

Crowdsourced Labor-on-Demand Changes the Future of Disaster Preparedness & Relief

Summary: CrowdFlower insights from work with Mission 4636 in Haiti

San Francisco, April 20, 2010 — This week marked the three month anniversary of the Haitian earthquake. At CrowdFlower, we remain inspired by the collaborative impact of Mission 4636, and we've taken time to reflect on the challenges and successes of these disaster relief efforts. Today we are sharing lessons learned from the process in the hopes of seeing this type of crowdsourced volunteerism become a key component of future disaster preparedness and relief.

Mission 4636 Overview

Despite the massive devastation of buildings in Port-au-Prince in January, most of Haiti's cell tower infrastructure remained intact.

* Within 48 hours of the earthquake, Josh Nesbit of FrontlineSMS:Medic and Katie Stanton of the U.S. State Department convinced DigiCel, the largest telco in Haiti, to set up a short code - 4636 - that people could text for help.

* Robert Munro of Energy for Opportunity and Brian Herbert set up a workflow where French Creole-speaking volunteers could translate and classify the messages to help aid workers send relief.

* Once the system was working, InSTEDD (www.instedd.org, in collaboration with Thomson Reuters) worked on the ground to broadcast the existence of the short code to as many Haitians as possible.

* Through word of mouth, the number of volunteer translators grew throughout the Haitian Diaspora.

* As the volume of urgent messages grew, there became a growing need for a more robust workflow platform.*

* CrowdFlower began pulling in feeds of SMS messages, facilitating their translation and posting feeds of translated messages.

The Results

By using crowdsourced volunteer work, the Haitian SMS translation and classification work was completed with contributions from around the world. "Harnessing thousands of volunteers would normally create a logistical nightmare, but it is specifically this kind of amorphous virtual labor force that the CrowdFlower platform was built to accommodate," said Lukas Biewald, CEO of CrowdFlower. Results of the effort included:

* CrowdFlower collected over 16,000 judgments/translations on this job. At peak volume in one hour over 5,000 SMS messages were processed.

* The average response time to translate, map/geocode and categorize a message did not exceed two minutes.

* Before the earthquake, Samasource (www.samasource.org, a nonprofit specializing in socially responsible outsourcing) launched a work center in Haiti. This new center assumed a large amount of the earthquake relief responsibilities, providing not just labor for the emergency message routing but also creating badly-needed jobs for the local economy.

* For messages like "condition bloody about. undergoing children delivery corner of delmas 31 and rue marine"(translated message) it was crucial to act quickly, get the exact location from an ambiguous, 140 character message and get an accurate classification so the right type of aid could be deployed. In this case, USGS responded "just got emergency SMS, child delivery, USCG are acting, and, the GPS coordinates of the location we got from someone of your team were 100 percent accurate!"

What's Next for Relief Organizations

Parts of the feed of emergency SMS messages - and maps generated by Ushahidi (www.ushahidi.com) - are now used by a growing number of organizations, including the Red Cross, Plan International, charity:water,

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the U.S. State Department, International Medical Corps, AIDG, USAID, FEMA, U.S. Coast Guard Task Force, World Food Program, SOUTHCOM, OFDA and UNDP.

"I wish I had time to document to you every example, but there are too many and our operation is moving too fast... I say with confidence that there are hundreds of these kinds of [success] stories," said Craig Clark of the U.S. Marine Corps. "The Marine Corps is using your project every second of the day to get aid and assistance to the people that need it most."**

Many other relief organizations, including the State Department, shared similar feedback on the utility of Mission 4636 and the unprecedented efficiency it added to relief efforts. Mission 4636 was brought to life because many, different organizations were able to work together quickly and effectively. It made clear the advantages of a flexible crowdsourcing workflow to managing disaster relief. Businesses like crowdsourced work because they don't have to plan unknown work capacity in advance, and disaster relief is simply an extreme extension of this same situation - a case where planning for the unknown is impossible. Through viral channels and a microtask framework, thousands of people around the world were brought in to doing mission-critical work within days.

The SMS translation project was developed and launched extremely quickly, and there were numerous challenges of every shape and size throughout the process. Two main points emerged:

* Importance of information sharing: publishing an RSS feed of the translated SMS that was accessible to many different groups was key in allowing aid agencies to access particular categories of messages most important to their work. Ushahidi's maps of the reported incidents and the requests for help made an important delineation of the overall trends separate from the individual needs. Helping streamline the actions and information exchange among more than a dozen agencies was a much-needed contribution to a typically fragmented disaster relief ecosystem.

* The role of crowdsourcing in future efforts: it is clear that new technology and cross-platform collaboration stand to make significant contributions to future relief efforts. Mobile phones will enable an iterative data collection and data exchange process to assist relief agencies in future emergency situations. Crowdsourced data processing has a role within these relief efforts and will be a highly flexible, highly responsive tool for any and all actors.

As mobile phone penetration grows around the world, we can anticipate growth in the coverage of SMS-based relief efforts in the event of an emergency. As Internet penetration grows, the available worker pools to assist with crowdsourced translation, categorization and tagging efforts to support on-the-ground relief efforts will also expand. Finally, as governments, nonprofits and humanitarian relief agencies learn more about the possibilities of crowdsourcing for emergency relief, we are confident that greater numbers of lives will not only be changed but saved.

You can learn more about Mission 4636 at www.mission4636.org.

*source: <http://blog.ushahidi.com/index.php/2010/02/23/ushahidi-the-unprecedented-role-of-sms-in-disaster-response/>

**source: <http://blog.ushahidi.com/index.php/2010/02/06/ushahidi-how-we-are-doing/>