



# INVESTIGATION ON THE EFFECT OF USER'S EXPERIENCE TO MOTIVATE PLAYING ONLINE GAMES

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## ABSTRACT

Internet technology has been growing and become one of the options for people to interact with others. Now days, one of the most famous usage of the internet was as an entertainment. Online game was a sample. For this reason, therefore the online business games also growth among the public. As someone frequently play the online games, interaction with other users could increase, which would lead for more users to join the game's community. In this community, users might perform specific roles (role-playing), social interaction and exchange of information. People who did interaction can create their own virtual world. This was a new phenomenon in the human life among gamers. Meanwhile, previous studies have not been sufficient to explain the question why did people tend to play the games, entry to the virtual world, and brought it to the real life.

The aims of this study was to find out the motivation that drives someone to play the game. This study also find out the effects of experiences and user interaction as motivation to play online games. Furthermore, Massively Multiplayer Online Role-Playing Games (MMORPG) was chosen as an object. The method of research proposed was qualitative study. The result of research could show that it was very important to know the deeper effect on the attitudes of players typologies constructed when people play the game. This typology could explained the motivation of people for playing games.

**Keywords:** *Online Games, Qualitative Study, Player Typologies, User Interaction, MMORPG*

## 1. INTRODUCTION

Online games allowed humans not only play with the computer, but they also could connect with others via the Internet [1]. Therefor since last few years, online games and the business arounds has been growing among the public. The popularity of online games also supported by the fast development on the internet technology. According to the survey, the growth of Internet users in Indonesia has reached 430%, which made Indonesia become second position in the world's largest Internet development [7].

Since a user frequently play online games, interaction with other users will increase, which then usually leads to more users join the community of the game. In the online gaming community, users can perform specific roles, social interaction and information exchange. People who interact can create their own virtual world [5]. Goal, operation, and feedback was presented for an efficient personal interaction in online gaming, as well as communication place, and communication tools were important feature in the form of social

interaction in online games. Personal interaction and social interaction were a positive aspect on experience flow of players who have a positive influence on customer loyalty (Choi & Kim, 2004)

Yee (2006) provided empirical model of motivation of the players in the online game to understand and assess how the characteristics and behavior of players. Yee found that the achievement of components tend to have a desire to gain power (Advancement), has an interest in optimizing the performance of the character (Mechanical), and desire to compete with others (Competition). Social component tend to have an interest in helping and communicating with other players (Socializing), had a desire to establish long-term relationships (Relationship), and got satisfaction from teamwork (Teamwork). Components of immersion tend to seek and know the things that were not known by other players (Discovery), interacted with other players to tell the background of an activity in the game (Role-Playing), and had an interest in customizing the appearance of their character (Costumization) [11].



Hsu and Lu conducted a study on the reasons why people play online games and used user acceptance model (TAM) and incorporating social variables influences and flow experience. As a result, social norms, attitude, and flow experience 80% predispose people to play games [4].

The purpose of this study is to explore the deeper motivation of the game player's experience that was formed. By knowing the motivations of the players of the game, then we could know the reason why people play games online. In this study, informants were taken from players Ragnarok Online Indonesia which is one type of MMORPG (Massively Multiplayer Online Role-Playing Games). This study was designed to explore new factor in proposing and explaining the motivation of playing online games and develop a conceptual model.

## 2. THEORITICAL BACKGROUND

### 2.1 Game Online

Online games means private users installed the game's software and connecting to the game servers via the internet gaming company. All the prominent characters in the game are stored in the server of the company's games. In the online game, players had a control of the role which they created for entering the virtual world [9].

