Cultivating the sense of belonging and motivating user participation in virtual communities: A social capital perspective

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A B S T R A C T

Virtual communities (VCs) are attracting more attention as they provide a platform for people to share experiences and knowledge, which may further impact their purchase decisions. From a social capital perspective, this study investigated factors that cultivate a VC member's sense of belonging and their effects on facilitating his participation in the VC in terms of the intentions to get and share experiences and knowledge. The results indicated that three factors that relate to three dimensions of social capital in the VC – familiarity with members in the VC from the structural dimension, perceived similarity with other members from the cognitive dimension, and trust in other members from the relational dimension – are all positively related to the sense of belonging, which affects intentions to get and share knowledge and mediates the relationships between social capital factors and a VC member's intentions to participate.

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1. Introduction

"Make no mistake. Virtual communities will fundamentally change how companies develop, price, and promote their products."
John Hagel and Arthur Armstrong, The McKinsey Quarterly, 1997

Defined as "computer-mediated spaces where there is a potential for an integration of content and communication with an emphasis on member-generated content" (Hagel & Armstrong, 1997), virtual communities (VCs) grew quickly in recent years. Among these VCs, commercially oriented VC, where people gather together mainly to share commercial information, such as their experiences or knowledge about specific products/services, is a typical kind of VCs. Such commercially oriented VCs establish relationships among online strangers and provide important complementary information sources of products and services. Though similar with most other VCs, commercially oriented VCs are characterized by weak ties and geographical dispersion, the interactions

in such VCs have posed significant impacts on businesses. For instance, in China, commercially oriented VCs are widely used by major C2C providers to convert VC members to C2C customers (Lu, Zhao, & Wang, 2010), as the C2C market in China is a social marketplace where social relation management service is a more effective way to build customers' loyalty to the vendor than transaction service (Chen, Zhang, Yuan, & Huang, 2007). Moreover, due to the imperfect supervision on counterfeit products sold on C2C platform in China, information from these VCs become important references for customers to recognize fake products and undesirable businessman online (iResearch, 2007). Thus, the success and prosperity of commercially oriented VCs would be vital to the vendors who rely on VCs to promote online transactions. It is, therefore, important to understand why VC members are hanging out in VCs and are willing to share or get information from such communities.

Researchers always want to figure out what factors attract people to the VCs (Zhou, Jin, Vogel, Fang, & Chen, 2011). The stickiness of a VC, which can be reflected by its members' sense of belonging and participation, is a vital factor for its success or survival. Sense of belonging, which is also called having an attachment, a sense of identification, and a sense of membership (Hagborg, 1998), describes an emotional attachment of a user to a VC. Establishing and maintaining relatedness to others is a basic need of human, and the nature and quality of such interpersonal relatedness would influence people's physical and mental health (Cohen & Wills, 1985; Kohut, 1977). Sense of belonging is considered as one specific process of relatedness and an important factor for mental health and

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social well-being (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992). Under the online environment, sense of belonging is also a vital component of online "*community*" (Roberts, 1998). That is, without such emotional attachment, any online discussion group and chat room would just be a means of communication among people with common interests, but not communities (Bromberg, 1996). Sense of belonging in VCs will lead to positive outcomes. For instance, sense of belonging is found to facilitates online sustained participation in virtual learning communities (Teo, Chan, Wei, & Zhang, 2003) and contribute to members' loyalty to VCs (Lin, 2008). Though these few studies show the importance of the sense of belonging in VC success, there are still questions related to this concept requiring more investigation. For example, the above two studies indicated that sense of belonging positively affected general participation of VC members. But to be more exact, how would sense of belonging affect members' specific participation behaviors, such as getting knowledge, or sharing knowledge? Meanwhile, the study of Teo et al. (2003) focused on a virtual learning community whose members were the students from the same course, probably with strong ties, while the study of Lin (2008) did not refer to any specific VCs. Thus, what role does sense of belonging play in a commercially oriented VCs, whose participators are usually offline strangers with weak ties but common goals? Finally, given the importance of sense of belonging, more investigation on how to cultivate such emotional attachment should be conducted.

