

WEATHERING THE STORM:

Technology, Communication, and Disaster Recovery

By Ivanka Menken

How would you react if you find yourself in the middle of a disaster? For example, imagine you're at work and your boss tells you to go home because there is a hurricane coming, or the city is flooding.

Forget about the standard corporate response or the enterprise disaster readiness procedures. I'm not asking about what your boss tells you what you should say and do. I'm asking you: *What would you do? What would you say? How would you respond?*

There have been several major natural disasters over the past twelve years: Hurricane Katrina, floods in Queensland (Australia), earthquakes in Haiti and Japan. Over the past few months, I interviewed people who actually had to deal with disaster recovery, and this article shares what they learned—and what we learned during the floods in Queensland.

BE PREPARED

Even for the most loyal employees, business continuity is likely not as high on the priority list as home and family (including pets). However, the people I interviewed—having been through earthquakes, hurricanes, floods, tornadoes, and fire—continued to look after their homes, their families, and their customers, all at the same time. Personally and professionally, the best way to get through a disaster with the least amount of permanent damage is to be well prepared:

- *Plan for what will happen and know what you can and can't do:*
- *Make it real—practice and test your plan on a regular basis, and update it based on the test results.*
- *Have disaster plans for your business, your job, and your home:*
 - What are the documents and items that you want to have with you when you need to evacuate the building?
 - Are these items conveniently located so you can grab them as you leave the building?
- *Have different plans for different scenarios:*
 - What are you going to do when there is a fire or an earthquake (i.e., when you have no prior notice)?
 - What will you do in case of flooding or hurricanes (i.e., when you do have prior notice)?

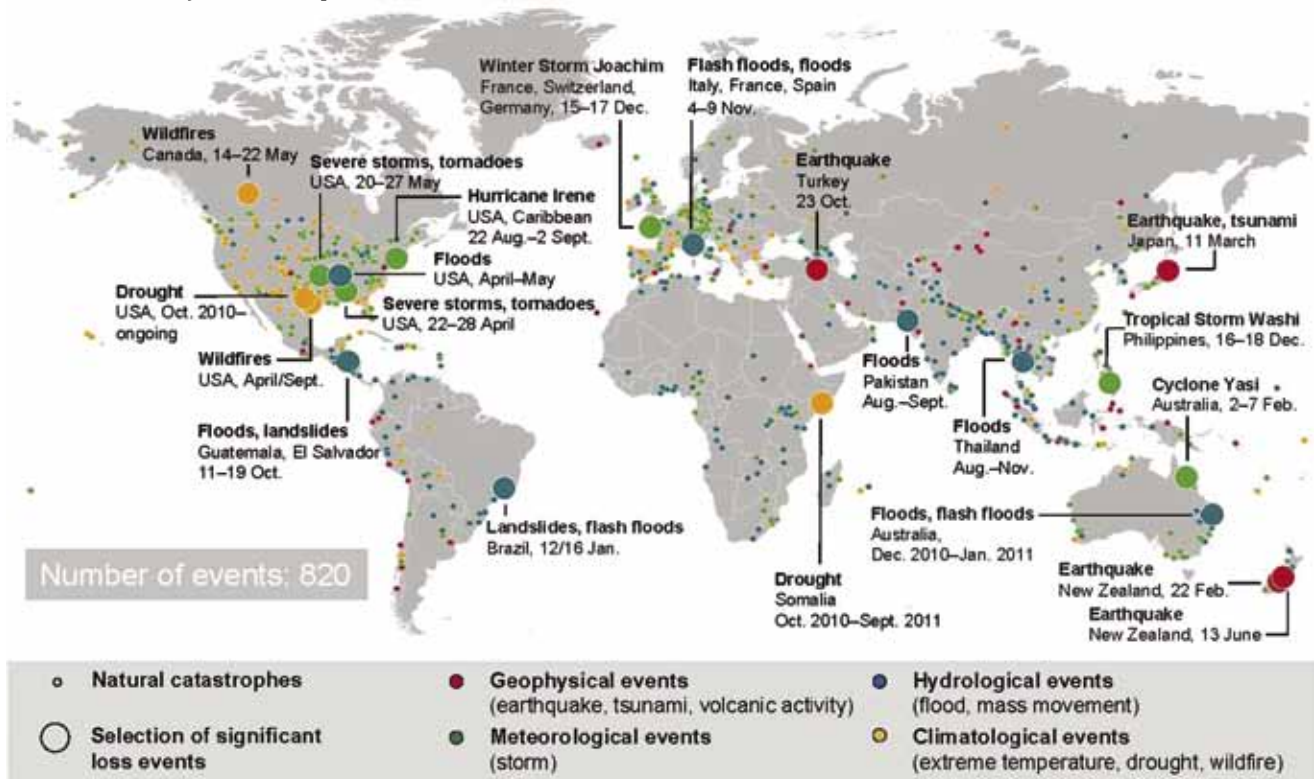
Perhaps the biggest mistake is thinking that natural disasters won't happen to you! While the number of reported disasters was lower in 2011 than in previous years, the number of people involved in natural disasters in 2011 was higher than ever before.