The development of online games could not separately from the development of computer technology and computer's networks. It covered significant developments in computer games, console games, and internet technologies. In 1969 ARPANET network building at UCLA, Stanford Research Institute, UC Santa Barbara and University of Utah, altogether have been commissioned by the Department of Defense for developing this technologies. Leonard Kleinrock at UCLA sent the first packet over the network when trying to log remotely into the system of SRI. Later on the computer has ability that called time-sharing. So that in 1978, Roy Trubshaw wrote Multi-User Dungeon (MUD), the first feature in time-sharing machine code. It allowed the game moved around and doing communication. This is the starting point of international's matches and multiplayer. In 1986 the National Science Foundation created NSFNET backbone with a speed of 56 Kbps. This technology allowed a large number of institutions, especially universities to be connected. It has motivated Jessica Muligan started Rim Worlds War, as the first game using email on a commercial server. In 1991, Tim Berners-Lee created the World Wide Web, a system in which words, images, sounds, and

hyperlinks can be combined and formatted in different platforms to create digital pages as similar as to a word processing document. CERN in Switzerland published her first post HTML code in their newsgroup and it called "alt.hypertext" In this kind achievement of technology, then Advanced Dungeons and Dragons Online was launched in America.

In 1992, Wolfenstein 3D by ID Software took the computer's game industry and launching a manifold games called First-Person Shooter Game. Meanwhile, some games creators has innovated the variety of game with new technology. In 1996, Meridian 59 became one of the first graphical game that can be played by multiplayer and able to assign roles to the players. This kind of games then well known as role-playing games (RPG). Further, in 1998 NCSoft, a software company launched Lineage in Korea and also has grown to be Massively Multiplayer Online Role-Playing Games (MMORPG). The other combination games was called a Team Games, which was field of space became more widespread, several additional modes could customize a player character, and also vehicles. In 2001, Blizzard started talking about World of Warcraft, a popular MMORPG [8].

### 2.2 User Experience

The user experience was defined as how people felt when using products, systems, or services. The user experience highlighted the aspects of experience, influence, meaning and value of human-computer interaction and ownership of a product. It was also including one's perception correspond with the practical aspects such as usability, ease of use, and efficiency of a system. The user experience was essentially subjective, because the user experience was based on individual feelings and thoughts about a system. The user experiences were dynamic, since it always changed from time to time in line with the changing of circumstances [6].

User experience has explained why the customer still wanted to continue using certain services or product, although there were new ones. This was happened due to the strong level of customer's loyalty to their current services or product [1].

### 2.3 Personal Interaction

The gameplay is the process of resolving a problem (problem solving), where fixers are trying to achieve certain goals, defeating monsters, improve the character or search the dungeon using the feedback provided by the gaming system. Some



features of the personal interactions were classified into three categories: goals, operators, and feedback.

First, the goal can be defined as a specific target of the game player to achieve a particular game. For example, the goal of the games is to make the character into a formidable warrior, or in other cases, its goal was to find the hidden treasure. As mentioned before, players could interact with the system to achieve these goals. Second, the operator could be defined as an instrument for problem solving, which gave players a way to accomplish goals. For example, when a player destroyed an opponent, monsters or other players, using a sword or magic attack in the game, sword or magic was regarded as operator. These were considered as a tool to help achieving the goal. The player also interacted with the system while utilizing the operator to achieve these goals. Third, the feedback was defined as the feedback from the game system to respond while operator handled the player. For example, the enemy has been destroyed by the used of guns. It means the ability of the player's character was increased after reaching a certain task in the online game. Players could feel the effective interaction and build a good relationship with the system [1].

#### 2.4 Social Interaction

Along with personal interaction, it is also important for online game players to provide effective social interaction. It was happened, because the online game players were connected to a computer network, and allows multiple users to meet in the virtual world. Social interaction was important to optimize the experience. Some of the features of social interaction were classified into two categories, namely (i) the place for communication, and (ii) tools for communication. The place where gamers could meet in a virtual world and communicate with other players in the game should be available online. First, online games need to provide a communication's place as a place of communication in the virtual world, where players can get together. Virtual world may provide many options are supported with good graphics and allow players can play together. Through these characters, players could find a place and other players in the same time. It directed the players to have social interaction to be collected in the same place. Second, online games needed to provide a communication's tools so that it allowed the player to express their opinion. For example, it allowed players to chat in a virtual world, or by providing a notice board on the game, players

would easily give and receive messages. Communication tools facilitate the players to share your opinion with other players [1].

