THE HIDDEN COSTS OF
DATA MANAGEMENT

Smart Strategies to Avoid Pitfalls of the "Keep Everything" Culture

SEE INFORMATION
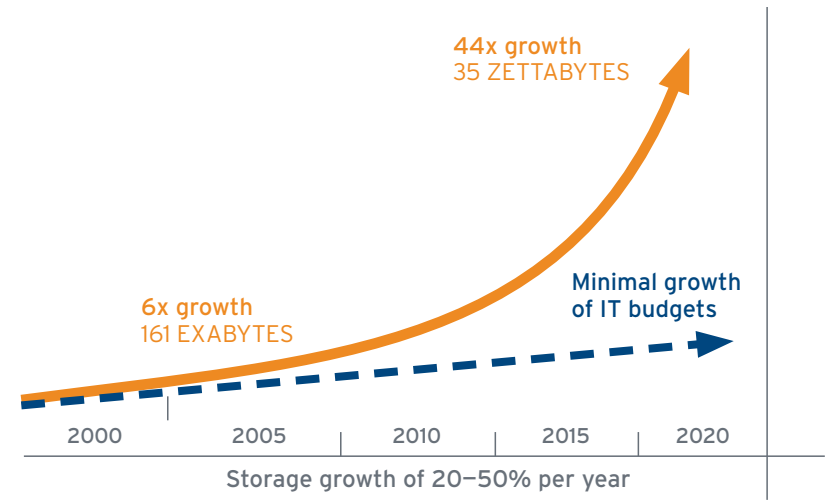**DIFFERENTLY**

IRON MOUNTAIN®

THE DOUBLE-EDGED SWORD OF DATA GROWTH

In today's economy, information is the lifeblood of organizations. We are surrounded by data and rely on it for insight and innovation, and the volume being generated is staggering.

IDC estimates that the total amount of data stored by businesses will be 44 zettabytes by the year 2020, representing more than 40x growth over the last 15 years.[1]

To put this in perspective, today's standard smartphone has about 32 gigabytes of memory. To get to one zettabyte, you would have to completely fill the storage capacity of 34 billion smartphones.[2]

If you don't have the right strategy and best practices in place, the sheer volume and rate of data growth have the potential to do irreparable harm to your business.

44x growth
35 ZETTABYTES

Minimal growth of IT budgets

6x growth
161 EXABYTES

2000　　2005　　2010　　2015　　2020
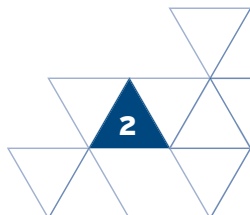
Storage growth of 20–50% per year

Before delving into an intelligent approach to managing and protecting information, let's first examine some of the reasons behind today's data explosion.

LET'S EXAMINE ▶ THE REASONS

[1] http://www.computerweekly.com/news/2240217788/Data-set-to-grow-10-fold-by-2020-as-internet-of-things-takes-off

[2] http://www.techradar.com/us/news/internet/data-centre/world-could-run-out-of-storage-capacity-within-2-years-warns-seagate-vp-1278040/2

CAUSES AND CONDITIONS

Two primary drivers of the data explosion are related to advancements in technology, which are reshaping not only the quality of data being produced, but also the ways that we put it to use. These two tech drivers are innovation and insight.

» **Innovation means higher quality and larger formats.**
High-resolution audio, video, images, rich Internet content and other high-volume formats are placing more demands on the enterprise's ability to manage data. Moreover, the Internet of Things is playing an increasingly important role. For example, Cisco estimates that there are now more than 14 billion "things" connected to the Internet.[3] All of these devices generate information that needs to be captured, stored and managed.

» **Insight drives longer retention practices.**
In order to reap the promised rewards of Big Data, companies are now gathering and storing more customer and operational data for longer periods of time. Email, databases, documents and other information is now being mined for insights to improve day-to-day operations and inform long-term strategic goals.

[3] http://www.cisco.com/web/ME/about/news/2015/180115.html

In practice, these forces work in tandem to promote a "keep everything" culture where companies can't discern what to archive, back up or delete so they just save all of their data.

A CHANGING CULTURE

In addition to contending with the ever-increasing volume of information, organizations worldwide are also faced with new laws, regulations and guidelines that carry stiff fines and penalties if data is not properly handled. Businesses now operate in a regulatory and legal landscape that is in constant flux, making it difficult and time-consuming to keep data management practices current. This is further complicated by the fact that more enterprises have a growing number of global operations.

Organizations must also consider BYOD, social media and other trends that continue to blur the line between "work" and "personal" life. These changes are forcing IT organizations to contend with even greater data volumes as more and more employees use company resources that generate data.

Combined with skyrocketing data growth and a growing "keep everything" culture, this shifting legal and regulatory terrain is not only making it difficult to use information intelligently, but also creating dangerous circumstances for organizations that aren't proactively managing their data.