TECHNOLOGY TO THE RESCUE

Once upon a time, a natural disaster meant the end of your business. There are countless stories of business owners and shop managers who lost everything due to a fire, earthquake, or flood. These days however, that is no longer a foregone conclusion. This is due, in part, to the fact that we have more documented evidence of successful policies and procedures to follow before and during a disaster.

Technology has also given us better tools for weathering disasters (so to speak). For example, in many organizations, client details, business processes, and financial data are electronic and are no longer stored in paper-based filing systems. As long as there are solid backup and recovery procedures, and actual backup activities are performed, the building could burn down and your critical data would be safe. However, this is only true when you keep your data backup off site, far enough away from the original location that it won't be affected by the same disaster event. A disaster recovery center or backup storage within a three-mile radius is probably not the answer; the operation should be separated from the recovery site by *at least fifty miles* (if not more).

Another thing to consider is how you're going to get the data from the backup media into the new operational environment. After a fire, you probably have to purchase new hardware. Will you be able to run the backup tapes to load the data on the servers? After



Source: Munich RE.



a natural disaster, you and 50,000 other people will be looking for the same answers, and possibly trying to buy the same hardware. Where can you find the tape readers? Or the correct drivers to read the hard drives and CDs/DVDs?

One IT service provider who has dealt with many data restores over the years recommends storing your critical data in the cloud. Tapes are too vulnerable, CDs and DVDs can get scratched, and external hard drives can crash. But when you store data in the cloud—with redundancy, of course—you will have easy access to your backup data without having to procure dated hardware or software to complete the restore.

The information you need to have on a backup depends on the type of business you're in. At the very least, plan to back up:

- Your client/customer data, including identity management data;
- Financial/compliance data;
- Project details (i.e., work-in-progress data); and
- Contracts and legal documents.

Cloud computing, the internet, and mobile technology have also been extremely beneficial for planning and preparation in relation to business continuity and the ongoing support of our clients.

PLANNING FOR PEOPLE

I interviewed one business owner in New Orleans who, after multiple hurricanes, implemented a “backpack system.” Once hurricane season starts, every employee must keep a backpack

with them at all times. The backpack has all the business necessities: data and power cables; a mobile internet connection; a VoIP phone, handset, and a headset; a USB drive with the company's current disaster recovery manual and contact data for all employees and key stakeholders; a notepad, company stationery, and pencils. All of their emails and files are stored off site via cloud (SaaS) services. Thus, armed with their backpacks and the cloud, employees will be able to keep the business running and customers are often none the wiser. Luckily, hurricanes give you at least a few days' notice, which makes the backpack system a good fit for New Orleans and other hurricane-prone areas; you may not be so lucky with tornadoes or earthquakes.

