

The TMC ADVISOR

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[Disaster Planning 101](#) *By Guy Robertson*

People may use a variety of names for Disaster Planning. Regardless of this, you need to think in terms of:

- before the event - emergency preparedness planning
- during the event - disaster response planning
- and after the event - disaster recovery planning



[Conversational Interfaces](#) *By Roban Chahal*

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Normal Cellular Service

Usually, your cell phone will connect to a nearby base station using radio spectrum allocated to your service provider. That service degrades as you get farther from the serving base station, or as you put more dense material in the way of the signal, such as by being inside a building or going underground.

There are solutions for poor signal areas, like booster antennae or even very small cell sites. However, these are for carriers themselves to use because end users are not licensed to set up their own base stations this way.

WiFi Calling

While you can make VoIP calls on your phone using WhatsApp or other specialty apps, using carrier-supported WiFi calling is easier to set up and use. The technology is likely there in your phone, but it has to be enabled first.

How To Activate

It's a two part process. First you activate the service with the carrier, then you activate the feature on your phone.

Step 1, using Telus as an example: Add the free WiFi Calling Feature on your plan using your TELUS online account.

It's similar for Bell. For Rogers: use your smartphone browser and go to www.rogers.com/AndroidWiFi. For



Fido, Step 1 and Step 2 are all done as one process from your phone.

Step 2, using iPhone as an example:

1. Open your iPhone
2. Select Phone
3. Select Wi-Fi Calling
4. You will need to read and accept the Wi-Fi Calling Terms and Conditions
5. Enter your Emergency 911 Address

On Samsung Android phones, you start from the Phone app, as if you were making a call. Click the three dots at the top right and select 'Settings'. Scroll down and you will find WiFi calling just waiting to be enabled.

Other phones will be similar but you may need to revert to the manual or a

Google search.

Your phone will now authenticate over the internet with your service provider and, as long as WiFi is available, all inbound and outbound calls will go over WiFi. This includes text messages for Android. Apple already uses the data network for text messaging.

Your phone will happily switch back and forth as WiFi service comes and goes but active calls might drop.

Is There a Cost?

They say that it's free but they mean that there's no extra charge. Usage counts against your monthly plan limits for calls and texts.

If you're an IT manager, or otherwise are responsible for WiFi or cellphones, you should first check how much traffic each access point is carrying to ensure that there's enough capacity to add WiFi calling. Then teach your users the procedure for enabling the feature. It is a simple way to give them better service.

If you'd like to explore these ideas further or comment on this article, contact me at ellen@tmconsulting.ca.

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Remote Work + Power Outage *By Peter Aggus*



Deciding what you might do if 'situation normal', or Plan 'A', is compromised is something we regularly teach. Have you ever thought that this is not just a corporate concept—but also one that applies to the increasing numbers of home-based workers? Take a look at how a real, if small scale, 'disaster' can shut you down, and see how having a Plan 'B' can keep you working.

Who Needs a Plan 'B'?

If 'normal life', or Plan 'A', always worked, then nobody would need a Plan 'B'. However, we live in a real world where the unexpected happens and normality fails. Typically this will be a loss of power or communications. It might be because the office becomes unusable due to fire or flood. Let's avoid chaos by planning what to do when the crisis happens.

A Real Example

Shortly after midnight one day recently, a driver lost control of their car and veered off the highway at speed. The car hit a wooden power pole. The pole broke, twisted as it fell and shorted out the 14kV power lines it carried. Circuit breakers cut power and fire was averted, but electric power was cut to over 2,000 customers. I was one.

I woke to an eery quiet and cold. No way to cook breakfast, so we went out at 8am to a restaurant outside the dark zone. We returned around 9am. I had a conference call at 10am. Panic would be a normal response, but I had plans.

My Plan B

Firstly I have an extended run UPS for my IT equipment, so the computer and comms gear were running. This let me complete my conference call as though nothing was wrong, except me wearing a thick sweater (Plan B if no heating).

My UPS batteries would not last



forever, so a new plan was needed. Here I turned to my car, which is a plug-in hybrid electric vehicle. Its 300v battery has around 15kWh of energy and has a 120V inverter. So a long extension cord gave me 1.5kW of power, good for almost 10 hours.

Loss of Infrastructure

By late morning, internet service had died, because the local network only has limited battery backup for the line amplifiers and several were in the dark zone. Not to worry, I have a cellular backup for internet and phones, which was fine until the base station battery ran dry. Cell service was dead by lunch time, meaning phones only worked if they could 'see' cell towers outside the dark zone.

Restoration

By lunch time, Hydro crews had cleared the mess and replaced the

pole. Power came back on ... for a few minutes. Then a sub-circuit fuse blew with the surge load created by all the people who had got up, turned on all their usual morning stuff, found it not working, and left for work in the city. Those appliances now drew massive surge current when the power came back on ... and the fuse blew. This second outage took until early evening to fix (it was one of several fused circuits that failed) so all in we lost power for about 18 hours.

