

# Potentials of Information Technology in Building Virtual Communities

**Isola Ajiferuke**

*University of Western Ontario, Canada*

**Alexander Markus**

*University of Western Ontario, Canada*

## INTRODUCTION

In recent years, virtual communities have become the topic of countless books, journal articles and television shows, but what are they, and where did they come from? According to Preece, Maloney-Krichmar, and Abras (2003), the roots of virtual communities date back to as early as 1971 when e-mail first made its appearance on the Advanced Research Projects Agency Network (ARPANET), which was created by the United State's Department of Defense. This network would lead to the development of dial-up bulletin board systems (BBSs) which would allow people to use their modems to connect to remote computers and participate in the exchange of e-mail and the first discussion boards. From these beginnings a host of multi user domains (MUDs) and multi-user object oriented domains (MOOs) would spring up all over the wired world. These multi-user environments would allow people to explore an imaginary space and would allow them to interact both with the electronic environment and other users. Additionally, listservs (or mailing lists) sprang up in 1986, and now, almost two decades later, they are still in use as the major method of communication among groups of people sharing common personal or professional interests (L-Soft, 2003). Since then the Internet has exploded due to the development of Web browsers as well as the development of communications technologies such as broadband, digital subscriber line (DSL), and satellite communications. Groups of people from as few as two and reaching to many thousands now communicate via email, chat, and online communities such as the Whole Earth 'Lectronic Link (WELL) and such services as MSN, Friendster, America Online (AoL), Geocities, and Yahoo! Groups. Other examples of online communities are collaborative ency-

clopedias like Wikipedia. Web logs (Blogs) like Slashdot.com and LiveJournal allow users to create their own content and also to comment on the content of others. They also allow the users to create identities and to make virtual "friends" with other users. The definition of virtual community itself becomes as convoluted as the multitude of technologies that drives it. Are e-mail lists, message boards, and chat rooms online communities or are they virtual communities? Virtual communities might be persistent worlds as those found in popular online games (Everquest, 2004, Ultima Online, 2004) or virtual worlds (such as MUDs and MOOs) where the user is able to explore a simulated world or to take on a digital "physicality" in the form of an avatar. It becomes clear from the literature that the terms are still used interchangeably.

## BACKGROUND

In the online version of his 1993 book on virtual community, Rheingold states that:

*When you think of a title for a book, you are forced to think of something short and evocative, like, well, 'The Virtual Community', even though a more accurate title might be: 'People who use computers to communicate, form friendships that sometimes form the basis of communities, but you have to be careful to not mistake the tool for the task and think that just writing words on a screen is the same thing as real community. (<http://www.rheingold.com/vc/book/intro.html>)*

And it is with this statement about his own work, that Rheingold so eloquently captures the essence of the problem in defining the virtual community and

separating it from the technology. That is to say, there is a difference between the online community and what is known as computer mediated communication (CMC). According to December (1996), CMC deals with both a technological and a sociological approach to communication over the Internet, but it is important to note that because a communication happens “online”, it does not imply community. Etzioni and Etzioni (1999, pp. 241) touch on this issue precisely when they say “that to form and sustain communities, certain conditions must be met”. They state that in the CMC literature, community can refer to either tightly knit social groupings or it can also mean people using a common service whom have no ties to each other (such as subscribers to a news source).

The difficulty is in defining the term community itself. Both the Merriam-Webster’s online dictionary (2004) and the Wikipedia online (2004) define community as having, at its heart, a common bond between the members, originally having some geographic significance (such as the same city or even the same nation) and more recently to include more widely spaced persons who form either a physical or a digital Diaspora. Those that have attempted to define or explore aspects of virtual community include Rheingold (2000), Preece (2000), Fernback and Thompson (1995), and Wilson and Peterson (2002). However, there are also those that do not share an optimistic view of virtual communities with some seeing CMC as necessarily precluding community without face to face communication (Weinreich, 1997, Shenk, 1998). The idea of virtual community strikes at the very heart of what we know a community is composed of and the presence of a wide range of views indicates that we will not have a definitive answer for some time to come. It is possible that in the future, those who have grown up with the Internet and have been “wired” from an early age might be more willing to accept the virtual community in the same way that we accept our own physical communities. We don’t even think about it, we just go on about our lives participating in the communities that we align ourselves with. In 20 years will there even be a need to define virtual or online communities at all?

