



# The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

## Final Copy of Case Study

**YEAR:**  
*2012*

**STATUS:**  
*Laureate*

**Organization:**  
Microsoft Corporation

**Organization URL:**  
<http://www.microsoft.com>

**Project Name:**  
Microsoft Disaster Response Portal

**What social/humanitarian issue was the project designed to address?  
What specific metrics did you use to measure the project's success?**

When a natural disaster occurs, people that have been impacted need to immediately access the latest information on conditions in the surrounding area, connections to the relief services that are available and guidance on actions that they should take to ensure their safety or support immediate response efforts. The portal enables responders to rapidly share critical information with the community and other relief organizations using dynamic maps, social media integration, photos and video content. To ensure that this information is accessible for the community in the impacted area, the content can be viewed by mobile phones and viewers are able to translate content to their preferred language. Complicating delivery of this information, often local humanitarian response organization websites and communications vehicles are 1) disrupted by damage to data centers, 2) unavailable because of power outages, or 3) unable to handle the spike in traffic following a disaster. By using the cloud service Windows Azure, the portal is hosted on Microsoft's global data center infrastructure for availability, traffic capacity and performance. Metrics: Time and simplicity are of the essence during a disaster. Either as a supplement for a site that has been disrupted by the disaster or as a new communication and collaboration tool, the Microsoft disaster response portal can be deployed in less than an hour and managed by communications managers or other personnel with very limited IT skills. This reduces the burden on the IT staff of the humanitarian organization, which will likely be working to restore systems that have been impacted.

**Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.**

The portal is built on the Windows Azure platform from Microsoft to support performance, availability and simplified publishing. What is most innovative is the way that rich text and HTML admin interface tools are used to integrate a number of publically available tools and services (including Windows Live, Bing Maps, and social media feeds) to provide dynamic and contextual information to the community.

**Please list the specific humanitarian benefits the project has yielded so far.**

Following the 2011 Japan earthquake and tsunami, food shortages and distribution issues were a significant problem. The shelves in markets were empty, as people in the community stocked up in response to the nuclear situation. Transportation challenges delayed delivery of food to shelters throughout Sendai. Second Harvest Japan, Japan's food banking network, with the help of Aidmatrix, used the portal to communicate rapid updates to the government agencies, relief organizations, shelters and individuals. In addition, the flexible structure of the portal enabled them to integrate several solutions into a single website, making it easy to: find a local food bank using Bing maps; see lists of products needed; make donations of goods and services; donate transportation services; donate financial support; volunteer at a Second Harvest Japan food bank. The existing Second Harvest site had been unable to provide real-time publishing, but the portal enabled it to reach food donors, transportation providers and distributors in the relief effort. Results: "Within just a few hours, I was able to deploy the Microsoft Disaster Response Portal for Second Harvest Japan from my home in Texas after hours to the Microsoft data center in Hong Kong as events were unfolding. It provided a fast and easy way to pull together all the tools that could help the public engage with Second Harvest Japan in the disaster response," said Michael Ross, VP Delivery for The Aidmatrix Foundation. "As a result of this site, we were able to coordinate donations and transportation for the Japan Tsunami Relief valued at approximately \$2 million." In addition to the approximately \$2 million processed, these efforts resulted in: procurement of needed items, including radiation detectors, radiation suits, and food and health items; international and in-country air transportation support; and creation of new connections by providing computers and restoring networks.

**Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.**

When the EF-5 category tornado caused catastrophic damage in Joplin, Missouri, including to the St. Johns Medical Center, the Missouri 1 Disaster Medical Assistance Team (MO-1 DMAT) was mobilized to rapidly set up new emergency medical facilities and provide care for the injured. Getting the necessary resources (physicians, nurses, paramedics, administrative and communications personnel) and equipment to Joplin was a complex process, made more challenging by the fact that different response organizations use technologies for coordination which are often not compatible with one another. Prior to the Joplin tornado, MO-1 DMAT had been working with Microsoft to test the ability to use the disaster response portal to facilitate cross-agency coordination as part of an exercise. During the Joplin tornado response, this was put to a real-world test, with MO-1 DMAT using the portal to direct resources to the available roadways on the path to Joplin, provide information on the temporary medical facilities and construction of the longer-term solution, and connecting the public to relief resources. "When Joplin hit, the portal allowed us that communications capability we didn't have before that." - Tim Conley, Chief of Operations, Interstate Disaster Medical Cooperative. "This is really the new way

to communicate, a much more efficient way to get information out to the public, to get information out to the media." - Rebecca Dougherty, Public Information Officer, MO-1 DMAT.