Struggles and Successes of Online Teaching: The Teachers' Lived Experience

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Abstract

Indonesian government through The Ministry of Tourism and Creative Economy has recognized video game to be one of the national creative economy sectors. This initiative was the first ingenuity made by Southeast Asian country foreseeing a great potency of video game industry for years to come. Nevertheless, Indonesian local game industry only contributed less than 3% of the national GDP. Numerous problems such as unsupportive state policy, dry investment and mediocre talents' skills are among major causes. Those difficulties have forced local game developers to create their own supportive system to sustain their existences. Consequently, their loyalty to stay in the local game industry is very much in questioned. Three independent variables of self-authorship, job insecurity and patronage trust are applied to assess the level of adaptability and measure the career loyalty among local game developers in contemporary Indonesia. The result can forecast the sustainability of Indonesian local game industry particularly from the human resource point of view.

Keywords— Career Loyalty, Creative Workers Game Industry, Indonesia, Self-Authorship

I. INTRODUCTION

Since the year of 2014, Indonesian state through The Ministry of Tourism and Creative Economy has recognized video game to be one of creative economy sectors in Indonesia. In fact, its contribution to the national creative economy sector is still below 3%1. In addition, more than a half of local game developers have to do a side-job to maintain their creativities. The previous data mentioned that 2/3 of the new established local game studios must close their productions due to numerous problems like economic setback, human resources, limited investments and state supports (Adiguno, 2021). Indonesian local game workers are now living under a precarious situation.

As an infancy condition of Indonesian local game industry with limited human resource and state support, the issue of career loyalty among local game developers becomes a major aspect to foresee industrial sustainability (Allifiansyah, 2022). Career loyalty stands for commitment of local game developers to consistently stay to their profession as game talents or workers. This loyalty concept is meant to measure the engagement and commitment levels among local game developers as professional game producers amidst the contemporary precarious situations in the local gaming industry.

Assessing career loyalty can also indicate the sustainability and endurance level among workers. Their experience dealing with current patronage, market and precarious conditions are considerations to measure either the willingness to stay firm or pursuing another career. Career loyalty can also predict the longevity of the industry itself (Daneshgari & Moore, 2016). As creative workers, game developers share different roles and positions which associated with the decision-making process. They rely on their creativities, therefore, it's easier for them

to change occupations and careers over time (Florida, 2012).

Recent research indicate that most of the local game developers are unsatisfied to the state incentives and expecting more from related state ministries². Since game industry is a very dilute working space, numerous developers don't just abandon their positions as game developers after resigning from a full-time employee (Bulut, 2015; Styhre, 2020). Game developers can still connect to the industry without involving in a full-time daily basis responsibility.

There are 3 types of local game developers in contemporary Indonesia. The first type is a selfemployed developer who worked as a parttimer or project-based talent. This particular type of developer is usually tied with a shortterm contract to make a particular project. Selfemployed game developer still engages in developing games though not live it as a fulltime occupation. The second type is a developer who worked for someone's studio or an employee in a particular game studio. This type of worker has an intact working schedule and contract as a professional game worker with weekly or monthly salary. The third type is a developer who owned a studio and being responsible to organize manpower as a part of their business resources.

By examining three different types of local game developers, we can summarize the characters and type of workers with the foremost loyalty and commitment to their career in the Indonesian gaming industry. The result can also indicate the most vulnerable type of developer in terms of their commitment to sustain local game development.

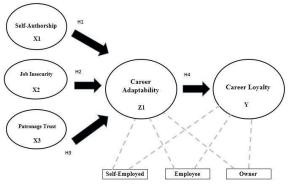


Figure 1. Proposed Model

These nuances of workers share different standpoints regarding to self-authorship, job insecurities, patronage trust, adaptability and loyalty to the current local game industry. Three types of Indonesian local game workers are based on their positions as an integral part of local game development in the national creative economy sector. In other words, individual who created local video game asset (i.e. programs, storylines, sounds, artworks) for industrial purposes can be identified as game workers in Indonesia.

II. CAREER LOYALTY

In academic research, the concept of career loyalty often intertwines with occupational or job loyalty which refers to someone's commitment to the current occupation in the daily basis (Dutta & Dhir, 2021). Nonetheless, the concept has several spectrums whether occupational loyalty is more leaning to a particular company or the industry as a whole (Riley, Lockwood, Powell-Perry, & Baker, 1998). There is a tendency of people to be more loyal to their career instead of organizations or companies (Kristof-Brown, Zimmerman, & Johnson, 2005).