#### 2.5 Typology of Gamers

Typology is a group based on the type or types of specific criteria. Yee (2006) conducted a study to make the 40 list of questions related to motivation MMORPGs game players. The data were collected through a survey of 3,000 players online. In his research, Yee splitted the group of players based on the motivational component to play MMORPG. Meanwhile, Yee also splitted the group of players based on motivational components including achievement, sociality, and immersion [11].

### 3. METHODOLOGY

A research begins with lifting the issues which will answer the main research question. Issues of this research has started from the interesting phenomenon that occurs in the gamer's community such as the motivation to buy expensive virtual items. Symptoms of this problem also called the background of the problem. And it was written in the form of a narrative context. At this early stage, identification of issues has formulated the information discovering the problems of online gaming phenomenon that occurred in Indonesia.

This study is a qualitative research study information systems perspective. Reasons for using a qualitative approach because researchers intend to understand the social situation in depth, discover patterns, and explore the wider implications of the online gaming phenomenon that occurred in Indonesia. In this approach, researchers created a complex picture, researching words, a detailed report of the views of respondents, and conducted a study on the natural situation. This qualitative research design refers to the theoretical reference written by John W. Creswell [2]. Qualifications of research informants was based on their record of frequency or intensity of playing the game every day with a minimum play at least once a week. According to research by Zhang and Kaufman, the more time has been spent by gamers to play, it will increase the level and competence of character [12]. The informant was the players of Ragnarok's Online Indonesia.

### 4. FINDINGS AND RESULT

The findings were categorized to the four themes. These results has obtained and refined from interviews about the user experience, personal

interaction, social interactions, the desire to compete in the game, the desire to build community, and a desire for adventure in a game. Quotes from informant transcripts are provided to support our observations of these specific ideas.

*Theme 1 - There was Influence between User Experiences to form Motivation.*

Based on interviews and observations conducted by researchers, it is known that a good user experiences, personal interaction, and social interaction has an extensive influence on each typology of players, namely, Achievement, Sociality, and Immersion. Each of these dimensions (personal interaction and social interaction) building experiences, which indirectly form a type of game player, who created the characters of different players. For example, when the game players have experience in building social interaction (chat and party group for leveling) then this happens due to the social motivation was high. Meanwhile gamers who tend to want to compete with the other characters, will more increase the skill character by hunting monster. In this case there was a relationship between the user's experiences with the motivation to play games.

*Theme 2 - User Experience influenced by perceived Enjoyment*

In this study, playing online games could give the players a feelings of enjoyment. This is due to online games could create a virtual stream of experience and interaction. Therefore the game was considered as an entertainment technology. This findings or argument supported previous research that conducted by Hsu and Lu, where the social norm perceived enjoyment and positive effect on loyalty [5]. Online gaming was a hobby that can give pleasure to the players. The higher the person's feelings enjoy, the higher the experience formed. These findings also confirmed the research conducted by Wu and Liu that attitude was built, enjoyment, and subjective norm influential in building intention to play online games [10].

*Theme 3 - Online Games Not Just Creating Virtual Communities, but, however also has an impact to the real-life on communities*

In this study, the user experience was affected by the interaction of the Personal and also Social. Furthermore, this will trigger the formation of virtual communities. The existence of the guild

(dynasty) who built a group with a membership of approximately 50 members to seize the castle, was a proof of the existence of virtual communities. But it was not just a virtual community, this relationship continued on gathering guild members at a particular event. This could be useful to establish friendship among a group of players. In addition to the friendly relationship, online gaming impacted also on human life in any diversification and level. For example, there was a married couple because closely relationship or warm intimacy during a game. There was also a business partner who met in a game, and so on. Afterward, it could highlighted that people who interacting can create their own virtual world and continuing in real life [5].