Best Practices

This real story shows how one simple action caused massive complications for thousands. But it also shows how being prepared can reduce the effect of the disruption and keep business alive.

Everyone needs a set of 'Plan B' scenarios. Some steps are simple, like knowing where to find the extension cord to bring power from the EV in the garage to where it is needed. Some may need investment, like perhaps getting a cellular booster so you can make use of distant cell sites when your local one goes dark.

If you'd like to explore these ideas further or comment on this article, reach me at peter@tmcconsulting.ca.

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Before the Event

Good planning at any company begins with a comprehensive risk analysis that should be grouped by likelihood. For example, leaks, flooding and fires are more common than any other risk in Canadian business offices.

A mitigation program enables a company to determine a strategy to mitigate risks before they lead to serious trouble, with the best mitigation programs based on common sense. For example, janitorial staff should watch for stains on walls and ceilings, puddles on window sills, and faulty plumbing.

The combination of a risk analysis and a mitigation program constitutes an emergency preparedness plan (EPP), which, for a head office with three hundred employees, might be twenty-five pages. Authors of disaster plans should remember that the longer the document, the less chance there is that people will read it carefully.

During the Event

Brevity is even more essential to the production of a successful disaster response plan (DRP), which is nothing more than a series of instructions for employers to follow during the occurrence of a disaster. Life safety is the sole purpose of the DRP. The DRP



tells them basic information about how to arrive at their safe gathering site outside the building. Ideally the DRP fills no more than one page. Some companies produce wallet-sized DRP brochures for staff.

After the Event

The final phase of corporate disaster planning concerns measures to reactivate the company after a disaster and to restore facilities and essential operations. The business resumption plan (BRP) comprises these measures in a clear, well-organized document.

A BRP begins with disaster recognition and declaration, usually by the most senior manager on site at the time of the disaster. It involves alerting Board members and all key

employees, calling for the services of strategic alliance partners, and releasing a statement to the media. Immediately after a disaster declaration, emergency management activities should begin. The BRP indicates a time-frame for these activities, which are intended to enable the company to offer at least basic service.

After a fire at an investment brokerage in Vancouver, employees formed emergency response teams (ERTs) to handle business operations, customer service, and computer systems. Within the allotted time-frame of two days, the ERTs had relocated their accounting department to a hotel, set up a temporary customer service unit, organized clean-up, dealt with adjusters, activated an IT back-up site, issued a reassuring message to clients and the business press, and replaced office furniture and equipment.

Finally, disaster plans must be regularly tested, audited annually, and updated.

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Conversational Interfaces *By Roban Chahal*



Remember how everyone in Star Trek talked to the ship's computer? That was great, and it is where business computing is heading, but we're not there yet. At home, people talk to personal assistants like Siri and Alexa and others but what's happening about voice interfaces at work? It turns out that it is likely much closer than you think.

Home First

As with smartphones, years ago, consumer use leads business use for personal assistants. According to Insider Intelligence (eMarketer), a market research company, this year, approximately:

- 24% will use Google Assistant
- 23% will use Apple's Siri
- 21% will use Amazon's Alexa

That's 68% of households! Your experience at the office lags far behind, but maybe not for long.

Voice at Work

A range of companies are integrating a voice assistant into their products or services:

1. The Mercedes-Benz MBUX infotainment system provides voice control over windows, in-car temperature, lighting, navigation, phone calls, text messaging, as well as some internet searches.
2. Starbucks has partnered with Alibaba in China for food delivery.
3. Bank of America's voice assistant provides a voice interface for their mobile app.
4. With Pandora Voice Mode, music streaming users can play, pause, or skip any song, find podcasts, control the volume, and much more.
5. The Nike Adapt Huarache White



Black sneaker allows for a customized fit through the use of a smartphone app.

6. MSC Cruises offers a digital cabin assistant using a smart speaker.

But these are still consumer-focused apps. What about at your office?

Office Applications

Microsoft has developed a range of voice-based services:

- Voice Access is available with Windows 11. For example, a user can open and switch between apps, browse the web, and read and author email. Windows 10 had Voice Command.
- Microsoft Dictate is a speech recognition tool that allows voice input into a Microsoft Office program as well as other programs.
- Microsoft Transcribe records,

then converts speech to a text transcript with each speaker individually separated, using Word for the Web.

- Microsoft has recently partnered to bring OpenAI's Chat-GPT 4 technology to its software products.

Google Docs also supports dictation.

Just Think

We're not yet at the Star Trek level of voice interface but the race is now on for conversational voice interfaces that will make us smile.

Just think about this workday:

- "reschedule my meeting with Susan to tomorrow"
- Read and process your email: "Delete", "forward to Susan with the comment Can we do this?", "Block sender", "Reply I'm busy this week but Tuesday next week would work for me"...
- Open the quarterly report that you're working on and ask "How did these stats compare to previous years?", "Include last year's stats".

Work is going to become a lot more fun!

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