

In a Disaster, Social Media Has the Power to Save Lives

Brenda K. Wiederhold, PhD, MBA, BCB, BCN

SOcial media, with its ability to connect the whole world within minutes of a calamity, has the potential to save tens of thousands of lives per event and to help target assistance to the most needy survivors of a natural disaster. At the third International Disaster and Risk Conference Davos held in May and June 2010, the role played by information and communication technologies (ICT) in the early detection of natural calamities was stressed. According to conference statistics, it took just 30 minutes using social media to assess damage after any natural disaster. Conference participants stressed the fact that the news needed to be relayed to government leaders and first responders in time for successful evacuation of the disaster-prone areas. Conferees proclaimed that social media “legality is an institutional and not a technical issue,” asking for policies to be drafted by attendees representing the various nations, and stating that the role of this effective communication channel during the chaos of disaster is indispensable.

How can social media perform this essential function during times when people are facing the fear and stress caused by a natural disaster? In this instance, the role of social media is to control the information flow for an extended period of time and to channel its course in the right direction—that is, in ways that save lives. The role of social media during disasters has been divided into three different functions: (a) information relay, (b) targeting the right group to receive information, and (c) effective postdisaster strategy implementation.

Information relay. As smartphones that can access the Internet and therefore social media become ubiquitous in many nations, government policies promoting knowledge of emergency measures will ensure quick and efficient flow of information.

For example, the 8.9 (on the Richter scale) earthquake in 2011 that ravaged several Japanese nuclear plants and led to an unprecedented tsunami with a death toll of more than 19,000 was destructive in every way. Fortunately, the news was spread among the residents of threatened regions via Twitter “push” service and smartphone apps, even before CNN started reporting it. Usage peaked at 20,000 tweets per second. Because people were able to move to higher ground from flood-prone areas, thousands of lives were saved.

One idea in the works is a smart network system that scans a defined boundary, within which people register to receive alerts at times of crisis. In this manner, the warning

behaves like a widespread rumor reaching everyone’s ears at once.

The idea of information relay is instant, and response is immediate. Casualties are reduced and damage is monitored. A single person observing a disaster in the making can sound an alarm by logging into the social media app that connects with the right servers, thereby alerting responsible individuals so proper precautionary steps can be taken.

Targeting the right group to receive information. When a natural calamity strikes an area, a fraction of people living in the vicinity of the affected site prove to be the “canaries in the coal mine” and eventual storytellers. They can play an essential role in mitigating the extent of damage and lives lost.

When the alarm goes off and people receive alerts via their smartphones, it is imperative that those getting the message are acquainted with the emergency measures to be implemented. Therefore, these “canaries” as well as trained personnel need to be alerted ahead of the larger group of those affected, so that the evacuation process is immediate and successful.

To aid this process, people can save emergency contact numbers on their smartphones and sign up to receive “push” notifications on their iPhones or Android phones via the Twitter feed. Twitter launched this new feature in accord with American Red Cross and all 10 FEMA regions because people using the same social network are more likely to read the alerts if they are posted there. Thus, natural disaster alert messages are being posted on Facebook, YouTube, and Twitter to increase visibility.

Surveys show that most people turn on their television sets to get details, while many are simultaneously using their tablet or smartphone to connect with others. Thus, social media will be essential in projecting a clear image of nationwide awareness at the time of crisis. For example, during Hurricane Sandy, Instagram was brimming with photos uploaded at the rate of 10 per second, and Hurricane Sandy was the second most talked-about topic in 2012 on Facebook. In another example, when Haiti was ravaged by the earthquake, the Red Cross raised nearly \$3 million within 48 hours with a single Facebook alert, and another group raised \$1 million in 24 hours with a single tweet.

Effective postdisaster strategy implementation. After a calamity, actions must be taken to meet the needs of those adversely

affected by the disaster. In certain circumstances, UN conferences are held, nations pool their resources, rehabilitation centers are set up, and large-scale compensation plans are discussed.

An example of how social media can be used to implement an effective postdisaster strategy can be found in the recent Uttarakhand floods, in which the Google “person finder” feature proved to be a tremendous help in ascertaining the welfare of loved ones. Nearly 53,000 records were stored. The procedure of organizing options for the survivors and collecting donations from all over the world proved to be a much easier task when social media was involved. The hash-tag (#) aspect of Twitter proved to be important in generating awareness. The statistics of the calamity were debated and discussed, and timings of news

broadcasts were changed to ensure that the maximum number of people in the world were alerted to the damage. The primary aim of effective postdisaster strategy implementation is to make people aware of the circumstances so they can act accordingly.

Social media has a way of carrying the news to the people of the world so that they can interact, decide, and act upon it. While previously the importance of social media in times of natural disaster might have been recognized only in hindsight, it is quickly becoming an essential disaster planning tool in the arsenal of nations.

Brenda K. Wiederhold
Editor-in-Chief