Occupational loyalty can be expanded to any subjects and level of working class groups (Majdin, 2005; Elegido, 2013). Creative workers are among interesting subjects to be examined. The major reason is the precarious working condition they have to deal with, such as unstable industry, unsupported state policy, unwelcome market and high cost of production (Hartley, 2005; Flew, 2012). In Indonesia, local game developers have to deal with those various crisis. Based on the grounded examination from Dutta & Dhir (2021) occupational or job loyalty can be measured by assessing 3 aspects of affective (sense of ownership), cognitive (trust), and behavioural aspects (willingness to stay). In this research, occupational loyalty is meant to measure the commitment and engagement of Indonesian local game workers to their career professional game developers.

Another theory tries to explain the career decision making and consistency is a selfauthorship theory. Coined by Kegan (1994) and expanded by Magolda (1999), this theory explains the decision-making processes that every people went through before choosing career possibilities. Individuals experience numerous adaptation crossroads and interpersonal and intrapersonal levels besides trust issues involving aspects such as unstable income, lifestyle, insecurity, and market trends. Particular research exposes that certain number of bartenders are more loyal to the career instead of the one particular industrial house (Riley, Lockwood, Powell-Perry, & Baker, 1998). For creative workers, the tension embraces the issue of artistic passion and rationalization for fulfilling life passion (Holt & Lapenta, 2010).

The Context of Indonesian Local Game Industry

The literature of Indonesian local game industry is difficult to find as inadequate research on particular area. One major research only mentions the early stage of local game development in Indonesia (Rakhmani & Darmawan, 2015). As other creative industry sector, each talent has a strong self-efficacy on measuring himself/herself as a creative human being (Hartley, 2005; Flew, 2012). At the same time, there is a high risk and precarious conditions challenge them while struggling for existence (Hesmondhalgh & Baker, 2011). Labour's willingness to stay and the level of loyalty are at the stake to foresee the sustainability of a particular creative economy sector, including gaming industry.

The longevity of a particular creative industry can be seen through the loyalty among the workers. Otherwise, the lack of loyalty wedges the industry due to the scarcity of talents (Puttip, 2013). Despite having a recognition from the state, Indonesian local game industry is still in an infancy period. Bringing a question on the talents' commitment to embrace it in a long run. Variables are derived from the contemporary conditions of local game development particularly to the labour issues

(Allifiansyah, 2022). There are 3 dependent variables, 1 moderate variable and 1 dependent variable which later be tested to measure the assumptions and correlations.

Self-Authorship (SA)

Self-authorship is a psychological theory explaining people's choice and decision on their life. The concept consists of 3 important which are cognitive intrapersonal (IA), and interpersonal (IE) dimensions. Each dimension has 4 phases of following formulas, crossroads, author of one's life, and internal foundation (Magolda, 1999, 2001). These 4 phases explaining someone's dilemma before and after choosing a particular decision such as seeking for references, rationalization and internalization. Studies expose this concept is applicable on the field of self-management particularly in the situation such as job- seekers, career path and career sustainability (Bennett & Hennekam, 2018). Self-authorship isn't rigid theory. People can change their self-authorship standpoint from time to time. In other words, self-authorship is a continuity and dynamic perspective someone's decision making process (Bennett & Hennekam, 2018). Creative workers or people who work in creative industries also become explainable subject (Banks & Hesmondhalgh, 2009; Banks & Milestone, 2011). As creative labour mingles with ideas, he/she doesn't simply rely on a manufacture equipment like conventional workers (Lazzarato, 1996). As immaterial labours, they must sustain creativities even after working hours. Borderless working time, precarious market condition and state policy have made their career rationality becomes questionable.

The concept of self-authorship also explores both of inner-self and working environment until a rationalization phase emerges while adjusting the identity as a creative person the creative industry, in accordance to the life-span and life circle theory in career adaptation (Savickas, 1997). As individual growing up, their experience will guide their calculation of adaptability longevity in a particular career.

Self-authorship is a continuum theory with a theoretical principle addressing that every chapter of individual lives contribute to their decisions (Bennett & Bridgstock, 2015).

