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Virtual Community Attraction: Why People Hang Out Online

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Abstract

Understanding the attraction of virtual communities is crucial to organizations that want to tap into their enormous information potential. Existing literature theorizes that people join virtual communities to exchange information and/or social support. Theories of broader Internet use have indicated both entertainment and searching for friendship as motivational forces. This exploratory study empirically examines the importance of these reasons in assessing why people come to virtual communities by directly asking virtual community members why they joined.

The responses to the open-ended question "Why did you join?" were categorized based upon the reasons suggested in the literature. Across 27 communities in 5 different broad types, 569 different reasons from 399 people indicated that most sought either friendship or exchange of information, and a markedly lower percent sought social support or recreation. The reasons were significantly dependent on the grouping of the communities into types. In all the community types information exchange was the most popular reason for joining. Thereafter, however, the reason varied depending on community type. Social support was the second most popular reason for members in communities with health/wellness and professional/occupational topics, but friendship was the second most popular reason among members in communities dealing with personal interests/hobbies, pets, or recreation. These findings suggest that virtual community managers should emphasize not only the content but also encourage the friendship and social support aspects as well if they wish to increase the success of their virtual community.

Introduction

Online virtual communities have existed on the Internet for almost a quarter of a century. The Well (http://www.well.com), started in 1985, and Usenet newsgroups, started 1979, are widely regarded as the first virtual communities on the Internet. However, despite the existence of over 100,000 Usenet newsgroups with over 650 million messages (google.com, 2003), only five to ten percent of Internet users go to Usenet (Morochove, 2003). More recently, with the shift from the early static Web pages that appeared in the mid 1990s to highly interactive Web pages that allow communication not only between the site and users but also between users, virtual communities have swiftly appeared on the World Wide Web (WWW). As both the number of WWW virtual community sites and users has expanded and grown quickly, these communities have become a subject of study by both the popular press and MIS researchers (Lee, Vogel, & Limayem, 2003). Community sites are one of the fastest growing categories of Web-sites (Petersen, 1999; Wingfield & Hanrahan, 1999). Estimates of virtual community membership have exceeded 25 million (Gross, 1999) and the Pew Internet & American Life Project reports that 90 million Americans have participated in an online group, with about half of active participants being online for three years or less (Horrigan, Rainie, & Fox, 2001). Supporting this trend, practitioner-oriented organizations have emerged that are devoted to building, fostering, and studying virtual communities.[1] Thus, reasons why users join particular communities have implications for businesses seeking to establish a Web presence and for academics trying to understand user behavior. Understanding virtual communities is also of interest to organizations that want to tap into their enormous information and revenue increasing potential. For example, *Johnson & Johnson* is marketing acne products using online communities of teenage girls (Kenny & Marshall, 2000). A virtual community has even appeared for homeless persons (Horowitz, 1997).

If a better understanding of why people hang out in virtual communities can be achieved, it would be beneficial to organizations that host virtual communities. Despite the fact that virtual communities have existed in some fashion for over 25 years, little scholarly research has empirically addressed the reasons why people join virtual communities or choose to remain a patron of one (Wellman & Gulia, 1999a). Indeed, Wellman (1997) specifically calls for research to examine whether online relationships are based on shared interests, similar social characteristics, or the need for frequent communication. Accordingly, the purpose of this exploratory research is to examine, based on first-hand accounts, why individuals choose to join a virtual community.

Literature Review

Definition of "Virtual Community"

Virtual communities have been characterized as people with shared interests or goals for whom electronic communication is a primary form of interaction (Dennis, Pootheri, & Natarajan, 1998), as groups of people who meet regularly to discuss a subject of interest to all members (Figallo, 1998), and groups of people brought together by shared interests or a geographic bond (Kilsheimer, 1997). Traditionally, the word "community" is likened to a geographic area such as a neighborhood (Wellman & Gulia, 1999b), albeit in this case the "virtual" part of the term "virtual community" indicates without a physical place as a home (Handy, 1995). The term "virtual" itself means that the primary interaction is electronic or enabled by technology. This type of computer-mediated communication (CMC) allows people to locate and talk to others with similar interests, thereby forming and sustaining virtual communities (Hiltz & Wellman, 1997) and creating "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, 1993b, p. 5).

Although the connection to others through the Internet is key to a virtual community, the notion of a community is not applicable to all sites of on-line discourse (Erickson, 1997; Fernback, 1999). Some discussion groups and chat rooms, for example, are just places for people to meet without any sense of permanence or consistency among the members. For example, chat rooms exist that cater to single people looking to meet other single people, each room

having a different mix of people each day, none returning on a regular basis. Such chat rooms, because they lack a regular basis of participation by their patrons, do not qualify as a virtual community (Q. Jones, 1997).

Accordingly, another facet of the definition of a virtual community is the frequency with which its members participate in it. Typically, members become attached to their communities and visit them often (Hiltz & Wellman, 1997), sometimes becoming so dependent upon the community that they can be described as addicted (Hiltz, 1984). Although the literature does not specify what particular visit frequency makes a member an active one, a virtual community is generally understood to consist of persistently interacting members (A. D. Smith, 1999). Likewise, Figallo (1998) suggests that virtual communities are those where members feel part of a larger social group, sense an interwoven web of relationships with other members, have ongoing exchanges with other members of commonly valued things (such as information about a common hobby), and have lasting relationships with others.

Ridings et al. (2002, p. 273) offer a comprehensive definition of the term "virtual community" that embraces the attributes discussed above: "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."[2] It is this definition that is used in this research. Examples of virtual communities are bulletin boards where the same people come, on a regular basis, to discuss common interests such as fighting breast cancer, collecting antique vases, or the issues of owning a Sabre sailboat. Since community membership has not been explicitly defined in the literature and since the typical usage of the term "membership" deals also with members who do not actively contribute to the community but still take part, even silently, in its activities, this research defines a member as anyone who participates in a community by either posting or reading messages regardless of frequency.

