Chapter 6.11
Use and Participation in Virtual Social Networks:
A Theoretical Model

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ABSTRACT

Managers are increasingly interested in the social web, as it provides numerous opportunities for strengthening and expanding relationships with customers, but the network processes that lead to these user-based assets are poorly understood. In this paper, the authors explore factors influencing use and participation in virtual social networks. They also discuss unusual drivers and inhibitors present with virtual social networks—highlighted by the presence of positive network externalities and fears that the content will be misused. The authors offer hypotheses stemming from a model of how these factors work together, test the model with a dataset collected from two different virtual social networks, and discuss the implications of this work. The findings offer managers insights on how to nurture Web 2.0 processes.

INTRODUCTION

Many of the most innovative new services that are appearing in the modern economy represent attempts to aid and harness human social processes. Virtual Social Networks such as Second Life, Facebook, LinkedIn, MySpace and many others do not specifically offer content created by the sponsoring firm. Rather, these websites function as a platform for a virtual community, allowing members to create the content that attracts new members. For example, a blogging site offers a variety of content generation tools but it is the users that write the blogs, not the firm. This user-generated content in turn attracts readers, some of whom will in turn create even more content. Similarly, the site del.icio.us allows community members to produce content in the form of tagged bookmarks. These bookmarks can be useful to other visitors who are seeking interesting articles

and who can use the tools provided by the site to find other users' bookmarks.

All the above services exhibit some unusual properties that are of significant importance but have not been examined to date.

First, the value of the service to any one user depends in a generally positive way on the number of other users who are using the service. This is in sharp contrast to most offline services. Typically, competition from other users, crowding and simple logistical issues will often produce a reduction in total advantages to any one user as the number of other users increases. In contrast to the offline world, social network websites exhibit positive consumption externalities: the more users who also consume the product, the greater the potential value as the site becomes more useful in satisfying user social needs. The size of the group that "contributes" makes the site more useful for users (for instance a forum with many lurkers will be valuable only if there are also contributors). We also believe that the size of the total virtual group (and not just only the active contributors) matters to the individual user because it influences how many people can be reached by the message and will be potentially able to read the post or interact. While there are numerous macroeconomic models for how externalities function, previous research has not looked closely at these positive consumption externalities from the point of view of the individual user.

A second unusual aspect of social networking websites is the risks that users run in availing themselves of the service. Often when a user posts some content, he or she incurs some risk in revealing more information about himself or herself. Among other things, users may fear that this information might be subject to misuse by the site owners, by hackers, or by other participants (Walker & Johnson, 2006).

A third unusual aspect about these electronic services is that they offer two logical steps or levels of involvement. The user can simply use this Social Network by signing up and browsing the content already present on the site. In a second step or level of involvement, the user can actively participate by expressing his or her own identity and creating his or her own content to be browsed by others. Previous research has not drawn a clear distinction between these two levels of electronic service "use".

The explosive growth of the social web has changed the manager's role from a broadcaster pushing out messages and materials to an aggregator who brings together content, enables collaboration, and builds and participates in communities (Weber, 2007). Content includes new ideas, research, and opinions. Collaboration creates an open environment in which people can, and do, share knowledge. Managers are increasingly interested in creating social webs as they provide opportunities for strengthening and expanding relationships with customers (Weber, 2007) or benefit from new marketing tools such as special interest discussion groups related to products or product categories (Boyd et al., 2007).

To summarize the development so far, this research effort is in response to the need for an expanded, yet still parsimonious, analysis of user behavior in virtual social networks (VSNs), a topic growing in importance as "social media" grow in importance.

Few empirical studies in marketing have tackled this issue. These studies focus on proving the presence of network effects (Nair et al., 2004), investigating the nature of network effects (Shankar & Bayus 2003), or analyzing the role of network effects in diffusion (Gupta, Jain, & Sawhney 1999). However, no study has explicitly examined the impact of network effect on active and passive use. This issue is important for several reasons. First social networks are being adopted by companies as marketing tool with increasing frequency. Second, what influences perceived usefulness and the influence of network effects has important implications for managerial strategies.

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