

Does Online Game Community Matter?

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Abstract. With the rapid growth of online games, online game communities has been used to explain game players' loyalty to the game. The purpose of this paper is to review the current literatures and summarize the constructs to explain game players' behaviors in online game communities. In this paper, we propose a research model to predict online games continuance play. We believe this framework will help both researchers and practitioners in game research, design and development.

Keywords: Online game · Loyalty · Game community

1 Introduction

Computer games and video games turn to one of the key entertainment media our life. With the development of network, online games now become the leader in the market. According to the new Online Game Market Forecasts report by Statista Incorporation (2012), online game market will reach \$41.4 billion at the end of 2015. In another report by Holodny (2014), online gaming in the US is expected to be a 5.2 billion business by 2020. Along with the blooming age of online games, there are some concerns raise by different parties. Game developers concern about how they can make a certain game life longer. Players concern about how to find a better game to play. Game stores or retail stores concern how to sell more games and subscribing licenses to the consumers. For all three parties, the key connect them is customers' loyalty to the game, so that game developers are happy with the current game, retailer will have enough customers to buy, and players will keep playing a game they like.

A number of studies have been conducted in this area. Researchers believe that high quality of the online games, including a good game story, high quality of geographic design, proper length of the game, ease of use, and a good online service, social norms, enjoyment feeling, etc. Will increase players' loyalty to the game (Holsapple and Wu 2008; Sweetser and Wyeth 2005; Wu et al. 2008; Zeschuk and Muzyka 2004). However, only a few studies have focused on social media impact to the game loyalty. The goal of this research was to examine the function of social media played in the loyalty context in online game playing.

2 Literature Review

There are two categories of social media channels in the online game playing. The first one is all the channels in the game named synchronous communication mediator. When

players are playing the game, they can adopt different channels to communicate with other players instantly, such as online chatting or texting function provided by the game or chatting/texting with cell phones or other devices if the players know each other in person. These channels are efficient especially when players need corporations in the game. Besides the channels provided by the game, players most likely communicate to each other based on self-organized communications. For example, players enrolled to a same game guild will have a special guild channel to communicate while anyone else outside the guild will not be able to see or hear the communications. The second method is named asynchronous communication mediator. Players often share playing experiences, communicate, develop social network, and search additional useful information of the game playing at a special virtual place named virtual community. These virtual communities usually are built by the game developers. They use a number of artifacts and tools, such as online forums, discussion boards, chat rooms, video channels, and so on. These tools can help game players to gain more information about the game and share their game knowledge.

An online community is defined as social groups of people who communicate with each other via network technology, such as Internet. Typically, each online community has a community theme, such as purposes or reasons why people are here, to attract more members. The theme of online game community is focus on the game to share information about game news, game experiences for different tasks and different types of actors, stories related to the certain game, social network communications, and so on. Through the online game community, players share their game information, seek helps from the community for game activities, and even build their social network beyond the game. The better quality of online game community motivates more players to gather and share information in the community, and in return stimulates even higher quality of the community. Players will feel comfortable and enjoyable if they have a social network in the game, which they build through the online game community. This community network also encourages their intentions to play the game and eventually increase their loyalty to the game (Hsu and Lu 2004).

Current studies focus on players' behaviors in the community. Some researcher adopted social capital theory believing that some aspects of a social structure can create valuable consequences for an individual and facilitate the players' actions within the social system (Coleman 1998). Hsiao and Chiou (2012a) merged social capital into social exchange theory and develop a social capital framework (Fig. 1) to support that social trust and confidence come from game players' strong embeddedness with an online game community. They point out that through normative, relational and utilitarian processes, players' social capital in online game communities affect their loyalty to the game.

On the other side, other than a virtual information sharing community, an online game community could also be recognized as a self-organized guild in the game. From this point of view, Ho and Huang (2009) identify different position in the guild may affect game playing satisfaction differently. They state that relationship between the guild leader and members is significantly associated with member satisfaction with the game. Additionally, the level of game involvement of the leader positively impacts members' attitude toward the guild. Furthermore, Hsiao and Chiou (2012b) argue that