Motivations to Join a Group

Research in social psychology has revealed different motivations for individuals to join regular, non-CMC groups. Humans have a need to belong and be affiliated with others (Watson & Johnson, 1972), because groups provide individuals with a source of information and help in achieving goals (Watson & Johnson, 1972), give rewards (Thibaut & Kelley, 1959; Watson & Johnson, 1972), and, according to social identity theory (Hogg, 1996; Tajfel, 1978; Turner, 1978, 1985), people form a social identity of values, attitudes and behavioral intentions from the perceived membership in distinct self-inclusive real or imagined social groups. An individual's self identity typically results from the membership in a preexisting self-inclusive social group, including vocation (Hogg & Terry, 2000) and avocation (Underwood, Bond, & Baer, 2001). These motivations for joining traditional, face-to-face groups can be extended to examine membership in virtual communities.

Information Exchange Aspect of Virtual Communities

Why do people choose to join a virtual community? The most frequently cited reason in the literature is to access information (Furlong, 1989; S. G. Jones, 1995; Wellman et al., 1996), which is also a reason for group membership cited often by social psychologists (Watson & Johnson, 1972). Indeed, there are some reports of CMC site providers who have been directed to use content to attract members by creating virtual communities where patrons can search for product and service information (Hagel & Armstrong, 1997). Virtual communities, providing a subset of the information available on the Internet, are unique in that most of their content is member-generated, as opposed to other Internet information which is typically provided by the site provider. This makes the quality of CMC content an important factor in virtual community success (Filipczak, 1998). It has even been suggested that virtual communities must have compelling content, and that they might fail if they do not having good standards for this content (Sreenivasan, 1997). One way of achieving such compelling context is through member-generated content, and the self-sustaining process it creates: as more members generate more content, the increased content draws more members (Hagel & Armstrong, 1997).

Knowledge and information are, in general, a valuable currency or social resource in virtual communities (Binik, Cantor, Ochs, & Meana, 1997; Hiltz & Wellman, 1997; Rheingold, 1993a; Sproull & Faraj, 1997). What makes virtual communities special in this regard " as compared, for example, with traditional social groups " is the magnitude and impact of "weak ties," i.e., relationships with acquaintances or strangers to obtain useful information through online networks (Constant, Sproull, & Kiesler, 1996). A virtual community can be an ideal place to ask relative strangers about information. Virtual communities tend to focus on very specific topics with relationships among members being mostly

intended for information exchange about specific topics (Baym, 2000; Wellman & Gulia, 1999a). Indeed, virtual community messages tend to express views, provide and request information, express feelings, and suggest solutions (Herring, 1996). Likewise, a Pew Internet and The American Life Project survey studying 1,426 virtual community members found that those involved with entertainment, professional and sports groups focus their activities on obtaining information (Horrigan et al., 2001).

Social Support Exchange

Another reason why people join a virtual community is the social support that the community can provide. Social support is "the degree to which a person's basic social needs are gratified through interaction with others" (Thoits, 1982, p. 147). Social support may also be linked with individual motivation to join groups because of the sense of belonging and affiliation it entails (Watson & Johnson, 1972) and the way it addresses the need for self-identity (Hogg, 1996). House (1981) offers a more specific definition of social support: "a flow of emotional concern, instrumental aid, information, and/or appraisal (information relevant to self-evaluation) between people" (p. 26). Consistent with this definition, many studies suggest that virtual communities are places where people go to find emotional support, sense of belonging, and encouragement, in addition to instrumental aid (Furlong, 1989; Hiltz, 1984; Hiltz & Wellman, 1997; Korenman & Wyatt, 1996; M. A. Smith, 1999; Sproull & Faraj, 1997; Wellman, 1996; Wellman et al., 1996). Indeed, the structure of the Internet, with its searching capabilities and various virtual community forums, makes it easier to find others in similar situations and get emotional support, social support, a sense of belonging and companionship (Wellman & Gulia, 1999a).

In perhaps one of the earliest and most comprehensive studies of virtual communities, Hiltz (1984) presents, in her book *Online Communities*, a detailed account of her 2-year study of seven virtual communities with a total of 213 individuals. These communities of scientific researchers used a CMC system to enhance communication and productivity. Hiltz came to the conclusion that system use was determined by participant motivation and by the social context, rather than by system characteristics. This conclusion was later echoed by Herring's (1996) empirical investigation of gender, ethics, and etiquette in computer-mediated discussions. Herring found that the freedom to express views and to receive social support were the main reasons individuals joined and used virtual communities. Her study of two email distribution lists found that people participated to exchange opinions, beliefs, understandings, and judgments though a social interaction with others, but where the pure exchange of information took on a secondary role. The social support aspects of virtual communities have come up in many other studies. Hiltz and Wellman (1997) suggested that online communities provide emotional support and sociability as well as information and instrumental aid related to shared tasks. Indeed, there is empirical evidence that the Internet is a social setting in which people can exchange useful social support (Mickelson, 1997). Support for this conclusion can also be found in the wealth of websites that specialize in social support. These include virtual communities for recovering alcohol and drug addicts, people suffering from diseases, and those coping with stress from major life changes such as job loss, death of loved ones, or divorce.

Friendship

The research reviewed above shows that information exchange and social support are among the central reasons why people join and then choose to remain in a virtual community. But are these the only reasons? Some research on virtual communities and research dealing with why people use the Internet, in general, suggest that there are possibly other reasons.

