is developed, or even when it is developed, the quality of the game will be substandard due to the lack of financial support from investment. Lack of investment means no vibrant local industry that eventually circle back to the first point.

The lack of competency among the workers has initiated the Indonesian Game Association to standardize the workers' skill competency. This initiative is expected to solve the upstream problem for the sustainability of local game workers. The program would set a benchmark of local game workers' standards in their skill related to game development, such as programming, design, artist and music.

Countries like Vietnam and Singapore have the strongest bargaining power to gain investment since they have the strongest political stability among other Southeast Asian nations. However, they also deal with similar problems face by Malaysia, Indonesia, Thailand and Philippines. The best local game talents tend to prefer to work overseas for better salaries, opportunities and environment (Fung, 2016). Senior Indonesian local game talent also stated this problem with the concern as "the big talent loss" in the local game environment. In the meantime, the labor association contemplates creating more vibrant environment to attract and bring back the overseas talents to develop the local game environment.

4.4. Self-Creation Principles

Game developers need financial support to drive their creative minds through individuals and teams/studios. Prior to this, it was mentioned that the core of the investment problem relies on the upstream complex on the unstandardized labor skill, inexperienced labors and infancy market environment. The investors are majorly techno venture enterprises. The explanation below presents major investors funding numerous local game developer studios to run their local game business and workers' needs. It also shows the symbiosis between local game developer studios about being independent investors to one another through acquisitions.

Touchten, one of the senior local game developer studios, was among the first to secure an investment since 2011. Majority of the funds come from venture capital, such as Ideasource, which is a technological venture capital, Cyberagent, and TMS Entertainment. UOB, which is a well-known Singaporean overseas banking company in Southeast Asia, also invests effectively in the gaming industry and digital commerce business. Securing investment from big enterprise companies, Touchten currently has more than 30 game workers, along with other office employees.

Another local venture investing in the two prominent local game developer studios in Indonesia (Touchten and Toge Productions) is Discovery Nusantara Capital. It is also known for its investment activities in the internet startup industry in Southeast Asia. It is a joint venture capital with a Chinese IT enterprise called Hangzhou Zhexin IT which specializes in technology. Nevertheless, the developers stated there was no intervention from Chinese investors related to the game contents. Investors mainly emphasize on the game selling target.

Acquisition is another example apart from the investment in any potential talents from a particular studio. Agate, which is one of the first generation of local game developer studios in Indonesia, acquired Ekuator studio worth IDR 5 million. This acquisition is defined as the "economies of scale" in the microeconomic perspective. The economies of scale are the efficiency strategies carried out by enterprises to cut production cost by expanding their infrastructures (Clark, 2006, p. 90). Agate tried to create larger manufacturers in order to improve the game productions while consequently reducing the cost.

Another strategy was implemented by Toge Productions as they executed a sistercompany approach to nurture Mojiken. This method easily connects Mojiken to the parent

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company but still operates separately with autonomous flows (Friedman, 2007). In this case, Toge Productions as the parent company invested their funds to help Mojiken survive or maintain their talents while consequently utilizing them to develop video game products through collaboration. There were also incentives from the state through The Ministry of Tourism and Creative Economy. However, it was inadequate to cover all the production cost. A proper game production costs approximately IDR 50–100 million.

As youth subcultures and occupational groups, local game talents are enforced to provide alternative ways of collecting funds for game productions. With the advantage of the internet, they obtain a special fundraiser scheme called "crowdfunding," a method where people communally collect funds, money, or incentives to support other people's projects in a particular occasion (Warf, 2018, p. 111). At least eight local game developer studios had successfully collected funds through this method. Internet and social media platforms have leveraged this communal participation. Several issues like natural disaster aids, medical expenses, and bailout–money for the innocent (Fuadi, 2020) also apply this funding scheme to communally solve problems. The list below presents the success story of a crowdfunding scheme for local game developer studios obtaining funds to complete the game products before being enjoyed by the masses, including the crowd fundraisers.

This method has started to gain popularity among the local studios due to their lack of financial aid from both private and state investors. Digital Happiness studio stated that the crowdfunding idea was inspired by foreign game developer studios which started the funds collection through special platforms such as Kickstarter and Indiegogo. The funder's targets both local and international game fans.

