# Chapter 1.16 Virtual Social Networks: Toward A Research Agenda

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#### **ABSTRACT**

Multi-user virtual communities have become an accepted fundamental component of communication whereby community members share information and knowledge for mutual learning or problem solving. Virtual communities in a multi-user virtual environment (MUVE) have evolved into active social networks, formulating an alternative social existence and this phenomenon warrants further investigations. In these virtual social networks (VSNs), member participation is essential for their success. Therefore, developing knowledge on how to manage and sustain participation of members in VSNs fills a gap in our academic understanding of the dynamics underpinning the processes of virtual community development. This article aims to address these issues by extending the theory of sense of community into a virtual context (SOVC) and by integrating it with other communication theory of U&G.

#### INTRODUCTION

Internet technologies have changed the methodology and content of communications in online environments (Koh, Kim, Butler & Bock, 2007). New forms of communication, such as collaborative communications, which enable people to communicate and interact with one another in the absence of face-to-face interactions, have emerged (Jepsen 2006). Such interactive collaborative communications have led to the formation of multiuser virtual communities for social networking known as virtual social networks (VSNs), and these have become an accepted fundamental component of communication (Koh et al. 2007). This proliferation of virtual communities worldwide provides an important form of communication whereby community members share information and knowledge for mutual learning or problem solving (Chen &Xie 2008). These communities in the multi-user virtual environment (MUVE)

have expanded into a space to live and not just for occasional or casual participation (Kwai & Wagner 2008). These virtual social networks are essentially communities aiming to formulate alternative social existences and this evolving phenomenon warrants further investigation.

In this respect, the issue of what makes sense of a virtual community has captured the attention of both practitioners and researchers but so far research on this subject is limited (see Blanchard & Markus 2004, Fisher, Sonn & Bishop, 2002). According to communication theory, a sense of community (SOC) implies an emotionally positive effect which creates an intrinsically rewarding reason to continue participation in an online community (Blanchard & Markus 2004, Whitworth & DeMoor, 2003). When participants experience positive feelings in a virtual community, they are more likely to increase or maintain their membership, thereby contributing to its sustainability and success (Blanchard & Markus 2004, Sangwan 2005). We postulate that the sense of virtual community must be a principal construct in research designed to understand any form of virtual collaboration such as communication and participation in virtual communities-of-practice, or virtual social networks. Indeed this construct can facilitate our understanding of participation in virtual space where organizations are also increasingly using collaborative communication for various issues (Jepsen 2006, Koh & Kim 2003). Prior research has shown that virtual networks play a critical role in determining the way problems are solved, organizations are run, and the degree to which employees succeed in achieving their goals (see Kuk 2006, Kwai et al. 2008, Wietrz & Ruyter 2007). Similarly, virtual social network research has focused on how the structure of bonds affects members and their relationships in physically lessbounded social systems and global communities in a multi-user virtual environment (Wasserman & Faust, 1994). Most large-scale, virtual social networks that rely on members to contribute content or build services share the problem of how

to increase participation across the board. The concentration of a small number of members who contribute both to postings and to other content shows that a larger number of participants do not feel motivated enough for regular participation (Koh et al. 2007). For example, in a study of a USENET forum, Franke and Hippel (2003) found that the most prolific 1% of members contributed 20% of the postings, and the top 20% of members contributed to 61% of the messages. Similarly, in a study of an online project, Koch and Schneider (2002) found that 17% of members made 80% of the contribution. Different levels of participation are related to the success of virtual communities (Kuk 2006). Therefore, developing knowledge of how to manage and sustain participation of members in VSNs fills a gap in our academic understanding of the dynamics underpinning the process of virtual community development.

This article aims to address these issues by extending the theory of SOC into virtual contexts (SOVC). First, we demonstrate the theoretical strength of SOVC from the members' perspective to develop a conceptual understanding of why members participate in virtual social networks. In accordance with previous research, we treat the social network context as a moderator (Venkatesh, Morris, Davis & Davis, 2003). Subsequently, we develop a research agenda with propositions for future research work. Implications relating to the satisfaction of members for sustainability of virtual social networks are also discussed. The article contributes toward an improved understanding of the SOVC construct on aspects contributing to the successful VSN for the interests of various stakeholders. VSN organizers can apply the theoretical understandings to increase participation by and satisfaction of their members (Koh & Kim 2003, Porter & Donthu 2008) for successful business models. An understanding of the dynamics of VSNs can also potentially be applied by enterprises and policy makers to facilitate virtual collaboration among their members, and to better transform activities of offline communities into an 11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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