Much as people have been found to join face-to-face groups to belong and be with others (Watson & Johnson, 1972), another possible reason why people join virtual communities is to seek friendship. The interactivity achieved with chat rooms, instant messaging, and bulletin boards, and the various search facilities available on the Internet provide a way for individuals to search for and to communicate with others for the purpose of establishing and continuing friendships. The structure of the Internet makes it easier to find others in similar situations and meet with them than it is in real life (Igbaria, 1999; Wellman & Gulia, 1999a), especially when the interest may be highly unusual or unique. It has been suggested that some people whose jobs are lonely and isolated seek others in virtual communities not only to exchange opinions and request advice about problems, but also just generally to engage in small-talk with people around the world (Filipczak, 1998; Lowes, 1997; Wellman, 1997). In Baym's (2000) ethnographic study of a Usenet newsgroup discussing soap operas, she found that people were initially drawn to the wealth of information on the topic, but friendliness also emerged strongly in the community.

Friendships in virtual communities can provide additional benefits beyond that of information exchange and social support. The feeling of being together and being a member of a group of friends comes with the notions of being part of a group, spending time together, companionship, socializing, and networking. Friendship in this context is about the value of being together, unlike social support that deals with seeking emotional help or helping others. While friendships may also provide information and social support, seeking these exchanges does not necessarily indicate the desire for friendship. For example, a lawyer could be a member of a virtual community solely for information exchange regarding her profession, and she could have no interest in cultivating friendships in the virtual community. Likewise, a recently widowed husband could look to a virtual community for social support in dealing with the loss of his wife, but, again, without the intention of forming friendships.

Research shows that people use the Internet to contact others with similar interests simply for the purpose of making friends and "hanging out" together (Parks & Floyd, 1995; Rosson, 1999). Indeed, Rheingold (1993a) suggests that this may apply to virtual communities too. An empirical study by Wasko and Faraj (2000) found that the community interest was the primary motivating factor for participation in three technically oriented newsgroups. Although their study focused narrowly on knowledge exchange in virtual communities among practitioners, they did find that participation is due also to pro-social behaviors. Another empirical study by Utz (2000) in a specific type of virtual community called a Multi-User Dungeon (MUD) examined why individuals play and develop friendships in MUDs. Utz (2000) found that people form friendships in MUDs and that, interestingly, those who did not have friendships spent less time in the virtual community. Friendship development in MUDs seems to be a secondary motivation for joining, although it is unclear if this is true in other types of virtual communities. Establishing friendships and personal relationships through a virtual community is a major reason people join online groups (Horrigan et al., 2001) , as noted also by the popular press (Saranow & Hayward, 2003).

Recreation

Another reason people participate in virtual communities is the recreation they provide. The use of the Internet in general has been touted in both the popular press and scholarly research as a relatively new form of recreation similar to that of watching TV (Jackson, 1999). Arguably, the entertainment value of the Internet applies to virtual communities as well. A good example of this are adventure MUDs, a type of virtual community in which users play games with other community members (Reid, 1999; Utz, 2000). Virtual community participants have been found to believe that the communities are fun and enjoyable (Wasko & Faraj, 2000), and Utz (2000) proposes that the primary motivation for individuals in MUDs is an interest in recreational role-playing and game playing.

Methodology

Bulletin Board Communities

While several types of technologies exist that support virtual community communication, this research focused specifically on communities that interact using bulletin board technology. In this medium a member can post a message for anyone in the community (and sometimes anyone in the general public) to see, much like the physical bulletin board after which this medium is named. Bulletin boards and newsgroups are different from other technologies, such as email distribution lists, in that members must actively choose to go to the community to review messages, as opposed to passively receiving them in their email inbox.

Communities that use bulletin boards or newsgroups offer a unique characteristic in that one can observe the community interaction without explicitly registering to join it. In addition, the conversation in the community is preserved. Some virtual communities keep the conversations for weeks or months, others indefinitely, allowing potential members to review the community interaction before joining. This condition affords the researcher an opportunity to observe a community before deciding to include it in a study. Bulletin board communities also have the potential of having more members than synchronous communities. Only a finite number of people can communicate in a chat room at one time before it becomes too crowded and the conversation unmanageable. However, hundreds of people can easily participate in the different threads of a bulletin board community. Given these characteristics, the data gathering for this research study was conducted in bulletin board communities.

Virtual Community Sample Selection

The population of interest of this study is the population of Internet virtual community bulletin board members. Because there is no universal global list of such communities, and therefore random sampling from a list of all the virtual communities is impossible, a convenience sample was employed, as has been done by other researchers (e.g., Parks & Floyd, 1995; Preece & Ghozati, 1998; Ridings, Gefen, & Arinze, 2002). In accordance with previous research (e.g., Q. Jones, 1997; Liu, 1999; Witmer & Katzman, 1998), the study included only active communities with a minimum traffic volume, a minimum number of different users posting, and a high proportion of messages with responses. This was necessary in order to exclude inactive communities and communities where the communication might be mostly announcements and news postings. Both Q. Jones (1997) and Liu (1999) call for examination of member stability and traffic volume when examining a virtual community. Thus the following specific criteria, proposed by Ridings et al. (2002), was used in order to determine if a bulletin board was a virtual community qualified to be included in this research:

1. The bulletin board must have at least 10 postings per day over a randomly selected three-day period.
2. The bulletin board must have at least 15 different individuals posting over a randomly selected three-day period.
3. At least 80% of postings must have at least one reply over a randomly selected three-day period.

These criteria were chosen to make sure that the bulletin board represented a large group of people who were actively communicating with one another.

