

# Virtual Communities as Challenges to Real Companies

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## Abstract

The Internet is considered as enabling technology that allows companies to create and nurture business-related online communities. Such "communities of commerce" are expected to be a key element in gaining and sustaining customer loyalty in the age of the Internet. In this paper, we argue that not only the creation of new online communities but also the appropriate treatment of already existing online communities is increasingly important. By example of an existing online community situated in the global conferencing system Usenet News, we outline that online communities may disseminate significant amounts of information about companies, their products, their bright sides, and their dark spots. Dissemination of such information may be supportive to companies but may harm companies and their reputations as well. An investigation of the Web sites of two multi-national corporations suggest that these corporations are not yet prepared to communicate with online communities. Finally, we outline ways to establish communication to the mutual benefit of companies and communities.

Keywords: online communities, online communication, information management

## 1. Introduction

The importance of the Internet as communication medium has increased significantly over the past few years and so has the commercial interest in online communities. The Internet is considered the enabling technology that allows companies to create and nurture business-related online communities (also referred to as communities of commerce (Bressler and Grantham, 2000)) which are expected to be a key element in gaining and sustaining customer loyalty in the Internet age. Frequently mentioned examples for this particular type of online community are the communities that have formed around Amazon.com's virtual bookstore and eBay's virtual market place.

However, the Internet has not only enabled the creation and nurturing of businessrelated online communities. Rather, the Internet and related electronic communication channels, such as the global conferencing Usenet News, have enabled the establishment of a huge variety of online communities that may pursue quite different interests. Such business-independent communities are difficult to address for companies and ways to influence such communities are limited. Moreover, it is tempting to underestimate the power of such communities as they may be relatively small in terms of members. Nevertheless, such communities may strongly effect a company's reputation due to rapid dissemination and wide distribution of information. This means that online communities may be beneficial to companies they like by conveying a positive image but they also may be detrimental by spreading information that contributes to a negative (or more realistic) image.

In this paper, we focus on an online community that discusses popular fast food products and

we show that this community is an environment in which effective information sharing happens. For example, community members point out that certain fast food restaurants ignore internal quality standards when serving overdue food to customers and community members also provide the knowledge how to find out whether food served is freshly made or overdue. Despite these potentially threatening discussions, however, the community members share a rather positive attitude towards the products they discuss.

Considering the growing importance of online communication, we argue that companies, such as the fast food company discussed in this particular community, should be prepared to communicate with online communities. An informal investigation of related company Web sites, however, indicates that these companies are not yet prepared. A brief discussion of ways to establish communication channels suggests that much work has to be done in this area.

## **2. The Power of Online Communication**

The speed of information dissemination in the age of the Internet has been demonstrated by computer viruses, such as the "Melissa" virus or the more recent "Love Letter" virus, infecting computers all over the world within a few hours. At the same speed, information, rumors, gossip, urban legends, and purposely false information may be disseminated.

Ulfelder (1997) reports how the designer Hilfiger was the victim of a threatening urban legend. The legend goes that Hilfiger appeared on the Oprah Winfrey Show and made racist comments about several groups, after which he was tossed off the set by Winfrey. In fact, Hilfiger has never appeared on or taped an episode of Winfrey's show but the legend spread so rapidly and generated so much controversy among customers and potential customers that the company was forced to respond on the net.

The potential power of relatively small communities has been demonstrated when a small group of European artists, etoy, forced the big e-commerce player eToys to its knees when the company tried to grab the group's domain name etoy.com (TOYWAR, 1999). Recently, even one of the world's largest media corporations, AOL Time Warner, has been forced to back pedal when confronted by online communities (Riley, 2001). AOL Time Warner is the parent company of Warner Bros which is shooting the hyped "Harry Potter" film. The company tried to shut down Harry Potter fan Web sites when launching its own Harry Potter promotional Web site. As a consequence, one of the fan Web site owners formed a project called "Defense Against the Dark Arts" which is threatening a world-wide merchandise boycott. AOL Time Warner's reaction was to issue a contrite statement, admitting that it may have been over-zealous with its letters and offered to talk to Potter fans about their fan Web sites (Riley, 2001).

A related problem is that communication is no longer limited to their specific social contexts. Search engines, such as Alta Vista and Google, preserve information for years and have empowered casual users to find information that was published somewhere on the Internet. Online archives, such as Deja.com (now Google.com) allow casual users to search billions of documents that were published in the global conferencing system Usenet news. This means that users may find all information (positive and negative, true and false) that has been published on a particular company or their products.

