Wary of the Web: The Underutilization of Web Sites for Public Outreach by State Emergency Management Agencies

Associate Professor David W. Guth, University of Kansas (PI)
and Gordon A. Alloway, Kansas University Medical Center (RA)

The Issue: Emergency Management in the Digital Age

This is the era of the "citizen journalist," where anyone with a smart phone, an Internet connection or a Twitter account can spread his or her version of the truth to the entire world. For state emergency managers and their public information officers, this new technology brings both opportunities and challenges. In many ways, they face the same challenges that confront today's marketers – getting their messages heard in an increasingly crowded marketplace of ideas.

The Research Design: A Two-Phased Approach

Phase One: Content Analysis

Each of the SEMA Web Sites was analyzed. We created a Content Richness Index (CRI) based in part on the presence of these Web site features:

Newsroom	Training information
Director's biography	Director's picture
Explicit mission statement	Implicit mission statement
Photo gallery	E-mail links
Document downloads	Weather
Video content	Audio content
Podcasts	Vodcasts
National threat level	DHS links
Kids info (agency created)	Kids info (other)
Governor's office links	Disabilities information
Family crisis planning	Business crisis planning
School crisis planning	Pets information
Name of PIO	PIO direct phone or e-mail

The CRI was also based on the presence of information on common emergency situations:

Radiological/nuclear power	Nuclear war
Terrorism	Tornado
Flooding	Chemical/Hazmat
Fire	Hurricane
Biological	Snow/ice
Tsunami	Electrical blackout
Oil spill	Public health issues
Road conditions	Drought
Extreme temperatures	Cyber-disasters
Weapons/munitions	Dam failures
Landslides and avalanches	Thunderstorms/lightning
Volcanoes/ash fallout	

Phase Two: Survey

During phase two, each of the 51 SEMA public information officers was contacted by e-mail May 13-14, 2008, and invited to participate in an online survey. Twenty-three of the PIOs completed the online questionnaire, a good response rate for online-based research. While the sample was not statistically representative, it appears to be a good cross-section of the SEMA PIOs.

A Media Accessibility Index (MAI) was created to quantify the ease with which journalists could retrieve information from SEMA Web sites based on presence of an online newsroom, accessibility to the newsroom within one mouse click, whether the agency's public information officer was identified, whether a direct telephone number for the PIO was posted, and whether there was a direct e-mail link to the PIO.

Respondents were asked about their current position, where they fit within the agency's organizational structure, their professional experience and the management of their agency's Web site. They were also asked a series of rating-scale questions about key stakeholders targeted by their Web sites and their attitudes toward the Internet's role in emergency management.

Findings

RQ 1: Who do SEMA public information officers see as the primary publics of their agency Web sites and does the content reflect their priorities?

SEMA Web sites are, for the most part, untargeted. When asked who they considered the primary audience when preparing information for their Web sites, 52.2% said it was "the public, in general, regardless of where they live." Another 34.8% said that their sites were targeted at "residents of our state only." However, a content analysis of the Web sites suggests the primary focus of target is internal audiences, such as other EMA managers. Training information was the most frequent feature, present on 92 percent of the sites. This pattern held in the low and medium CRI sites. The high CRI sites appeared to be more targeted to citizens and the media. Survey results also showed that the PIOs felt that media have a better understanding of their agency's mission than legislators or the public.

RQ 2: What factors influence the content-richness of SEMA Web sites?

In what may seem an obvious conclusion, the people who design and maintain SEMA Web sites appear to have the greatest influence on their content richness. However, the significance of this finding relates to a second finding, that only one-third of SEMA Web sites are designed and maintained by agency PIOs. Among respondents, only 30.4% of the Web sites were designed within the agency. More than 60% were designed outside of the agency, with the overwhelming majority of those sites (85.7% or 52.2% of the total) required to follow a state government-mandated graphic/content template. It appears that the higher in the SEMA organization chart the PIO is placed, the greater the content-richness of the agency's Web site. These results suggest that persons maintaining SEMA Web sites appear to have a higher influence on their content richness than those with the actual responsibility of deciding Web content. This may be explained by the site administrator's deeper understanding of Web technology and subsequent decision to make greater use of it. It also suggests the need for a greater understanding of Web technology by those determining an agency's Web content.

RQ 3: To what degree are SEMA online newsrooms and agency public information officers accessible?

Less than half of the SEMA Web sites provide the identity of the PIO, his/her direct telephone number and direct e-mail address. One out of every five sites does not identify the agency's PIO by name. This, in our opinion, is in conflict with the value of transparency the public expects of government agencies. While it may seem counter-intuitive, SEMA PIOs may want to be insulated from the citizenry. Most SEMA public affairs staffs are relatively small. Demands on their time are considerable, especially during periods of crisis. It was noted during the content analysis phase of this research that a handful of states appear to have sought a middle ground by providing password-protected access to journalists.

RQ 4: To what degree do SEMA officials value the Internet as a vehicle for emergency public information?

When asked whether they thought the Internet was a valuable medium for use during emergencies, 78.4% of the respondents answered in the affirmative, while 17.4% answered in the negative. However, when asked if the Internet is as valuable a medium for use during emergencies as traditional media, 63.7% answered in the affirmative and 31.8% answered in the negative. Some may express concerns about the fragility of the Internet during calamities, but all digital age communications face similar vulnerabilities. The FCC has noted that some social media systems may continue to function while other systems fail.

Copies of this paper, as well as related research, may be downloaded at:

http://people.ku.edu/~dguth/EMAreport.html