Rather than study the members in just one particular community that might have its own biases, this research sought respondents from a variety of communities that had different types of topics. The researchers were not members of the communities and were essentially interrupting their conversation to ask for survey participation, making the communities' reception of the researchers uncertain. Therefore it was decided to expand the survey beyond one bulletin board in case of a low or hostile response and in an attempt to address the generalizability of the results. Popular Web search engines such as Yahoo, Excite, and Google were used to identify bulletin boards. Generic search terms such as "boards", "communities", "discussions", and "forums" were used in the search engines. Very often the search results pointed to a listing of bulletin boards on a host site. For example, the ParentsPlace.com site has a bulletin board listing of over 500 boards. When a listing was encountered, a random number generator was used in order to pick one or more boards from the listing. Then the board was checked against the criteria. Ultimately, 33 bulletin-board type communities addressing different topics met all criteria and were chosen for this study, and usable results were received from 27 communities (see Table 1). There is no commonly accepted categorization scheme for virtual community topics. Loosely following the categorization proposed by Preece & Ghozati (1998), the community topics were put into the five broad categories of heath/wellness, personal interests (hobbies), pets, professional/occupational, and sport recreation.

Code	Community Topic	Web Site URL	# Respondents (% of total)		# Reasons for Joining (% of total)	
BACKPAIN	Back pain	http://boards.webmd.com/roundtable_topic/42	14	(3.5%)	16	(2.8%)
CANCER	Cancer support	http://boards.webmd.com/roundtable_topic/115	6	(1.5%)	8	(1.4%)
DOWN	Down's Syndrome children	http://boards.parentsplace.com/messages/get/ppdownsyndrome1.html	7	(1.8%)	8	(1.4%)
PP	Conceiving a child	http://boards.parentsplace.com/messages/get/pptrying3.html	15	(3.8%)	42	(7.4%)
SOLOS	Surviving a loved one's suicide	http://www.1000deaths.com/board-portal.html	7	(1.8%)	10	(1.8%)
		TOTAL FOR HEALTH/WELLNESS COMMUNITIES (n=5)	**49**	**(12.3%)**	**84**	**(14.8%)**
BROADWAY	New York City Broadway plays	http://www.broadway.com/ft/frameCategories.cfm?catid=2 (This site has discontinued the use of message boards since data collection)	9	(2.3%)	16	(2.8%)

CLARINET	Musical instrument clarinet	http://www.woodwind.org/clarinet/BBoard/list.html?f=1	51	(12.8%)	56	(9.8%)
LORDRINGS	Lord of the Rings books/movies	http://forums.fanhq.com/viewforum.php?f=1	12	(3.0%)	18	(3.2%)
NASCAR	Nascar racing	http://boards.nascar.com/	17	(4.3%)	17	(3.0%)
PEARLJAM	Musical group Pearl Jam	http://bbs.sonymusic.com/wwwthreads.pl?action=list&Board=Jam (This site has discontinued the use of message boards since data collection)	19	(4.8%)	26	(4.6%)
WINE	Wine	http://www.myspeakerscorner.com/forum/index.phtml?fn=1	25	(6.3%)	29	(5.1%)
		TOTAL FOR PERSONAL INTEREST COMMUNITIES (n=6)	**133**	**(33.3%)**	**162**	**(28.4%)**
ACMEPET	Pets in general	http://www.acmepet.com/club/bboard/ (This site has discontinued the use of message boards since data collection)	6	(1.5%)	12	(2.1%)
AQUAR	Freshwater aquaria	http://community.compuserve.com/n/pfx/forum.aspx?webtag=ws-fishnet	7	(1.8%)	7	(1.2%)
BEST	Health and behavior of pets	http://65.205.160.196/idealbb/forum.asp?forumID=12	8	(2.0%)	11	(1.9%)
DOG	Dogs as pets	http://www.dogomania.com/forum/index.php	17	(4.3%)	21	(3.7%)
		TOTAL FOR PET COMMUNITIES (n=4)	**38**	**(9.5%)**	**51**	**(9.0%)**
CISCO	Cisco systems cerifications	http://forum.cisco.com/eforum/servlet/NetProf?page=netprof	6	(1.5%)	6	(1.1%)
FINANCE	Finance careers	http://forums.finance.monster.com/forum.asp?forum=1290	7	(1.8%)	7	(1.2%)
JAVA	Programming in Java	http://forum.java.sun.com/forum.jsp?forum=361	6	(1.5%)	8	(1.4%)
NURSE	Nursing careers	http://allnurses.com/forums/forumdisplay.php?&forumid=8	27	(6.8%)	44	(7.7%)
PHD	Ph.D. dissertations	http://www.phinished.org/phin.cgi	13	(3.3%)	13	(2.3%)
TECH	Technology careers	http://forums.technology.monster.com/forum.asp?forum=111	17	(4.3%)	25	(4.4%)
		TOTAL FOR PROFESSIONAL COMMUNITIES (n=6)	**76**	**(19.0%)**	**103**	**(18.1%)**
BACKPACK	Wilderness travel on foot	http://forums.backpacker.com/	24	(6.0%)	33	(5.8%)
BIKE	Biking while on vacation	http://thorntree.lonelyplanet.com/categories.cfm?catid=32	9	(2.3%)	9	(1.6%)
BOW	Traditional Bow Hunters	http://www.bowsite.com/bowsite/tf/lw/threadsx2.CFM?category=9	26	(6.5%)	45	(7.9%)
FISH	Saltwater Surf Fishing	http://www.wmi.org/saltfish/saltboard/surf_fishing/index.html	23	(5.8%)	52	(9.1%)
RUNNER	Marathon running	http://forums.runnersworld.com/forum.jspa?forumID=4	8	(2.0%)	14	(2.5%)
SNOW	Snowmobiling	http://ultimatesnowmobiler.com/forums/index.php?showforum=2	13	(3.3%)	16	(2.8%)
		TOTAL FOR SPORT RECREATION COMMUNITIES (n=6)	**103**	**(25.8%)**	**169**	**(29.7%)**
		GRAND TOTALS (n=27 COMMUNITIES)	**399**		**569**	

