Disaster Wiki: Get Ready NOW to Harness Social Media!

Eric Holdeman
Emergency Management and Homeland Security Consultant and Blogger

2011 has been a year of record disasters. Increasingly, people are turning to social media as a way to communicate and to self-organize in response to these disasters. Governments are looking for ways to tap into social media and use mapping to help them and others scope their disaster response and recovery efforts. The article below provides one viewpoint on how social media can be leveraged.

Introduction

Social media is the next technological phenomenon that is starting to sweep through all layers and sectors of society. Business, government and the media in particular are all trying to sort out how to react to the surge in interest in meeting, networking, interacting and exchanging information in a cyber space context.

Emergency management and homeland security are also trying to chart a path in the new world of social media. Technology in general has taken emergency management by storm. It was only 15 years ago that many smaller emergency management offices did not even own a computer. While it was only ten years ago that emergency management homepages were being developed, the use of email and the Internet for communications is now common practice.

Today, a variety of electronic notification systems and EOC (Emergency Operations Center) information management systems are found in mid- to larger-sized jurisdictions. The next step in emergency management is to establish a platform for the use of social media to communicate with citizens and organizations in a two-way and multi-dimensional format. One way to promote this interaction before, during and after a disaster is the use of a Disaster Wiki.

As a point of reference, most people today are familiar with Wikipedia, the online encyclopedia. What makes Wikis unique is that the authors who write content for a Wiki are not from one organization. Content for a Wiki can come from many sources. If you have information to share you can do so by posting directly to a Wiki. While this idea may scare some people, it is this ability to tap into the strength and knowledge of a cyber community that makes a Wiki such a powerful tool. Wikis can be used in a variety of ways for content management. Some may even use it as a project management tool. Since a Wiki is not bound by geography and our artificial jurisdictional barriers, it is best suited to be used in a regional context. This is not a multistate region, but one in which there is a collection of jurisdictions that share a common population and resources. This might be mid- to large size metropolitan areas with a larger central city/county, but then including neighboring jurisdictions.
You cannot make an artificial determination for what those boundaries are; for in fact, the participants in the Wiki will do that for you. However, it should be noted that trying to establish a national Wiki is not the place to start. While the federal levels of government might like that idea, the Wiki participants may have difficulty in identifying with such a large scale concept. A Wiki can be most powerful during disaster response and recovery when the need for information is at its greatest. Here is how a Disaster Wiki might function:

**Situational Awareness**

At the start of an emergency or disaster it is difficult to determine what is actually happening. Where are events occurring, what damages are being inflicted and what are the greatest needs for the community response? What a Wiki can access is a network of thousands of remote sensors capable of reporting and documenting damages as they are occurring. These instruments are handheld, geo-locatable devices that have audio, picture and video capabilities – they are called cell phones.

Average citizens with their smart phone technology in hand can provide eye witness accounts backed up with images that collaborate what they are reporting. With a Wiki there can be scores if not hundreds of reports coming in on a single point incident, or across a broader regional disaster. One of the beauties of this reporting is that these individual reports can be automatically posted to a map that will rapidly give first responders and emergency managers an inkling of what is happening, where there are needs and the scope of what is going on. Yes, there may be some inaccurate reporting, just as there is today with existing systems, but with a Wiki it can be self correcting as there are many more reporting entities. Studies have shown the impact of the “wisdom of crowds” when people share the information burden.

These reports are not sent to just one single jurisdiction. They are logged on the Wiki by the reporting individual and then ideally populated to systems that tabulate and display the information for anyone to see. Rather than being overwhelmed with reporting, an agency can simply mine the Wiki for the information it needs.

**Damage Assessment/Reporting**

In a post disaster environment there must be an initial damage assessment that is typically conducted by local emergency management agencies that do “windshield surveys” and perhaps have “citizen hotlines” for people to call and report their damages. This is true for both the average citizen and businesses. With an already established Wiki, people could go to the Wiki and fill out a simple online form, geo-code the location of the damage, add a photo and have it populate a map. The information could either be viewable by anyone on the Wiki, or perhaps it could be only for public agencies to mine for the information they need to help with the disaster response or in securing federal disaster recovery funding for their communities. Since it is regional each community would have access to information for their jurisdiction.
Volunteer Donation Management

Government keeps being put in the middle between those people having needs and people or organizations who are willing to provide assistance. In the typical disaster there is an outpouring of support for those impacted by a disaster. People want to help. They will give money, and they also want to donate goods and services to those in need. Matching those needs with the donations many times ends up being one role that is foisted on government. It is sometimes a millstone around the necks of emergency managers who are already busy with the disaster response and then disaster recovery. Many a landfill has consumed tons of donated goods when there has been no need or system for distribution of the supplies.

It could be possible to use a Disaster Wiki as a trading post for people with needs and those who want to help. Think of it as a Craig’s List type of function. Those with a need post their need on the Disaster Wiki. Those who have goods or services to donate also post what they have in the same fashion. Ideally, it will be market driven in that those who want to provide assistance can do so by perusing the needs posted and then matching up what they have to offer. Government does not need to be the middle man in the exchanges of good-willed people and organizations.

Resources will naturally flow to those people and organizations that have the need. For example: A church is willing to serve as a disaster shelter. But, they don’t have electrical power, and they don’t have a generator. They could post on the Disaster Wiki their need for a generator and other accessory equipment, or the need for expertise in hooking it up. People or organizations who are willing to make a donation, or rent or sell a generator could contact the church to offer their services. This does not become a resource request that is passed through the local EOC, onto the County EOC, then to the State EOC, then perhaps on to the National Guard or FEMA to fulfill. The resources just flow independent of government action.

Summary

There are certainly some challenges to be overcome in establishing a Wiki. What organization will administer it for a region? What are the legal risks associated with providing a forum like a Wiki for the exchange of information? How can the Wiki be sustained over time? Will volunteer “moderators” emerge who can help administer the Wiki like is already done for Wikipedia? These are just a few questions to consider. In reality, we are already seeing these types of social media tools being used following large scale disasters. Enterprising citizens with the energy and expertise are setting up online forums for communicating with their neighbors about all of the areas discussed above.

Now is the time for governments to take the initiative and work in concert with their “region” to pre-establish a Disaster Wiki so that it is available when disasters strike their communities. Building disaster resilience demands incorporating the resources of our private citizenry into solving issues as they emerge. It will make for a stronger community, region, state and nation.