RETHINKING DATA PROTECTION

YOUR BUSINESS MAY BE AT RISK: HOW WELL IS YOUR DATA PROTECTED?

datto

datto

STATE OF THE MARKET

The term "big data" may be overused—but something big is going on.

The big thing is this: digital information has become the lifeblood of every business—and an increasingly important part of the value of all products and services.

From the obvious, like law offices and engineering design firms, to the surprising, like construction companies and craft beer makers, businesses large and small are discovering that they have no business without their data. Have you thought how your business would fare without access to your critical data?

Advancing technology is driving this "perfect storm" of data. Technology is centralizing in some ways, like cloud/SaaS; decentralizing in others, like smartphones and tablets. And it's always getting easier to use—so it's used more, and is throwing off a lot more data. Did you read the part about the perfect storm?

Technology evolution over the last five years has changed the data protection risks facing businesses. It puts more and more businesses at risk. Inevitably, systems will fail. Inevitably, data will be lost.

This eBook identifies the key data protection pain points for businesses. It explores the magnitude of data protection challenges in the emerging data-dependent business era, along with your must haves in a Total Data Protection solution. These solutions protect data everywhere it lives—on-premise, in virtualized environments, in the cloud, and even in third-party clouds (like SaaS apps).

RETHINKING BUSINESS DATA

Where does your company do business?
Where do you have data?
Everywhere!

Once upon a time, employees conducted business in their offices on PCs or at their customer sites, bringing relevant information back to the office for data entry.

Now, smartphones and tablets let customers do business anywhere and everywhere. Data is entered in the moment, shuttling to and fro between mobile devices in the field and server-based applications back in the office or the cloud.

The magnitude of this data transformation is evident in two business scenarios provided by a Pennsylvania-based MSP (Managed Service Provider). Joe Wright Jr., President and co-founder of Central Pa Technologies, talks about one of his clients, a cell-tower inspection company. Once, paper reports were the primary output. Now, smartphone or tablet photos document the condition of towers in the wilds of, say, Minnesota, and reports are filed from the field. As a result, this particular client went from generating 250 gigabytes in eight years to more than 1 terabyte in 2013 alone, its first full year as Central Pa's client.

As another example, Central Pa was called in last October to take over IT infrastructure for a multi-site ophthalmology practice. Between HIPAA rules, doctors starting to use iPads, new electronic medical record (EMR) software and lack of IT forethought, data proliferation was out of control. "It's more than just proliferation," Wright says: "If this client's EMR system goes down, they are pretty much out of business."

When businesses depend on data to this extent—and most now do—their challenges extend beyond the data itself. Data alone won't keep a business operational if there is no IT infrastructure to make use of it. That's why Total Data Protection solutions must keep your data safe and also protect your infrastructure, so when something goes wrong you can continue your business—not just restore your files.

Wright's restored many businesses in a long career. So you can hear the delight in his voice when he describes bare metal restores without re-installing operating system or application software, or re-configuring custom settings— or anything else. "Normally, that stuff all goes away. But when I do a restore, the most I have to do is enter the Microsoft product keys. From there, everything's good." Datto Inc. is Wright's Total Data Protection provider.

> *Total Data Protection solutions must keep your data safe and also protect your infrastructure, so when something goes wrong you can continue your business.*
>
> *- Joe Wright Jr.,*
> *President and co-founder of Central Pa Technologies*

Data and Infrastructure Availability, 24/7/365

In researching a solution that can manage the requirements safeguarding all a business' data and systems, make sure the solution can perform the following:

- **Protect data on a diverse range of new devices and environments (including clouds and SaaS apps)**

- **Utilize image-based backups that include all the business data plus the IT environment**

- **Keep data safe and also protect the infrastructure, so when something goes wrong they can continue doing business—not just restore their files.**

RETHINKING TECHNOLOGY ARCHITECTURE

Technology paradigms come and go—and sometimes come back again. So it is with the cloud.

While data is spreading out among dozens of forms and formats throughout your business (PCs, servers, smartphones, tablets, clouds, SaaS apps), it's also centralizing. Tablets and smartphones behave in the same way as the mainframe era's "dumb" terminals when it comes to business applications. Sure, they enable data to empower business everywhere—but they act only as pure "client" front-ends to applications running on a server somewhere.

Increasingly, that somewhere is the cloud.

While many businesses still prefer to operate their own servers and networks (or have an IT solution provider do it for them), cloud adoption is on the rise—and will only accelerate, says Matthew Hahn, Vice President of Network Services at SWK Technologies, Inc., an MSP headquartered in Livingston, NJ.

"Today, it's all mobile workforces. Many people don't even work out of a standard office today," says Hahn. "As a result, they need access to the resources on their network, whether it be line of business applications, collaborative documents, or email. There needs to be a way for them to constantly be connected."

Thus mobile clients are pushing businesses to put more and more data into the cloud, or in SaaS applications, because this approach makes it more easily accessible for mobile devices.

But it raises new challenges for Total Data Protection, because clouds are not magical infrastructures. They're prone to the same flaws inherent in all IT. Even businesses that understand the importance of backing up their own systems can fail to grasp the risks they're building by migrating to clouds or SaaS applications without commensurate backup and business continuity plans.

So if a business is putting more infrastructure in the cloud—and most are—need Total Data Protection programs that integrate backup of those clouds, or SaaS applications. Otherwise, you're betting more of your business, and your customers' businesses, on unprotected infrastructure.

Take five minutes—right now—for the following exercise. Open a document and just start writing down all the locations where you have business data. And ask yourself, "How is our data being protected in each of those locations?"