Table 1. Virtual communities surveyed

Data Collection

An open-ended question approach was chosen in order to ensure the capture of unbiased information from virtual community members with all the semantic richness that typically comes with unconstrained answers to this type of question. The open-ended question "Why did you join this virtual community?" was posted on each of the bulletin boards inviting anyone to respond either directly on the board, through survey web page (the URL of the survey was

provided), or privately in email to the researchers. The subject heading of the post was generally "Need help with survey." Although previous studies (Maignan & Lukas, 1997) have directly interviewed users about perceptions and use of the Internet in general, few studies have been conducted that directly asked members why they join virtual communities. Wasko and Faraj (2000) explored reasons why people participate in Usenet newsgroups, but their study was confined to technical groups discussing programming languages. Due to the previously mentioned factors regarding the uncertainty about the responsiveness of virtual community members and the need to capture unbiased data, and also to increase the response rate to the one question survey, the researchers decided to only post the one question and not gather any additional demographic data. It was felt that the members might be more likely to respond to a quick one-question survey with regard to both survey length and issues of invasion of privacy since the researchers were strangers in the communities.

While research has found that active participants offline are also likely to be active online (Matei & Ball-Rokeach, 2001), we allowed for the inclusion of participants at all levels of activity, including lurkers. The Internet context is unique in that it provides a way for an individual to observe and learn from a group without the group even knowing that the individual is present. Indeed, individuals can visit virtual communities regularly and know the people in the community well, but never contribute to the conversation. This is termed "lurking." Lurking is generally known as visiting a community on a regular basis but not posting or posting very infrequently (Nonnecke & Preece, 2000). It is important to note that lurkers may not necessarily visit the community less or know it less well, but simply post less often. Lurking is usually not a negative behavior, but seems to be an acceptable and expected part of a virtual community. It is not uncommon to see a message with the poster declaring that he is "delurking." "unlurking," or "has been lurking for a while" (Baym, 2000). The implication behind such postings is that the individual still considers himself or herself a lurker after posting in the community. Clearly, posting frequency seems to be the key factor in the determination of lurker status. There is speculation that lurkers make up a large majority of visitors to virtual communities (Baym, 2000), perhaps over 90% of people visiting online groups (Nonnecke & Preece, 2000). While the inclusion of lurkers as members of virtual communities is debatable by some (Liu, 1999), arguably lurkers are members, albeit silent ones, in virtual communities (Nonnecke & Preece, 2000) and as such should be of interest to companies and to researchers. Moreover, lurkers must actively navigate to the URL and occasionally even login to this type of a virtual community to obtain access to it. In doing so, even a lurker becomes an active, albeit silent, participant. Moreover, research indicates that even silent members are affected by their group membership (Gefen & Ridings, 2003; Hogg & Terry, 2000; Tajfel, 1978). In Baym's (2000) research, a lurker indicated that she thought of the others in the community as friends even though she had never posted. Therefore, it is recognized that lurkers could have responded to the survey question, and were considered part of the virtual community for this research.

Survey Response

After dropping communities that had five or less respondents, a total of 399 people from 27 communities responded to the open-ended question within five days. The unit of analysis was a distinct motivation given by a member for joining the community. Because the data was collected with an open-ended question, we allowed for each respondent to give multiple motivations. Thus the entire text of a respondent's answer was broken up into distinct motivations. Most often these corresponded to distinct phrases or sentences within the text of their answer. Phrases that appeared to be similar were grouped together for each respondent. For example, if Respondent A began with a motivation regarding meeting new people, then wrote about finding information on a subject, but ended his response again with words regarding meeting new friends, Respondent A would be coded as having two motivations. The first and last parts of the response were grouped together for a single distinct motivation and then the middle part of the response would be the second distinct motivation. This coding procedure avoided counting a distinct motivation multiple times per each respondent and perhaps biasing the results in favor of the more loquacious writers. By categorizing each distinct motivation of each member, a total of 569 reasons were obtained from the 399 respondents. The number of respondents and the reasons for joining from each community are shown in Table 1.

Data Analysis

Based on the literature review, *a priori* to the data collection procedure four initial categories of reasons why individuals might choose to join a virtual community were developed (see Table 2). Two judges categorized the responses into the categories given in Table 2. Additionally, the judges were permitted to choose another category of "other" if they felt the response did not fit into one of the given categories. The judges worked independently of each another. After categorization the reasons put into the "other" category were examined. The judges agreed that there were enough common themes to develop two additional categories termed "common interest" and "technical reasons." The common interest category was included because some respondents professed a love of the topic of the virtual community but did not expressly indicate a desire to talk about the topic with others (friendship) or exchange information about it. In addition, several respondents mentioned specific technical aspects of the community that motivated them to join, so the "technical reasons" category was included.

Category	Description	Examples
Exchange Information	Obtain and transfer information about a topic, educate about a topic, learn new things.	To get new ideas.
		To learn about new things.
		To find out how to better grow flowers in my garden.
		To learn about new technologies for my business
		To share my knowledge of woodworking with others.
		To share my successes and failures with home-schooling with others
Social Support	Obtain and give emotional support.	A way for me to express my anger to others who will sympathize with me.
		To talk out my problems and get advice.
		I can easily let out my emotions here and others will understand.
		To support others going through a rough time.
		To let others know that I have gone through it too.
Friendship	To make friends	To "hang out" with people I enjoy.
		To socialize.
		To talk with people with the same interests and values.
		To chat with people with similar interests.
		To find others like me.
Recreation	For entertainment	Because it is fun.
		I enjoy reading and posting in the community.
Common Interest	Love of the topic of the community	I like talking about baseball
		Because I love woodworking is my true love
Technical Reasons	Technical features in the community	The interface is easy to use
		The search function is really cool.