Companies, such as IntelliSeek, eWatch, and CyberAlert, recognized the potential threat of

the situation offer tools that allow to search the Internet (aka Web) and other sources to find out "what is 'being said about [a] company and its products', and that provides 'a way to identify potentially damaging rumors' " (Manktelow, 2001). Ebbinghouse (2001) discusses ways to handle threatening situations but in fact ways to limit damage are rather limited as it is not possible to completely "remove" information once the information have spread. Community members may also use other online communication channels, such as email, mailing lists, chats, instant messenger, and other newsgroups, to disseminate information they received in a community. Furthermore, members of online communities are real persons in the end who meet family members at home, friends at the movies, and colleagues at their workplaces which means that rumors can be expected to be disseminated in the real world as well.

To sum up, companies have to understand that the forces of the Internet can hardly be controlled; the challenge is to understand how to react to them (Bressler and Grantham, 2000).

### **3. Case Study: Knowledge Sharing in a Usenet Newsgroup**

According to Williams and Cothrel (2000), online communities are groups of people who engage in many-to-many interactions online and form wherever people with common interests are able to interact. In this sense, the term "community" is used in a more general sense than in sociological research (e.g., Wellman and Gulia (1999)) where sharing beliefs or a feeling of belonging to the same community is considered essential for viewing a social groups as community.

In this paper, we focus on particular newsgroup which is situated in the global conferencing system Usenet news. Usenet is one of the oldest and probably the largest conferencing systems of its kind (Smith, 1999) and its roots go back to the early Eighties which means that the conferencing system is much older than the more popular World Wide Web. Although Usenet is purely text-based, it is used by hundreds of thousands of users who contribute more than a million postings per day, generating a daily network traffic of more than a hundred gigabytes. Collecting precise usage data is rather difficult as the largest part of user interaction with Usenet is invisible; postings only reflect active contributions to Usenet whereas the much more frequent activity of reading postings remains invisible (Lueg, 2000).

Usenet newsgroups have been found to be capable of forming communities (e.g., Roberts (1998)). Interest in Usenet is increasing (again) as newsgroups have been identified as places where information is effectively disseminated (see the Hilfiger example above).

#### ***3.1 The Online Community daff***

In this paper, we focus on the Usenet newsgroup daff. The name of the newsgroup is an abbreviation of the newsgroup's location within a particular internationally distributed newsgroup hierarchy. daff qualifies as a community in the sense of Williams and Cothrel (2000) as its members are engaging in many-to-many interactions and the motivation for the engagement is the shared interest in certain products. In addition, daff members share certain attitudes, such as expecting posters to behave according to the Usenet netiquette and its rules of good conduct. Also, they maintain shared artifacts, such as a list of answers to frequently asked questions (FAQ) and a Web site that is used as a central repository for information, such as the FAQ, that are relevant to the newsgroup and their interests. The newsgroup's participants are well connected in terms of electronic communication so that information can

be distributed rapidly. The shared interest in a particular topic is the basis for the newsgroup which suggests to view the newsgroup as a community of interest (Carotenuto et al., 1999).

The daff newsgroup has formed to discuss "fast food" which is a generic name for food as offered by companies such as McDonald's, Burger King, KFC, Pizza Hut, Taco Bell, Hungry Jack's, Wendy's, and Subway. Fast food could be characterized as food that is prepared and consumed within minutes. Typical fast food products are hamburgers, French fries, pizzas, and sandwiches, which are usually served in combination with soft drinks, such as Coca Cola and Pepsi Cola.

### ***3.2 Knowledge Sharing in the daff Community***

Fast food is popular among Usenet participants and "netizens" in general; accordingly, it is a frequent topic in various newsgroups. In most cases, only anecdotal information about products is exchanged. In the daff newsgroup, however, experiences with fast food restaurants are shared and discussed. Examples for information being collected and shared by newsgroup participants range from the quality of food and service (e.g., food temperature; speed of service, friendliness of employees, responsiveness to questions and critiques) in particular restaurants to regional differences in what restaurants offer. In one particular case, a newsgroup member reported that he or she observed the (strictly forbidden) re-use of food products that were returned by an unsatisfied customer.

Of particular interest are companies in the hamburger business. In the case of one particular hamburger giant, information about the company ranges from knowing which restaurants are operated by the giant itself and which are operated by one of its franchise partners to details of internal quality control systems used to ensure product quality.

A frequent topic are the internal quality control systems used by the two most popular hamburger companies. Fast food companies seem to face the problem that their freshly made products should be consumed within short periods of time to ensure product quality (depending on the actual product, products may be stored in the warmer for a few minutes). According to internal quality standards, products not served after this time should be discarded.

