IRON MOUNTAIN®

# MAKING THE UNPREDICTABLE, PREDICTABLE: THE CHALLENGE OF DATA RESTORATION

## BRIEF

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## INTRODUCTION

While technology news outlets tell stories of moving to the cloud, big data and cybersecurity threats, IT teams deal with the reality of an information-driven business world: the challenge of storing an ever-increasing amount of data. We have an insatiable desire to keep everything from email to spreadsheets, just in case we might need them in the future. And while tape and hard drive storage costs continue to drop, the growth in data is far outstripping that rate.

As if dealing with the technical challenge of managing all this data were not enough, IT is faced with another challenge: how to handle data restoration for legal and regulatory events. These kinds of events are unpredictable from both a timing and scope perspective – playing havoc with IT budgets and planning.

### FINANCIAL IMPACTS OF DATA RESTORATION

Unfortunately, unexpected data events are not discretionary, and IT has to find a way to handle them regardless of competing priorities. When the data is readily identifiable and available, the disruption may be minimal; however, sometimes the location of the data may be unclear or may be in obsolete formats or media. In these cases, IT can face difficult challenges. For example, IT may need to know where the data is located (in-house or in the cloud), if it's available in a human-readable format and how quickly it can be found and restored into a format that's presentable in court.

Typical technology lifecycles are three to five years; typical legal retention requirements are seven to ten years.

The disconnect between the speed of technology change and the legal need to retain data for many years is a fundamental issue. For example, if an IT department has changed technology twice during the retention lifespan of a typical piece of data, they may need to retain old hardware or software to access data stored on older formats.

Since IT is required to capitalise most enterprise hardware and software, retaining multiple generations of technology can create a depreciation burden on already stressed budgets. Even if the fixed cost of depreciation is not an issue, the operating expenses for maintenance may be excessive. In either case, precious pounds are diverted from meeting the demand for new business solutions.

## IT IS DESIGNED FOR DATA RESTORATION

IT organisations are comprised of two basic teams: infrastructure and applications. Infrastructure teams may be organised by platform (desktop, computer, storage, networks, etc.) or by service (email, unified communications, file and print, backup, security, etc.). Application teams are typically organised around a business function such as finance, human resources, procurement, etc. The infrastructure team is usually responsible for handling data restoration events.

Just as other parts of the business have shed non-core services to third parties, IT is going through this same transformation.

Whether organised around platform or service, the team has a horizontal view of data; i.e., each platform or service may have its own backup and archiving approach and technology. Data restoration events tend to be vertical; i.e., data about a person or subject that may cross every platform or service. Therefore, IT is at an immediate disadvantage when faced with data restoration. Compound this with having to go back to data on obsolete media, and you can see why IT has to jump through hoops to handle data restoration events.

The goal is to make the unpredictable, predictable, but to do so, IT may have to step back and take a hard look at whether data restoration should be handled in-house.

### DATA RESTORATION TAKES SPECIAL EXPERTISE

With the exception of email, it is not easy to identify data that may be relevant to a data restoration event. For example, a Microsoft Word file will have a creation and "last updated" date, but any other identifying information is unreliable. This is because people often create documents from templates and never bother to change the metadata describing the author or description. Even the "last updated" date is unreliable, as it changes if the file is copied from one place to another.

There are specialised forensic tools that can be used to retrieve data from damaged or obsolete media. These tools are not found in most IT teams, nor is the expertise needed to use them effectively. It makes more sense to work with a trusted partner for these needs, rather than trying to maintain the expertise in-house.

### MOVING TOWARD SERVICE-BASED IT

With the rise of cloud computing, Software-as-a-Service (SaaS) based applications and managed service providers, today's CIO is becoming more of a "service broker" rather than the direct owner of technology. While outsourcing IT used to be an all or nothing proposition, the CIO can now be selective about what stays in-house and what can be handed off to service providers.

Data restoration is best left to a trusted partner, especially if that partner is already helping to manage archived data for your organisation. While in some cases it makes sense to hire data restoration services on demand, the reality is that the need for this kind of service is only going to rise as more and more information becomes electronic rather than paper-based. Having a service provider that understands your environment and the nuances of legal and regulatory requirements – and that can respond at any time – will be a key part of your IT's service portfolio.

Iron Mountain can help. Watch this video to learn how you can reduce the cost and frustration of retrieving data from your archival backup tapes today.

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### ABOUT IRON MOUNTAIN

Iron Mountain Incorporated (NYSE: IRM) is a leading provider of storage and information management services. The company's real estate network of over 67 million square feet across more than 1,000 facilities in 36 countries allows it to serve customers around the world. And its solutions for records management, data management, document management, data centre management and secure shredding help organisations to lower storage costs, comply with regulations, recover from disaster and better use their information. Founded in 1951, Iron Mountain stores and protects billions of information assets, including business documents, backup tapes, electronic files and medical data. Visit www.ironmountain.co.uk for more information.