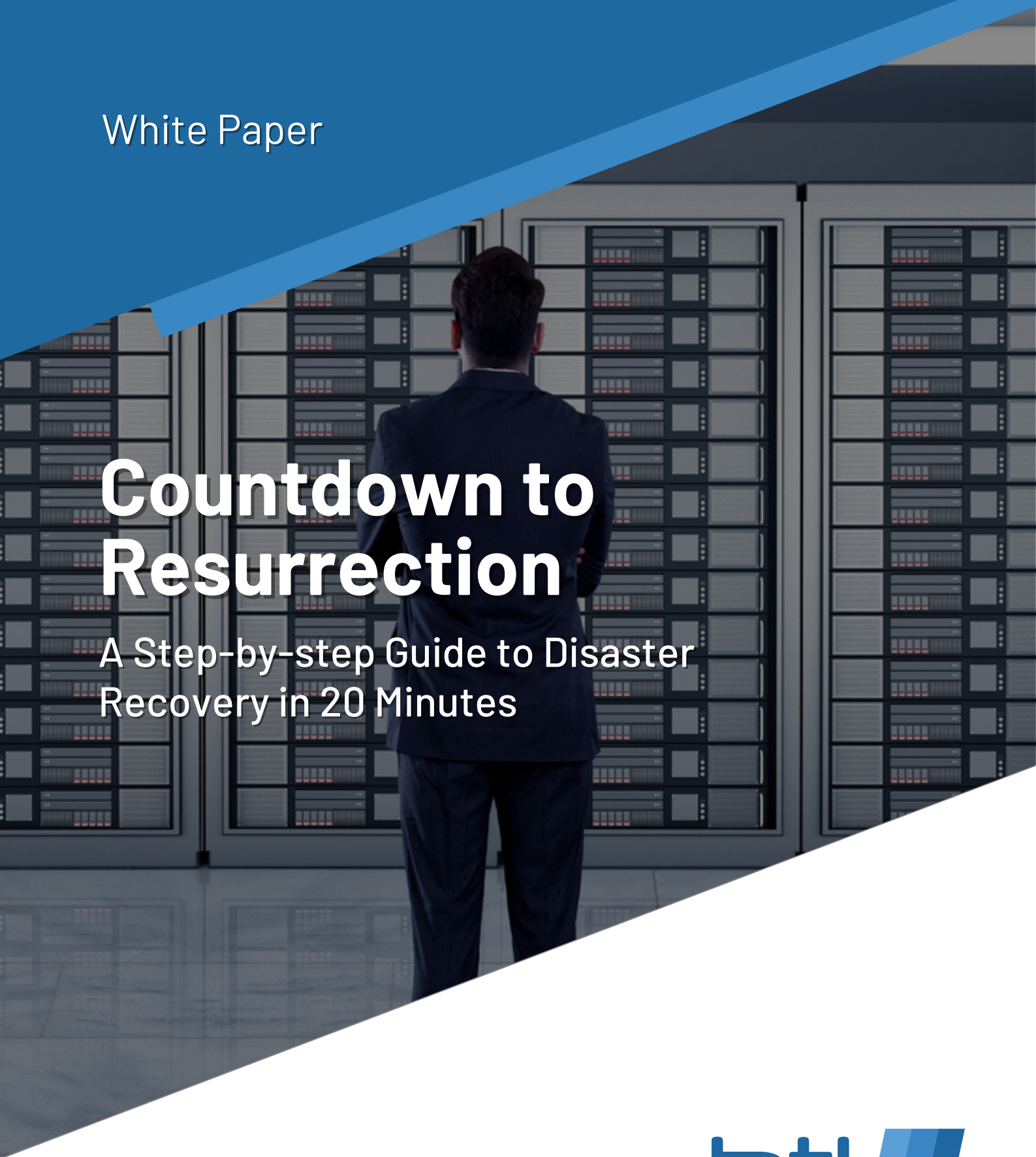
White Paper



Countdown to Resurrection

A Step-by-step Guide to Disaster Recovery in 20 Minutes

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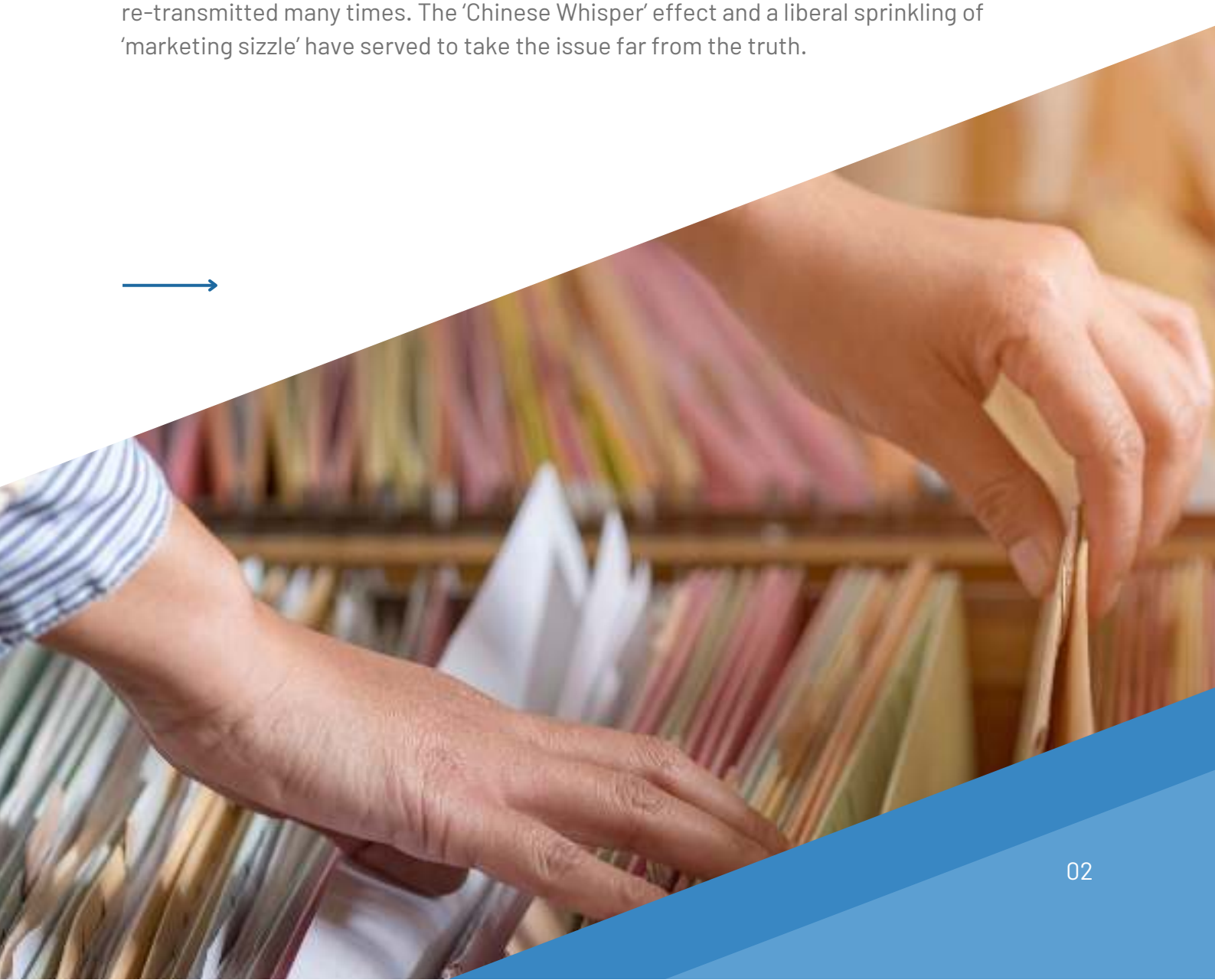
The History of a Myth

Consider these statistic-based statements:

- 80% of companies go out of business after experiencing a major data loss.
- 80% of businesses suffering a computer disaster, who have no disaster recovery plans, go out of business.

