Cover Story

No need to cry

Having a properly thought out and crafted disaster recovery plan will ensure
tears are not shed if the unexpected occurs.

By Mike Pearson

Capsule comment: Without a plan in place, any type of disaster can be crippling.

It is a day that no business hopes it will ever see. An office is destroyed by fire or
flood. A hard drive goes down. Chaos sets in. Now what do you do?

Well, that depends on how much thought you have put into your disaster
recovery strategy and how prepared you are to act on it because with a little bit of
plan-ning, there is no doubt that a disaster does not have to signal the end of the
world for today's businesses.

For Ian Miles, establishing a solid business continuity plan is key to formulating a
disaster recovery strategy. While the term disaster recovery is usually applied to
IT infrastructure, business continuity planning encompasses everything from
computers to supply chains.

"You need a good understanding of what your exposure will be if something goes
wrong," says Miles, who is the president of Toronto Hydro Telecom. "A good
(business continuity) plan will look at all of your potential weaknesses. Once you
cost-out all of your weaknesses you can figure out how much you can afford to
spend (on disaster recovery)."

Toronto Hydro Telecom deploys what Miles describes as the "Cadillac Solution" to disaster recovery. The firm uses a mirrored system at another location, which is capable of handling the same functions as its primary system. The two systems are tied together in real time, ensuring that regular business functions continue without a glitch in the event of a disaster.

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While not everyone can afford the "Cadillac Solution," Miles recommends that all companies, as a bare minimum, back up their data on tape daily. Once data is backed up in this form, it must be stored off-site in a secure location.

As a telecom provider, Toronto Hydro Telecom is especially conscious of the need to keep the lifelines of communication in proper working order. In its case, a system failure could not only result in lost business, but could also put lives at stake if emergency services are disrupted.

"For any kind of company, a disaster can be crippling, without a proper plan in place," says Miles, adding that no two disaster recovery plans are ever alike. "If we were to lose our customer database, it would take months to recover it. And if we give our customers any inconvenience that would result in lost business as well."

Having a plan can go a long way towards preparing for an unforeseen event, but executing that plan is vital to assuring its success. As manager of business resiliency planning for IBM Canada, Ralph Dunham helps clients arrange all of the necessary details, in case the worst case scenario should occur. As Dunham points out, disaster recovery plans can have weaknesses that are not revealed

until the actual time of crisis. That means that everything — right down to the last detail — should be accounted for in a disaster recovery plan.

"In a lot of cases, you won't have access to what you need unless you prearrange it," says Dunham. "You can't order a new network and have it installed at the time of disaster."

""People will react to a disaster the way they are trained. Without the proper preparation, the cost of a disaster can be much higher than anticipated."
-- Pat McAnally, Sungard Data Systems

Dunham points to recent events to illustrate his point. On Aug. 14, 2003, much of the Eastern Seaboard was left without power for an extended period of time. Many companies had diesel generators in place, but did not make arrangements to have more fuel delivered. By assuming that a power outage would not last more than two hours, companies that were poorly prepared were left in the dark. Another event, which exposed weaknesses in recovery plans, was Ontario's experience with the SARS outbreak in 2003.

With any disaster recovery plan, eliminating single points of failure is key to ensuring that the rest of the organization maintains stability. By adding system redundancies, both in terms of IT infrastructure and people, core activities that are deemed "business critical" can be protected, even if access to a particular site is restricted due to quarantine.

To survive a crisis a business must be able to show its customers they are still in business. For Paul Sullivan, that typically involves safeguarding about 25 to 35 per cent of a company's overall business functions. When those business critical applications are protected, long-term damage to a company's reputation can be avoided.

"If a company tried to do everything in a recovery environment they probably wouldn't see a full return on investment," says Sullivan, who is vice-president of Agility Recovery Systems in Mississauga, Ont.

Sullivan defines "business critical" applications as those which a company must have restored within a 24 hour period to maintain consumer confidence. For a hydro company that would mean keeping the lights on, while for a financial institution, that would involve keeping the ATMs up and running.

Establishing both a recovery time objective and a recovery point objective are vital to the stability of a company in crisis, Sullivan says. It is not just a matter of how fast you can get everything up and running, but also dealing with business activity, which occurs during the time of uncertainty.

"You need to consider how current your data has to be at the time of recovery," says Sullivan. "You need to ask yourself: Can I capture those transactions, which occurred when we were down, and how long will it take to get them into the system?"

Agility offers a range of modular solutions that provide companies with alternate facilities in the event of a crisis. It also offers online data backup and mobile recovery services, as well as a Quick-Ship service that provides a pre-configured emergency system that can be sent to a specific location in the event of an emergency. One of its main marketing objectives has focused on the small- to medium-sized business sector, which Sullivan believes represents approximately 50 to 60 per cent of the total marketplace.

For Graeme Jannaway, a Toronto-based business continuity planner and owner of Jannaway and Associates, it is the use and increased reliability of mobile solutions in today's interdependent business world that helps companies resist negative impact from unforeseen events. Jannaway is a vendor neutral company, which assists clients in finding the best possible disaster recovery solution to fit

their needs. Its clients range from a 13-employee company to one of Canada's largest municipalities.

"All of the major recovery providers offer some form of mobile solutions," Jannaway says. "It's important for companies who use them to test them on a regular basis. Mobile solutions and other shared solutions have been proven to work in the past. It used to be just the top banks in the world that could afford this kind of solution, but now we're seeing literally thousands of successful recoveries."

Mobile solutions, such as portable offices delivered to a customer on a flatbed truck, can be linked via satellite to a client's data network. Modular solutions are normally financed on a shared-cost basis, on the assumption that several companies will not have a disaster at the same time. Should a company lose access to their facilities, they can declare a disaster and use the recovery provider's temporary facilities.

"It's a good bet that you won't have multiple disasters at the same time, like a hurricane, a flood and an earthquake," Jannaway adds. "The larger recovery providers have so many places to go, if they can't accommodate a company at one site, they can easily go to another."

Another company offering disaster recovery solutions is Sungard Data Systems. It deploys ultra-redundant Mega Centers in major urban areas, like Philadelphia, Pa., Chicago, Ill., and Atlanta Ga. With the ability to service remote locations up to 40,000 km away, these centres carry a dedicated network to support Sungard's range of modular solutions. Sungard also has its own end-user facilities, called Metro Centres, in select locations. These facilities provide companies the opportunity to relocate all of their business and administrative functions during a time of crisis. Sungard's self-contained mobile solutions are delivered on flatbed trucks and can service up to 50 end users with a generator and satellite hook-up.

In the past, Sungard has sent mobile solutions to help businesses affected by the Red River flooding in Manitoba in 1997, and the great ice storm which hit much of Quebec in 1998. Its clients range from Fortune 100 companies to small independent credit unions.

When choosing a recovery strategy that will best fit their needs, Sungard's Pat McAnally believes that each business must start by identifying what their needs are, and what the consequences would be if those objectives could not be met.

"It's important to think about the length of the service outage and the impact it would have," suggests McAnally, Sungard's senior director of thought leadership and analyst relations. "It's a trade off between risk and what it will take to mitigate that risk."

Whether it is a natural disaster or a simple hard-drive failure, the impact of data loss can be dramatic for any business without a proper disaster recovery plan in place. But with the right preparation, experts agree disasters can be overcome before they escalate into catastrophic proportions.

"People will react to a disaster the way they are trained," explains McAnally. "Without the proper preparation, the cost of a disaster can be much higher than anticipated."

Mike Pearson is a freelance writer in Mount Forest, Ont.