A crowdfunding scheme can be seen as the best method to create and publish a game product as the developers are artistically and financially less constrained. Crowdfunding makes the studios responsible for their artwork to the fans, not investors nor publishers. Developers develop games solely to fulfill the demand of their fans. Compared to the worldwide game environment, the scheme is a popular method of gaining financial aid, especially for indie or small-medium game studios (Smith, 2015). Normally, a game studio develops the game prototype or demo before opening the crowdfunding donation to complete the development. The fans who have watched the trailer or played the demo would later assess the game and decide whether to join the donation. The initiative is a typical grass-root movement where the fans financially support the artists to complete the works (Planells, 2015; Tyni, 2017).

Table 1. List of Local Game Developer Studios with the Crowdfunding Successes.

Developer Name	Game Product Name	Year	Crowdfunding Nominal Amount
Storytale Studio	Pamali: Indonesian Folklore Horror	2018	IDR 96.683.400 (USD 6.778)
Blissful Works	One Last Crane: Another	2018	IDR 181.483.740 (USD 12.724)
Ekuator Games	Celestian Tales: Realms Beyond Celestian Tales: Old North	2017 2014	IDR 338.783.500 (USD 23.747) IDR 566.890.500 (USD 40.115)
Anantarupa Studio	Boma Naraka Sura	2015	IDR 439.936.500 (USD 30.839)
Artoncode	Winterflame: The Other Side	2015	IDR 782.693.600 (USD 54.863)
Touchten	Target Acquired	2014	IDR 317.285.000 (USD 22.240)
Tinker Games	Pale Blue	2014	IDR 830.397.000 (USD 58.762)
Digital Happiness	Dreadout	2013	IDR 450.538.500 (USD 45.053)

Source: Own elaboration.

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Unfortunately, not all of Indonesian local studios in Indonesia can maintain their business even after a successful crowdfunding. There are only five local game studios remaining in the business, while the rest of them went bankrupt or acquitted by larger studios. The reason behind the collapse studios' business despite the rejuvenation is their inability to maintain the operational cost, such as promotion activities, and to obtain other sponsor or investments for workers' salaries and infrastructures. Crowdfunding is only a temporary solution for game developer studios. Hence, they should not rely on the funding capital for the production and operational cost of their studios in the long run.

5. Conclusion

The Indonesian local game industry has entered a new era, from a non-existent entity to one of the promising commodities in less than 15 years since the first generation of local game talents established game developer studios. The local studios emerged from the youth subcultural environment. They, like other creative youth subcultural establishments including independent music, films, clothing, and fine arts struggled for survival. This massive establishment of local game developer studios in Indonesia has made Indonesia game talents less dependent on outsource foreign game studios like they used to be.

Indonesian local developers as both individuals and studios group have to rely on their creativity and self-creation to survive. Although the government has recognized them as one of the national creative economy sectors, the policy has not fully supported and accommodated their sustainability. The industry also encounters major obstacles, including limited state investment, slim knowledge of the industry, and the fact that related-government agencies are headed by someone who is much senior and not familiar with the gaming industry.

Nevertheless, Indonesian local game talents are gathering to unify themselves into a representative labor union called Indonesian Game Association (AGI). This labor union plays an important role encouraging state and related ministries to create sustainable workshops and incubation programs, which enhance the life and sustainability of local studios. At the same time, entities that are willing to invest in the industry are still difficult to find. Thus, local game developer studios utilize crowdfunding scheme to support their creations. The benefit of this method is, not only is it meant to collect funds from fans, but also creating a healthy bond between artists and their loyal customers.

Certain prominent local game studios like Toge Productions, Mojiken and Digital Happiness are famously known for producing adventurous-storytelling games while other prominent studios like Own Games and Touchten are specialized in modest mobile games. Local game studios elaborate the local taste of games with global styles. They apply various manual game language options such as Indonesian, English and indigenous local languages like Javanese and Sundanese, depending on where the game is created. This strategy is intended to expand their selling figures to the overseas market while maintaining their local identity.

