ONLINE GAME AND SOCIAL IDENTITY: AN EMPIRICAL STUDY

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Abstract -
Online games have created business for electronic commerce managers and change our life. Since online gamers frequently switch between games. Online gamers often participate in teams also. In this study, we develop the research framework via the social identity theory. We collected data from college students who play online games. Results suggests that social identity has impact to online gamers behaviors. We also found that online gamers behaviors explains the loyalty to online games.

Keywords - Online Games, Social Identity Theory, Flow, Game Loyalty.

I. INTRODUCTION

"Gamification" has a place in daily life. According to the Gartner Group, nearly 70% of the world's largest companies use gamification, including large companies such as Microsoft and Starbucks. Gaming is seen as a secret weapon to increase loyalty and enhance competitiveness (Managertoday, 2014). Social factors were found to be important predictors of online activities, including online games.This paper focuses on how social factors have impact to online game playing. In this paper, we introduce the background, research purpose, and our findings. We also provide managerial and theoretical contributions.

II. LITERATURE AND BACKGROUND

1. Online Games

Today's research on online games is increasing, and social interaction has always been the focus of online game research. In the field of information systems, scholars mainly focus on how social interaction affects loyalty (Teng & Chen, 2014). Psychologists are concerned about how social interaction affects game addiction (Carras et al., 2018). On the other hand, some scholars use the difference in technology adaptation (Chen& Teng, 2004), the gender difference (Guadagno, 2011), the player's online self-expression (Kim et al., 2012) and the impact on online experience (Huang, 2012).

There are many types of online games. Some games are diversified and cannot be classified as a certain category. The brand manufacturers they represent are too numerous to enumerate. After the study is compiled, it is divided into 10 different game categories, and their representatives are listed one by one. Works and brands, indicating the current types and styles of games on the market.

Game genre	Brand	Name, year
Action game	Capcom	Monster Hunter: World, 2018
Fighting game	Team Ninja	Dead or Alive 5, 2012
Adventure game	Naughty Dog	The Last of Us, 2013
Role playing game	Blizzard	Diablo III, 2012
Shooting game	Supercell	Brawl Stars, 2018
Music game	Square Enix	Love Live, 2012
Puzzle game	Blizzard	Hearthstone, 2014
Racing game	Garena	Speed Drifters, 2019
Real-time strategy game	Blizzard	WarcraftIII, 2003
Massive multiplayer online role-playing game	Blizzard	World of Warcraft, 2004

Table 1. Online game genres and examples

Research have shown that Strategy Analytics predicts that there will be as many as 1 billion virtual worlds and users in massively multiplayer online games (MMOs) by 2018. Among them, the massively multiplayer online role-playing game (MMORPG) is one of the most popular games. Millions of players randomly assign team members to participate in games through PCs or game consoles.

In, MMORPGs, the online community is similar to the real community in terms of common interests and goals, shared values, membership norms and long-term social interaction. Based on these shared goals, shared values, and the concept of social interaction, this study explores the relationship between game loyalty and belonging and emotional dependence.

2. Social identity theory

The term social identity refers to members of society, in a group, and sees themselves as in-group behavior (Turner et al., 1987). It is defined as a person who realizes himself as a member of a group through self-recognition, and also is considered the significance of being a member of the group to give him emotional support and value evaluation.

Social identity is closely related to the emotional

significance of group members (Tajfel & Turner, 1986). This theory is widely used in many places, such as consumer psychology. Communicate with computer intermediaries (Postmes et al., 2001).

Social identity is also an important factor in ensuring the sustainability of the community (Koh & Kim, 2004). Engagement is key to making the virtual community permanent. Therefore, the continuous participation of players is the key to the success of the virtual community. High participation means the degree of active participation in the community.

3. Flow experience

The flow theory was first proposed by Csikszentmihalyi in 1975 to explain why people are fully involved in situations when conducting some daily activities. According to Csikszentmihalyi's research, flowing this state of mind is described as one of the most enjoyable in nature. It leads to strong participation, a distorted sense of time, loss of self-awareness and motivation. Scholars define it as a state of mind in which people are simultaneously influenced by cognitive efficiency, motivation, and happiness.

III. METHOD

Survey design was used. We used a structured questionnaire design, using questionnaires to measure the individual variables of the study, and obtained the data by means of online questionnaires and entity questionnaires. After collecting the data, it was analyzed and verified the hypothesis proposed in this study.

We placed the questionnaire at Google online questionnaire and invite the respondents to answer. We will invite the students at the "Computer Game Club" in the activity center 214 classroom. The community will issue a questionnaire to answer the questions of the students who participates in the social class, and will provide Presotea drinks and Maixiang milk tea to attract students to answer. The Questionnaire use the fourth question: Do you have played a massively multiplayer online role-playing game, confirming that the respondent is the sample of MMORPG players we want to collect. A total of 30 students participated our survey. Based on the research purpose and research hypothesis, this study uses Partial Least Square (PLS) and Structural Equation Model (SEM) as the main statistical analysis methods, and uses SmartPLS and SPSS 25.0 as the analysis tool.

IV. RESULTS AND DISCUSSION

Based on the analysis we found that the social identity plays an important role of online gaming. We also found that flow experience is a predictor of online gaming behaviors. The results are consistent with the previous studies where flow have impact to online service use. The limitation of this study is a relatively small sample size. We recruited small participants given the constraint of our time and resources. Future study shall increase the sample size so the results can be more convincing. Survey study also is subjected to the validity issue where data might have self-selection problems. To over come the problem, future study may perform multiple rounds of surveys to increase the robustness and increase the level of confidence in validity.

The theoretical contribution is in the application of theory in a new type of online game context. The Internet functionalities enable a variety of new game features available for game designers to provide new experience to online gamers. Little did we know how these new features have implication to online gamers' use behaviors. Testing social identity theory enables us to understand to what extent, the social theory can be adopted in online game context. The managerial implication is that system developers and game designers can based on our results to develop game features that is more popular to be used. Thus, the business venues can be opened up and opportunities can be created.

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