



Japan Tsunami Relief

Combining Donations and Technology for Maximum Impact

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-Local support recipient

Intel Foundation relief efforts connect Japanese tsunami refugees with help, hope, and the outside world

As Intel Japan employees watched televised images of people frantically trying to contact friends and families on decimated cell phone and landline networks following the devastating earthquake and tsunami in the Tōhoku region in March 2011, an idea began to form. Laptops with WiMAX Internet connectivity could provide a lifeline for those searching for loved ones and wanting to communicate with the outside world.

The morning following the earthquake, an Intel team worked with WiMAX provider UQ Communications to find where signals were strongest, packed up a couple of cars with food, water, WiMAX LAN adapters, cables, power supplies, and as many computers as they could find, and headed into the tsunami-stricken zone. As thousands of people were fleeing in the opposite direction, they navigated the treacherous road and made their way to the Sendai NPO (Non-Profit Organization) community center, which was the nerve center of earthquake response in the region. They determined the greatest need for Internet connectivity was in refugee shelters.

Enabling refugees to connect with loved ones

Before the Intel team arrived, the Sendai residents in refugee shelters had limited ways of connecting with friends and family after thousands of homes, phone lines, and computers were washed away. The Intel team's first stop was Wakabayashi, where an estimated 1,500 people were missing. They set up two Intel® classmate PCs in the gym of a junior high school that was now a refugee shelter, housing hundreds of people who had lost their homes. The Intel team set up classmate PCs and laptops with Internet connectivity in 10 different locations in the tsunami zone the first day.



With PCs connected to the Internet via the UQ Communications WiMAX or other 3G service, residents were able to get onto Facebook* and use services like Twitter* and Google People Finder* to let family, friends, and the world know they survived the disaster.

As the immediate need for confirming the safety of individuals and creating evacuee lists subsided, the equipment began to be used for other purposes such as collecting up-to-date administrative information and news, employment searches, creating a volunteer information database, and posting words of thanks on blogs to those who had assisted in support efforts.

Nearly 50 Intel Japan employees were involved in deploying, training, providing back-end support, or preparing equipment for the refugee centers.



Intel Foundation matches funds, provides grants

At the same time, Intel employees and retirees from around the world began to respond and donated over \$1 million to the relief organizations of their choice. The Intel Foundation matched the employee giving with \$1 million and then also set aside an additional \$1 million for direct grants.

Most funding went to projects and to provide humanitarian relief in the hardest hit prefectures of Miyagi, Fukushima, Iwate, and Ibaraki. A portion also went to NetHope, a consortium of relief organizations that focus on IT infrastructure needs to ensure that relief experts have the technology tools they need to function effectively in the field.

Because improving education is part of the Intel Foundation's mission, we look for opportunities to contribute to efforts that benefit children and schools affected by a disaster. The Intel Foundation chose to partner with Learning for All, a refugee effort for children who have been displaced by the tsunami. Students who were forced to evacuate from their homes, relocate to another region, or transfer schools have fallen behind or face additional academic and psychological difficulties, such as post-traumatic stress disorder (PTSD).

Learning for All provides classrooms, supplies, and teachers in Tokyo for displaced kids as well as sends teachers and University of Tsukuba students into the disaster zone to act as mentors for children in refugee centers whose schools have been destroyed. Learning for All was able to assist students in the Tōhoku region, for example, who were unable to complete their school years or have graduation ceremonies.

In total, the giving from Intel employees and the Intel Foundation represents the fifth largest philanthropic effort in Intel's history.

Massive relief effort required new approach

It became obvious to the Intel team that the challenge of restoring connectivity in the region was more than what one company could do alone. The need was so widespread and the devastation so massive that it would require government, non-governmental organization (NGO), and industry collaboration to successfully tackle the problem. This was a challenge that the Intel World Ahead Program decided to take on.

Because of the unique relationship that Intel Corporation and Microsoft have with OEMs, carriers, and ISVs, they worked with the Japan Electronics IT Industry Association (JEITA) and pulled together an industry consortium of Information and Communication Technology (ICT) companies who were willing to be a part of the solution. Japanese IT, software, computer, and carrier industry associations, the two primary government ministries responsible for disaster relief (Ministry of Economy, Trade, and Industry, and Ministry of Internal Affairs and Communications), and other government Diet and cabinet representatives also joined the cause. The industry, government, and association representatives orchestrated their relief efforts with the National NPO Support Center and Japan Communications, Inc. to determine which communities, local NPO refugee centers, or other locations needed assistance.

One of the locations where the ICT group started working was Yamada, a coastal town that suffered catastrophic damage. The town hall, located on high ground, managed to escape significant damage and became the community hub. Here, PCs and other ICT equipment were used for coordinating medical care, finding out about conditions outside their town and coordinating administrative information.

In Ishinomaki, where the municipal hospital was destroyed, the ICT support group set up PCs in the Yurakukan emergency shelter where nursing care could be provided to evacuees. These PCs have become the equivalent of nurses' stations used by medical staff.

In total, the industry consortium donated nearly 1500 PCs, hundreds of printers plus wireless LAN adapters, switching hubs, and other computer equipment.



ICT support model an industry first

This ICT support scheme was the first time in Japan's history where all of these organizations worked together on a disaster relief effort. Although only active for three months, the support team acted as a model for efficient and effective distribution of support computers supplied by the participating companies. Now that the collaboration agreements are in place, Intel and the ICT support group are working with the government to perpetuate this structure as a model for future disasters.

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- Local support recipient

"...given the situation in which we found ourselves, where we were unsure of even where to start, this type of support perfectly hit the spot, and we are very thankful for it."

- Local support recipient

According to the groups' post-disaster activity report, future efforts should focus on improving ICT literacy among government employees involved in disaster recovery. One other recommendation is that government and industry take more advantage of cloud computing as it would facilitate restoring municipal administrative operations, such as evacuee information acquisition, relief supply management, and disaster victim certificate and residential building disaster certificate issuance.

Ready for the next one

Should another natural disaster come, the Japan team at Intel has put forth a generous example and an ICT support model that can be quickly replicated. Intel and the Intel Foundation will continue to encourage employee volunteerism and giving as we seek to improve lives in communities where we work and live throughout the world.