RETHINKING
CLOUD BACKUP

Cloud storage and backup are causing a critical rethink of business continuity approaches—and are now required components of a Total Data Protection solution.

But there are clouds—and then there are purpose-built clouds obsessed over from the first stroke of the design pen to:

• **Create extremely fast backups**

• **Deliver lightning-fast restores**

• **Mitigate data loss**

• **Deliver on a simple, predictable price**

• **Do it all for one simple price**

General-purpose clouds are designed with many functions in mind. But clouds that form the backbone of a Total Data Protection solution should be designed solely to answer one question: How do we protect business data and bring it back as quickly as possible?

SWK's Hahn uses just such a purpose-built cloud as a key element in a hybrid (on-site and in-the-cloud) Total Data Protection solution deployed for multiple customers. Hahn notes: "General-purpose clouds such as AWS, Azure or Rackspace can't hold a candle to this infrastructure when it comes to rapidly virtualizing a customer's environment. When you are spinning up images for emergency purposes, you need to allocate incredible resources. We use a cloud with the resources and horsepower to put the pedal to the metal when they need to virtualize environments in their cloud."

In addition, Hahn likes the "one-price" retention-based pricing approach of his Total Data Protection solution—and so do his customers. "It works great for our customers because they know exactly how much they're going to spend every month," says Hahn.

"We've saved our clients a lot of lost revenue and profit from downtime and lost business opportunities," explains Kersti McDonald of Western Canada's Sysgen Solutions Group.

Wright points to the obsessive commitment of support staff as key to Total Data Protection—and his own good night's sleep. He says every time he calls for support from his Total Data Protection provider, a live person answers. And only one time was the support rep unable to immediately answer. "I called around midnight, and they had not encountered my problem before. So they built a test environment that night. They were able to replicate the problem and tell us how to fix it. By 6 o'clock the next morning I had the answer," Wright explains.

We use a cloud with the resources and horsepower to put the pedal to the metal when they need to virtualize environments in their cloud.

- Matthew Hahn
Vice President of Network Services at SWK Technologies

datto

www.datto.com

RETHINKING SECURITY

It turns out that Total Data Protection solutions have a "side effect": they're the ultimate security solution, too.

But don't be too surprised. Total Data Protection platforms were conceived with laser focus on the challenge of a business' data is always protected and their business continuity is always guaranteed. Malware, hacker attacks, and (most commonly) human error are simply three of many "disasters" they defend against.

Several technical factors come together to enable a Total Data Protection solution to be the fastest, safest way to return a breached business environment to normal operation.

• **Total Data Protection requires image-based backups that include all the business data plus the customer's IT environment**

• **They use on-site appliances and purpose-built clouds together, with both storing backup images in an archival format (ZFS) that is virtually invulnerable to malware**

• **Total Data Protection includes tools that let you pinpoint the moment of attack or infection**

• **And by using inverse-chain technology, they ensure that backup images stored before the attack are wholly uncorrupted**

While some businesses address virus, ransomware and other attacks by rolling back their entire environment to the last uncorrupted backup image. A bare metal restore from their Total Data Protection platform guarantees a clean result.

Says Hahn: "The security aspect is key to our business continuity and disaster recovery solution." SWK takes backup images every 15 minutes. So despite multiple cryptolocker attacks, SWK's clients using Total Data Protection have never lost more than 14 minutes worth of productivity.

"We've definitely [implemented] Total Data Protection as primarily for backup and business continuity, but also as a failover or secondary security backup," adds Sysgen's McDonald. "The way it functions, you're able to just turn back time. It's a lot easier than relying on any other application or software to get back your uncorrupted data."

> ❝ *We've definitely [implemented] Total Data Protection as primarily for backup and business continuity, but also as a failover or secondary security backup.* ❞
>
> *- Kersti McDonald*
> *Sysgen Solutions Group*

RETHINKING DATA PROTECTION

Data dependency is rising for all businesses, of all sizes. Their technology options are proliferating and their IT architectures are evolving. This means data protection must be rethought, and broadened to encompass IT infrastructure—especially for the small- and medium-sized businesses who are moving most rapidly to cloud solutions.

Consequently, emerging Total Data Protection solutions must:

- **Protect data on a diverse range of new devices and environments (including clouds and SaaS apps)**
- **Guarantee data is always available—because you can't do business without it**
- **Use image-based backup approaches in order to capture the IT environment along with the data**
- **Assure extremely fast and easy restores, because disruption is inevitable**
- **Must be easy to use and manage**

Listening to the solution providers interviewed for this paper, it's easy to conclude that Total Data Protection solutions meeting these criteria will emerge as a critical advantage for the businesses that deploy them. For example, McDonald tells of a flood that closed downtown Calgary two years ago. Sysgen clients using the MSP's Total Data Protection solution were back in business in 24 hours or less. But it took four days, on average, for Sysgen's other clients to get back up and running.

The conclusion has become clear: the age of total data dependency demands Total Data Protection.

About Datto

Datto is a top tier provider of enterprise-grade backup, recovery and business continuity solutions that protect business data everywhere it lives. Its solutions are based on a hybrid-cloud model, to enable fast restores, instant failover and the ability keep a business running, no matter what.

Datto solutions are only available through licensed IT solution providers, managed service providers (MSPs) and value-added resellers (VARs). To locate a solution provider near you email mspfinder@datto.com or call 888.294.6312.

datto

Corporate Headquarters
Datto, Inc.
101 Merritt 7
Norwalk, CT 06851
United States
www.datto.com
888.294.6312

Regional Offices
Norwalk, CT   888.294.6312
Cambridge, MA   800.571.4984
Toronto, CAN   877.811.0577
Reading, UK   +44 (0) 118 402 9606