One of the hamburger companies marks its freshly made products according to the time left until the products should be discarded. Its main competitor uses a number-based flag system to indicate until when products may be kept. In both cases, details of the quality control systems and the meaning of the indicators used are not communicated to customers. As a consequence, customers ultimately have to trust the companies that only freshly made food is served and that overdue food is indeed discarded.

Some members of the newsgroup community, however, knew about the quality control systems used and contributed these information to discussions in the newsgroup. Almost all members of the newsgroup are now able to assess how fresh products really are when they are served. Observations reported by newsgroup members indicate that it happens that overdue food products are not discarded as demanded by internal company policies. In the case of the company using the flag-based system, it seems to happen that sometimes quality control indicators are manipulated to pretend a later production time. As a result, food served may not be as fresh as demanded by company policies. In the case of some restaurants of that particular company, newsgroup members reported they could observe that the flag system

was not used at all so that it were impossible even for employees to assess freshness of products they were serving to customers.

Knowledge about the quality control system, how it is intended to be used and how it may be abused, has become part of the community's "organizational memory" and is described in the newsgroup's FAQ.

### ***3.3 The Scope of the daff Community***

The newsgroup's FAQ is available on the Web site that is maintained by some of the newsgroup members. New participants in the newsgroup are pointed towards to Web site when information related to topics covered by the FAQ are being requested. The discussions as well as the FAQ itself can easily be found when using a regular search engine, such as Google. In addition, it is reasonable to assume that members share their knowledge with real world friends and colleagues when physically visiting fast food restaurants. daff members are physically located Germany and a few other countries which means that they are able to collect information from a rather large physical area.

Put in a nutshell, the scope of the community exceeds the particular newsgroup by far; the community and the corresponding Web site have the potential to become a widely recognized fast food information resource on the Internet. Given the growing recognition of the Internet's importance to companies (e.g., Kalish (1997); Reuters (1997)), it is not unlikely that some of the fast food companies discussed in the newsgroup are aware of the ongoing discussions.

### ***3.4 The daff Community as a Chance rather than a Challenge***

The reason why this online community is especially interesting is the fact that most community members share a positive attitude towards fast food. This means that the community and its Web site are quite different from so-called revenge Web sites, such as McSpotlight ([www.mcspotlight.org](http://www.mcspotlight.org)), providing information about the fast food giant McDonald's.

Members of the daff community can be assumed to be interested in increasing the quality of the products they like and the service they enjoy. Apart from revealing and discussing dark spots, newsgroup members also report on good experiences in particular restaurants and how they liked certain products (especially in the case of new and limited "special offers"). However, the importance of the "quality problem" discussed should not be underestimated. Discussion statements indicate that several of the newsgroup members understand the quality problem in such a way that they question the company's attitude towards its own quality standards in general.

In the case of online communities with a rather positive attitude towards companies and their products, companies may have the chance to establish communication with online communities in order to prevent damage and to actually improve their service to the community. For example, the observations concerning disregard of the internal quality control system could be used to investigate the issues. In this particular situation, the goal of communication between company and community would be to convey the message that the company is in fact a trustworthy company offering quality products. More importantly is, however, the message that the company does not intend to hide grievances. Instead, incidents are isolated events and the company investigates and resolves these incidents as soon as

possible after they have been reported.

#### **4. Web Sites of Two Fast Food Companies in Germany**

In what follows we focus on two particular fast food companies, "Golden Bun" and "Burger Man",<sup>1</sup> as these companies and their products are by far the most frequently discussed topics in the newsgroup under consideration.

Golden Bun and Burger Man are both US-based companies operating in the highly competitive hamburger business which means that they are direct competitors. Both companies are operating world-wide and both are often attacked for being icons of the US-American culture and for selling animal products. Golden Bun and Burger Man are both facing the problem that the beef market in Europe is affected by Mad Cow Disease spreading all over Europe as customers are concerned about healthiness of beef-based products. The German Web sites of both companies explicitly address the quality of the beef used in their products. Neither Golden Bun nor Burger Man has dropped its beef products (which are an important part of their business) but it seems that the range of products offered has been adapted due to changing customer needs. For example, Burger Man's latest "5 Men" special offer consists of five dishes of which four are beef-free. Golden Bun's current special offer is centered around fish-based and its upcoming special offer will feature chicken-based products.

