

## Online Gaming: The Linkage on Social Identity and eCommerce

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### Abstract

*Internet network and online games penetration has gotten one of the driving variables for web based business development in Indonesia. Having an enormous populace, Indonesia gives a tremendous market to nearby and global online business. Alongside the advancement of web and web based gaming, the way of life and social behavior also the life styles of today's society in Indonesia has been shifted which demonstrated by the conveniences in using technological advances including in using online payment transaction methods, 48% of users who are between 26-35 years old are using various mobile payment methods for many purposes. This phenomenon describe that Indonesia become a potential target for e-commerce industry, including for gaming industry that utilizing e-commerce in generate revenues from selling games application and its accessories. If this potential can be utilized properly, it will certainly improve the national economy. Gaming business through web based business can offer incredible open doors for monetary development in. With increasing internet penetration, online gaming market is seen as an opportunity with a large potential for e-commerce. Developers across the world are expected to enter the booming online gaming market. This research aim to investigates the role of online gaming in increasing social identity effect to eCommerce, study in web based online community. Dota2 community in Bandung city, taken as samples from populace of Indonesian web based online gaming community. The result reveals that online gaming contribute to the effect of social identity to eCommerce in Indonesia market as much as 79,1%.*

### Keywords

mobile games; online marketing; community; ecommerce; gamers



## I. Introduction

In order to enhance the profit, the online gaming industry including in Indonesia needs to understand how to meet the basic needs of users. Basically, the online games have a great sense of community. Most of the player needs community forums to express their opinions or answer their questions about a particular game. As a complementary to the official website, many virtual game players develop some online communities or forum and some of them become important communication channels for players to interact and communicate each-others. Through discussion forums, message boards, and chat rooms, this community website can attract the attention of gamers and make buzz and verbal (WOM) impact. The significance of informal (WOM) has for a long while been a huge subject for investigators and displaying experts for different reasons. WOM has been appeared to altogether influence purchaser decision (Katz and Lazarfeld, 1955; Engel et al., 1969; Arndt, 1967; Richins, 1983). Significantly more unequivocally, the Internet has climbed as a source and channel for electronic easygoing (eWOM) correspondence for

clients (Hennig-Thurau et al., 2004). Inside online game community, there are several game genres been discussed. Genres are narrative styles that affect story structure, depth of character, and other storytelling elements (Grace, 2005). A game classification is a particular classification of games associated by a comparative interactivity trademark. Types are not generally characterized by the genuine substance of the game or its vehicle of play, yet by its normal test. Sorts may incorporate a wide assortment of games, prompting considerably increasingly explicit characterizations called subgenres. For example, an action game can be portrayed into various subgenres, for instance, arrange games and engaging games. A few games, particularly programs and versatile games are generally ordered into different types. The accompanying table is a rundown of all ordinarily characterized game classes with short depictions.

Among Indonesian Dota2 community, there is the largest community called Steam Community that have active around 1,691 member from 63,265 members, they sharing knowhow by online media, such as whatsapp group, website, and blog they discuss about special cheat, game instruction, tips and role in DOTA2 language such as “LFT ROLE”, “MIN MEDAL ANCIENT”, “LPF PARTY MMR”, this language represent they identity as DOTA2 member in Indonesian. Even though games have similar elements, the perception of Group was not on the same wavelength, because each group produce terms and unique abbreviation based on the agreement from the player that also have a function as a sign of their group. Besides that, the difference on their perception was also has an effect on the poster identity difference on their each group. It means the language interpretation by legitimately was identified with the client network.

The study in the region of brand networks demonstrates that to produce client worth can be made from sharing different assets, for example, social, monetary, and information (Mc Alexander, Schouten, and Koenig, 2002). The "mutual sharing" in information trade is the members' own training and experience (Benkler, 2004). The sharing trade makes an incentive through casual "know-how exchanging" (Hippel, 1988), and the trading of expertise is the focal point of this investigation. Expertise trade happens when clients interface with one another, and they trade information, contacts, forms, concerns, protests, stories, or suggestions that will improve their prosperity.