The famous local game called *Lokapala* (2020) developed by Anantarupa studio is the best example combining global style with the local taste of Indonesian folklores, mythologies and fantasies. Adapting the interface style of worldwide multiplayer games such as *Dota* (2003) and *League of Legends* (2009), *Lokapala* (2020), becomes the most prominent local Multiplayer Online Battle Arena (MOBA) in Indonesia.

There's no constraint in game contents as long as the developers stay away from redbutton issues such as religion, beliefs and LGBT contents. Like other creative economy sectors, religions and sexual minority subjects remain taboo for local game industry. Developers do not even dare to cross the strict line of conservative social norms in Indonesia. They emphasize more on introducing appropriate creations rather than producing controversial materials. Studios in major cities like Jakarta, Surabaya, Bandung, Malang, Balikpapan and Batam are able to cooperate with these exceptions. As the game industry is still in its

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infancy, it's more comfortable for developers to create games with strong vernacular characters in daily basis such as human interests, fantasies, horror folklores, and satirical political events.

References

- Barker, C. (2004). The SAGE Dictionary of Cultural Studies. London: SAGE.
- Baalam, D. N. & Dillman, B. (2015). *Introduction to International Political Economy.* London: Routledge.
- Bennett, A. (2004). Virtual Subculture? Youth, Identity and the Internet. In A. Bennett & K. Kahn-Harris (Eds.), *After Subculture: Critical Studies in Contemporary Youth Subculture* (pp. 162-172). New York: Palgrave Macmillan.
- Bessant, J., Farthing, R. & Watts, R. (2017). *The Precarious Gneration: A Political Economy of Young People.* London: Routledge.
- Borowy, M. (2017). The Asian Mobile Gaming Marketplace: Context, Opportunities and Barries. In D. Y. Jin (Ed.), *Mobile Gaming in Asia: Politics, Culture and Emerging Technologies* (pp. 35–52). New York: Springer.
- Boyd, S., Pyne, B. & Kane, S. F. (2019). Video Game Law: Everything You Need to Know about Legal and Business Issues in the Game Industry. Boca Raton, Florida: Taylor & Francis.
- Budziewicz-Guzlecka, A. (2018). The Role of Youth in the Development of the Creative Industry. *Management*, 22(1), 228-237. https://www.doi.org/10.2478/manment-2018-0016
- Bulut, E. (2015). Glamor Above, Precarity Below: Immaterial Labour in The Video Game Industry. *Critical Studies in Media Communication*, 1–15.
- Cao, Y. & Downing, J. (2008). The Realities of Virtual Play: Video Games and Their Industry in China. *Media Culture and Society*, 30(4), 515–529. https://www.doi.org/10.1177/0163443708091180
- Carbone, M. & Ruffino, P. (2014). Introduction: Games and Subcultural Theory. *The Italian Journal of Game Studies*, 1(3), 5–22. Retrieved from www.gamejournal.it
- Castronova, E. (2003). On Virtual Economies. Game Studies: *The International Journal of Computer Game Research*, 3(2). Retrieved from http://www.gamestudies.org/o302/castronova/
- Clark, J. O. (2006). *Dictionary of International Economics Terms*. London: Lessons Professional. Chung, P. (2016). The Globalization of Game Art in Southeast Asia. In L. Hjorth & O. Khoo (Eds.), *Routledge Handbook of New Media in Asia* (pp. 402-415). New York: Routledge.
- Chung, P.-c. (2016). Revisiting Creative Industry Models for game Industry Development in Southeast Asia. In A. Fung, *Global Game Industries and Cultural Policy* (pp. 125–152). Gewerbestrasse: Palgrave Macmillan.
- Creswell, J. W. & Poth, C. N. (2018). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches.* London: SAGE.
- Dymek, M. (2012). Video Games: A Subcultural Industry. In P. Zackariasson & T. L. Wilson, *The Video Game Industry: Formation, Present, State, and Future* (pp. 34–56). New York: Taylor & Francis.
- Ernkvist, M. (2008). Down Many Times, But Still Playing The Game: Creative Destruction and Industry Crashes in The Early Video Game Industry 1971–1986. In K. Gratzer & D. Stiefel (Eds.), *History of Insolvancy and Bankruptcy* (pp. 161–191). Huddinge: Södertörns Högskola.
- Ernkvist, M. & Strom, P. (2008). Enmesh in Games with Government: Governmental Policies and The Development of The Chinese Game Industry. *Games and Culture*, 3(1), 98–126.
- Florida, R. (2012). The Rise of Creative Class, Revisited. New York: Basic Books.
- Friedman, J. P. (2007). Dictionary of Business Terms. New York: Barron's.
- Fuadi, A. (2020). Social Media Power for Protest in Indonesia: The Yogyakarta's #gejayanmemanggil Case Study. *Jurnal Ilmu Komunikasi*, 4(3), 541–552. https://www.doi.org/10.25139/jsk.v4i3.2438

