The Critical Importance of Web Usability in Disasters: Agency-Wide Efforts to Promote Usability at FEMA

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It is crucial that disaster managers, disaster survivors and those interested in preparedness are able to get information via the Internet as quickly and easily as possible. In order to make sure this happens, FEMA has made usability part of the agency culture through promotion of user research and through a nationwide two-day usability training program. This type of approach could be useful to other disaster-oriented organizations and should certainly be considered as existing content is updated and new content is rolled out.

Usability Workshops

In 2009, a FEMA stakeholder asked for a series of "lunch and learn" sessions for those who create disaster-related websites for survivors, disaster managers and the general public. She proposed that I and my team come up with a number of usability-oriented topics, and perhaps offer one per month.

This idea snowballed into a total of eight topics centered on usability that were soon woven into a two-day workshop. After about a year-and-a-half of offering this course monthly, we have trained approximately 400 attendees. The workshop was so successful that this year it also became a "road show" and was offered at FEMA regional offices. So far, the course has been offered in a total of nine cities.

The workshop provides an overview of how to create sites that are both usable and accessible to disaster managers, disaster survivors and the general public. It includes discussion of how websites can be designed to cater to user needs, how content can be developed to be more easily comprehensible, and how an understanding of user research can help in website development. Also included is an introduction to web accessibility for disabled web users; a discussion on search engine optimization and how that leads to better website usability; and a review of information architecture, specifically how websites should be structured for optimal findability.

Teaching this course has been an incredible experience as I, along with a staff of two other trainers, have really felt that we have had an impact on getting web teams to develop more usable sites. We've had the opportunity to open attendees' eyes to issues that they may never have considered, and we have received e-mails and phone calls expressing a lot of appreciation for our offerings.

Ultimately, these courses will help fix usability problems before they happen by giving teams the knowledge they need to create websites that are both usable and accessible. It is an incredible opportunity to help those who have experienced a disaster, those who manage disasters, and those who prepare for disasters by assuring that the web pages that they access are usable from the outset. We get to provide knowledge that really makes a difference.

User Research Projects

I have also had the opportunity to lead a number of user research projects for FEMA as well. We have conducted user research with disaster survivors in five cities. We've also conducted user research with disaster managers at IAEM-USA annual conferences in 2009, 2010, and soon 2011. Additionally, we've conducted user research with those interested in disaster preparedness through multiple studies in the Washington, D.C. area. We try to represent the experiences of these user groups as they use various online resources that might eventually replace the web and mobile pages that are currently available. Participants try certain specific tasks and assess whether they can complete these tasks successfully. We have the opportunity to listen to their very emotional stories – to hear and better understand what they went through in order to assure that the websites that are being created will meet the needs of future disaster-oriented users.

Usability testing is a powerful experience in and of itself, for any audience group. But it becomes all the more meaningful when you realize that you can make a difference for those who are, as one survivor put it, "in that freaking-out stage."

Looking Ahead

There is so much that this usability testing and resulting reporting has accomplished during the past two years in providing information that has led to definitive improvements on FEMA sites. Yet there is so much more still to do: to create websites for desktop and mobile devices that have what those who are involved in or are preparing for a disaster want and need; and to let them drill down quickly and efficiently to exactly those bits of information that are critical to their preparedness, their survival, and their recovery.