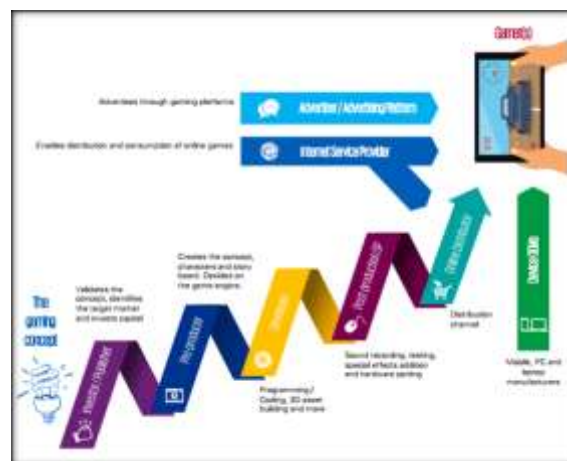
The across the board arrangement of the overall web has made a powerful mode for moment correspondence at low or no expense and online correspondence has become a gigantic stage for buyers to express their choices about item encounters. Customers effectively express their suppositions and encounters identified with online item utilization, and this data can arrive at countless topographically scattered individuals. Surveys of as often as possible posted items on the web become significant, and different buyers are progressively searching for online item audits by their friends before settling on a buy choice. Purchasers have produced numerous surveys, weblogs, evaluations, messages, and dialogs on sites. To be sure, the new media-enabled such a large number of purchasers that it must change the manner in which their customary organizations speak with their clients to mirror the developing significance of buyer collaborations among themselves.

Indonesia has a populace of more than 250 million individuals, where the online population of 143.26 million people with the number of active game players is 54.13% or 77.5 million people (APJII, 2017). It shows that Indonesia is a potential market for game developers both nationally and internationally. Based on the revenue generated, by 2017, Indonesia is ranked 16th in the world for \$882 million and has increased in 2018 by \$1.2 billion (Newzoo, 2017). Driven by the fast increment in web access and ICT gadget possession, Indonesia's game market revenues are expected to show annual growth rates (CAGR 2017-2021) of 13.6% and generate market volumes of \$ 227 million by 2021.

Game players' penetration increased by 6.6% in 2017 and is forecasted to reach 10.4% in 2021 (Newzoo, 2017). This is the quickest development of any geographic area in Southeast Asia. By correlation, the worldwide development rate is assessed at 7% for a similar period. The enormous development of the gaming market in Southeast Asia gives an incredible chance to the gaming business to create and develop.

One of the fastest development and most popular games in Indonesia is Dota2. Dota2 is a game that can be done by forming a team and establish cooperation. The large number of players who form teams to compete in various e-sports tournaments aims to test their playing abilities. In fact, there are some well-qualified Dota2 teams in Indonesia who often win various Dota2 competitions, such as Rex Regum Qeon (RRQ). Several Dota2 competitions including JOIN DOTA is one of the competitions that allow Indonesian players to compete against teams from overseas to earn both in game and cash prizes. Teamwork is very important in Dota2 games, thus creating a compact and balanced team in matches. Various online communities of Dota2 players established as a media sharing and discussion about the Dota2 game.

Based on data, online gaming industry is an industry that has high growth potential with broad market share coverage, so it needs an understanding how to serve the basic entertainment needs of online users because retaining users has been considered one of the most critical challenges in online gaming industry (Fu, Chen, Shi, Bose, & Cai, 2017). That phenomenon will encourage online gaming industry to enhance gamers attention to the level of technology acceptance in the using process. According to Liang and Yeh (2011), the apparent convenience in web based games doesn't give a huge impact on user attitudes while playing games, yet more straightforward impact on the aim to play web-based games. Their review shows that if a web-based game is simpler to play, it will straightforwardly expand the expectation to continue playing and also enhance the intention to paid virtual items and buy additional characters or gear that lift their exhibition and improve their gaming experience. oppositely, more gamers satisfied with the game and the virtual selling items, the more purchases will be conducted. Hence, it will offer excellent opportunities for gaming industry e-commerce to gain more profit.



