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TECHNOLOGY in the Aftermath of a Hurricane

IT Insight by Jill Barson Gilbert

Living on the Texas Gulf Coast, we get our share of severe weather, but we had had no major hurricanes since 1983. On September 13, Hurricane Ike arrived early in the morning, knocking out power to over 4 million customers. There is nothing like a natural disaster to get you thinking about technology.

Watching and Waiting...

Early in the week of September 8, Ike grew to tropical storm strength and headed into the Gulf of Mexico. At one point, six computer models predicted six different paths. When computer models predict that tropical weather will affect any densely populated areas, TV meteorologists have a free-for-all. By September 11, Hurricane Ike was on a potential collision course with Galveston (a barrier island) and Houston (more than 30 miles inland), TX. My family spent most of the day putting things in order, from personal, business, and technology perspectives.

Sitting on relatively high ground in the Clear Lake/Galveston Bay area, we planned to stay put. The house was designed to withstand Category 3 Hurricane winds (130 mph) and the greatest threat was rising water. When Tropical Storm Allison dumped over 26 inches of rain in 24 hours in 2001, our area had only temporary street flooding that subsided quickly.

Under mandatory evacuation orders, we left on the morning of September 12 when Ike threatened to produce a Tsunami-like storm surge of up to 20 feet. We packed our most important possessions, adopted dog, and laptops into the back of a Chevy Trailblazer and drove inland another 20 miles to wait out the storm with friends.

Technology in the Aftermath

Ike was large and slow moving. We watched on TV as the eye of the storm passed over our house early that Saturday morning, knocking out the power grid to the entire metropolitan area, and then some… power in our section of the neighborhood was out for more than 11 days. A friend who leads the computer data backup team for a global oil company said that they never lost power. Nonetheless, three days before Ike's arrival, the group loaded up three FedEx trucks with data tapes and headed north, not to return for 10 days. The information was safe.

We still use landline phone service, since the local voice-over-internet-protocol (VOIP) phone providers cannot accommodate two phone numbers at one address. With hard-wired phones in addition to wireless landlines phones, we had fully functioning phone service, where others did not.

Blackberrys, smart phones, and even simple cell phones were critical in the storm's aftermath. Cell phone service worked before and after the hurricane passed. Radio stations advised subscribers to send text messages, rather than placing calls, to help keep bandwidth open for emergencies. We were glad to be in touch with our far-flung families. After a while, the ringing cell phone became annoying and we asked friends and family to use our landline.

We had portable radios, but no other news for a week. Our cable service was intact, but useless. On Day 6, I went to the local library to use the Internet. It was painfully slow, with every available public computer occupied and several patrons using personal laptops to access the Wi-Fi network.

On Day 8, generous friends loaned us a gasoline generator. This redefined the term "uninterruptible power supply"—a generator with a tank of gas that lasts for 18 hours. We plugged in our refrigerator and a neighbor's, a wireless Internet router, and a small table lamp. On Day 12, one full week after the rest of our neighborhood got power, our electricity came back on. Now we were back in business!

IT Disaster Preparedness and Recovery

Natural disaster can strike anywhere, any time. Your best bet is to prepare not only for the necessities—shelter, food and clothing—but also for business interruptions and communications challenges. The following advice may help you cope after a hurricane, earthquake, ice storm, or other disaster.

- If your organization does not have one, develop and implement a Disaster Preparedness and Recovery plan that addresses how and where you will conduct business after a disaster. The plan might include sending some employees to different facilities and allowing others to telecommute.
- Back up your most critical computer files in two places, if possible. Use your organization's shared servers for one copy and take another with you on CDs, DVDs, or flash drives. Assume that you will not be able to access your network immediately after a natural disaster, either from the office or remotely, because of downed power lines, storm debris in the roadways, traffic light outages, and other infrastructure issues.
- Unplug computers and other small electronic devices

and secure them on high ground. This protects them from water and wind damage and power surges.

- If practical, keep your laptop computer(s) with you. An operational wireless network may be your best means of communication following the disaster.
- If you must evacuate, take along a global positioning system (GPS) unit. You might have to divert off the highway into unfamiliar territory.
- Establish a phone or e-mail "tree" for your workgroup. Build in redundancy, as communications networks will be erratic after the disaster.
- Charge batteries in laptop computers, cell phones, Blackberrys, and digital cameras. You will need these devices after the storm. Remember to keep automobile chargers handy to charge cell phones after the power goes out.
- Use a digital camera to document storm damage to your office and its contents, and then make repairs immediately to secure the property and prevent further damage.
- Take advantage of Web-based e-mail programs after the storm. While features may be limited, you can still conduct business from anywhere that has power and a public computer or network.
- Once power is restored, be sure to plug computers and other electronics into a surge protector before turning them on.

On many levels, natural disasters like Hurricane Ike force us to examine what is truly important and what we can live without. We camped out in the suburbs, without leaving home. Family, friends, and neighbors were a great help. Our family was able to maintain contact and keep our spirits up, though we should have set up a phone tree in advance. Friends loaned us a generator. Neighbors helped neighbors with cleanup, bare necessities, and any working communications technology.

Putting the business in order before the hurricane arrived was a plus. With paper files and my laptop computer high and dry, I got back to business as soon as practicable. Innovation is important. With just a fraction of the power grid restored, the public library's Wi-Fi was a lifeline for personal and business communications. A borrowed generator allowed us to operate our office's wireless network—although we surfed the Internet by candlelight!

Hurricane Ike's aftermath lets those affected make a fresh start. The Houston–Galveston area has a lot more recovery ahead, and we would be ecstatic if it was another 25 years before the next major hurricane. Our thoughts go out to those who suffered significant losses. em

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