The Genesis and Self-Reliance of Indonesian Local Game Developers as the National Creative Workers in Contemporary Indonesia

- Fung, A. (2016). Creative Industry and Cultural Policy in Asia Reconsidered. In A. Fung (Ed.), *Global Game Industry and Cultural Policy* (pp. 15–32). London: Palgrave Macmillan.
- Fung, A. (2016). Redefining Creative Labour: East Asian Comparisons. In M. Curtin & K. Sanson (Eds.), *Precarious Creativity: Global Media, Local Labour* (pp. 200–214). Oakland: University of California Press.
- Hebdige, D. (1979). Subculture: The Meaning of Style. London ℰ New York: Routledge.
- Hesmondhalgh, D. & Baker, S. (2011). *Creative Labour: Media Work in Three Cultural Industries.*New York: Routledge.
- Informatics, Indonesian Ministry of Communication and Sciences, Indonesian Institute of; Association, Indonesian Game (2020). *The Map of Indonesian Local Game Industry*. Jakarta: Indonesian Ministry of Communication and Informatics.
- Jenks, C. (2005). Subculture: The Fragmentation of the Social. London: SAGE.
- Jiang, Q. & Fung, A. Y. (2017). Games with Continuum: Globalization, Regionalization, and The Nation-State in The Development of China's Online Game Industry. *Games and Culture*, 1–24. https://www.doi.org/10.1177/1555412017737636
- Lazzarato, M. (1996). Immaterial Labour. In P. Virno & M. Hardy (Eds.), *Radical Thought in Italy: A Potential Politics* (pp. 133–148). Minnesota: University of Minnesota Press.
- Marchand, A. & Hennig-Thurau, T. (2013). Value Creation in the Video Game Industry: Industry Economics, Consumer Benefits, and Research Opportunities. *Journal of Interactive Marketing*, 27, 141-157. https://www.doi.org/10.1016/j.intmar.2013.05.001
- Merkusen, A., Wassall, G. H., DeNatale, D. & Cohen, R. (2008). Defining the Creative Economy: Industry and Occupational Approaches. *Economic Development Quarterly*, 22(1), 24-45. https://www.doi.org/10.1177/0891242407311862
- Menger, P.-M. (2015). The Market for Creative Labour: Talents and Inequalities. In C. Jones, M. Lorenzen & J. Sapsed, *The Oxford Handbook of Creative Industries* (pp. 148–170). Oxford: Oxford University Press.
- Moore, I. (2014). Cultural and Creative Industries Concept A Historical Perspective. *Procedia-Social and Behavioral Sciences*, 110, 738-746. https://www.doi.org/10.1016/j.sbspro.2013.12.918
- Mould, O. (2018). Against Creativity. New York: Verso.
- Ng, B. W.-m. (2008). Video Games in Asia. In M. J. Wolf (Ed.), *The Video Game Explosion: A History from Pong to Playstation and Beyond* (pp. 211–222). Connecticut: Greenwood Press.
- Newzoo (2017). The Indonesian Gamer: Key Consumer Insight. San Francisco: Newzoo.com.
- Nie, H. A. (2013). Gaming, Nationalism, and Ideological Work in Contemporary China: Online Game Based on The War of Resistance against Japan. *Journal of Contemporary China*, 22(81), 499-517. https://www.doi.org/10.1080/10670564.2012.748968
- O'Donnell, C. (2012). This is not a Software Industry. In P. Zackariasson & T. L. Wilson (Eds.), *The Video Game Industry: Formation, Present State and Future* (pp. 17-33). London: Routledge.
- Planells, A. J. (2015). Video Games and the Crowdfunding Ideology: From the Gamer-Buyer to the Prosumer-Investor. *Journal of Consumer Culture*, 17(3), 620-638. https://www.doi.org/10.1177/1469540515611200
- Rakhmani, I. & Darmawan, H. (2015). Indonesia. In M. J. Wolf (Ed.), *Video Games around the World* (pp. 249–270). Massachusetts: MIT Press.
- Riggill, J. E., McAllister, K. S., Nichols, R. & Kaufman, R. (2017). *Inside The Video Game Industry:* Game Developers Talk About The Business of Play. New York: Routledge.
- Roodhouse, S. (2011). The Creative Industries Definitional Discourse. In C. Henry & A. d. Bruin (Eds.), *Entrepreneurship and The Creative Economy: Process, Practice and Policy* (pp. 7-29). Cheltenham: Edward Elgar Publishing Limited.

