CDW PEOPLE WHO GET IT™

DISASTERS OF ANY SIZE CAN NEGATIVELY AFFECT SMALL BUSINESSES

Effective planning and preparation can mean the difference between a brief outage and going out of business.

Executive Summary

Extreme weather, power outages, fires, hardware failures and other disasters can instantly bring any business to a screeching halt — resulting in significant financial losses while also jeopardizing critical customer relationships. Business leaders who fail to address the risks of such business interruptions are skating on thin ice.

Fortunately, specific steps can be taken to minimize these risks. By ensuring the resiliency of information technology that supports the business, companies can keep serving customers and generating revenue even when disaster strikes. A smart business continuity plan is the best kind of insurance because it actually prevents losses, instead of partially compensating for them after they occur.

Companies can take action to protect themselves against the numerous threats to business continuity, so they can avoid the fate of those who choose to merely cross their fingers and hope nothing bad happens.

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Why Business Continuity Is Vital

Life is uncertain. The small business owners who found themselves in the path of Superstorm Sandy never expected their buildings to be so badly flooded or to have to go without electricity for more than a week. Nor did the small business owners of Lawtell, La., expect to have to evacuate their facilities because of a train crash that resulted in a toxic spill.

But these things happen, and when they do, they can have devastating consequences for businesses. Active orders can't be processed. New orders can't be taken. Customers who have urgent needs (often related to the same disaster that is affecting the business) sometimes have to turn elsewhere for help — and often don't return. In fact, according to the Federal Emergency Management Agency, 40 percent of small businesses struck by a major disaster never open their doors again.

Among the numerous threats that small businesses face:

Hardware or mechanical failure: The Disaster Recovery Preparedness Council's 2014 Annual Report indicates that about half of all business interruptions result from the failure of a server, network or other piece of equipment. Businesses must be prepared to respond to such failures.

Human error: According to the Uptime Institute, 73 percent of data center outages are caused by human error. These mistakes range from unplugging the wrong cable at the wrong time to making a minor but disastrous change in a software setting.

Security threats: PwC's 2015 Global Security Survey reveals that cyberattacks increased by 48 percent from 2013 to 2014. Small businesses must be able to continue operations in the event of a successful attack. They also have to ensure that they maintain information security even in the event of some other type of disaster.

Natural disasters: Mother Nature is an unstoppable force. Although Superstorm Sandy and Hurricane Katrina are infamous for the damage they caused and the effect they had on hundreds of businesses, they weren't the only threat to the East Coast. An average of about 10 named storms occur during each Atlantic hurricane season. Businesses also must prepare for the devastation that can be wreaked by tornadoes, floods, blizzards and earthquakes.

Being prepared for disaster does more than just preserve the status quo for the duration of a storm or power outage. It also preserves customer relationships that can pay dividends for years to come.

In addition, companies that keep operating during a local disaster can win business away from their less prepared competitors — often permanently. Few things enhance a company's brand image more than a dramatic demonstration of its reliability, even under extremely adverse conditions.

Small businesses can also suffer serious legal and regulatory consequences if they lose data during an outage, because that loss can prevent them from fulfilling their contractual obligations or filing reports required by government agencies. A good business continuity plan can enable small businesses to reduce their insurance premiums. Every company should, therefore, make appropriate investments in business continuity.

Key Components of Business Continuity

While continuity plans will vary significantly from company to company, most companies' plans share certain common components:

Data, Application and Server Image Backup

As businesses grow increasingly dependent on IT, it becomes critical to ensure that core systems can be restored in the event that servers, storage or network equipment fail, are damaged or become inaccessible.

This is accomplished through regular backup of data and applications. Historically, companies have maintained onsite backups that could be utilized to quickly restore business operations, while also using tape backups to move copies of critical data offsite in case of an emergency.

The trend today is to use the cloud for backup, for several reasons:

- The cloud offers economies of scale that allow for large amounts of data to be stored inexpensively.
- Automated backup to the cloud eliminates the unreliable manual processes associated with tape backup.
- Cloud providers typically mirror their customers' data at multiple locations, which helps safeguard business continuity even in the event of a severe regional disaster.

$627,418

The median cost to businesses for an unplanned data center outage

$74,223

The minimum business impact of an unplanned data center outage

SOURCE: Ponemon Institute, 2013 Cost of Data Center Outages, December 2013

- Cloud backup gives businesses the flexibility to access critical systems from anywhere, including employees' homes and alternative workspaces.
- A network connection of sufficient size can enable all necessary data to be both backed up into the cloud and restored in a timely manner.

Many businesses also opt for a hybrid solution that implements cloud computing for some operations and on-premises backup for others.

Server and Desktop Virtualization

Virtualization turns server and desktop configurations into software "images" that can be reproduced on other physical devices. Originally, virtualization solutions from vendors such as VMware and Citrix were created to streamline IT operations and improve the utilization of physical IT capacity. However, this technology is also useful for business continuity, since it allows a company's infrastructure to be reproduced at an alternative location or in the cloud.

Backup Power and Cooling

Since power outages are a primary cause of unplanned IT downtime, businesses should equip their essential infrastructure with uninterruptible power supplies. UPSs can keep vital IT services up and running temporarily during a power outage, and make sure the business can transition to alternative cloud infrastructure in an orderly manner, if necessary. UPS-powered fans may also be necessary to ensure that IT equipment can be properly cooled in the event of a power failure.