Self-authorship grows continually and gradually on individuals' depends perception him/herself and the environment (Magolda, 1999, 2001). Individuals can develop their identity concept and attempt to adapt to the contemporary situation. It is the reason why the efficacy of people might get change every time thev encounter the new chapter comprehensive rationalization in their career choice (Betz, 1994). This never-ending process lead into a career development explanation whether individual stay to develop the passion, change the career direction or doing both at the same time (Stead, LaVeck, & Rua, 2021).

Hypothesis 1. Self-authorship statistically correlated to career adaptability

Job Insecurity (JI)

The second independent variable is career insecurity and involving indicator like workers' standpoint to the current industrial conditions such as precarious situation, income, and office environment. Career insecurity is a concept normally applies in the job loyalty in a particular office in a particular situation like massive turn-over and board changing (Klehe, Zikic, Vianen, & Pater, 2011). Job insecurity also indicates certain degree of satisfaction on the current job and powerless sense in maintaining occupational flows (Sverke & Hallgren, 2002). Since every local game developer has to deal with precarious conditions, then insecurity becomes inevitable (Bulut, 2015; Menger, 2015; Bessant, Farthing, & Watts, 2017).

In this research, the concept of career insecurity isn't applied to assess job loyalty in a particular office, but towards the whole their professional career in the local gaming industry. The workers can change their workplace from one particular studio to another, but remain loyal to the career as game developers. Job insecurity is a concept measuring cognitive stance of

workers related to the crisis of external factors like future certainty (Saks & Ashforth, 2002) and job satisfaction (Smith, Kendall, & Hulin, 1969; Witte & Naswall, 2003).

Hypothesis 2. Job insecurity statistically correlated to career adaptability

Patronage Trust (PT)

The trust concept is derived from current Dutta & Dhir (2021) research on job loyalty by concerning of socio-economic situation and workers' struggle to ease uncertainties. It highlights trust as a belief towards the current major patrons of state, investors and labour association. Patronage trust describes the labours' concern over safety, expectancy and sustainability prospects of their career to the external supports (Dawson & Holmes, 2012; Davies & Sigthorsson, 2013). It's a similar concept of trust among other labours in a specific bracket of patronage issues. The confidence of patronage assistances embrace aspects such as experience, reference and problem-solving approach by patron-client relationships.

There are three dimensions of trust relate to this research. To begin with, an expectation to the future of industry. Secondly, the risk understanding as a part of having a career as a game developer in Indonesia. Lastly, dependency and environment trust among local game labours and negotiation as it refers to calculate activities involving rewards and benefits (West & Turner, 2020). The calculation embracing elements like trustworthiness, expected outcome, and potential loss.

In a professional work, cost and reward are inevitable occurrences. There's a dynamic among actors such as employee, supervisor, owner, human resource, and also external entities like state and investors. As the employees enter the professional work, they become interdependent each other as a system (Cole, Schaninger, & Harris, 2002; Cropanzano & Mitchell, 2005). The satisfaction level to each stakeholder relates to their next scenario of their career path. The more positive they

perceive stakeholders, the more likely they can adapt to the industry (Zikic & Klehe, 2006; Klehe, Zikic, Vianen, & Pater, 2011).

Hypothesis 3. Patronage trust statistically correlated to career adaptability

Career Adaptability (CA)

Before exposing the workers' career loyalty, it's important to measure workers ability to adapt throughout times. Career adaptability involves elements concern (CN), control (CT), curiosity (CU) and confidence (CF) (Savickas, 1997, 2013). In the recent research, these 4 elements are materialized to activities like redundancy, career planning and career exploration (Klehe, Zikic, Vianen, & Pater, 2011). Workers endure ups and downs during their career. Their cognitive, affective and behaviour resilience determined their career consistency. Like Self Authorship, Career Adaptability is also a second-order reflective variable with four major reflective measurement to assess adaptability level.

Meanwhile, there is a major difference between career plan and exploration (Klehe, Zikic, Vianen, & Pater, 2011). If workers have career plan, it is most likely they have a tendency to adapt to the current job situation. Otherwise, career exploration indicates that workers are less likely loyal to their current career in the near future. Both career plan and exploration occur when there is a redundancy or turbulence (ex. employers turn over, different policy approach) during the career path.