Table 2. Category descriptions

The judges' categorizations agreed on 516 cases (90.7%). An inter-judge contingency table showing the classifications for each judge is presented in Table 3. Sample responses for each category can be found in the Appendix. Inter-judge reliability, Cohen's Kappa (Cohen, 1960),[3] was .868, significant at p<.000.

		Judge 1							
		Common		Info			Social	Technical	

	Category	Common Interest	Friendship	Info. Exchg	Other	Recreation	Support Exchg	Technical Reasons	Total
Judge 2	Common Interest	9							9
	Friendship	1	124	1	2	3			131
	Information Exchg	1		257	2	1			261
	Other	11	13	5	16		5		50
	Recreation			2	2	45		1	50
	Social Support Exchg		2	1			56		59
	Technical Reasons							9	9
	Total	22	139	266	22	49	61	10	569

Table 3. Inter-judge contingency table

Diagonal cells represent agreement between the judges; off-diagonal cells represents a disagreement among judges; for example, observations in this cell are ones that were coded into the Friendship classification by Judge 2, but into the Common Interest classification by Judge 1.

For reasons classified the same for both judges (n=516), 257 reasons (49.8%) indicated information exchange, 124 reasons (24.0%) indicated friendship, 56 reasons (10.9%) indicated social support exchange, 45 reasons (8.7%) indicated recreation, 9 reasons each (1.7%) indicated technical reasons or common interest, and 16 reasons (3.1%) were put into the other category. Examples (including original misspellings, punctuation and grammar errors, etc.) of these types of "other" responses include:

"I got on to try to sell some used equipment, and this was a place I knew fishermen frequented."

"The lock of visual contact also eradicates any reluctancy to be open. It also eliminates some of the human complexities that can be associated with a face-to-face encounter."

"also because some times its easier to write things down than to say them."

Some of the respondents joined solely for information exchange:

"Knowledge is power!! Then again, the bass probably don't care if the clam was baited by a web surfer. It helps though, I've learned a lot."

"I'm a 30 year old single mother in the process of having a homestudy completed and I'm hoping to adopt a child with Down syndrome and want to learn as much as I can about the day-to-day "stuff" involved with parenting a child with Down syndrome. What better place to go?"

"The reason that I personally use the Leather Wall is to gain information, assistance, and insight from others with an interest in Traditional archery."

Others joined for social support:

"I joined for the support of families who are in the same situation as I am..... People who don't deal with the same disability only understand so far"

"To me, this is a place I can visit, express the loss I feel, know that I am not alone, and if possible help others that are now the victims of suicide."

Other responses went beyond the desire to exchange information and social support. Many of these responses explicitly mentioned friendship:

"These 2 boards are responsible for many of my closest friends. Some say that couldn't be possible, but it is. I have traveled all over the U.S. in the last 4 years hunting, shooting and just meeting my cyber friends and i can tell you that there is somthing magical about these boards. I have had friends that have opened their homes to me without any hesitation and call me friend. I also have friends that I have never met but trust them unconditionally.....it's magic."

"I joined the board to make friends who are experiencing the same emotions that I am."

Reasons that mentioned technical features of the communities included:

"Broadway.com has an easy interface.."

"Its slower than a chat room."

"By posting my tasting notes there I have a searchable database of my own notes without having to keep track myself."

Reasons that were classified by both judges as "common interest" included the following examples:

"Student of the clarinet"

"It's all about dogs!"

"love of pearl jam"

"I love Broadway!"

Finally, some people seemed to join virtual communities for entertainment:

"I also look forward to stealing some time from each day to glance at the boards and read or exchange some messages--it gives me a little (justifiable) time of my own for quick and non-prepared fun, on the run."

"I feel it's just another form of entertainment. Me. I'm still a child at heart who like to play. This is just a new toy."

	Category							Total	Percentage
Community	Common Interest	Friendship	Info. Exchg	Other	Recreation	Social Support Exchg	Technical Reasons		
ACMEPET		3	6		1	1		11	2.1%
AQUAR			6		1			7	1.4%
BACKPACK	1	6	20	1	2			30	5.8%
BACKPAIN		1	8			5		14	2.7%
BEST		1	4		2	1	1	9	1.7%
BIKE			8					8	1.6%
BOW		23	15		2	2		42	8.1%
BROADWAY		4	6		1		1	12	2.3%
CANCER			2		2	2		6	1.2%
CISCO	1		5					6	1.2%
CLARINET	1	7	35	3	4		2	52	10.1%
DOG		4	10	1	1		2	18	3.5%
DOWN		2	3			3		8	1.6%
FINANCE			5			2		7	1.4%
FISH	2	12	19	3	10			46	8.9%
JAVA		1	6	1				8	1.6%
LORDRINGS		9	5		1			15	2.9%
NASCAR		4	8		4			16	3.1%
NURSE		8	19		6	7		40	7.8%
PEARLJAM		8	10	1	3			22	4.3%
PHD		1	3		1	8		13	2.5%
PP		7	15	2	1	14		39	7.6%
RUNNER		6	6			2		14	2.7%
SNOW		8	6					14	2.7%
SOLOS		3	1			5		9	1.7%
TECH		1	13	2	3	4		23	4.5%
WINE	4	5	13	2			3	27	5.2%
Total	9	124	257	16	45	56	9	516	
Percentage	1.7%	24.0%	49.8%	3.1%	8.7%	10.9%	1.7%		

Table 4: Cross-tabulation: Community by Category of Joining
Note: only the responses for which the judges agreed upon (n=516) are included above

	Category							Total	Percentage
						Social			

Community Classification	Common Interest	Friendship	Info. Exchg	Other	Recreation	Social Support Exchg	Technical Reasons		
HEALTH		13	29	2	3	29		76	14.7%
INTEREST	5	37	77	6	13		6	144	27.9%
PETS		8	26	1	5	2	3	45	8.7%
PROFESSIONAL	1	11	51	3	10	21		97	18.8%
RECREATION	3	55	74	4	14	4		154	29.8%
Total	9	124	257	16	45	56	9	516	
Percentage	1.7%	24.0%	49.8%	3.1%	8.7%	10.9%	1.7%		