**Figure 1.** The Linkage Ecommerce and Online Gaming

(Source: KPMG in India research and analysis with detailed methodology in annexure, 2017)

## II. Review of Literature

### 2.1 Global Online Game Market Growth : Community and Gamers as a Market

As the online game market growing continuously, the kind of online games that penetrate in Indonesia also develop with appearance of MMORPG (greatly multiplayer online pretending game) and the RTS (ongoing recreation) and then the MOBA (Multiplayer Online Battle Arena) that recently is on the great demand by the players. Dota is MOBA's game that was released on 2002 as a sign of modification from Warcraft and Aeon Strife (Harley, 2017). At the moment, MOBA games has dominated market of online gaming with the growth of Dota 2 (defense of the ancients) that has become the best MOBA Games (Wilson, 2017). Based on the statement of Steamspy (2017), Dota 2 is also one of the first top games to be played in Indonesia at the end of July 2017. Dota 2 by Valve was acclaimed web the game with a player base in excess of 6 million exceptional customers. While a critical number of these customers play coolly, there are also capable players who look into Dota2 rivalry with colossal financial payouts. Dota2 has an in all cases and dynamic forceful scene, with bunches from wherever all through the world playing expertly in various classes and rivalries. Premium Dota2 rivalries routinely give a hard and fast prize of millions US dollars; the most imperative of any e-Sport. The greatest is known as The International, which is conveyed by Valve and held each year at the KeyArena in Seattle. Valve furthermore bolsters more diminutive rivalries, yet progressively a significant part of the time holds huge rivalries known as the Majors, which lead up to the International reliably. For greater rivalries, media incorporation is coordinated by on-area staff giving comments and examination to consistent matches, as standard game events. The competition of Dota 2 that qualified was told directly by using web and in odd moments by the telecom of organizations, with the total of watchers landing at countless people. In 2017, there was a Premier Tournament that offers an exceptional prize of \$ 7.227.416 USD (Lee Kah Leng, 2017).

Dota2 is a spin-off of Warcraft games that became famous a few years ago because of the exciting gameplay and excitement offered during the play. This game was released by Valve Production in 2013. According to Harley (2017), unlike other games, Dota2 offers exciting games where players have to cooperate to win a game. The ability of every individual in the team must also be qualified, because playing Dota2 also requires players who are able to analyze the situation and make decisions quickly when facing hero opponent. Dota2 itself has had tens of millions of fans worldwide and one that keeps a game survive is the fans. In addition, the popularity of Dota2 has made this game as a prestigious game with an international tournament that prize billions of dollars. In fact, the type of e-Sport began to be taken into account in the world because of Dota2. Update features become one of the important factors to attract players and it was always noticed by the developers of this Dota2 game. The focus of this study is the Dota2 players specifically in Indonesia. This research will analyze the positive effects of the game is associated with the effect of saw convenience and saw the handiness of the players on the client to client online expertise trade. What's more, this examination likewise centers around breaking down the impact of inspiration, opportunity, and capacity of players on the client to client online expertise trade.