ARE YOU ON THE VERGE OF DATA DISASTER?

Data management may not be one of your top priorities right now. But it will be soon.

The torrent of data growth, along with new and more stringent regulations and laws, make it imperative that you proactively manage your operational and customer data. Today, it isn't just about fine tuning your business to reap competitive rewards – it's about survival.

If you fall prey to the "keep everything" culture, you'll begin to see an array of rising costs and a loss of productivity that can stifle innovation and hurt your bottom line.

Now let's turn our attention to the "hidden" costs of data management.

THE RISING RISK OF DATA MANAGEMENT

In a 2014 global compliance survey, Thomson Reuters reported that 75% of respondents expect the pace of regulatory change to increase.[4]

«   **Tweet This Stat**

In the US, the Health Insurance Portability and Accountability Act (HIPAA) requires specific sets of data to be retained for six years. The "safeguards rule" in the Gramm-Leach-Bliley Act requires financial institutions to create and document a security plan that describes the company's methods of protecting clients' information.

Companies are also bound by rules that require them to destroy data according to specific timelines. The United Kingdom's Data Protection Act of 1998 outlines maximum retention periods and penalizes companies who keep certain records too long.

Costs related to e-discovery also continue to rise. In 2013, the RAND Institute for Civil Justice found that collecting, processing, and reviewing information for e-discovery cost approximately $17,000 per gigabyte.[5]

These startling figures continue to rise. In the US, patent cases, class action suits, and other complex litigation generate enormous e-discovery costs that can exceed $1 million.[6]

[4] http://www.banktech.com/compliance/virtualizing-data-key-to-overcoming-rising-compliance-costs/a/d-id/1297786 | Also http://accelus.thomsonreuters.com/sites/default/files/GRC00814.pdf

[5] http://www.rmmagazine.com/2013/12/01/the-risk-of-keeping-too-much-data/

[6] http://www.law360.com/articles/499758/e-discovery-cost-recovery-in-the-wake-of-cbt-flint

IT AND OPERATIONAL COSTS

Even without factoring in the regulatory and legal aspects, data growth can have significant consequences to internal operations. These include:

» **Negative impact on budget**
Soaring data growth is driving storage into unsustainable territory. Storage is growing by roughly 35% each year.[7] Even companies with healthy IT budgets will begin to feel the cost pressure from this increasing storage volume.
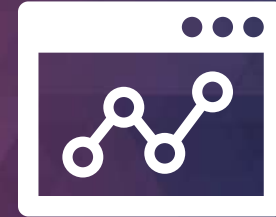
» **More responsibility for IT**
Accelerating data growth means exponentially more work for IT. For every 1 terabyte of primary storage, organizations also create between 4 and 6 terabytes of copies for backup purposes. All of this responsibility rests squarely on the shoulders of your IT organization.

» **Loss of productivity**
Data isn't only drowning your IT staff. Many of your employees spend an inordinate amount of time searching for the information they need to do their job effectively.

An IDC study found that

36%

of an average knowledge worker's day is spent looking for and consolidating information spread across a variety of systems.[8]

Tweet This Quote

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[7] ESG. "Backup and Archive Convergence Trends." April 2014.

[8] http://www.coveo.com/en/company/news-releases/2014/new-idc-report-points-unified-search-text-analytics-drivers-knowledge-use-employee-productivity

THE HIDDEN COSTS OF DATA

Left unchecked, data growth can also have negative effects that don't immediately come to mind. These "soft" or "hidden" costs aren't usually considered in conversations about data strategy, but they can greatly affect your organization over time.

» **Power and Cooling**
Information is the great business asset of the digital age. And while we rarely think of it as a tangible entity, it runs on physical devices. Whether it's a server, storage device, network switch or some other piece of equipment, it requires power and cooling. The more data you handle, the more of these costs you'll incur.

» **Real Estate**
In today's world of exploding enterprise data, real estate expenses are often not included in the cost conversation. As you handle more information, you may need to add new physical locations, which add additional challenges related to leasing, security and the other potential headaches.