'Facts' like these (or something similar) have been quoted sellers of IT backup products and Disaster Recovery (DR) services for nearly 30 years. However, research has shown that the original sources of such information cannot be verified. Consequently, such assertions should be collectively regarded as a business myth.

They are very likely to be stats taken out of context and broadcast, picked up and then re-transmitted many times. The 'Chinese Whisper' effect and a liberal sprinkling of 'marketing sizzle' have served to take the issue far from the truth.



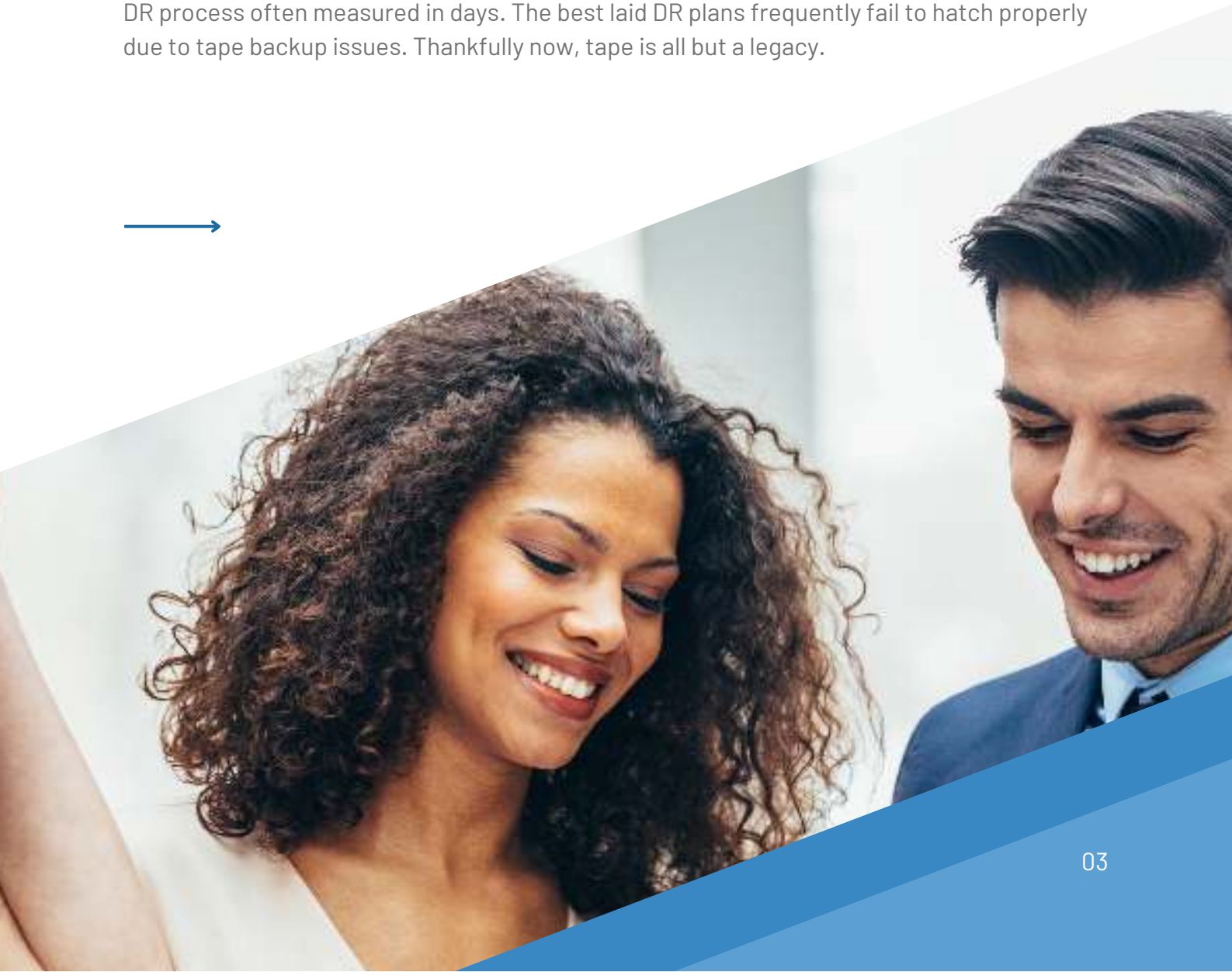
But what is the truth? It's just too neat and simple to wrap it up in a 80/20 relationship (the Pareto principle). And in fact if we keep trying to frame it by asking "What percentage of companies go out of business after a data loss disaster?", then we may be asking the wrong question.