Social personality is considered a mediator in this research, it is considered important because Dota2 players usually form the community as their social identity. Personality or identity has been a significant piece from since of society individuals needs a personality to communicate with the others. Just talking, identity was whatever that you consider could speak to who you are, it can be your name and your ethnicity. As indicated by Joseph



(2004), there are two fundamental parts from an individual's character, the first also could separate one from the other was name and the other was substantial, found somewhere inside. Quintessence from character is closeness consistently; It was alluded to as the sameness" of an individual, at all occasions or in all circumstances"(Edwards, 2009, p. 19) the state of being indistinguishable' (Joseph, 2004, p. 3) and socially important however pretty much unchangeable" (Fearon, 1999, p. 2). These thoughts of character are known as close to a home character. It can likewise allude to an individual's qualities, qualities characteristics, objectives, and values, and methods for being' which separate them from social job (Oyserman, Elmore, and Smith, 2012, p. 94). Then again, the social character is an item come about from social cooperation; that is, one's information and his participation in a specific social gathering. The hypothesis of the social identity is ascribed to Henri Tajfel, a social analyst in the mid-1970s, as referred to by Joseph (2004), Tajfel (1978) characterized the social way of life as acknowledgment of one's self towards enrollment of a the specific gathering which is an item from his insight, esteem, and enthusiastic noteworthiness connected to that enrollment.

## **2.2 Identity as a Language Groups**

The identity has close relationship with the language. The language that was used by people could reveal many things about them without they said anything about that. The Social background, membership of group, linguistic background, age, mentality of nationality, and gender could be guessed from the language that they used. The Language is one of the principles ways people could establish their own identity and establish others" views of them" (Price, 2010, p. 8). Bucholtz and Kira state that "Identities are inter subjectively constructed through several, often overlapping, complementary relations, including similarity/difference, genuineness/ artifice and authority/delegitimacy" (p. 23). This principle has two goals, are to pathetic that identity was never stands alone and always depend on identity and other social actors that was available to get the meaning, and to review the broad understanding about identity that was based on single spindle; similarity and difference. In a term of gamers sharing know-how, from the choice of their words, game group of players could be known. It's because each group have their own way to disclose an idea was related with the game and this thing was influenced from the activity of group and the game itself. Except the choice of words, they also made terms abbreviation to made it easier to explain the game. The choice of word and abbreviation, Both of them have a function as indexical links between user and group where they are like that was stated by Bucholtz and Kira (2010) because they had significant value for the corresponding groups.

## **2.3 Social Identity an Online Gaming : The linkage**

The Social identity is related to the satisfaction in the group context (Moon et. al., 2006). The social identity is refers to social category characteristics where is the individual perceives. Feeling have or togetherness is important aspect from everybody self-sense. The social categories help to create frame of reference that have contributes to the place and individual definition in the society. The social identity is also positive perception become part of community where the person was motivated to have interaction as socially with the others, and it has positive impact to their willing to use social networking sites (Cheung & Lee, 2010; Sombutpibool, 2011).

Barnett & Coulson (2010) have opinion that one base to have interesting that was needed between the individual (to promote group establishment) is same identity – people are interested to others that have important aspects from their own identity (Barnett &

Coulson, 2010). Bagozzi & Dholakia was stated (2002), The social identity give motivates to online participation by irradiate “our-willing”, is commitment of individual to have participate on together with action. They have enhance that membership, frequency and level of participation are pushed by choices of will. Shen et al give opinion. (2007), the main thruster of social identity is presence of affective social, that was called as how far relationship of user’s emotional was be raised by virtual social interaction with the others.

An individual has an individual goal that is to expand his identity of positive social, that in turn of leads to being bound that bigger on the group and encourages individuals to keep in the group and be involved, than leaving a group (Tajfel 1977; Brown, 2000). Identification was also considered an important factor that give facilitates to motivation to exchange of information and resources (Nahapiet & Ghosal, 1998), and it’s the base to functioning a group. In the online community, social identity was plays an important role because the users with bigger social identity in that community differentiate themselves more than other communities. User identification with communities of online was based on understanding that membership leads to significant benefits, which help meet what members' needs (Dholakia, Bagozzi & Pearo, 2004). Previous researchers have pointed to knowing the relevance of social identity on the context of online community (e.g. Dholakia, Bagozzi & Pearo, 2004; Alghesheimer, Dholakia & Herman, 2005; Woisetschlaeger, Hartleb & Blut, 2008; Briliana et al., 2015).