##### ***4.1 The German 'Golden Bun' Web Site***

Golden Bun's German Web site offers information about future product releases, a game, and a link to "BunWeb" which appears to be the actual portal of the company. BunWeb offers a lot of information about the company, its products, and its restaurants including a restaurant locator and a link to external Web pages maintained by a franchise partner. Also, the Web site offers some entertainment, such as animations and games for kids. In addition, the German Web site explicitly addresses the quality of the beef used in the company's products.

The company's Web site provides a lot of information and entertainment and thus raises the impression that the company cares about its online customers. Information provided suggests that communication is considered an important issue. According to the Web site, most communication with the company takes place in the company's restaurants (and thus with the particular franchise partner) but the company also claims to communicate with other parties, such as the public, journalists, nutrition experts, sub-contractors, and so on. All restaurants are equipped with feedback forms and places where these forms are collected.

A closer look at the Web site suggests that ways for online customers to interact with the company are rather limited. The description of ways to provide feedback is difficult to find as the description is located in a second order sub menu. Customers who wish to provide feedback are referred to restaurant managers in the first place which may prevent a lot of customers from giving feedback. A surface mail address is provided as well as a fax number but a way to provide feedback online could not be detected. It seems that feedback from online communities is generally discouraged as neither an email address nor a Web forum are provided.

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<sup>1</sup>Names have been changed.

The franchise partner operating seven Golden Bun restaurants around a particular German city pays more attention to customer opinions. The Web site provides a feedback form on the Web site's front page and even mentions the person to whom feedback is forwarded. Thus it seems that the franchise partner is much more interested in feedback from online communities than the fast food company itself.

#### ***4.2 The German 'Burger Man' Web Site***

Burger Man's German Web site offers information about current special offers, online games, a list of products offered, information about the company, a restaurant locator, and the opportunity to sign up for a free email account. The Web site provides an explicit link to information about the quality of the beef used by Burger Man.

Similar to the Golden Bun's Web site, the Web site operated by Burger Man provides a lot of information and entertainment and thus conveys the impression that the company cares about its online customers. However, ways to provide feedback or to interact with the company hardly exist. Multiple searches on Burger Man's Web site could not reveal a way to contact the company; even encouragement to send a fax or to contact restaurant managers in the case of Golden Bun's Web site is missing. Put in a nutshell, the lack of feedback channels suggests that the company is generally not interested in feedback from online communities.

### **5. Supporting Communication With Online Communities**

Our interest is in the communication channels that are necessary in order to establish communication with online communities. Certainly, establishing such channels involves expertise, such as public relations (e.g., Reuters (1997); Michie (1998)), that is beyond the scope of information systems research. Also, additional communication channels are potential risks as they could be used for attacks (see Lueg (2001) for a broad discussion). Accordingly, we make a few assumptions that simplify the situation. In what follows we assume that the goal of communication with an online community, such as the daff community discussed in this paper, would be:

1. Prevent deterioration of reputation through isolated events.
2. Improve reputation through transparency.

Reporting of incidents to the company requires communication channels from communities to the company as such channels either seem not to exist as in the case of Burger Man or appear to be severely limited as in the case of Golden Bun. Feeding back results of investigations to the reporting community is important and requires novel communication channels as well. A rather generic approach would be to provide a dedicated communication channel, such as a blackboard, on the company's Web site. Information provided should be as detailed as possible as incidents were eyewitnessed by community members so that reports may be subject to critical reviews. Information about investigations could be provided in protected areas that can only be accessed by members of reporting communities. However, such access restrictions could be considered as a lack of transparency.

Another way to feed information back to communities would be to have one or more dedicated employees who are acting as "mediators" between company and communities. This communication style, however, requires in-depth knowledge of Usenet habits (or habits of other communities) and is thus difficult to establish for companies not familiar with these

habits. In the case of Usenet, for example, too many postings or information qualifying as advertisements could be considered as spamming resulting in image loss rather than the intended image improvement. Some online communities, such as newsgroups dealing with net abuse topics like spamming, had good experiences with employees of large Internet service providers reporting results of investigations. Other companies may want make hire external consultants specialized in this kind of communication.

To summarize, communication between a company and an online community requires:

1. Communication channels to report incidents to the company.
2. Communication channels to feed back results of investigations to the community.

For example,

- Ⓣ A fully accessible blackboard on the company's Web site.
- Ⓣ A restricted access area on the company's Web site.
- Ⓣ Employees acting as mediators between company and community.