Participation in a VC usually refers to behaviors of sharing with and getting information, experiences, opinions, or knowledge from other users in the VC. Prior research has shown the importance of this kind of participation activities on the subsistence of a VC (e.g., Koh & Kim, 2004). As user-generated content is fundamental to VCs, abundant studies have highlighted the importance of knowledge sharing in variant kinds of VCs, and examined the factors that facilitated such knowledge sharing behavior (Chiu, Hsu, & Wang, 2006; Hsu, Ju, Yen, & Chang, 2007; Wasko & Faraj, 2005). The sale of information gathered from online experiences generated by VC members is also considered as a promising business model for monetizing Internet applications and web sites (Clemons, 2009). As to getting information, we argue that it should be also regarded as an important part of commercially oriented VC members' participation for several reasons. First, it will increase the traffic for the website if the members consider the VC as a reliable and useful source of consumption information. VC providers could profit from advertising which is based on website traffic. Second, as more and more people make use of consumption information on VC sites before making a purchase decision (iResearch, 2007), VC providers could also benefit from cooperation with merchants who want to conduct word-of-mouth marketing online. Studies have found that online reviews of books, movies, and craft beer could affect product sales (Clemons, Gao, & Hitt, 2006; Duan, Gu, & Whinston, 2008). Third, VC providers could make profits by converting the VC visitors to consumers. As Shan, Sutanto, Kankanhalli, and Tan (2006) suggested, visitors of VC could be converted to consumers by satisfying the needs during different stage of membership. That is, when more people get information from VCs, there would be greater potential to convert these visitors to online consumers. Lu et al. (2010) also found that the intention to get information from a VC significantly influences a member' intention to make a purchase on the C2C website hosting the VC. In sum, members' participation plays an important role in VC success and how to facilitate such participation is also a concern to VC providers. Thus, we examine not only the intention to share information, but also the intention to get information from VCs. In other words, this study concerns "*why VC members make recommendations to and take recommendation from others*".

Given the importance of both the *sense of belonging* and *participation* in VC success, our research reported here attempts to answer the following two research questions. First, what factors would cultivate the sense of belonging of VC members to a VC. Second, what factors would encourage their participation in the VC in terms of getting and sharing information, experiences, and/or knowledge? In this study, we investigate these issues from a social capital perspective, which focuses on the resources rooted in the relationships among people, how these resources formed, and what outcomes they could bring about.

There are several areas of significance in this study. First, we include the sense of belonging in our research model as a perception of emotional attachment to the VC and examine how the sense of belonging is affected by social capital. From one side, we linked these two concepts because social capital theory provides different perspectives (e.g., structure of network, social norm) to understand interactions among people, and sense of belonging is developed through such interaction (Rovai, 2002). From the other side, as mentioned, VCs used as an effective way to build customers' loyalty in the C2C market in China (Chen et al., 2007). This is because relationship is an important concept in the Chinese culture, and Chinese people will use different rules to treat other people based on the degrees of social relations among them. VCs build social relations among strangers and then facilitate trust and deeper intimacy among these connected people (Chen et al., 2007). Thus, as Roberts (1998) pointed out, it took time for VC members to feel belonged to the community. For understanding the quality of social relations varying across the network structure and degree of interaction, Social Capital Theory provides a properly theoretical foundation. To our best knowledge, we have found few prior studies investigating this factor in this way, and our study will provide a better understanding of its impact on VC success. Second, we consider two aspects of participation in VC: getting and sharing experiences and knowledge. Most previous research only investigates how to facilitate the sharing behavior and ignores the issue related to the getting information behavior (Chiu et al., 2006; Wasko & Faraj, 2005). We believe that getting information from VCs is also important for their success, especially for those VCs that provide purchase information that could promote the actual purchase behavior and bring profits to VC service providers.

The remainder of this paper is structured as follows. Section 2 reviews the related literature on social capital theory and related concepts. Section 3 presents our research model and hypotheses. Research method is described in Section 4. Section 5 reports data analysis. Section 6 discusses the findings and the last section concludes the study with limitations and implications for theory and practice.

2. Social capital theory

Defined as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (Nahapiet & Ghoshal, 1998), social capital describes the resources rooted in relationships. Its biggest difference from other forms of capital, such as physical, financial, and human capitals, is that social capital is embedded in the structures of social networks and the relationships among people (Putnam, 1995), while the latter ones generally focus on assets or personnel.

Nahapiet and Ghoshal (1998) proposed that social capital consists of three dimensions: *structural*, *relational*, and *cognitive*. The *structural* dimension refers to the connections between actors in a social system, where network ties provide access to resources. This dimension is fundamental to social capital because, without network ties, various actors would not gain access to available resources and relationships would not be able to form. The *relational* dimension refers to the personal relationships individuals