The theory of Social identity define that self-concept was lowered by psychological membership to the various social groups. Generaly in People were trying to get positive self-esteem and the reward could be came from social group members through in-group and out-group comparisons (Hughes & Ahearne, 2010). The main assumption from theory of social identity was that people were motivated to maintain and improve self-image as a member of the group (Ely, 1994). Clement et al. (2001) was found that support of communication is necessary for those by a social identity that collaborate with each other. This indicate that social networking would be perceived as useful tool for them, if the tool was usable. Researchers before had found that social identity has attitude significant impact (Terry et al., 1997), and it give affects to organizational behavior on sharing a knowledge (Ho et al., 2012).

Boyd & Ellison (2007) was indicated that social networking provides opportunity to the users for articulate and made their visible social connections. Moreover, Song & Kim (2006) was proposed that social identity as affecting determinant crucial to the intention use social network. Recently, Zhou (2011) found the strong relationship between social identity and social networking participation. Guegan et all (2015) was found that in Massively multiplayer of online role-playing games (MMORPGs) virtual world, playing online games might be self-involving because become a player, but also become a member of guild, and directly contribute to the social identity.

Table 1 below shows severals examples of previous research that explained the dimensions of social identity. It can be seen that the most common dimensions used in social identity are cognitive, affective, and evaluative.

**Table 1.** Dimension of Social Identity

No.	Sources	Cognitive	Affective	Evaluative
1	Bagozzi & Lee (2002)	✓	✓	✓
2	Dholakia et.al.(2004)	✓	✓	✓

3	Song & Kim(2006)		✓	
4	Sukoco & Wu (2010)	✓	✓	✓
5	Karjaluoto & Leppaniemi (2012)	✓	✓	✓
6	Arenas-Gaitan et.al.(2013)	✓	✓	✓
7	Vernucio et.al.(2015)	✓	✓	
8	Wang (2017)	✓	✓	✓

(Source Rahutami, 2019)

According to Ellemers, Bergami and Bagozzi (2000) there are three aspects from social identity: social cognitive identity, social affective identity, and social evaluative identity. The three of this social identity could be referred to self-categorization, commitment of affective and self-concept based on organization, and has been considered as sub-constructs from concept of social identity (Bagozzi and Dholakia, 2002). Based on opinion from Shen et al. (2009), the main thruster of social identity is affective social presence, that was called as how far emotional relationship of users was be raised by virtual social interaction with others. Bergami and Bagozzi (2000) defined identity of cognitive social (CSI) as overlapping that was felt between self-concept and identity of the group/community. Allen and Meyer (1990) explain identity of affective social (ASI) was identification and involvement in emotional bond with group/community. According to Bergami and Bagozzi (2000), identity of evaluative social (ESI) was evaluations of self-concept that come from someone's membership on a group/community.

#### 2.4 The Dimensions of a Game World

Adams (2009) state that there are many different properties that define game's world. Some games, such as world size, quantitatively and could be given numerical values. The others, such as mood of world's, qualitatively and only could be explained by the words. Specific properties that are related with another, and these groups property are related was game world dimensions. Entirely define your world and the setting, you have to consider for each dimension and answer the questions about them.

The Video of game worlds almost always to implemented as like physical space that were simulated. The player moves their avatar inside and around in this space or manipulate some pieces or other characters inside. The properties of physical determine the gameplay. Even the text adventures include a dimension of physical. The player was moves from one abstract location, usually it's called a room although it was described as outdoors field, to another. Back to the time when more people play the text adventures, the boxes that were used to take a game with proudly a total of room on the game. Players could assume it as the size that very rude from the size of the world that they could be explore in the game and, therefore, the total of players that was offered by the game. The physical dimension from a game itself was characterized by some different properties: spatial dimensionality, scale, and boundaries.