*Theme 4 - Game Online able to provide financial benefits for players.*

Benefits in playing online games, instead of just feeling entertained, a community, or have a strong character. Currently, profits from online gaming is also in the form of financial gain. The practice of buying and selling virtual items increasingly unpopular since the beginning of the concept of freemium or free online games played using the service item's mall. In the Online Ragnarok Games, there was an opportunity to get virtual items and sell them to others player. It gave an opportunity for players to conduct buying and selling virtual items. Virtual goods has become one of the main sources of revenue for suppliers of online gaming. There were two types of virtual goods, namely Functional Props and Decorative Props. Functional Props improved the competence of the game; while Decorative Props could change the appearance of the game from the game [3]. The Online Ragnarok Game provided so many items such as weapons, armors, shadow gears, ammunitions, cards, usable items, healing items, delayed - consumables, Taming items, pet armors, monster eggs, cash shop items, and others. This was an additional finding that not only the desire to compete with the other characters, build a community, or immersed in a game, but there were exist external factors that benefit financially from online games.

## 5. DISCUSSION

After conducting an analysis of the findings, then there is a development of conceptual models of the user experience. Some of the factors which builds upon previous study of the theory, previous

research altogether combined with refinement experience based on interviews.

Interview's results confirmed that there was a relationship between the user's experiences with the motivation of the user. The user's experience was not only influenced by the interaction of personal and social interaction, but also influenced by the perceived enjoyment. Motivation player game play, not only influenced by intrinsic motivation such as research by Yee, among others, Achievement, Sociality, and Immersion but also by other findings that were extrinsic motivation. The example was the impact of online games to build community in the real world and the motivation to benefit financially from online game. This extrinsic motivation could make a person would enjoy playing the game and continuing to use the game [11].

Figure 1 illustrates the research model that can be built based on: (i) the refinement of interview results, (ii) the concept of user experience (personal interaction and social interaction) [1], (iii) the effect on the motivation of the user (Achievement, Social, Immersion) [11], (iv) and extrinsic motivation that can drive behavior to play games.

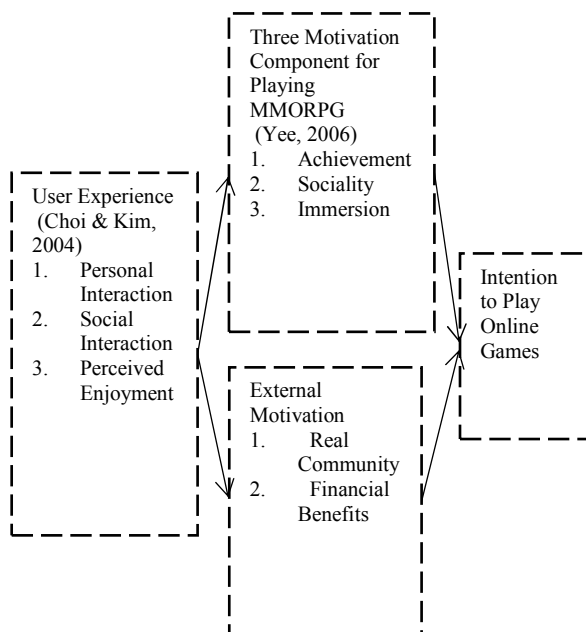


Figure 1. A possible preliminary research model

## 6. CONCLUSION

This study has two contributions both theoretical and for business. First, this study combines several research and conduct a qualitative

study to explore more about the motivation of the player's game. Then the results are used to construct a conceptual model that can be studied further. Second, this study provided an opportunity for online game publishers to study the behavior of game players for maximizing the user experience and performing satisfaction. Studying the behavior of users also provided an opportunity for the existence of online gaming products.

However this is still a challenges due to the limited number of samples has taken, thus this study might not be generalized. Further research suggested is to develop a model of research and to test the model with quantitative studies. However since there were many types of MMORPG Games (Massively Multiplayer Online Role-Playing Games), then any differences types of MMORPG could also be an additional variable to be studied further.

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