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Online Communities: Usability, Sociabilty, Theory and Methods

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17.1 Introduction

Internet usage doubles every 52 days. Over 18 million people are AOL subscribers – many of whom are attracted by AOL's emphasis on email, chats, instant messaging and, of course, the Web. Active Worlds, a graphical chat environment, has over a million participants. During the first quarter of 1998, 450 000 messages were posted to 20 000 Usenet groups. The number of people coming online continues to increase as e-commerce, online education, online health, and increasing amounts of information and people with whom to chat entice even more people. Meanwhile, according to Moore's Law computing power doubles every 18 months. For the well educated, with jobs and Internet stock, the future looks bright. However, the gap continues to broaden between low and high income, and between poorly and well-educated people. There are fears that socializing face-to-face will decline leading to an unprecedented number of lonely, psychologically impoverished people. Better access to successful online communities for all citizens could reduce isolation and improve quality of life for all citizens.

Study of online communities is finding a place university agendas and in major laboratories and national funding bodies (Brown *et al.*, 1999b,c). Like other new topics, its status is debatable. At a similar stage in the 1990s, researchers tried to characterize human–computer interaction. At a National Science Foundation workshop, Stu Card identified four stages in the growth of a discipline (Card, 1991; Olson and Olson, 1997). Building and evaluating individual systems, or *point systems*, is the first stage in early development. As more communities develop, research intensifies and *comparative evaluation* studies start to identify dimensions for success. This is the second developmental stage. The third stage is characterized by understanding the *relationships* in online community development more thoroughly, so that *models*, *laws* and *theory* can be articulated, which is an indicator of coming of age.

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Current research in online communities deals primarily with individual communities – i.e. stage one. However, critics argue that the basic technology (i.e. email, listservers, bulletin boards, chats etc.) are established technologies, that are used enthusiastically. They question why research is needed. There are four reasons:

- Little is known about the social and technical dynamics of mass communication involving thousands or millions of participants via the Internet.
- People in online communities will come from diverse cultures and vary widely in age, technical and educational experience. Technology with appropriate usability for this broad range of users is needed.
- People have expectations of excellent usability and sociability. At present these expectations are not being met.
- Local, national and international agencies, governments and e-commerce will demand that people go online for certain activities such as voting, paying taxes, licensing, social support, health, all kinds of information, and purchasing of goods. Online communities *must* be well developed so that they are usable by *all* citizens.

Directions[1] for research and development are needed that address usability and sociability problems so that better online communities can be developed. There is a particularly strong need to involve social scientists as well as computer scientists. Successful online communities will result from a blend of good usability and carefully guided social policies that encourage social interaction. Theory and better research methods are also needed to support Internet research and system development.

17.2 Usability and Sociability: a Framework for Online Community Design

There is no formula for a thriving online community. Online communities are new and there is a dearth of experience to guide successful development. Furthermore, online communities evolve and change constantly depending on their membership. What may be important early in the life of a community may not be significant later on. Communities also vary depending on their purpose, participants, policies and the software that supports them. Success is determined by *usability*, *sociability* and the affect of both of these on people's *interactions* in the community. Developers have *little* or *no* control over community members, except in some e-commerce communities where behavior is strongly managed. However, developers

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