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# Interface Considerations in Designing Online Communities: A Case Study

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## Abstract

This paper discusses the creation of an online community for the survivors of a high-rise building fire. An examination of the fire itself, the community that formed because of the fire, and the considerations that went into the design of the on-line community will be examined. The on-line community enjoyed some success after it's creation; however traffic to the site dropped off after a few months. Theories as to why this happened are presented, as well as a discussion of the current state of the community.

## Introduction

On February 5<sup>th</sup>, at approximately 1:22 am, a discarded cigarette ignited a couch in an apartment on the 15<sup>th</sup> floor of the Charles Towers Apartments. The Charles Towers Apartments consist of two thirty-story apartment buildings and are located in the Baltimore Metropolitan area.

The resident in apartment 1501, which is where the fire originated, opened the windows in an attempt to vent the smoke filling up in his apartment. What this resulted in was a flash-over in approximately two minutes, and the beginning of an eight-alarm inferno that

gutted eight floors, caused three million dollars in damage, was blamed for one death, and trapped residents for over an hour while 177 firefighters battled the blaze.

This paper describes the process of developing an online community and reports the current status of the online community to support the people who lived through the Charles Towers fire.

## What is an Online Community?

An online community is a group of people who communicate using a computer-mediated communication tool, such as a listserver, newsgroup, or bulletin board [6]. Usually, community members share a common interest, concern, or hobby that serves as the purpose for the interaction between community members [10; 6; 7]. Some online communities are based on a specific geographical community or location [6]. For instance, well-known online communities are based on the cities of Seattle, Washington, Cleveland, Ohio, and Blacksburg, Virginia [1; 2; 12; 3]. Some online communities are not based on specific geographical locations. Instead, these types of communities, such as

scholarly communities, have periodic face-to-face meetings, but continuous communication through the online community [5; 6]. Other online communities have no face-to-face meetings at all [6]. These communities, sometimes called virtual communities, include communities such as those that are based on role playing [4; 13]. Other types of virtual communities include support communities [11; 9]. In support communities, also called empathic communities, many people join the community to share painful experiences and provide support to each other [11].

### **The Need for an Online Community**

Information systems should be built around the needs of the user [8; 14]. An online community is no different. An online community needs to be built for a purpose, to satisfy the needs of a set of users. In this situation, there was a need for an online community. One of the unexpected results of the fire was the formation of new acquaintances and friendships. These relationships formed as people ran down the stairs together, hurriedly introducing themselves as they made their way to the ground floor. Some people met in the street after locating the person with whom they had been communicating out their window while the fire raged just outside their doors. Some people just hugged anyone they could find, glad to be alive, thankful they survived a disaster which could have very easily cost them their lives.

It was because of these unusual, but strong, relationships that the need for the online community arose. The fire displaced many residents; some moved to other apartments in the city, some moved to nearby counties, and some moved out of state. Many expressed feelings of sadness that these friendships that formed because of the fire were now going to be so quickly dissolved,

and wished that they could continue regardless of physical location. An online community was born of this sentiment, as a central meeting place, to not simply relive a tragedy, but to see the after-effects as well. The purpose of this online community was to offer support to those who might need it, to keep in touch with those who relocated to other states, and to simply keep up with how everyone was faring in the weeks and months after the fire. Finally, it was hoped that this community could partner with other communities that served a similar purpose, that supported individuals who had survived a tragedy and wanted to remember what happened.

### **Designing the Online Community**

Surprisingly, many people remember the night of the fire not with terror, but with fascination. From the way the firemen fought the fire on their floor, to how they were rescued, to the way the Red Cross administered supplies and food to those who needed it. Conversations about the fire are not confined to hushed whispers, but rather are excited exchanges not unlike sports fans discussing a football game. This attitude needed to be incorporated into the design of the web site for the fire survivors.

It was important to use good taste when deciding on content, but liberties could nonetheless be taken. It is because of this that the color scheme arose. The fire occurred at 1:22 am, so the background color for the web pages is black, which represents night. This is the time the fire broke out, and it was at night when the fire was extinguished. The darkness was pierced by the yellow and orange and red of the flames for more than two hours, so yellow text with red hyperlinks were used to symbolize that fact. Through this color scheme, the web pages became a symbol of the fire itself, the black of the background

pierced by the red and yellow of the text. It must be noted that the choice of colors for the text and the background was not done to elicit memories of the tragedy, but rather used as subtle symbolism for those viewing the pages. The online community is located at <http://www.thesurvivors.net>.