In this research, as being creative worker is a precarious occupation, the tendency among the workers to adapt to the current condition is highlighted. Recent research mentions there is a volatility career engagement among creative labours from creative industry sectors such as radio, TV and movie (Banks, 2010; Beirne, Jennings, & Knight, 2017). An overwhelming market trends and technological changes enforce them to adapt in order to remain as both labours and autonomous artists.

Career adaptability is the predictor to measure another level of engagement, like loyalty and career-fulfilment (Hirschi, Herrmann, & Keller, 2015). In creative industry, where individual's creativity is the main core of production, self-fulfilment is an important to execute ideas among talents. In Indonesia, creative industry has a very good contribution to the national GDP income³. However, the gap between the top-three sectors (culinary, fashion, craft) is huge to other 15 sectors (animation, game, film, music, fine arts, etc.) regarding to GDP distribution. Their adaptability exposes their level of confident to stay in the current and upcoming local game industry (Creed, Fallon, & Hood, 2009; Hirschi, Herrmann, & Keller, 2015).

Hypothesis 4. Career adaptability statistically correlated to career loyalty among local game developers in Indonesia

III.RESEARCH METHOD

This research is tested via partial least squares structural equation modelling (PLS- SEM) to measure assumptions and model of variables. Moreover, PLS-SEM also adequate acceptable to measure a non-random sample technique (Hair, Hult, Ringle, & Sarstedt, 2014). Furthermore, the exact number of population for quantitative step is unknown due to several reasons. The first reason is that there is no stable figure that revealed the exact number of the total Indonesian local game in 3 categories (self-employed, employee, owner). The Ministry of Manpower only exposes 1. 136 legal game labours. Meanwhile, self-employed or indie developers are neglected from the recognition due to state's enforcement to establish legal business enterprises in order to receive a certain state funding.

Meanwhile, self-employed and indie developers cannot be overlooked. Numerous game assets are made by these types of game developers via part-time projects. In other words, self-employed developer still involves to the game environment in particular moments. As researcher has a consideration on population classification, a purposive non-random sampling technique is applied to pull samples from various sources such as Indonesian Game

Association, Ministry of Manpower and online platforms where the local developers assembles (*Discord*, *Facebook* and *WhatsApp*).

There is no rigorous population number of local game workers from 3 categories. In addition, Indonesian game labour association can't also provide the number of local game workers as they only categorize the number of studios, not developers as persons. Therefore, the total numbers given by The Ministry of Manpower are applied as a major reference to calculate samples along with Taro Yamane (1967) formula and Roscoe rule of thumb (1975) principle of appropriate sample sizes. The Yamane formula indicates the proper number of samples with 0.05 margin of error tolerance. The total of 296 samples is the maximum standard with the consideration of Roscoe (1975) rules of appropriate 30-500 samples. Meaning, if the samples surpass the figure of 100-296, it can be generalized in statistical sense as it has already comprised into a proper number of samples.

The survey consists of 41 item of questioners with likert scale of 1-5 (Dawes, 2008). The scale is chosen to standardize every item with interval scale to accomplish PLS-SEM statistical standard with non-random sampling technique. The research successfully collects 332 respondents through online survey from social media platforms (*Discord*, *Facebook* and *WhatsApp* group). The result displays a brief form of loyalty level among local game developers in Indonesia based on their positions and roles.

IV. RESULTS

Hypothesis Testing

Once validating 41 items of measurements, the structural models are evaluated to facilitate evidences for theoretical model. Each structural model explains the relationship between the latent constructs which are the subject of the hypotheses in the theoretical model. The main goal of PLS-SEM model is to forecast theoretical fitness by the strength of its structural lines and predictions or the strength

of variance of exogenous structures (Joseph Hair, Hult, Ringle, & Sarstedt, 2014).

Bootstap resampling with 1000 subsamples is conducted via PLS-SEM software for each sample group in order to generate scores representing the strength of path coefficients and t-value to evaluate significance. A brief PLS-SEM graphic results also generates by bootsrap resampling technique are displayed as figure. The PLS-SEM analysis indicates that three independent variables of *Self-Authorship*, *Job Insecurity* and *Patronage Trust* are positively and significantly influence to *Career Adaptability* among local game workers in Indonesia.

