

# Online Communities and Community Building

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## INTRODUCTION

“Online community” is one of today’s buzzwords. Even though superficially it is not hard to understand, the term has become somewhat vague while being extensively used within the e-commerce business. Within this article, we refer to online community as being a voluntary group of users who partake actively in a certain computer-mediated service. The term “online community” is preferred over the term “virtual community,” as it denotes the character of the community more accurately: community members are interacting online as opposed to face to face. Furthermore, the term “virtual community” seems too unspecific, because it includes other communities that only exist virtually, whereas an online community in our definition is always a real community in the sense that community members know that they are part of the community.

Nevertheless, there are other reasonable definitions of online community. An early and most influencing characterization (which unfortunately utilizes the term “virtual community”) was coined by Howard Rheingold (1994), who wrote: “...virtual communities are cultural aggregations that emerge when enough people bump into each other often enough in cyberspace. A virtual community is a group of people [...] who exchanges words and ideas through the mediation of computer bulletin boards and networks” (p. 57). A more elaborated and technical definition of online community was given by Jenny Preece (2000), which since then, has been a benchmark for developers. She stated that an online community consists of four basic constituents (Preece, 2000, p. 3):

1. Socially interacting people striving to satisfy their own needs.
2. A shared purpose, such as interest or need that provides a reason to cooperate.
3. Policies in the form of tacit assumptions, rituals, or rules that guide the community members’ behavior.
4. A technical system that works as a carrier that mediates social interaction.

Not explicitly mentioned in this characterization but nevertheless crucial for our aforementioned definition (and not in opposition to Preece’s position) is voluntary engagement.

## BACKGROUND

Just because everybody is now talking about them, online communities are, historically seen, neither an implication of the World Wide Web — which dates back to 1991 (Berners-Lee et al., 1992) — nor dependent on the Internet as a transport infrastructure. In fact, online communities emerged at times when ARPANet—the predecessor of the Internet — was still restricted to military-funded institutions. They were based on computerized bulletin boards first introduced by Christensen and Sues (1978). Their system was called CBBS (computerized bulletin board system) and followed the idea of a thumbtack bulletin board hosted electronically on a computer. Other computer hobbyists were able to connect with their home computers via a dial-up modem connection and could “pin” messages to a shared “board.” The first online communities developed through other participants responding to those messages, creating ongoing discussions. At that time, computer hobbyists and scientists were more or less the only ones who owned computers and modems. Therefore, most topics on CBBS were within the realm of computers, but in the long run, the discussions broaden. Within the 1980s, similar systems appeared that were now subsumed as BBS (bulletin board system). The most well known were “The Well” (Whole Earth ‘Lectronic Link) and FidoNet (Rheingold, 2000).

Apparently, at the very same time, the technological and social environment was ready for online communities, as there were at least two other independent developments concerning this matter:

1. The Usenet was invented by computer science students at Duke University and the University of North

Carolina, using a simple scheme by which these two computer communities could automatically exchange information via modems at regular intervals.

2. The first MUDs appeared at the University of Essex (UK) creating playful and imaginative online communities. MUDs (short for Multi-User Dungeon/Dimension/Domain) are computer-implemented versions of text-based role-playing games, in which multiple persons can take virtual identities and interact with one another. Early MUDs were adventure games played within old castles with hidden rooms, trapdoors, etc.

Nowadays, most online communities are using the Internet as carrier, and most of them are Web based, using HTTP as a protocol for transportation and the DHTML standard for presentation. But there are still communities that employ other systems and protocols, like newsreaders using NNTP and mail-groups using SMTP or IRC (Internet relay chat) based chatting systems (IRC). Some online communities even use multiple systems and protocols to communicate and cooperate.

## **ONLINE COMMUNITIES**

The conditions in pure online communities highly differ from a computer-mediated communication situation within a company. Whereas employees in a computer-supported cooperative work (CSCW) context usually meet online as well as face-to-face, members of online communities have, as a general rule, never met each other. Working in a highly standardized company context, employees have to focus on task fulfillment within a certain time frame. Superiors evaluate their achievements, and they are accordingly paid by the company. Online communities thrive on volunteers. Usually none of the community members can be forced to do something, and there are no tangible incentives. Basic research in motivation psychology (Franken, 2001) even shows that incentives tend to be counterproductive.

Community members usually show a high degree of intrinsic motivation to participate actively in the development of an online community. It is still open to discussion where this motivation comes from. Simple rules like "It's all based on trying to maximize the potential personal benefit" seem to fail, as long as one has a simplistic concept of the term "personal benefit." As the attention-economy-debate (i.e., Aigrain, 1997; Ghosh, 1997; Goldhaber, 1997) shows that personal benefit is a complex entity if one relates it to online activities in the World Wide Web.

The likelihood of taking an active part in a community increases with the potential personal benefit that could be gained within that community. This is directly related to the quality of the contents offered. As, e.g., Utz (2000) stated, the likelihood of submitting high quality contributions increases

with the quality and the manifoldness of the existing entries. Appropriate solutions of these quality assurance aspects are rating systems.

A "killer-feature" for such an application generates immediate benefit for a user as soon as he or she contributes to the community, even without anybody else contributing. In addition to such a feature, or even as a partial replacement, one can follow best practices. After analyzing numerous well-working online communities, Kollock (1999) came to the conclusion that there are basically two states of motivation: self-interest (what seems to be the common motivation found) and altruism. Self-interest as a motivational state is linked to expectation of reciprocity: people are willing to help or cooperate with others if they can expect a future quid pro quo.

A widely discussed issue in the context of community building is the so-called public goods dilemma: if people can access public goods without restriction, they tend to benefit from these goods and, therefore, from others' contributions without contributing in the same way. If, on the other hand, most members of a community are led into temptation, the public good will vanish (Kollock & Smith, 1996). The main problem is to keep the balance between the individual and common interest: an individually favorable and reasonable behavior turns out to be harmful for the others, and in the long run, disastrous for the community (Axelrod, 1984; Ostrom, 1990).

Owing to these circumstances, it is not surprising that a great deal of all online community building projects fail, even though much effort has been put into these projects due to the high profit opportunities within the field as, for instance, Hagel and Armstrong (1997) predicted.

## **ONLINE COMMUNITY BUILDING**

Recipe-based fabrication of online communities is, at least, a bold venture if not an illusionary enterprise. Social relationships and group momentum are particularly hard to predict. As Rheingold (2000) explicated, online communities grow organically and tend to follow their own rules. Therefore, controlling efforts always have to be adjusted to the current group context. Nevertheless, some well-approved principles could be derived from findings that were discussed in the last paragraph.

According to Kollock (1999), cooperation within an online community can only be successful if individuals:

1. Can recognize each other, i.e., they are not operating anonymously within the community.
2. Have access to each others interaction history.
3. Share the presumption of a high likelihood of a future encounter within the online community.

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