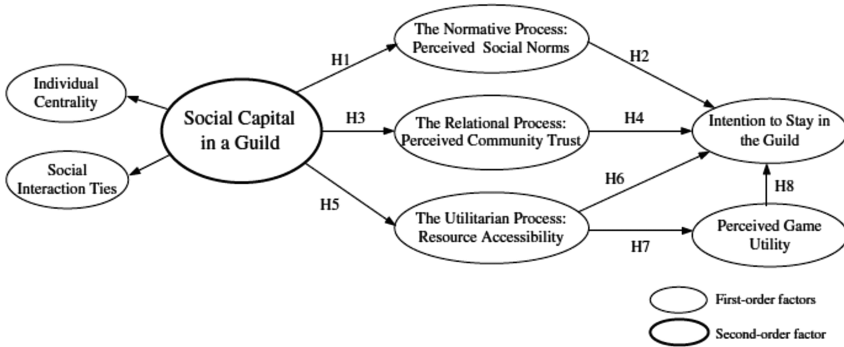


Fig. 1. Social Capital research model from (Hsiao and Chiou 2012a)

a player’s position in the guild could impact his or her continuance intention toward an online game playing. Based on social capital theory, they develop a research model (see Fig. 2) to demonstrate relationships among the community position, trust, social value and the continuance intention. The findings are very supportive that community position significantly affects community trust and social value and indirectly positively impacts online game continuance intention.

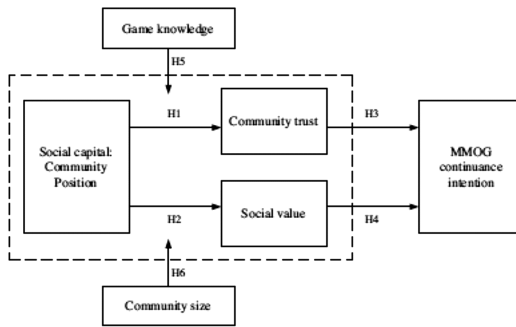


Fig. 2. Community position model by Hsiao and Chiou (2012b)

To confirm that online games are socially driven, Badrinarayanan et al. (2015) conduct a survey study from 970 online game players. The results confirm the influence from game environment characteristics and players’ characteristics to players’ identification and game community will be influenced by both players’ characteristics and identification. Knowledge sharing is another key characteristics in online game community, especially the external user community provided by the game developer. To study players’ knowledge sharing behaviors, Hau and Kim (2011) develop a modified model based on the theory of planned behavior. After analyzing 1244 players’ information, they suggest that intrinsic motivation, shard goals, and social trust are critical factors encouraging players to share their experiences and game knowledge in the

community, whereas extrinsic motivation and social tie have the opposite effect toward knowledge sharing.

In this study, we focus on external game community which helps game players gain game information, share experiences, store game knowledge, and provide discussion forums.

3 Theoretical Background and Proposed Framework

Many previous research adopted Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), or Social Capital theory to exam the link among beliefs, intentions, and behaviors in IT adoption. Obviously, these theories help understand consumers' acceptance behaviors and reveal key factors and issues at different circumstances. However, these theory are less applicable in explaining the continuance outcome after the intension of adoption. Therefore, we are trying to adopt a theory that can assist us both understand the behaviors of customers and show the predicted outcomes from these behaviors. Melville' belief-action-outcome (BAO) framework links human behavior, social structure, and environmental context together to explain the relationships among both macro and micro variables in the social system (Melville 2010).

The BOA describes the impact of macro-level constructs (environmental/social variables) on micro-level constructs (individual beliefs), and lead to actions (intention to adopt/consumption), and eventually reveal outcomes. We believe this theory framework is suitable for our study to relate game players' beliefs, actions, and behavior outcomes.

Based on the BOA framework and previous online game studies, we propose a conceptual online game continuance model as depicted in Fig. 3. This model integrates the motivational perspective into the original BOA framework. We proposed that micro (game indicators including game quality, game reputation, and critical mass of the game) and macro (usefulness of the community, extrinsic benefits players gain, and intrinsic