## MAIN THRUST OF THE ARTICLE

The day of a typical graduate student often starts with checking his e-mail, sometimes even before taking a shower or drinking a cup of coffee. He is plugged into the World Wide Web, and there’s no need to turn on his computer because it’s always on. While still thinking about how best to start his day, he is reading news from the Cable News Network (CNN), and answering any number of emails from friends, family, and students. These aren’t really communal actions; they don’t constitute a community in any sense. Arguably, his e-mail activity allows him to communicate with people in his physical community, but it is an extension of the community in which he lives; it is online, but it is not virtual.

In the long list of e-mails he has received might be some postings to his professional listserv. Many of the people posting to this list are in his professional community, he knows them by name, a number of them he knows in person, he sees them at conferences, they have come to give guest lectures at his university, and some of them are his colleagues. When he replies to these messages, he is still extending his physical community, but there is also a sense of virtuality included in the exchange because some of these people he knows only in the online context, yet he feels he actually knows them.

Some virtual communities are also served by online message boards, such as the message board for people who suffer from depression. The board is full of discussions about possible side effects, battling depression in general, common advice, and support between members of the message board. This is where the virtual community begins to take shape. Hundreds of people separated by geography, race, religion, or creed, but bound by their common battle against depression. Some of them have been posting only for a few days, others since 1995 (Wing of Madness, 2004). It is this persistent online location in the form of the message board that allows for the creation of the virtual community. As in every community people come and go as time marches on and they all participate to varying degrees ranging from active participation to passive lurking (Nonnecke and Preece, 2003). Lurkers, as they are called, can comprise as much as 99 percent of an online community though they receive the communications from

4 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: [www.igi-global.com/chapter/potentials-information-technology-building-virtual/17336](http://www.igi-global.com/chapter/potentials-information-technology-building-virtual/17336)

## Related Content

---

### New Internet Protocols for Multimedia Transmission

Michael Welzl (2006). *Handbook of Research on Mobile Multimedia* (pp. 129-138).  
[www.irma-international.org/chapter/new-internet-protocols-multimedia-transmission/20962](http://www.irma-international.org/chapter/new-internet-protocols-multimedia-transmission/20962)

### Internet Privacy Issues

Hy Sockeland Kuanchin Chen (2005). *Encyclopedia of Multimedia Technology and Networking* (pp. 480-485).  
[www.irma-international.org/chapter/internet-privacy-issues/17287](http://www.irma-international.org/chapter/internet-privacy-issues/17287)

### A Review on Semantic Text and Multimedia Retrieval and Recent Trends

Ouzhan Menemenciolu and Ihami Muharrem Orak (2015). *International Journal of Multimedia Data Engineering and Management* (pp. 54-74).  
[www.irma-international.org/article/a-review-on-semantic-text-and-multimedia-retrieval-and-recent-trends/124245](http://www.irma-international.org/article/a-review-on-semantic-text-and-multimedia-retrieval-and-recent-trends/124245)

### A Novel Research in Low Altitude Acoustic Target Recognition Based on HMM

Hui Liu, Wei Wang and Chuang Wen Wang (2021). *International Journal of Multimedia Data Engineering and Management* (pp. 19-30).  
[www.irma-international.org/article/a-novel-research-in-low-altitude-acoustic-target-recognition-based-on-hmm/276398](http://www.irma-international.org/article/a-novel-research-in-low-altitude-acoustic-target-recognition-based-on-hmm/276398)

### Conclusion and Future Trends

(2012). *Signal Processing, Perceptual Coding and Watermarking of Digital Audio: Advanced Technologies and Models* (pp. 177-181).  
[www.irma-international.org/chapter/conclusion-future-trends/56068](http://www.irma-international.org/chapter/conclusion-future-trends/56068)