#### 2.5 Spatial Dimensionality

One of the first question to be asked to themselves are how many spatial dimensions that would be mine by your physical room. It's important to understand that physical dimension room of the game not same with how the game show the room (camera model) or how them implemented the room on the software. How to applied a room and how to show them are separated question but had been related. The first related to technical design, and the last related to user interface design. At the end, all room have to be shown on the two-dimensional surface of monitor.

## 2.6 Scale

Scale refers to size of absolute from physical room that was represented, that be measured on the unit that have meaning in the game world (meters, miles, or light-years, for example) and the size object of relatively on the game. If an original game was abstract and not accordance with anything in the real world, the object size in the world game not too really important. You could be adjusted so it would be adjusted with a need of game with any way you like. But if you design a game that represent it (if just only separated) real world, you have to answer a question about how many everything so it could be seen real and play well. Some distortion often to be need for game players, especially on the war game; the trick was distors the scale without to spoil the distrust suspension of players.

## 2.7 Boundaries

On the board games, side of board is the end of the world game. Because computer don't have unlimited memory, physical dimension from world of game form computer have to "advantage" also. But, computer game usually more deeply than board game, and they always try to disguise or explain the fact that the world was limited to help keep an immersion of players. On some case, boundaries of world game arise experience, and we need to disguise or explain it. A sport game only go on the stadium or arena, and there is not somebody expect or want them to input a bigger world. In the most games of driving, car was restricted to the track or road, and it also quite reasonable.

## 2.8 Online Gaming and Ecommerce

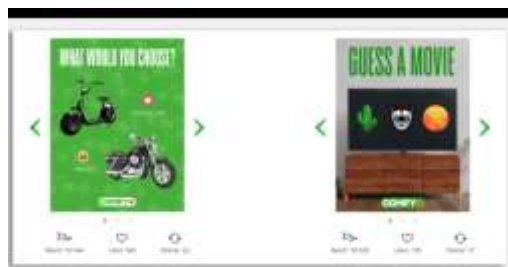
The e-commerce was process of buying, selling or trading a data, good, or service by the internet (Turban et al., 2015: 7). E-commerce was defined as a commercial transaction that involve value exchange that was done by or using digital technology between individuals (Laudon and Traver, 2017: 8-9). E-commerce media involve internet use, world wide web, and application or browser in the mobile device or device to have business transaction. Mobile platform is newest development on the internet infrastructure from various mobile device such as smartphone and tablet by using wireless (wifi) or mobile phone service. At the beginning of e-commerce development, digital media only just browser of web, but for now the most media used come from mobile application (Laudon and Traver, 2017: 11-12).

Gamification advertising is infiltrating Online business as perhaps the most sultry pattern that guarantees entrepreneurs to expand client commitment and drive deals. Gamification components are broadly actualized in some Internet business sites or application highlights, just as in email advertising and SMM methods. Be that as it may, before we slice to the opportunity and investigate the capability of gamification for Web based business advertising exercises, how about we start for certain rudiments. What's the significance here, and what is gamification in advertising? Gamification promoting is a methodology of getting and fusing ongoing interaction components into a non-play climate to connect with individuals and hold their consideration. As indicated by the review directed by ReflectDigital, 93% of individuals think about this type of promoting as an extremely captivating one. Indeed, 60% of respondents conceded they would be bound to purchase from a business or brand in the event that they cherished playing a game with it, and 86% of the individuals who have encountered gamification already. Gamification in Internet business implies executing a game element that will keep up the entire gaming idea. Online business proprietors can compensate clients who are associated with a "game" with limits, free things, and other potential prizes. This flighty advertising strategy ought to be at the focal point of your consideration, as practically 87% of retailers will actualize



