

After the Wave: Japan and the birth of Fon's disaster support procedure

Background

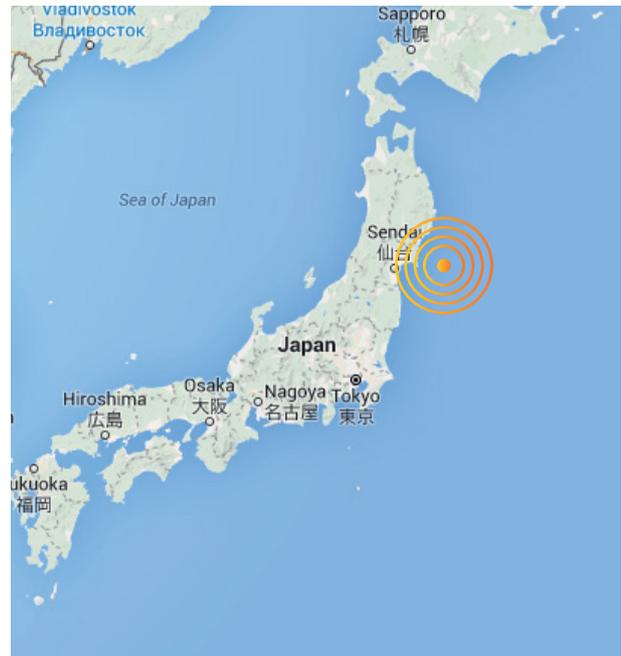
On March 11th, 2011, Shigeru was driving to work. It was a typical early spring day. The tranquil morning lazily turned into the afternoon, progressing as it normally did. Shigeru ate lunch as always, and probably never would have thought twice about that Friday afternoon. But at 2:46pm, the course of his life - and his country's and even the world's - altered when a 9.0 magnitude earthquake struck Northeastern Japan.

"We were in a huge skyscraper, on the 21st floor. We had experienced earthquakes before, but not like this. At first, when the shaking started, everyone was kind of laughing and smiling, just out of pure shock. We couldn't move. We were physically frozen in place by the intensity of the shaking. There were loud booming sounds, kind of like bombs going off. And then all of a sudden, it was quiet. After the shaking stopped, when you looked outside, you could just see buildings on fire and smoke everywhere. It was like a warzone. We had to stay at our desks, in our buildings. No one could leave the city, and no one could enter. We couldn't go home. The entire city was on hold, time stopped. And this was in Tokyo! We were 360 kilometers away. We were lucky."

The quake that struck Japan that day was the fourth largest earthquake in modern history. The shaking lasted for 6 long, nightmarish minutes. Within seconds, the magnitude of the convulsion cut power to 4 million people and sparked 14 major fires across Tokyo alone.

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It was less than an hour later when the first tsunami waves struck. The tidal waves towered over buildings with a full height of 39 meters (128 feet). Crashing down with colossal force. The sea was relentless, toppling buildings, carrying cars like mere river pebbles... dozens of coastal cities were lost to the hungry mantle of an enraged sea.



The advance of the waves halted only after having travelled 10 kilometers (6 miles) inland. In less than an hour Japan had been rattled to its very core, and Shigeru looked out of his window overwhelmed by shock.

As bad as the earthquake and tsunami were, the disaster didn't end there. A day after the earthquake, the Fukushima Nuclear Plant suffered a severe energy accident, largely as a result of the tsunami waves. This resulted in three nuclear meltdowns and the release of radioactive material. It was one of the biggest nuclear catastrophes in history.

"After the Fukushima crisis, life changed. The amount of public transportation was reduced to around 30% of normal capacity. Normally, if 20 trains ran per day, now only 6 would come. To save energy, we had to work in the dark. The lights in the office buildings had to be turned off. The city actually made a schedule, where the lights could only be on in specific zones during certain times of the day. No air conditioning could be used, and water usage was very limited. Life was like this for close to two months."

As all of this was happening, Fon employee Joan was just waking up to the birds chirping on the other side of the world. He began getting ready for work at the company's headquarters in Madrid when the first alarming thing of the day happened. He received a text from the office that at 5:48 a.m. local time, the lights of over 55,000 routers in Japan had suddenly switched off without warning, turning the hotspot map dark. They were now "deadspots" and no one knew why. In the car, listening to the radio, Joan soon had his answer. He heard the news about the earthquake and immediately thought of his colleagues in Japan - he had just been in Japan working with the team 2 months prior. Joan hoped they were all okay.