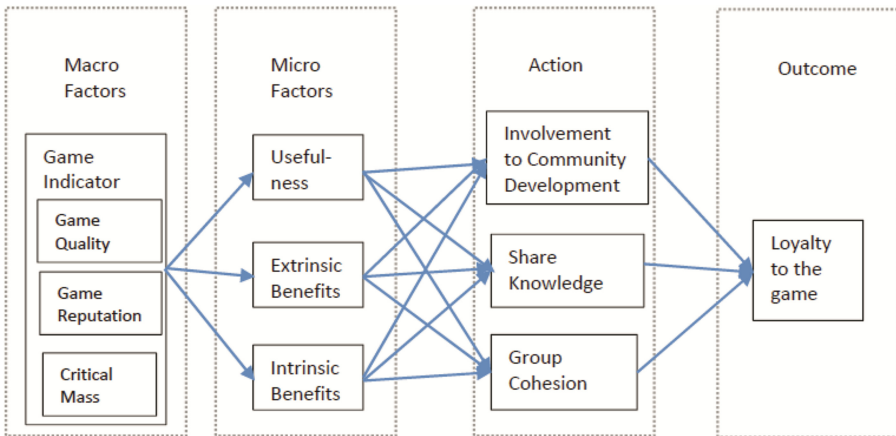


Fig. 3. Propose research model

benefits players gain) influence online game community acceptance and usage, including involvement of community development, share knowledge, and group cohesion, which can increase players' loyalty to the game. Discussions of this model are presented in the following sections.

3.1 Macro Factors

Product quality is one of the crucial factors influencing customers' consumption (2000). For online products, since most purchasing and service activities are completed over the Internet, both product quality and service quality are important determinants of customers' behavioral intentions (2006). As online products, online games' quality is important. It includes but not limited to game story, game graphics, game length, and game operations.

3.2 Micro Factors

Usefulness is one critical factor adopted in TAM models. When game players recognize the usefulness of the online game community when they are looking for certain game knowledge, such as how to defeat a monster, or game solutions, such as how to get out from a maze in the game, they gradually believe the usefulness of the community to help them in game playing.

Extrinsic benefits refer to a game player's desired outcome resulting from doing an activity (Porter et al. 2003). Access to in the game community allow game players to gain more knowledge of the game, review other players' experiences, stories and shared knowledge. Therefore, the game players can adopt all the information to the game and enhance their game playing, eventually obtain the enjoyment they are looking for. Besides, they will expand their social network and interact with more players who is playing the same game and build more relationships among the players. This social benefit offers more mental enjoyment to the players. Therefore, we believe that extrinsic benefits are the beliefs from the players who access to the online game community.

Intrinsic benefits include satisfaction and pride when a game player achieve or complete a certain task/activity. For example, the game player stuck at certain point in the game for a long time, and suddenly found out a solution from the game community, besides the usefulness of the community, he/she will satisfy with the community and also enjoy the feelings of completing a tough task.

3.3 Action

The main purpose of involvement in online game community is for leisure and pleasure (Hsu and Lu 2004). Once game players believes the benefits from the community, they will try to participate more in the community and develop the community to make it more useful. Therefore, the more they involved, the more beliefs they will gain from the community.

Knowledge sharing is the behavior when a player disseminates his/her acquired knowledge or experiences to other players in the community. After game players enjoy

the knowledge from community provided by other community members, they will most likely begin to provide their knowledge and experiences to share within the community. Therefore, the more knowledge shared among game players, the higher value the community will be recognized, and the higher binding between the game and the players who shared their knowledge and experiences.

Group cohesion refers to a sense of game players' attraction to the group (Hogg 1992). When people in a community perceive that some common desired goal or objectives can be achieved through some group activities, the cohesion in the group increases. In the online community, under a certain group, players have many common goals, such as defeat a certain monster, find out the best solution for a maze, or discuss the same event or issue in the game. By doing this, once the degree of their interaction reach to a certain level, cohesion will increase and show a better interaction environment to the players. Therefore, group cohesion, in many cases, has been linked to a number of positive outcomes, such as high commitment to the group activities (Klein and Mulvey 1995).

3.4 Game Loyalty

As suggested by Semeijin et al. (2005), maintaining customer loyalty not only lowers the cost of acquiring new customer, but also brings in substantial revenues. A typical revenue model of an online game is to charge subscribing fee every month. However, to attract more players, who are not willing to pay fees, most of the current online game developers start to offer the online games for free to the consumers. In the free games, their revenue model changed from collecting subscribing fee to allure customers buying virtual goods in the games. Therefore, the longer time players play the online games, the more money they possibly will spend on the game, and this will bring more revenue to the game vendors or developers.

4 Conclusions

The purpose of this study is to develop a theoretical research model regarding the key factors affecting customers' online game continuance usage based on a literature review. There are studies developed IS continuance research model and models for applications in mobile technology usage, social network adoption, and e-learning technology. However, there is no study focusing on the online game continuance playing area. This paper summarizes the previous IS continuance studies and proposes a complete research model to explain our research question: why there are online games that last over than 10 years while most of the online games only had short life less than 2 years.

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