2012년과 2016년 소셜네트워크 게임의 몰입

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Social Network Games' Commitment Between 2012 and 2016

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● 요 약 ●

Many of users play Mobil Social Network Games (M-SNG). M-SNGs are played through social network, and typically features multiplayer and asynchronous gameplay mechanics. It is most often implemented as mobile devices with mobile instant messenger app. Kakaotalk provids mobile game platform. The purpose of this study is to find significant factors that have effects on the commitment of M-SNGs. We also conduct multi-group comparison test to study the difference in factors of models between time t and time t1. Time t is October, 2012 and time t1 is April, 2016. This study is to empirically test the research model using data collected from M-SNGs' users. We survey two different groups of time t and time t1 people with the same model. We use structural equation model analysis with AMOS 18.0 and compare two models of different times. This study is to give academicians and practitioners insight about its effects and implications

키워드: Social Network Games, Mobile Messenger, Commitment, Motivation, Enjoyment

I. Introduction

Game Industry was able to grow over the past years with the advent of leading platforms by age. Starting with early Arcade games, through the PC-based Online games and then it has been changed to the mobile games at present. With the spread of smartphone, the time has come when people chat on messenger applications. Korean mobile users have chosen 'Kakaotalk' as the most preferred system. Mobile messenger provider Kakaotalk's puzzle game known as Ani-Pang has turned itself to a national pastime activity after only about three months of its release at 2012. Many mobile games have emerged as a beginning Ani-Pang game. These games are called Mobile Social Network Games (M-SNGs).

M-SNGs are defined that mobile game utilizing the user's contacts belonging to mobile messenger based SNS(Social Network Service) such as Kakaotalk. M-SNGs are played through social network from mobile and are typically characterized by multiplayer and asynchronous game play mechanics (Wikipedia). For example, users can see who's playing and instantly get in on the action. Also, users can check top their friends' best scores and dominate the leaderboard.

The purpose of this study is to make a comparative study of game users behavior between 2012 and 2016. M-SNGs began in 2012, and have become popular and have embedded in our daily lives at 2016. There are differences in the behavior of users' commitment when M-SNGs came out, compared to when it was popularized. This study developed model to explain why people continuously play and are immersed in M-SNGs. A dependent variable is commitment. Mediating variables are

enjoyment and motivation. Independent variables are classified into three groups (game factors, socio-game factors, and social factors). We conducted the survey twice through the same model.

II. Literature Review

1. Related works

1.1 Game Factors

When users are playing a game, users feel playfulness, difficulty to the game, and completion of the game [1]. This study suggest that the game factors influence enjoyment. Playfulness, simplicity, and design aesthetics are composed the game factors based on previous studies. playfulness is defined as the degree of the users' curiosity obtained during the interaction. If you understand the rules of the game easily, it has positive impact to enjoyment [2]. M-SNGs are operating in smart devices with touch screen, and enable lots of different ways to manipulation the game. Simplicity has positive impact on enjoyment. User satisfy design aesthetics such as game characters, music, and background design, they feel pleasure of the game. This study suggests that design aesthetics have positive impact on enjoyment.

1.2 Social Factors

Social factors are composed of subjective norm, social identity, and critical mass. Subjective norm is found to affect users' intention to play online games [1]. Subjective norm, group norm and social identity were included as the determinants of user desire and intention [3]. Subjective norm reflects the effect of significant others' opinions on a user's behavior. Social identity reflects one's conception of self in terms of the relationship to another person or group [4]. This study describes social identity is a status of M-SNGs such as score, ranking, and level. Previous studies have examined that the effects of network externality on IT adoption and innovation [1]. Critical mass refers to the fact that the value of technology to a user increases with the number of its adopters. Perception of critical mass is rapidly strengthened as more people participate in M-SNGs.

1.3 Socio-game Factors

Socio-game factors are the unique features M-SNGs. It has features to combination of social factors and game factors. Competition and social interaction are contained. M-SNGs can check users best scores, and can send messages which proud of their scores or 'hearts'. Hearts are points in order to play the game. Interactivity or feedback has been suggested as a potential factor that influences the perceived-enjoyment-related construct [5]. Competition and social interactivity have positive impact on two mediating variables like as enjoyment and motivation.

III. Research Methodology

Initial survey and second survey were conducted form M-SNGs users and Kakaotalk users in Korea. most participants are university students because M-SNGs are the most popular game in twenties. Initial data was collected total of 197 participants from October to November, 2012. Second data was collected total of 190 participants from April to May, 2016. Table 1 summarized the profiles of the respondents. Likert scale, ranging from "disagree strongly" (1) to "agree strongly" (7).

IV. Conclusion

The purpose of this study is to find significant factors that have effects on the commitment of M-SNGs. We also conduct multigroup comparison test to study the difference in factors of models between time t and time t1. Time t is October, 2012 and time t1 is April, 2016.

The key determinants of commitment are motivation and enjoyment in two groups. However, motivation is most important construct in influencing commitment in both groups. The path coefficient from playfulness to enjoyment is more powerful at 2016 than 2012. For 2016, subjective norm and social identity influence has diminished on motivation. Recently, user feel that game factors are more important. Game production companies will need to consider factors to raise interest.

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