The Genesis and Self-Reliance of Indonesian Local Game Developers as the National Creative Workers in Contemporary Indonesia

- Schlesinger, P. (2017). The Creative Economy; Invention of a Global Orthodoxy. *Innovation: The European Journal of Social Science Research*, *30*(1), 73–90. https://www.doi.org/10.1080/13511610.2016.1201651
- Smith, A. N. (2015). The Backer–Developer Connection: Exploring Crowdfunding's Influence on Video Game Production. *New Media & Society*, 17(2), 198–214.
 - https://www.doi.org/10.1177/1461444814558910
- Smith, C. & McKinlay, A. (2009). Creative Industries and Labour Process Analysis. In A. McKinlay & C. Smith (Eds.), *Creative Labour: Working in The Creative Industries* (pp. 10-18). London: Palgrave Macmillan.
- Spracklen, K. (2015). *Digital leisure, The Internet and Popular Culture: Communities and Identities in a Digital Age.* New York: Palgrave Macmillan.
- Sotamaa, O. (2021). Studying Game Development Cultures. *Games and Cultures*, *16*(17), 835–854. https://www.doi.org/10.1177/15554120211005242
- Steinkuehler, C. A. (2006). Why Game (Culture) Studies Now? *Games and Culture*, 1(1), 97–102. https://www.doi.org/10.1177/155412005281911
- Styhre, A. (2020). *Indie Video Game Development Work: Innovation in the Creative Economy*. Cham: Palgrave Macmillan.
- Tjadraningsih, I. (2012). State-Sponsored Precarious Work in Indonesia. *American Behavioral Scientist*, *57*(4), 403-419. https://www.doi.org/10.1177/0002764212466236
- Towse, R. & Handke, C. (2013). Introduction. In C. Handke & R. Towse (Eds.), *Handbook on the Digital Creative Economy* (pp. 1–6). Cheltenham: Edward Elgar Publishing Limited.
- Tyni, H. (2017). Double Duty: Crowdfunding and the Evolving Game Production Network. *Games and Culture*, 20(10), 1–24. https://www.doi.org/10.1177/1555412017748108
- Warf, B. (2018). The Sage Encyclopedia of The Internet. California: SAGE.
- Weststar, J. (2015). Understanding Video Game Developers as an Occupational Community. *Information, Communications and Society, 18*(10), 1238–1252. https://www.doi.org/10.1080/1369118X.2015.1036094
- Williams, R. (1965). Culture and Society. London: Chatto & Windus.
- Williams, R. (1965). *The Long Revolution*. Harmondsworth: Penguin.
- Yin, R. K. (2018). Case Study Research and Applications: Design and Methods. Sixth Edition. California: SAGE.
- Young, J. (1997). The Subterranean World of Play. In K. Gelder & S. Thornton, *The Subcultures Reader* (pp. 71-80). London: Routledge.
- Zackariasson, P. & Wilson, T. L. (2010). Paradigm Shifts in the Video Game Industry. Competitiveness Review. *An International Business Journal*, 20(2), 139–151. https://www.doi.org/10.1108/10595421011029857