When you have all your client data online, or at least location independent, you can develop plans to mobilize your support staff and relocate them to another area where they can continue supporting clients. This has an added benefit: if staff in the disaster area are able to continue working, you are providing backfill so that any help desk facilities outside the disaster zone don't wind up having their workload doubled (or tripled) overnight. One organization we interviewed had multiple help desks, and when one office went completely offline due to a natural disaster, they patched all calls to another branch. That branch was not staffed to deal with the sudden influx of calls, and the customer experience suffered as a result. The company has since changed its policy and moved to a VoIP phone system, so they can relocate the service desk staff to any location outside the disaster zone and continue to deliver support services to clients, in line with agreed-upon service levels.

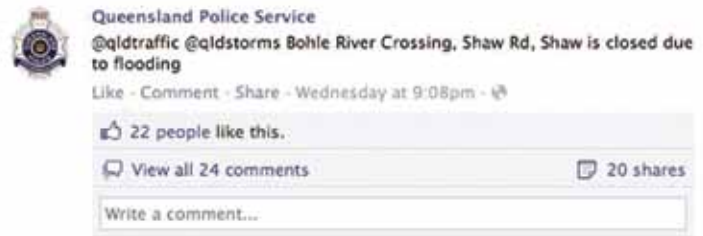
DISASTER DOESN'T MEAN YOU CAN'T COMMUNICATE

When disaster strikes, or is about to strike, you still want to be able to communicate with your clients, who want to know that they will not be negatively impacted by the fact that your business is in the middle of a disaster. But did you know that your digital office phone needs electricity to operate, and that calls from a mobile phone use a different technology from text messages? In the past, the telephone didn't need any external source of electricity to function. This has changed with the introduction of digital telephony. Phones now need to be plugged into the power grid to operate. So when the power is cut off during a disaster, you won't be able to use the phone to contact your clients. (And remember, in a disaster spanning multiple days, your backup generator will likely run out of fuel.)

When we can't use our office phones, our natural recourse is to our mobile phones. If you have a corporate mobile-phone number that is connected to the head office, it doesn't matter where you live or work. The number is connected to a specific area in the US and all voice traffic flows back via that area. When there is a natural disaster that stops the telephone system in that area, it also means that you won't be able to get any mobile-phone calls. During the earthquake in Japan, the mobile-phone system was so overloaded, it wouldn't allow any voice calls to go through. The only way to contact people was through text messaging. The same happened in New Orleans during Hurricanes Katrina and Gustav. With the power out, people learned to rely on SMS-text messages for direct communication.

So, if the phones aren't working, the mobile system is overloaded, servers are down, and all you have is texting and social media, what do you do? What is the best way to communicate with your employees and customers? A creative help desk staff at one insurance company sprang into action and started a Facebook page and Twitter account. When disaster strikes, they use these channels to tell employees if it is safe to come to work, keep clients up-to-date on what's happening in the office, and let clients know how they can contact the company to discuss their worries and concerns. This system has worked so well, it's now company policy: every employee has to follow the Twitter account for future reference. (Systems like Yammer or Salesforce Chatter serve a similar purpose, especially when you want to broadcast information internally.)

You can also use Facebook and Twitter to stay in touch with the general public. During the floods in Australia last year, the Queensland Police Service started using Facebook and Twitter to dispel rumors and myths that were causing panic throughout the region. They continued the service after the emergency situation and they now post about generic traffic information, missing persons, and persons of interest. Recently, they have started to inject a little humor into their messages, which makes you want to check their Facebook page on a regular basis.



What we learned from our interviewees (and our own experiences) is that a disaster recovery plan is just one piece of the puzzle. Your employees matter—what they care about most are their families and their homes. Power matters—make sure you can communicate with your employees and your clients, even when the phones don't work. Technology matters—take advantage of cloud computing to make sure your backup data is ready to be restored as soon as the crisis is over. And communication matters—use social media to keep the lines of communication flowing to your employees, your customers, and the general public.

Most of all, be prepared. Talk these items through in your next disaster recovery planning meeting—if you haven't already.



About the Author

Ivanka Menken is the founder and CEO of The Art of Service. Ivanka has spearheaded the company's Cloud Computing Certification Scheme, which is fast becoming an industry benchmark. She is a sought-after speaker at global IT events and has presented at itSMF meetings and the HDI Annual Conference & Expo.