INTRODUCTION

The rise of the Internet has spawned the prolific use of the adjective “virtual.” Both the popular press and scholarly researchers have written about virtual work, virtual teams, virtual organizations, and virtual groups. But perhaps one of the most interesting phenomena to come to the forefront has been that of virtual communities. Many definitions of this term have been proposed and the term has been used in many different ways. This article will examine some of the most popular definitions and guidelines to understand what truly constitutes a virtual community.

To define a virtual community, one needs to first examine the two words separately, particularly the sociological definition of “community.” The German sociologist Ferdinand Tonnies, in his 1887 book, made the distinction between two basic types of social groups: Gemeinschaft (community) and Gesellschaft (society). The former was often exemplified by the family or neighborhood (Tonnies, 1957). Sociology literature also often refers to the definition given by George Hillery, who reviewed 94 different definitions in academic studies. Three elements were common to the definitions, namely that community (1) was based on geographic areas, (2) included social interaction among people, and (3) had common ties such as social life, norms, means, or ends (Hillery, 1955). Thus the term community typically connotes a group of people within some geographic boundary, such as a neighborhood, or perhaps smaller subsection of a larger city. Further specification might have defined a community as a group of people within the geographic boundary with a common interest, such as the Jewish community of Brooklyn or the physician community of London. Therefore, members of the community were drawn together by both local proximity and common interest, even if the interest was in the geographic area itself.

The term virtual, precipitated by the advent of information technology, and specifically, the Internet, means without a physical place as a home (Handy, 1995), or that which is electronic or enabled by technology (Lee, Vogel, & Limayem, 2003). Information technology therefore has expanded the means by which the social interaction in communities can be accomplished. While for most of human existence interaction was strictly limited to the face-to-face medium, social interaction can now be accomplished virtually, thus eliminating the necessity of being physically close enough to communicate. This type of communication is called computer-mediated communication (CMC).

Combining the two terms together, thus, would mean eliminating the geographic requirements and allowing that the social interaction would occur virtually, that is, via information technology, among people with common ties. In fact, people have been coming together in virtual communities on the Internet for over 25 years. Usenet newsgroups, started in 1979, are widely regarded as the first virtual communities on the Internet (M. A. Smith, 1999), and The Well (www.well.com), started in 1985, is often referred to as an early exemplar of virtual community (Rheingold, 1993). Virtual communities may be part of a long-term shift away from geographic ties to common interest ties (Wellman & Gulia, 1999b).

Formal definitions and understandings of the term virtual community still remain problematic, however (Lee et al., 2003). Perhaps the most cited definition is that of Howard Rheingold, a prominent author, consultant, and member of The Well:

Social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace. (Rheingold, 1993, p. 5)

Common to many of the definitions is the presence of shared interests or goals (Dennis, Pootheri, & Natarajan, 1998; Figallo, 1998; Kilsheimer, 1997). With the advent of information technology, locating/contacting others outside the local community has become relatively easy, especially when one seeks others who have a unique or uncommon interest. It may be that technology makes it easier for communities to form. For example, it may be difficult for someone interested in traditional bowhunting to locate others with the same inclinations by popping into the local tavern or socializing at a church function. However, a simple search in Google reveals a vibrant community centered around such an interest (www.bowsite.com/). There are virtual communities for nearly every interest that comes to mind, from medical afflictions (e.g., breast cancer, Parkinson’s, Down’s syndrome) to hobbies (e.g., coin collecting, wine, saltwater aquariums) to professions (e.g., nursing, law, finance).
Defining “Virtual Community”

Implicit with the notion of community is some permanence among members and frequency of visits by members (A. D. Smith, 1999). Virtual communities must have a sense of long-term interaction (Erickson, 1997), not a place where people go only occasionally or where there are always different people. It is not uncommon for people to develop strong attachments to virtual communities, visiting them often enough to be described as “addicted” (Hiltz, 1984; Hiltz & Wellman, 1997). The members often feel part of a larger social whole within a web of relationships with others (Figallo, 1998). Indeed, many researchers have considered virtual communities as social networks (Hiltz & Wellman, 1997; Wellman, 1996; Wellman & Gulia, 1999a). Ridings et al. (2002) offer a comprehensive definition that incorporates the afore-mentioned concepts:

Groups of people with common interests and practices that communicate regularly and for some duration in an organized way over the Internet through a common location or mechanism. (p. 273)

TECHNOLOGY ENABLERS

Although virtual communities are not geographically centered, they do have a common location online. These locations also serve to organize the conversations in the community, either into e-mail messages, or a series of responses to messages arranged in a thread on a message board, for example. There are four basic ways that virtual community members can communicate, constituting the “common location” in the Ridings et al. (2002) definition (see Table 1):

1. listservs
2. bulletin boards or newsgroups
3. chat rooms or conferencing systems
4. Multiuser Domains (MUDs)

These technologies provide a single “place” on the Internet where members meet and communicate. Communities may, of course, utilize more than one technology and may also meet face-to-face (commonly termed offline).

Listservs are similar to powerful e-mail distribution lists (Schuler, 1996). Members send messages via a listserv program that forwards the message to the entire community. Members do not need to store the membership list, as this is done by the listserv program. Communication is asynchronous—members may be reading messages written by others hours, days, or even weeks before, and can reply at any time (not necessarily when the recipient of the message is online). Communication is also passive—members receive messages from the community in their e-mail inboxes; no action is necessary to “go” to the community. However, members must sign up with the listserv program in order to start receiving messages and in order to be able to reply to others.

Another technology enabler is bulletin boards or Usenet newsgroups. This medium functions much like the physical bulletin board after which it is named—members post messages to the board for others to read and respond to. While Usenet newsgroups used to be accessed by a separate program called a newsreader, they can now be accessed through most e-mail client programs or via the Web (http://groups.google.com/). Further, non-Usenet bulletin boards have become extremely popular, and are also known as discussions, forums, conferences, or roundtables. These communities are also asynchronous—members can communicate without being online at the same time. However, these communities are active—members must choose to go to the community to view messages. Some communities will notify members via e-mail if messages have been posted recently, but for the most part, members must choose to go the communities to participate. Although some bulletin boards require registration to view and/or post messages, most bulletin boards (including Usenet) are readable by the public, therefore requiring no registration or sign-up.

Virtual community members can communicate “live” via chat rooms, conferencing systems, or Internet relay chat (IRC). In these environments members type in comments which are viewed in real time by other members, who then reply immediately. This form of communication is more like a spoken conversation. Because participants are together (online) at the same time, it is termed synchronous. Most systems require registration, thus members must actively join a community and enter a chat room to participate.

Table 1. Virtual community technology enablers

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<tr>
<th>Technology</th>
<th>Asynchronous</th>
<th>Synchronous</th>
<th>Passive</th>
<th>Active</th>
<th>Need to “Join” the Community</th>
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