Table 5. Cross-tabulation: Community classification by category of joining
Note: only the responses for which the judges agreed upon (n=516) are included above

Not surprisingly, the reasons for joining a virtual community did seem to be linked to the type of community (see Tables 4 and 5). This was verified with a Chi-square test (χ^2_{24} = 129.125, p-value < .001). However, a closer look revealed that the five types of communities above can be regrouped into two overall categories with comparable reasons in each overall category: Health and Professional on the one hand (χ^2_5 = 10.065, p-value = .073) and Interest, Pets, and Recreation on the other (χ^2_{12} = 16.096, p-value < .187). Information exchange was cited most often with friendship being the second most popular reason for the Interest, Pets, and Recreation communities. Since these types of communities are typically centered on an individual's freely chosen interest (whether it be a hobby, pet, or personal sport), it is natural that information and friendship should be sought in these contexts. Individuals in communities centered around the more serious, and sometimes not so voluntary, life matters of Health and Professional issues also sought information but members in these virtual communities cited social support as the second most popular reason. The context of a health problem or a discussion of one's profession may necessitate more of a need for social support.

Discussion

Social psychology has found that people join groups in general for both feelings of affiliation and belonging as well as for information and aid in goal achievement. Inclusion in face-to-face groups gives individuals information as well as self-identity, values, attitudes, and notions of accepted behaviors. For similar reasons, people also seek to join groups of others in the online environment of virtual communities. The research data here suggest that people visit virtual communities because of the opportunities it creates to exchange information. Depending on the overall category of the virtual community, social support or friendships are also popular reasons for joining a virtual community. Brought into perspective of society at large, the frequency of each of these categories is intriguing, especially with regard to friendship.

Previous literature examining virtual community use posited reasons for joining based upon anecdotal evidence or the case study of only a few communities or in the context of only one proposed reason (e.g., Baym, 2000; Herring, 1996; Hiltz, 1984; Utz, 2000; Wasko, 2000). This research sought to examine all possible reasons for joining, pulling from both those suggested in the virtual community context as well as general Internet use in a larger sample of communities from the often used WWW, providing a broader theoretical base applied to larger scale empirical study.

The conclusions drawn in this study should be taken with a measure of caution because the response rate among the members of the surveyed communities could not be calculated. It is impossible to know how many people viewed the heading of the post requesting participation, and how many of these actually opened the post requesting participation to read the survey question. Moreover, very few communities give statistics about the size of their membership. Therefore, the notion of traditional response rate calculation is impossible to apply to this research and non-response bias cannot be assessed.

Implications

Membership in conventional face-to-face types of communities, such as bowling leagues, neighborhood picnics, church groups, etc., has fallen rapidly over the last 25 years (Putnam, 2000). On the other hand, the last few years have seen a tremendous sustained growth in virtual community membership. The results of this study present an interesting perspective on these tendencies. While caution is clearly needed in extrapolating from this exploratory study, the results suggest that virtual communities may be filling in the social void in conventional communities. The data show that a main reason why people join a specific virtual community is for information exchange arguably one of the primary reasons people go online and the original reason for which the Internet was created. However, people also sought friendship and social support in virtual communities. Interestingly, the frequency of friendship and social support together made up over one-third of the reasons. Does this suggest that the people are turning the Internet into a social entity, beyond its original informational purposes? The data tentatively, to be sure, suggest so. This is perhaps the major contribution of the study, showing that virtual communities, like real ones, are joined not only because of utilitarian information exchange, but also because they serve the social need of having a friend and getting social support.

Viewed in this manner, some practical recommendations for virtual community managers can be suggested, which could help organizations promote better customer relationships and C2C (consumer to consumer) interaction. However, in order to sponsor virtual communities, these organizations should consider that patrons of virtual communities are motivated primarily not only for information but also because of the friendship and social support these virtual communities can entail, depending, so it seems, on the whether the overall objective of the community is centered on members freely chosen topics of interest or whether it is centered on topics of importance beyond their free choice, such as health and vocation. The qualitative data provides initial tentative verification of this process.

There are several things a sponsor might do in the construction and maintenance of a virtual community to enhance the information exchange of its members. These might include advanced searching capabilities for locating specific threads of interest, ancillary links to non-member-generated material related to the community topic, and the use of experts in a particular area to interact with community members on either a periodic or ongoing basis. Such mundane items as the naming of the bulletin board could aid members in finding the appropriate place their posting and therefore exchange information more efficiently, especially when a community can be made up of tens or hundreds of individual bulletin boards. These suggestions would specifically facilitate the desire of members to exchange information.

While providing information is clearly an important aspect of maintaining a vibrant virtual community, so too is broadcasting social aspects through it, although caution is called for because of the exploratory and thus tentative nature of the conclusions drawn in this study. But, if this is the case, then companies administering virtual communities might find it beneficial to construct their site to ease the development of friendship and social support among their patrons, depending on this overall categorization, might also benefit virtual community sponsors. Indeed, one patron mentioned that he liked the format of the particular community because he could see who responded to each post, and the simple fact of who responded told him a lot about the post. He also mentioned other communities he did not like as much because they were not constructed in this way. If this can be generalized, the display of the messages and replies, including the ID of the poster, could be important in building connections among members connections that could lead to friendship. It would allow members to more easily identify conversations among their friends in the community. Other features of the community such as the ability to search for all posts by a particular member or access to member profiles could aid in friendship building.