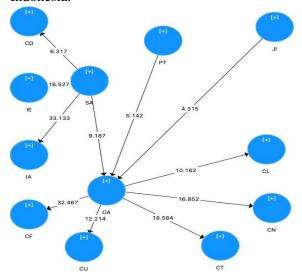


Figure 2. The Result of Structural Model

Among those three independent variables, the variable of *Self-Authorship* has the strongest influences towards *Career Adaptability*. Local game developers in Indonesia have strong self-efficacy and profoundly understand their identity to attach to the local gaming industry. According to the PLS-SEM result, there is a positive correlation between *Job Insecurity* and *Career Adaptability* among local game developers in Indonesia. In this research, *Job Insecurity* is positively correlated to the adaptability gesture among developers.

The principle resonates in a significant positive influence of *Job Insecurity* variable to *Career Adaptability*. The more local game developers feel insecure about their job, the more likely they will adapt to their career. Local game

developers understand their self-efficacy and consequence as a creative person who loved to play and later develop video game a part of their identity and professional lives.

When evaluating the predictive power of the structural model, the path coefficient of each structure in the structural model is also estimated by the bootstrap technique with 1000

subsamples. The path coefficient indicates the size, direction, and the significant of statistical relationship between two constructs (Hair, 2006). The results of structural model are summarized in the table indicating the effect of each independent structure to the corresponding dependent structure, path coefficients, t-statistics, and significant level.

Table 2. Path Coefficient Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	ρ Values
$SA \Rightarrow CA$	0.413	0.409	0.045	9.197	0.000
$PT \Rightarrow CA$	0.232	0.231	0.045	5.142	0.000
$JI \Rightarrow CA$	0.209	0.216	0.048	4.315	0.000
$CA \Rightarrow CL$	0.520	0.519	0.051	10.162	0.000

The results from the Table 2 indicate that three independent constructs link to *Career Adaptability* and demonstrates influence to *Career Loyalty*. Three independent variables of *Self-Authorship* (0.413), *Job Insecurity* (0.232), and *Patronage Trust* (0.209) prove moderately strong path coefficients. The effect of *Career Adaptability* on *Career Loyalty* is also significant (0.520).

Multigroup Analysis (One-Way within Subjects ANOVA)

The purpose of exposing multigroup analysis is to understand the nuances of local game developers' loyalty level. As there are 3 types of local game developers in Indonesia (self-employed, employee, owner). These three different types of workers share the same career path but in the different positions. Each of them struggles different obstacles though sharing similar concerned as talents.

Multigroup analysis displays the engagement level of each Indonesian local game developer type to the research construct, including career loyalty. It summarizes that the local game developer who owned the studio has the highest score among the other type of workers for every variable. Kruskal-Wallis Test is chosen to rank one-way analysis of variances. The test is commonly used to measure a non-parametric

data from two or more independent samples. An alternative one-way ANOVA test can figure out the degree within subjects that previously tested of having correlation via PLS-SEM path analysis. The figure below displays the *Mean Rank* which represents scores of 3 different subjects from 5 different variables. The scores picture engagement from each subject to variables.

Table 3. Multigroup One-Way ANOVA Test Results

	Developers Type	N	Mean Rank
Self Authorship	Self-Employed Developers	105	158.76
	Employee Developers	180	148.82
	Developers Owners	47	251.49
	Total	332	
Patronage Trust	Self-Employed Developers	105	150.02
	Employee Developers	180	167.71
	Developers Owners	47	198.70
	Total	332	
Job Insecurity	Self-Employed Developers	105	159.39
	Employee Developers	180	141.38
	Developers Owners	47	278.61
	Total	332	
Career Adaptability	Self-Employed Developers	105	169.76
	Employee Developers	180	143.26
	Developers Owners	47	248.21
	Total	332	
Career Loyalty	Self-Employed Developers	105	148.88
	Employee Developers	180	163.67
	Developers Owners	47	216.71
	Total	332	

The results emphasize on the advantage of experience. Once a developer gains experience

in the video game industry, he/she would have a tendency to establish an indie game studio and face the consequences. Not only is he/she able to fulfill their aesthetic idealism on the game product, but also launch a business model of their own brand as the core part of their "selfauthorship" identity. Developers who owned studios are always on the top positions in every variable. They're a type of local game developer with the most score for Self-Authorship (251.49) meaning their self-efficacy towards talents, potency and self-identification are high among the other two types. At the same time, their Job Insecurity (278.61) and Patronage Trust (198.70) levels are also the highest.