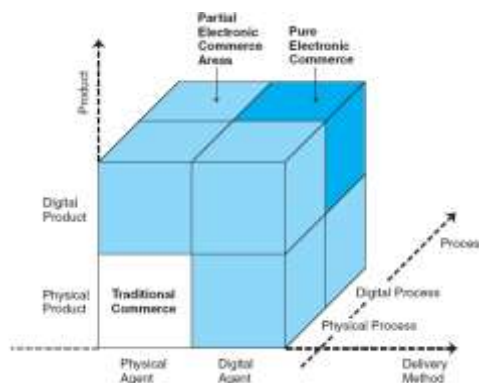
gamification promoting in the following 5 years. Gamification promoting will be an incredible decision for physical stores as well as for online shops to soar client commitment and transform their shopping experience into an intriguing excursion. To join gamification advertising successfully, you need to zero in not on selling things but rather on the actual game. The primary undertaking is to thought of something fun that will have the reason for drawing in clients as opposed to advancing explicit items.

Promodo.com state Incorporating gamification components into an Online business application expands deals and draws in a more extensive crowd. The primary concern is to determine what compensate clients will get toward the finish of a game. If it's not too much trouble, ensure you set a few difficulties for clients and give clear guidelines. Give identifications and offer day by day rewards to the most dynamic clients to rouse them to play more. To support your web-based media presence, it's prescribed to compensate clients who share their game with companions. A popular Online business store called AliExpress has just executed gaming arrangements. The objective is to hold clients and give them a positive encounter, which will bring about higher client commitment. Figure 1. below are the examples of integrating eCommerce in online game.



**Figure 1.** Examples of Advertising in Online Game  
(Source: promodo.com)

The e-commerce dimension according to Choi (Turban, 2000: 5) see figure 1.2 consists of three parts large numbers that build these dimensions, including products, intermediaries and process. Each of these dimensions can be physical or digital, thus in that dimension, there will be eight squares, where each box has three dimensions. In traditional e-commerce, all dimensions in the form of physical dimensions (lower-left corner box), and in pure e-commerce, all dimensions are digital (the box in the upper right corner). Meanwhile, others boxes are a combination of the physical and digital dimensions.



**Figure 2.** The Dimensions of eCommerce  
(Source : Choi et all, 1997:18)

Qteishat et al (2014) in their research grouped the dimensions of e-commerce in the Service Quality of e-ticketing technique into four dimensions, namely: 1) Customer technical support, related to service / support. 2) Infrastructure. 3) Data of security. 4) User-friendly.

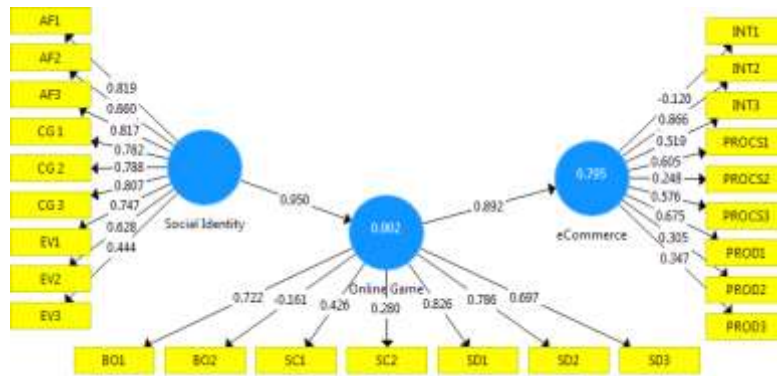
### **III. Research Method**

Social science research generally uses several scientific research methods such as quantitative, qualitative, and mixed methods (Sandelowski, 2000; Sekaran and Bougie, 2014). Aliaga and Gunderson (2000) use quantitative research methods are "explaining phenomena by collecting numerical data analyzed using mathematically based statistics methods". Given objectives set out, this study uses quantitative method with survey approach. The surveys include study of cross-sectional and study of longitudinal use a questionnaires or interview to collection the data with the goal to estimate large population of characteristics based on smaller samples of the population. This research was categorized for research explanatory that have a goal to explain the relationship of causal between the variables by hypothesis testing. This study uses path technique of analysis by Structural Equation Modeling (SEM) and Partial Least Square (PLS) as tools in data processing.