The truth is that it is more meaningful to consider the frequency of data loss, rather than the numbers of company failures resulting from loss of data. The issue is better expressed by considering analysis such as:

- 20% of small to medium businesses will suffer a major disaster causing loss of critical data every 5 years.
- About 70% of business people have experienced (or will experience) data loss due to accidental deletion, disk or system failure, viruses, fire, or some other disaster.

This approach frames the issue of data loss in a more balanced way, while strongly supporting the need for reliable backup and good DR planning.

Over the last decade, data backup and the DR plans which depend on them have undergone radical change. Tape-based data technologies are notoriously unreliable and slow, with the DR process often measured in days. The best laid DR plans frequently fail to hatch properly due to tape backup issues. Thankfully now, tape is all but a legacy.



Today's replication technologies and data centre based DR solutions enable systems and data to be restored rapidly. In this guide, we explore the issues and the process of restoring systems and data to enable business continuity within 20 minutes of a significant event that leads to a loss of access to data.

Some Bitesize Definitions

Recovery Point Objective (RPO)

The point in time before the disaster occurred from which data is recovered.

Recovery Time Objective (RTO)

The length of time after a DR plan is initiated that data and systems are available again.

Business Continuity Services

Disaster Recovery as a Service (DRaaS)

Provides a turnkey solution that restores your entire server-side IT capability in as little as 20 minutes from when you request the service is invoked.

Backup as a Service (BUaaS)

Replicates servers to data centre storage from where it can be restored back to on-premise servers or hosted servers in the data centre if that is the most appropriate option.

How to Save Your Firm in 20 Minutes!

A good way to understand the process of implementing a DR plan that gets a business back on its feet and running within 20 minutes is take a look at the timeline.

For context it's worth starting with a scenario that unfolds for 10 minutes before the decision to initiate the DR service is made.

Disaster Recovery plan initiation - 'T' minus 10 minutes...

It's been a normal day in the office. Aside from minor dramas like running out of printer paper as a result of it not being re-ordered and reception being short-handed due to sickness, its business as usual and then...

Bang! Computer screens simultaneously freeze or network server drives cannot be accessed. The office grinds to a halt...

The IT manager goes to the server room and discovers a steady stream of water falling from the suspended ceiling from a leaking pipe. It is drenching the IT cabinet below which contains the server infrastructure and has caused catastrophic electrical failure of the servers and storage array.

The IT manager calls the office manager with the bad news. We need to stop the leak. Until the plumber arrives, rotating a couple of buckets should help to prevent further damage. But that's not going to fix the server and storage. It's a judgement call: "We need to initiate the DR plan..."

Minute 1

The office cloud PBX telephony system is accessed through the business-class broadband connection and networked to desktop IP phones. Luckily the water has not damaged any network infrastructure, so you call for help...

Minute 2 & 3

Phew! You make contact with the IT Guys over at your Managed Service Provider (MSP). You explain what's happened...

- That both server and storage are essentially 'fried'...
- And how you have agreed with the office manager that you are indeed facing a genuine emergency
- The only thing to do is to formally initiate the implementation of the DR plan...

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Minute 4 & 5

Meanwhile... From the firm's satellite office in a city, far, far away and leafy suburbs where your remote workers are located, calls start to come in saying that the computer systems don't seem to "be there" any more...

Minute 6

The firm's management team holds its collective breath... Usually, one day's lost business could total tens of thousands of pounds. On the wrong day it might cost hundreds of thousands. Well, as you've still got power, there is little to do except... put the kettle on!

Minute 7 & 8

However, the management team needn't worry. While making the tea you can reflect on the good business decision making that means the business was properly prepared for this situation...

