

Japan Disaster Shows the Importance of 'Open' Crisis Management Tools

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Open-source Web tools are being widely used in emergencies like the crisis in Japan. Crisis planners and managers should recognize their usefulness in displaying crisis event information and helping to find missing persons.

Event

On 11 March 2011, a massive earthquake and tsunami struck the Japanese island of Honshu. Following these events, multiple online tools were activated to make it possible to locate missing persons in Japan. These tools include:

- [Google's Person Finder service \(for English-language version\)](#). Person Finder, based on Google Labs' now-discontinued Ride Finder tool, was also used following the Haiti and New Zealand earthquakes. Google has also activated a broad-scope crisis response website for Japan (www.google.com/crisisresponse/japanquake2011.html).
- [Ushahidi's open-source Crisis Map \(Japanese only\)](#). The Ushahidi platform, which makes it possible to collect data points about a crisis, display them visually and map them interactively, has been used in many crises, including the recent Egyptian and Libyan political uprisings and the earthquakes in Haiti and New Zealand.
- [OpenStreetMap Japan's Crisis Mapping Project](#)

All of these tools are delivered free of charge during a crisis. Ushahidi's Crisis Map and OpenStreetMap require a local sponsor to implement and manage the tools.

Twitter has also created a hashtag for the event: #Japan.

Analysis

During and after a major crisis, people are inevitably scattered widely, and the critical task of locating them and connecting them to needed resources becomes even more difficult when electricity, landline and mobile phones and Internet service are disrupted. The disaster in Japan, and the rapid deployment of various online tools in response, show that Web-centric methods have become essential to coordinating and managing the process of locating missing persons and disseminating crisis information.

These tools still have limitations, however. They become irrelevant if the Internet is not available, so robust local Internet connectivity is a critical concern. Japan has designed a strong network with multiple redundancies that enables more effective communications in a disaster situation. The country has responded very well overall to this series of disasters, in part due to the level of ongoing disaster preparation in Japanese society. Regular earthquake and tsunami drills, coupled with extensive infrastructure investments, enable broader and more-effective use of services such as these. It is important to note, too, that all of these tools are privately owned and managed — governments generally do not use them, and are under no obligation to review the information they disseminated — and false information may sometimes be posted, whether intentionally or unintentionally.

Nonetheless, these online communication and collaboration tools are rapidly becoming an essential component of crisis management. They are typically used by individuals, but businesses and government agencies can, and in many cases should, use them. Public- and private sector crisis managers cannot afford to overlook the capabilities of these readily available open-source tools. They should not rely entirely on these open-source or social networking tools for crisis communications, but should use them to supplement their crisis plans.

RECOMMENDATIONS

Crisis planners and managers:

- Survey the available humanitarian crisis management tools to determine which will work best for your jurisdiction's specific needs, and appoint a project sponsor responsible for building the jurisdiction's emergency response plans prior to any crisis event.
- Integrate social media services (for example, Twitter) into your planning for communication and coordination, to enable self-service for access to emergency resources such as information about missing persons.

RECOMMENDED READING

Some documents may not be available as part of your current Gartner subscription.

- "Sahana: Humanitarian Disaster Management and Collaboration System"— Sahana, is a free Web-based humanitarian collaboration system for disaster management, uses open-source software to help coordinate many critical disaster management activities. **By Roberta Witty and Andrew Walls**
- "Research Roundup: Business Continuity Management and IT Disaster Recovery Management, 4Q10"— Gartner's extensive body of research in these critical areas provides business and IT leaders with strategic insight and tactical guidance to keep up with the most-important practices and the latest trends. **By Roberta Witty**

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