Additional Research

Survey research in virtual communities is, by necessity, highly selective. Consequently, the findings of this study should be further tested on a larger sample of virtual community members from a wide variety of virtual communities. Moreover, additional types of communities should be examined, as the data suggest that the motivation for joining is linked to the overall category of the community (such as those based on a hobby versus a health issue), more research could validate the results of this study. Beyond establishing a comprehensive inventory for the motivations to use a community, future research could explore the relationships between motivation to visit and behavior in the community (posting frequency, flaming, post length) and demographics (gender, age, education). A deeper understanding of the motivations to use and behavior in virtual communities will allow organizations

who intend to sponsor them, advertise in them, or mine the data in them to construct and monitor them more effectively.

Epilogue

People are first and foremost social creatures. Friendships and socials support are a central part of human life and interaction with others. The exploratory results of this study suggest the same is true even in a medium that is designed for information exchange and that is devoid of the face-to-face social characteristics of most human communities. Even in such an information-centered medium friendship apparently is a crucial bond, keeping patrons in communities.

Footnotes

1. Examples include http://www.onlinecommunityreport.com, http://www.infonortics.com/vc/, http://www.rheingold.com/Associates/index.html, and http://www.peoplelink.com.

2. The common location could be a listserv email group, a bulletin board, a chat room, or a Multi-User Domain (MUDs). All of these technologies provide a single "place" on the Internet that brings together people and facilitates their communication.

3.Kappa is a function of agreement levels between judges, recommended for such purposes (Umesh, Peterson, & Sauber, 1989). The accepted threshold of Cohen's Kappa is 0.70 (Bowers & Courtright, 1984; Landis & Koch, 1977; Miles & Huberman, 1994). Kappa was designed specifically as a measure of agreement between 2 judges, where ratings are categorical, and where a correction for chance agreement is made (Cohen, 1960). The statistic Kappa has gained wide acceptance as a measure of agreement between ratings (Perreault & Leigh, 1989) when two or more judges rate each of a sample of responses on a nominal scale.

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Appendices

(Note: responses have been edited to remove signatures, salutations, and any other identifying information in order to preserve the confidentiality of the respondents; responses are reproduced exactly including misspellings, punctuation, grammatical errors, etc.)

Community	Response
AQUAR	To get advise on my aquariums/ fish.
FISH	♦ the virtual community allows people to exchange ideas, old or new, through a polite (usually), and easy medium. It allows people to think out their questions, view answers to questions they never thought about but are interested in, and test out new ideas, or what they thought were new. It also serves as a medium for information that is difficult to obtain by merging the thoughts of people across the world and obtaining information that is key to fishing local areas.
PP	Then I started to read the postings and could not believe the wealth of information that I learned
DOWN	I'm a 30 year old single mother in the process of having a homestudy completed and I'm hoping to adopt a child with Down syndrome and want to learn as much as I can about the day-to-day "stuff involved with parenting a child with Down syndrome. What better place to go?
BACKPACK	Education about backpacking equipment. Gear ideas and share with friends in the industry.
	I have been frequenting the Leather Wall for about two years. For me, there are two very important aspects to the LW. 1: Is the availability of information. I probably would not go to a VC that is oriented around a Chevy Lumina for example, I could simply go to a dealer or

BOW	ask a friend or two about them and get the desired information. With traditional archery, however, that is not possible. I know only two people in my area that use traditional gear. So if I have a question or need an opinion about something I won't be able to get many DIFFERENT answers. On the LW there are many people with many different experiences which of course makes for a diverse group of people with various answers for the same question. relationship.

Appendix 1. Example responses coded by both judges as exchange of social support

Community	Response
BOW	ther are a lot of people here that I can call friends.. This forum has opened up the bounderies of geographics and allowed many people here to share a common interest.. Traditional Archery.. Freindships made, gatherings organized(GORH) for example) the list can go on.
FISH	It's nice to have a fraternity [and sorority for and the lady from texas] of fun knowledgeable, and generous people. to bring on a smile after a long day at work and to commiserate in the winter doldrums.
PP	I joined the board to make friends who are experiencing the same emotions that I am.
PEARLJAM	I'm a huge Pearl Jam fan and it's a nice way to get together with other huge Pearl Jam fans.
WINE	shared interest, meeting like minded people
SNOW	All for the people. The people on this board (www.snowseekers.net) are usually pretty unbiased, and very little below the belt comments on here. Most of these guys I've known for 5+ years through other boards
DOWN	i love it! i am sure people hook up and might find a real friend on here!!!

Appendix 2. Example responses coded by both judges as friendship

Community	Response
PP	I also look forward to stealing some time from each day to glance at the boards and read or exchange some messages--it gives me a little (justifiable) time of my own for quick and non-prepared fun, on the run.
FISH	Furthermore, with how much school has taking up my time, I get to live my hobby through some of the stories you all share.
LORDRING	originally curiousity with lotr and the boards dedicated to that topic and boredom at home(my husband began a night shift and i hate tv-nothing on.)
CLARINET	Also can be amusing at times.
BOW	I find it relaxing to log on and post my opinion and read some humorous posts in the evenings
FISH	I feel it's just another form of entertainment. Me. I'm still a child at heart who like to play. This is just a new toy.

Appendix 3. Example responses coded by both judges as recreation

Community	Response
WINE	'It's a wine bulletin board; I'm interested in wine.
BIKE	It covers a subject that i'm actively interesting in, of course.
CLARINET	'I play clarinet

Appendix 4. Example responses coded by both judges as common interest

Community	Response
FISH	To a lesser degree, people use these boards as a personal cimmunication tool...while being much slower than other forms of contact, the board does allow direct contact with people from all over...kinda like public e-mail...where all the questions and answers are in plain view.

JAVA	Promote my websites.
DOG	I only read, as I don't personally own a computer to provide the E-mail address.
PP	intrigued by the ivillage.com ad on television about being the numberone network for women
WINE	'best wine board on the web

Appendix 5. Example responses coded by both judges as other