According to Hair et al. (2006), SEM give allows the analysis of a series from relations simultaneously to provide the statistical efficiency. This quantitative study uses a deductive approach in order to test a variables theory consisting, measured by the numbers, and it was analyzed by statistical procedures to determine whether theory's of predictive generalizations were correct (Creswell, 2017). Population of this research are Indonesian online gaming community and the samples are Dota2 community in Bandung. Malhotra and Peterson (2010: p.370) population was "the aggregate of all elements, sharing some common set of characteristics that comprises the universe of the purpose of a marketing research problem". Number of population Indonesian players in Dota2 online game in year 2019 are 701,852 players. The number of samples measures by Slovin's Formula was given such as:  $n = N/(1+Ne^2)$ . The samples number generated as much as 399,7 rounded to 400 samples from Dota2 players in Bandung city. the sample technique used is simply random sampling.

### **IV. Results and Discussion**

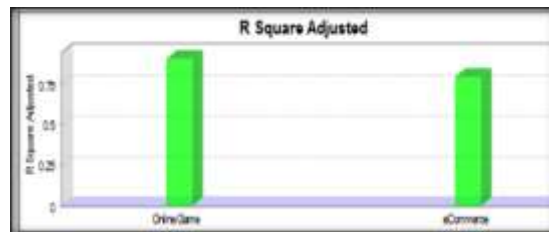
Figure 3 below illustrate the result of outer and inner measurement that assume online game non significantly raise the effect of social identity in online gamers to the eCommerce. The path coefficient from online game to eCommerce are lower than the effect of social identity to online game. Social identity effect to online game as much as 90% higher than online game effect to eCommerce as much as 79,1% (see figure 4 below).



**Figure 3.** Result of PLS Algorithm  
(Source : PLS Measurement Using Smart PLS)

	R Square	R Square Adjusted
Online Game	0.902	0.900
eCommerce	0.795	0.791

**Figure 4.** R<sup>2</sup> Adjusted Square Matrics  
(Source : PLS Measurement Using Smart PLS)



**Figure 5.** R<sup>2</sup> Adjusted Square Graphic  
(Source : PLS Measurement Using Smart PLS)

From result above we can assume that mostly 400 of Dota2 players that been chosen as sample attract more to playing online game than seeing eCommerce while they are playing, but these results cannot generalize that e-Commerce is not effective to do using online gaming media, seen from the positive results as many as 79.1% of advertisers can still use this media as a place to advertise and as much as 90% of online gaming has been able to increase the social identity of a gamer in the city of Bandung. These results do not accept the hypothesis that online games can increase the effect of social identity on eCommerce. The boundary indicator from online game lower the attraction of gamers to view the eCommerce in online game in this case are Dota2 game. From the observation also state that many gamers in Dota2 in Bandung city feels their affective, cognitive, and evaluative indicators increases after playing online games compared to single-player games, but when there is e-Commerce pop up when they play online games, there is a tendency for gamers to skip advertisements because they feel their game is interrupted.

## V. Conclusion

This research result supported Allen and Meyer (1990);Bagozzi and Dholakia (2002); Shen et al (2009) that state the driving force from social identity was affective of social presence, that was referred to how far the emotional relationship from user was be raised by virtual social interaction with others while playing game online. This research also supported research result by Reflect Digital, that 60% of gamers conceded they would be bound to purchase from a business or brand in the event that they cherished playing a game with it, more over in this research the percentage are higher 19%. What should be underlined is how to create interactive e-commerce ads with online game users creating a positive bond between gamers and advertised products so that there is no distraction perception when advertisements pop up when they play games, the role of advertising designers greatly determines the effectiveness of advertising messages in the media online, for more accurate results an in-depth test of what types and designs of e-commerce are needed to positively attract gamers' attention so that a strong bond is created between social identity and product advertising.

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