With a strong self-efficacy, a studio owner challenges themselves and took all of the risk to hunt a possible patron for sustaining the studio. No wonder they had a full-confidence level towards patron/s (investors, labour association, and the state) as the studio owner directly involves in negotiations as their Career Adaptability and Loyalty outnumber the other type of local game developers. However, as we decipher every variable based on the level of each type workers, we can summarize numerous interesting points. In Self-Authorship variable, self- employed developer receives a higher score (158.76) than the employee one (148.82). These scores indicate that a selfemployed local game developers in Indonesia had a higher self-efficacy comparing to employee developers who worked for a game studio in their regular basis. Self-employed developers have more confidence to their identity as both artists and developers. At the same time, self-employed developers are more insecure (159.39) than employee developers (141.38). They are less confidence taking a fulltime job as game developers.

Meanwhile, employee developers receive the least insecurity level, making them the least insecure type of developer among the three. This particular type of developer is arguably the least vulnerable type of works due to the professional legal contracts they've taken. Unlike the other two types of developers, the

employee developers have a strong legal standing position to address their rights if there's a massive lay off or frauds. Local employee developers also gain the second highest score for the *Patronage Trust* variable with (167.71) comparing to least one of self-employed developers with (150.02). As patron is one the key elements for career sustainability, both game studio owners and employee developers share the first and second highest scores respectively comparing to the self-employed type.

The most interesting point from this variable assessment is a self-employed developers turns out of having a higher score of *Career Adaptability* (169.76) comparing to employee developers (143.26). Self-employed developers are more adaptive to their career. Nonetheless, the self-employed are the least likely to be loyal to their career (148.88). Self-employed developer is a person with less confident to the industry but having a huge passion to the game productions. Therefore, he/she decides to take another firm job to secure their basic needs without losing the passion.

In other words, self-employed game developer is the most vulnerable type of local game workers in Indonesia. In a bigger picture, this situation is understandable as creative industry has a fluid environment, self-employed type of workers always have plenty options to do or not to do their creative works in the regular basis. They can easily involve in a creative duty without doing it regularly.

In general, multigroup one-way ANOVA test of local game developers in contemporary Indonesia reveals a fact that local game developers in Indonesia are loyal to their career (as previously measured in path analysis) with various degrees. Local developers who owned the studios understand the consequences by establishing game studio enterprises and recruit local talents to be his/her employees. A growing creative youth subcultural circle of recruitment has guaranteed a space for local game talents to fulfill their abilities in the local gaming industry and prevent them to work for overseas foreign game subcontractor studios like in the past

times. If the state wants to strengthen the local gaming industry, the studio owners need to receive more spotlights. With proper allowance and workshops, game studio owners with their properties are able absorb the other two types of local developers.

V. CONCLUSION

Local game development in Indonesia has just begun in less than 10 years. Prior to this, like any Southeast Asian countries, Indonesia used to be a major market for Japanese and Western game products. Indonesian 80's and 90's generations are vivid foreign game customers. particular habit has inspired transformed a respective generations from game customers to game producers. In the late of 90's and early 2000's, Indonesian local game talents didn't have a choice but to work as outsource foreign game developers in their native country. This condition occurred due to the nonexistence appearance of local game studios in Indonesia. Until the time when the local talents resigned from outsource foreign game studio and decided to create their own game studios.

At the year of 2014, Indonesian government via The Ministry of Tourism and Creative Economy recognized video game to be one of the national creative economy sectors, along with other 16 others. This recognition unfortunately isn't followed by an adequate state support and patronage. The state indeed provides workshop and incentives but with limited amount and complicated paperwork of tax and legalizations. Local game developers are forced to create their own support system. The establishment of Indonesian Game Association (AGI) as a labour union is the output.

Within these precarious conditions, the loyalty among local game workers toward their career is in questioned. This research proves that local game developers are loyal to their career as game developers in Indonesia. 3 types of Indonesian local game developers (self-employed, employee, owner) share different degrees of loyalty with the studio owner receives the highest level of career loyalty in the Indonesian gaming industry. The stance to

remain loyal to their path as video game artists accentuate in their identity from game customers to game prosumers with youth subcultural *Do It Yourself* ethic. The positive measurement on career loyalty among local talents is a good news for local gaming industry, particularly regarding to the issue human resources. Since video game is a fluid industry, the talents can go back and forth from one particular studio to another. From being full-time developer to a part-time one, from employee to studio owner. They can even accomplish more than one role at the same time.

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