Unified Communications and Collaboration

Unified communications technology facilitates collaboration by combining voice, email, instant messaging/chat and video into an integrated set of easy-to-use tools. UC solutions from companies such as Cisco Systems and ShoreTel can also be extremely useful in the event that employees have to work from their homes because it enables them to communicate with each other easily in real time, even when they are not in the same physical location. UC can be especially useful for safeguarding communications with the outside world by automatically routing incoming business calls to employees' smartphones.

Social Collaboration and Social Media

Social media such as Facebook and Twitter can be useful during weather disasters. Many users turn to social media during such events, because they remain accessible even if local power and phone lines go out. Various businesses have a plan in place for using social media to keep employees, customers, suppliers and partners informed during an emergency.

EXPECT THE UNEXPECTED

Some small business leaders try to rightsize their investments in business continuity by making assumptions about the probability of various types of disasters affecting them. This approach is likely not the best strategy for a couple of reasons:

- **No one can really predict when a disaster will strike.** If such things were predictable, the world would be a much safer place.
- **The cause of a business interruption is ultimately irrelevant.** Whether it's a hurricane, flood, earthquake, building fire, power outage, hardware failure, software glitch or accidental cable cut, the only thing that is relevant is the business interruption itself.

In fact, given all the different ways a business can be threatened, it's not surprising that the Ponemon Institute reports that 91 percent of companies have experienced some kind of unplanned IT downtime in the last two years. Therefore, rather than speculating about unpredictable causes, it makes more sense to focus on safeguarding the business from interruptions that could result from *any* cause.

Other Continuity Considerations

In addition to using the right technology solutions to ensure continuity of business operations, company leaders should consider other factors in planning for potential business interruptions:

Location

Not all business interruptions will force users to work elsewhere, but any continuity plan must take such a possibility into account. In many cases, it will be sufficient to have users work from home. In others, it may make sense to use a remote office as a temporary headquarters or to contract with a vendor that can immediately provide alternative workspace on a short-term basis.

Validation and Change Management

Business continuity planners should test their plans at regular intervals. Some components, such as data backups and phone trees, can be tested fairly frequently with little disruption and cost to the business. Others, such as a dry run of moving operations to an alternative facility, can be more burdensome.

Business continuity plans should also be regularly updated to reflect changes in the business. These updates can include everything from changing the names and numbers in a phone tree to modifying data backup policies to reflect changes in how an application and its data are being used.

A Business-driven Planning Process

Because small businesses have limited resources, they must be selective in how they allocate those resources for business

continuity. Also, every business is different. So a methodical process is required to formulate a business continuity plan that best meets a company's specific needs, while keeping costs to a minimum.

Step 1: Identify and financially quantify specific business operations. Every business can be broken into separate operations such as taking customer calls, placing orders, issuing paychecks or checking inventory. The first step in any business continuity planning process is to identify the specific operations that would have the greatest adverse impact on the business if they were interrupted, and to associate an approximate dollar figure with that impact.

Step 2: Identify resources required by those operations. Once business operations have been appropriately prioritized, the resources needed to restore operations in the event of an interruption can be identified. These resources typically include people, technologies, alternative workspaces, vehicles and physical tools.

Step 3: Define the minimum acceptable parameters for disaster recovery. Once the resources necessary to restore operations are identified, continuity planners must determine the minimum acceptable parameters for restoration. These parameters include:

- **Capacity:** A company that normally has four or five people taking phone orders may be able to operate with just one or two in an emergency.
- **Recovery time objectives (RTOs):** Planners must determine how quickly each specific operation needs to be restored.
- **Recovery point objectives (RPOs):** Businesses must define how much information they can tolerate losing in the event of an interruption.

CDW: A Small Business Partner that Gets IT

CDW is uniquely capable of helping small businesses create a continuity plan that makes the most sense for their needs and objectives. Our extensive experience in provisioning disaster recovery for companies of all sizes allows us to help you optimally mitigate your risk of business interruption. We offer a full portfolio of state-of-the-art backup and recovery products — including cloud-based solutions. Let us help you implement the technologies that best fit your data, applications and IT infrastructure.

To learn more about designing and executing a disaster preparedness plan that's right for your business, contact your CDW account manager, call 800.800.4239 or visit CDW.com/backup.

APC

The APC™ by Schneider Electric Smart-UPS system provides protection for electronic equipment from utility power blackouts, brownouts sags and surges, small utility power fluctuations and large disturbances. It also provides battery backup power for connected equipment until utility power returns to safe levels or the batteries are fully discharged.

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Barracuda

Barracuda® Backup is a complete cloud-integrated solution for protecting physical and virtual environments that includes software appliance and offsite replication. Barracuda Backup is simple to deploy, easy to manage and offers unlimited cloud storage.

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druva

The rapid proliferation of laptops and mobile devices in the enterprise has led to a significant decrease of IT data visibility and an alarming increase in the potential for data loss and breach. Yet workforce productivity is now inextricably linked to mobility. inSync uniquely addresses these realities by giving IT the tools to efficiently and confidently protect and govern data across platforms and devices while also enhancing the end-user experience.

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