It may be difficult to notice, but the links down the side of the page are textured with a pattern that is actually called "flames." This texture was subtle enough to keep within the overall design theme of the site without forcing the memories onto anyone viewing it. Subtlety was a major design philosophy for this site, so while there are obvious ideas behind the color scheme, there will never be animated bars of fire or the like.

The site was designed for the smallest learning curve possible, since people who were expected to view the site came from all different levels of experience. To maximize the utility of the site, all pages use a common template, with the navigation bar down the side of the page exactly the same for all pages. Furthermore, all pages were kept as top-level as possible to avoid the possibility of a user navigating so far down into the site that they become lost. Help information appears in small pop-up windows, as do external links from the links page. To further minimize the possibility of error, the entry on the menu bar representing the current page was automatically "blued out" to prevent re-navigation to that page, which would increase the number of times the "back" button would have to be pressed to recover. Of course, links to the home page exist on every page.

In order for this site to truly be a community, however, it needed the interaction that characterizes so many other online communities [6]. This was incorporated through the use of a Java chat

room and a message board. Sites that offered these services free of charge were located, and the design of these services was modified to fit into the theme of the web site. The message board, based on the popular WWWBoard and provided by an outside service located at <http://www.cgiforme.com>, even allowed for emotion icons in the form of happy (or sad or angry) faces, and it was believed that this would help show that discussions on this site were not all sad, sorrowful memories, but happy conversations as well. The threading of the messages with instant identification of the sender added an additional level of familiarity to the board, and hopefully conveys a sense of community to those who may hesitate to use the site to its fullest. The Java chat room may be a little more intimidating for some, requiring a username to log in, however if America Online is any indication, it won't take long for people to catch on.

No formal usability testing was done on this site, and there was never a plan to do so. Because the community this site was designed for is relatively small, testing wasn't deemed necessary. In order to ensure that the site was designed for maximum usability in the absence of testing, the rules of interface design proposed by Schneiderman were used as a guideline throughout the design. During the first few months after the site's creation it had moderately strong traffic. Those visiting the site indicated their enthusiasm about the design of the site through emails, message board postings and personal contact. This sort of post-hoc informal testing indicated that the site did indeed have stable design and easy to understand navigation.

#### **Current Status**

In the beginning, there was an overwhelming vote of support for the online

community. Videotapes of the newscasts about the fire, over 5 hours worth, were donated for digitizing and uploading to the site. One resident volunteered to donate a report of the fire statistics to the site, which indicated such things as gallons of water used, number of firefighters present, airtime for rescue choppers, etc. Many residents wanted to tell their story of the fire from their point of view, so a page was set up for just that purpose.

Unfortunately, after an initial wave of enthusiasm, interest in the online community seemed to wane dramatically. Some photographs were received and uploaded with full credits, but most people seemed to simply forget about the site, or possibly decided they were no longer interested in remembering what happened that night. Residents of the apartment complex pledged to write up their stories, but they never came through. It is an interesting phenomenon, one that has not appeared in other support communities. Those who offered to volunteer their stories or pictures were followed up on, however it became clear that those pledges would not come to fruition.

The URL of the online community has been submitted to all the major search engines, however that action has seemed to have little effect, and a hoped-for banner exchange with related rescue and survivor sites (the Red Cross, for example) never panned out. It was theorized and hoped that this online community might become part of a larger community of those who have survived similar disasters such as shipwrecks or plane crashes. Even though support circles for

these types of individuals are important, many of the survivors of this fire indicated that they couldn't help but feel that sometimes being part of a group such as that was morbid. While they stated that they understood the need for this type of relationship and wanted to remember the events of the night of the fire, at the same time they didn't want to lump themselves in with what seemed to them to be a group of individuals whose purpose was keeping alive the memory of a tragedy. Additionally, by making the site known nationally, the possibility existed that others who had survived an event like this would want to contribute or become involved, however no such communication was ever made.

As for advertising the site locally, thought was given to hanging fliers advertising the site in the elevators and lobby of the Charles Towers apartments, but since one of the original design philosophies was to not force the site and the memories on anyone, the idea was abandoned.

Ultimately, the final decision was to put the site out on the World Wide Web and let it fend for itself, so to speak. If people wanted to remember and took an active role in supporting it, then it would grow and prosper. If, on the other hand people preferred to not remember the fire, or remember it in their own way then the site would linger on it's own, but the final decision would ultimately be left up to those for whom the site was initially designed and it seems they have made their choice.

Research on the online community, located at <http://www.thesurvivors.net>, continues

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