Solution

At 8:45, Joan received the message he had been waiting for - his team members in Japan were okay. But there were many people who were not. Between the earthquake, tsunami, and nuclear explosion, 1.2 million buildings were destroyed and 400,000 were left homeless. Nearly 16,000 were dead and over 8000 were injured or missing. In some areas, mobile networks were completely down, making it near-impossible to make calls or get connected via mobile data like 3G. This meant that people were unable to locate their loved ones - an alternative way to connect was in desperate need.

Joan thought, how can we help them? What can we possibly do from this side of the world to lend a hand? Then an idea came to him - why not open the WiFi network across Japan, to almost 1,000,000 access points? Through a joint effort between SoftBank and Fon, this alternative was born: the Fon-SoftBank WiFi hotspot network across all of Japan were opened - for free.

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The deployment was not easy. The Fon team dropped their current projects and dedicated the entire working day to making this happen. Opening the network to only the hotspots in Japan and not to the many other countries within the Fon network was complicated. But by midnight, the service was up and running and people were able to get access.

Results

Urgently trying to communicate with friends and family members, the availability of WiFi through these Fon-SoftBank hotspots went viral. Over 20,000 Tweets were published within just a few hours after the network was opened. The amount of people who were now able to get connected skyrocketed.

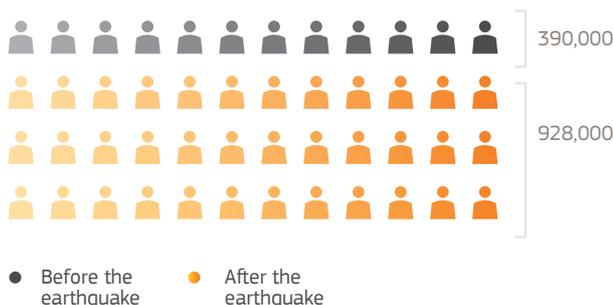
On March 11th, there were 570,000 network accesses to the Fon WiFi hotspots in Japan. After opening up the network, within just 9 hours, there were 3,456,313. That's over a 500% increase.

The amount of unique visitors also grew exponentially. On the day of the earthquake, 390,000 unique users visited the WiFi network. After WiFi access was opened up, that number more than tripled, jumping to over 928,000.

Network accesses



Unique visitors



With phone lines and 3G communication completely nonfunctional, accessing the internet via WiFi was, for many, the only way to contact their families and look for a way home. People started using a service that they only thought they would have to use in their worst nightmare, Google's newly deployed "People Finder" tool designed to help locate the missing.

Knowing this, Fon and SoftBank left the network open until April 4th, nearly a month after the earthquake struck. At this point, communication access had begun returning to normal, but there were still many people without access in the zones where the tsunami hit the hardest. In these places, Fon and SoftBank decided to leave the hotspots open - in some places, this lasted for nearly an entire year.

Impact today

Shigeru says that over 5 years later, you can still see signs of the destruction caused by the earthquake, tsunami, and nuclear disaster.

"Many people who lost their homes in the disaster are still living in temporary housing from the government. We have had thousands of earthquakes since, most of them very small. But even the tiny ones - you can feel the fear in the air every time the ground moves. Even slightly. Some people still refuse to eat any of the food that comes from the south side, because of potential radiation poisoning. Probably the worst part is not knowing what the full effects of the nuclear radiation are... those probably won't be seen for decades."

But one thing Shigeru will always remember is how people helped each other. He will remember how individuals and businesses did everything they could to lessen the crisis, no matter how small the act. Providing access to WiFi was a way to help ease some of the mass panic among the public, allowing them to assure that their family and friends were okay. It gave them a lifeline to call for help if they needed it. And just as importantly, it brought them some sense of normalcy and comfort in a time of extreme hardship.

Fon also walked away from this disaster a better network to its customers: it learned how to use its service in order to help in times of great need. Because of this experience, Fon implemented a new "Disaster Support" service and created a procedure that allows for quick deployment. Fon has had to use this system twice since the Japan 2011 disaster - again in Japan during the 2016 earthquake and in Belgium following the terrorist attack in spring 2016. At Fon, we hope to not have to use the service, but we are very grateful to be in a situation where we can help when needed.

In daily life, WiFi is used for surfing the web, watching videos, and listening to music. But just like in Japan, it can also be used to bring communities together and act as an invaluable tool to aid in times of disaster. Every community should be able to enjoy the benefits of WiFi - during the good times and the bad.