The firm had the foresight to realise just how business critical IT is to company operations and took good advice from the MSP to make provision for a DR plan based on Disaster Recovery as a Service (DRaaS).

Minute 9

A sip of tea... And you can consider the wisdom of opting for DRaaS... Which includes making and backing up server images - the software that runs each server - and backup of the data held on storage devices to a data centre.

An RPO of 15 minutes means backup snapshots are taken every quarter of an hour. The result? It means you only lose a maximum of 15 minutes of changed work files before the DR situation occurred.

Minute 10

In the meantime... The IT Guys are in the process of resurrecting the servers and data. The MSP has raised a Critical Ticket. This prioritises the problem and escalates it through the system so it is dealt with immediately. Even if it is Out of Hours, the on-call IT Guy is ready to implement the DR plan once the service is formally requested.

Minute 11 to 14

Meanwhile over at the data centre... The IT Guys use remote access software to control the DRaaS process. Redundant server and storage hardware is held in a state of constant readiness for events like this.

The server images are loaded on to virtual servers and connected to the storage volumes that hold the data. If it has been correctly configured when it was set up, it really isn't that complicated for someone with the appropriate skills and know-how.

Minute 15 to 17

Depending on specific requirements, sometimes there may be a requirement for configuration. Some elements, usually network IP addresses, may need to set up. However, such requirements are documented within the DR plan and the IT Guys simply make the necessary adjustments to enable a successful recovery from disaster.

Minute 18 to 20

Business-class broadband connects the office network to the resurrected servers in the data centre. People start to logon to their Hosted Desktops. Remote workers are also able to log back on. It's completely seamless.

If the scenario had led to the normal place of business becoming inaccessible or unusable, the DRaaS service is able to deliver the restored office computing systems to any suitable internet connected location.

This might be a DR suite in a serviced office or to individual home office locations. Hosted Desktop computing provides each user's familiar personal Windows desktop on any suitable hardware platform, including Mac and tablet devices.

Summary

DRaaS and BUaaS are cloud based technologies for enabling business continuity. DRaaS was cost prohibitive, but recent times have seen it become affordable for companies that identify IT as business critical.

Should data loss or an event outside the control of the business occur which renders the place of business inaccessible or unserviceable, the services are the core of a Disaster Recovery plan.

BUaaS ensures that data is safely replicated offsite in the data centre. If a disaster situation arises, arrangements need to be made to obtain server infrastructure, restore data and return systems to operational status. This is process that needs to be planned and should be designed to meet the RTO which is acceptable to the business.

DRaaS includes the necessary server infrastructure to which data can be restored and wraps in the arrangements for returning systems to operational status in as little as 20 minutes.

Why is HTL Support a Preferred Technology Support Provider

HTL provides a range of services to support the use of technology in today's businesses. Whether it is infrastructure and user support, internet connectivity or voice communications, we provide the high degree of personalised service. We are very proud to be able to say that we offer impartial advice because we are independent of suppliers, vendors and manufacturers. Ultimately this enables clients to obtain more value from business technology.

Once a business determines the risk attached to data loss or systems failure, the cloud enables it to make provision for a Disaster Recovery plan that is appropriate to its needs.

About HTL Support

HTL Support was initially founded in 2009 by Managing Director Justin Dean, to provide specialist IT support and IT consultancy services to financial services sector clients. Since its launch, HTL has rapidly evolved to offer a full range of cutting-edge, integrated and flexible products and services to a worldwide client base across all industries. Our experience and professionalism has been endorsed both by our clients and by many of the world's leading hardware and software manufacturers.

All companies need to know that their IT support provider is not going to let them down when it comes to important projects. We will always find the right solution and are equally happy either functioning as project managers for your internal IT department or providing an experienced team to work under your own IT Director or project leader.

References & Further Reading

HTL Support
5 business advantages of cloud-enabled working practices
https://www.htl.london/white-paper/5-advantages-of-cloud-enabled-business

HTL Support
Managed Services and the IT Support maturity model
https://www.htl.london/white-paper/it-support-maturity-model

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