

In a world plagued by disasters... finally there's help

Mission

Pangea Foundation delivers custom-fit software-as-a-service to nonprofits. Integrating enterprise-class software, visual analytics, and interactive web 2.0 technologies into an extensible service offering, we empower nonprofits to visualize and communicate the impact of their programs on demand.

Impact Essay

Transforming Microsoft® technologies into a real-time intelligence hub for nationwide disaster relief coordination

Pangea Foundation is what you get when you merge the heart of a nonprofit with the mind of Silicon Valley. A 501(c)(3) nonprofit and a trusted partner to nonprofits since 1996, Pangea Foundation delivers innovative, custom-fit web solutions using the *Microsoft .NET 2.0* framework, which enables rapid development, enhanced security, and optimized scalability.

We rely on the *Visual Studio 2005 Integrated Development Environment* to develop extensible applications. Further, we utilize *ASP.NET AJAX* to build applications that are highly interactive and responsive. To enable our software developers and extended IT team to manage and track the progress and health of our software projects, we use *Visual Studio 2005 Team Foundation Server*. We also employ *Microsoft Windows Server 2003* and *Microsoft SQL Server 2005* to ensure high performance and scalability in our hosting environment. Lastly, we host and traffic email with *Microsoft Exchange 2003* and we maximize productivity with the *Microsoft Office 2007* toolset.

Harnessing these robust Microsoft technologies, Pangea Foundation added innovative disaster relief software to its service portfolio in 2008. The solution, branded ReliefPoint™, was custom-designed to meet the unique needs of America's disaster services organizations.

From volunteerism to innovation to extraordinary impact creation

What began as a volunteer effort in San Diego has been transformed into a powerful impact multiplier that now serves people all across America. Today, when disaster strikes, ReliefPoint serves as a single, unified communications point for nationwide disaster relief coordination. And without the generous support of TechSoup and Microsoft, ReliefPoint would not have been possible.

2007 California wildfires: Beauty from ashes

The idea behind ReliefPoint stems back to October, 2007 when wildfires consumed Southern California and more than a million people were evacuated from their homes. Major highways were closed as fires spread ferociously. Information about evacuation routes, shelters, and road closures changed by the minute.

Recognizing the need, Pangea Foundation voluntarily created a custom-fit software solution to empower 211 San Diego and its 1,200 volunteers to communicate real-time relief information to the public. A 501(c)(3) nonprofit organization, 211 San Diego is recognized by the San Diego County Office of Emergency Services as a key communications resource during times of disaster. Upon launch, the software empowered 211 San Diego to link people with vital resources. It also tracked services delivered to over 120,000 households during the fires.

The *old* way: Paper-based processes that didn't scale

Previously, the 211 call center operations were paper-based. Every two hours, volunteer call operators at five locations received an updated paper binder from authorized resource specialists. The binder included information provided by authorities, which was then communicated to the public when they called 211 for help. Not only did this approach not scale, the information was up to two hours old.

The *new* way: Less time buried in paper—more time serving people

After a few days of round-the-clock software development using Microsoft technologies, Pangea Foundation helped to transform the 211 call center operations from a paper-based environment to a vibrant, scalable, intelligence hub. With accurate emergency information now instantly accessible via a live connection to a SQL database, 211 call operators no longer had to waste valuable time sifting through paper binders to find what they needed.

Instead, resource specialists were able to input information received from authorities directly into the software. Call operators were then able to instantly access that same information and communicate it to the public. Lastly, 211 could track the origin and nature of the calls to provide real-time trend insight to relief agencies and public officials.

A commitment to building the technological foundation for impact-enablement

Following the fires, Pangea Foundation and 211 San Diego made a commitment to work together to make the software even more robust, with an ultimate goal of equipping disaster services organizations nationwide with the software, to ensure they were prepared to meet the demands of future disasters. Incorporating lessons learned from the fires, ReliefPoint was born.

2008 Midwest floods, Hurricane Gustav, and Hurricane Ike

During 2008, ReliefPoint was donated to accelerate relief during the Midwest floods, Hurricane Gustav, and Hurricane Ike. Because ReliefPoint is web-based, relief workers can access and communicate updated information to the public in real-time—whether they are working inside the disaster zone or 3,000 miles away.

This was *particularly* important during Hurricane Gustav when 211 call centers based in the Gulf Coast region were immobilized. Because ReliefPoint is securely accessible via the web, distributed

211s from across the United States were able to backfill critical gaps by receiving forwarded calls originating inside the disaster zone, and using ReliefPoint to provide callers with relief information.

With ReliefPoint, call operators were able to answer a range of vital questions immediately: From questions about road closures to evacuation routes to the nearest shelter; from determining if it was safe to return home to identifying power outage updates to pinpointing boil water alerts. Without ReliefPoint, people would not have had access to the information they needed to remain safe.

2009 Santa Barbara fires and the H1N1 influenza (swine flu)

Most recently, ReliefPoint was donated to facilitate relief coordination during the Santa Barbara fires. It was also used to link people to services related to the swine flu, as well as deliver trend insight to stakeholders and public officials.

A smarter approach to disaster relief

Thanks to TechSoup and donated Microsoft technologies, ReliefPoint is transforming how disaster services are delivered and reported across America. In only a short time, ReliefPoint has already been used to serve over 330,000 households nationwide.

With additional support, we will build upon these efforts, make ReliefPoint even more robust, and help ensure that America's communities are better equipped to withstand the demands of the next disaster—before it happens.

“We first used the software during the 2008 Iowa floods. It was then that we began to realize the strategic role of technology in disaster risk reduction. The more prepared a disaster services organization is before an emergency, the more effective and credible it will be during an emergency. We will either save lives—or lose them—depending on the steps we take today to prepare for tomorrow’s disasters.”

--Chris Juett, 2-1-1 Program Manager, United Way