» **Maintenance**
Upkeep is yet another unglamorous and often overlooked expense. You'll need to add headcount to keep your gear in peak working order. In addition, you'll need personnel to staff any additional facilities that you purchase or lease to house your IT equipment.
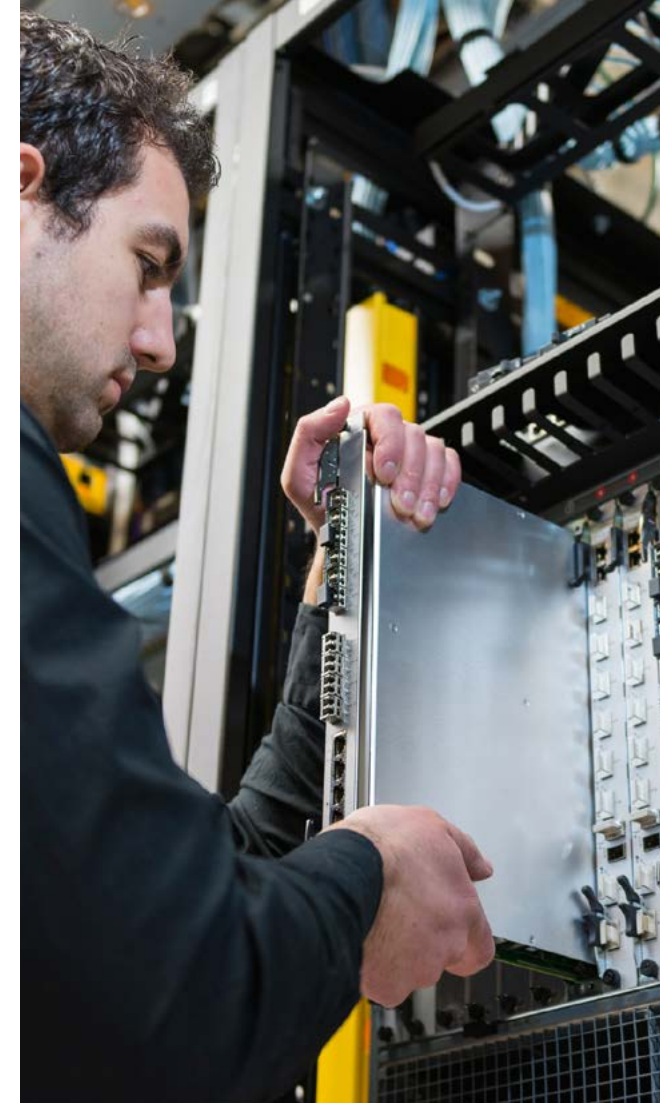
EXPLORE OTHER HIDDEN COSTS OF POOR DATA RETENTION POLICIES ▶

THE HIDDEN COSTS OF DATA

» **Talent**
A "keep everything" strategy inevitably leads to a collection of legacy hardware and software – all of which requires retaining experts' knowledge of those systems, which eats into your budget. Eventually, you'll have to migrate that data to new systems, which leads to additional complications and costs.

» **Big Data**
Reaping the rewards of Big Data calls for processing, storing and moving large volumes of information through different systems. But if you retain too much, you'll dull your analytical insights and run the risk of missing out on insights that can sharpen your competitive edge.

» **Brand Protection**
Without the right data storage and management policies, you risk leaking sensitive documents, emails or other information that can tarnish your company's reputation. Moreover, data mismanagement can compound litigation issues and lead to negative public relations.

MOVING TOWARD AN EFFECTIVE STRATEGY

What does a solid data management strategy look like?

What if you could you efficiently and safely retain the right information for the right amount of time so your organization could not only avoid incurring costs but also thrive?

To do this effectively, you need a cohesive plan that solves for every part of the data management equation – from the time it's created to the time it's destroyed.

MANAGING THE LIFECYCLE OF YOUR DATA

Data growth can't be stopped. Unless you can break free from the data management status quo, you'll find yourself dedicating more time, money and people to taming information and less time focusing on successfully growing your business.

At Iron Mountain, we can help you develop a smarter approach to managing, backing up, archiving and restoring your data. Our services focus on the complete lifecycle of the information that moves through your organization and can help you:

» **Create an intelligent backup strategy.**
Losing or leaking critical data can make or break your business. We can help you guard your most confidential business and operational information by transporting it to one of our secure off-site facilities. It will be stored under optimal environmental conditions and safe from hackers, human error and environmental threats.

» **Develop a smart tape-based archive.**
With Iron Mountain, you'll benefit from a suite of services that helps streamline your data. By removing information from your local systems and archiving it for future use, you can free up the flow of data that you rely on every day.

» **Recover from disaster.**
Fast and effective recovery hinges on having a plan in place before disaster strikes. We offer a strategic service that can help you analyze your existing plan, as well as run it through a range of scenarios, so that you're fully prepared to quickly get your business up and running following a disaster.

» **Securely dispose of your legacy devices.**
You'll have the peace of mind that comes with knowing your retired hardware and media is recycled or destroyed in a way that's compliant with environmentally-friendly security practices and regulations.

WHAT'S YOUR ORGANIZATION'S DATA MANAGEMENT IQ?

What's your current approach toward managing the lifecycle of your information and how does it measure up against industry best practices?

To find out, download our complimentary data management self-assessment guide now.

ABOUT IRON MOUNTAIN

Iron Mountain Incorporated (NYSE: IRM) provides information management services that help organizations lower the costs, risks and inefficiencies of managing their physical and digital data. Founded in 1951, Iron Mountain manages billions of information assets, including backup and archival data, electronic records, document imaging, business records, secure shredding, and more, for organizations around the world.

Visit the company website at www.ironmountain.com for more information.

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