The company could also provide incentives as feedback may be extremely valuable to the company in the end. Ways to support the community could be, for example:

1. Provision of latest information, such as latest product information and information about upcoming special offers, to the community.
2. Invitations to communities to visit restaurants and to have a look behind the scenes which is the counter in fast food restaurants.
3. Invitations to visit production lines.
4. Provision of coupons to community members who reported incidents. Coupons could be provided online as e-coupons. Coupons could be provided as e-coupons as already done by an American competitor.

It is important that the company does not appear to be trying to "buy" the community or its members as this would severely harm the company's reputation. Even if the company would manage to buy single members, the very act of buying could be used by others to undermine company-friendly communities and to harm the company's reputation.

## **6. Conclusions and Future Research Directions**

In this paper, we have outlined that not only the creation of new business-related online communities but also the appropriate treatment of existing virtual communities is increasingly important in the age of the Internet. As a matter of fact, companies cannot control information dissemination in virtual communities but they can (and they will have to) react to the fact that more and more of their real world customers are members in virtual communities as well. The two companies discussed in this paper, in particular, serve their products to a significant part of the population that is most active in online communities. Therefore, companies should establish communication channels to virtual communities to the mutual benefit of companies and communities. This paper outlined a few ways in which such communication could be organized.

The focus of this paper was on one particular community and its potential impact on real world companies. We are extending our investigation to cover communities in a variety of online environments as we consider the community under investigation as a representative for a new breed of online communities that can either support or harm companies.



Also, the members of the community under consideration are (mostly) situated in one particular country. Virtual communities, however, are not bound by physical borders and the companies under consideration are in fact multi-national corporations operating in countries all over the world. We are therefore extending our approach to cover different countries and continents as knowledge of cultural differences may be important to understand future online communities and their challenges to multi-national corporations.

## References

Bressler, S. and Grantham, C. E. (2000). *Communities of Commerce: Building Internet Business Communities to Accelerate Growth, Minimize Risk, and Increase Customer Loyalty*. McGraw-Hill.

Carotenuto, L., Etienne, W., Fontaine, M., Friedman, J., Newberg, H., Muller, M., Simpson, M., Slusher, J., and Stevenson, K. (1999). CommunitySpace: Toward flexible support for voluntary knowledge communities. In *Proceedings of the Workshop "Changing Places"*, London, UK.

Ebbinghouse, C. (2001). You have been misinformed - now what?: Attacking dangerous data. *Searcher*, 9(4).

Kalish, J. (1997). P.R. firms surf the net. Reuters.  
[http://www.mcspotlight.org/media/press/reuters\\_14feb97.html](http://www.mcspotlight.org/media/press/reuters_14feb97.html).

Lueg, C. (2000). Supporting social navigation in Usenet newsgroups. In *Proceedings of the Workshop "Social Navigation -- A Design Approach?"* at the Annual ACM SIGCHI Conference on Computer-Human Interaction (CHI 2000), The Hague, The Netherlands.

Lueg, C. (2001). From information sharing to information warfare: The network society as challenge to information systems research. Submitted.

Manktelow, N. (2001). Net chatter is a data goldmine. *IT News from The Age and the Sydney Morning Herald*  
<http://www.it.fairfax.com.au/e-commerce/20010227/A25453-2001Feb27.html>.

Michie, D. (1998). *The invisible persuaders*. Bantam Press, London, UK. Reuters (1997). P.R. Firms Seek Image Control on the Internet.  
[http://www.infowar.com/class\\_1/class1\\_zn.html-ssi](http://www.infowar.com/class_1/class1_zn.html-ssi).

Riley, M. (2001). Harry Potter magics a fortune from the marketing wizards. *Sydney Morning Herald*. 24 February 2001, page 3.

Roberts, T. L. (1998). Are newsgroups virtual communities? In *Proceedings of the Annual ACM SIGCHI Conference on Human Factors in Computing Systems (CHI'98)*, pages 360-367, New York, NY. ACM Press.

Smith, M. A. (1999). Invisible crowds in cyberspace. In Smith, M. A. and Kollock, P., editors, *Communities in Cyberspace*, pages 195-219. Routledge, London, UK.

TOYWAR (1999). <http://www.toywar.com/>.

Ulfelder, S. (1997). Lies, damn lies and the internet. *Computerworld*.  
<http://www.computerworld.com/cwi/story/0,1199,NAV47 STO6800,00.html>.

Wellman, B. and Gulia, M. (1999). Virtual communities as communities. In Smith, M. A. and Kollock, P., editors, *Communities in Cyberspace*, pages 167-194. Routledge, London, UK.

Williams, R. L. and Cothrel, J. (2000). Four smart ways to run online communities. *Sloan Management Review*, 41(4):81-91.