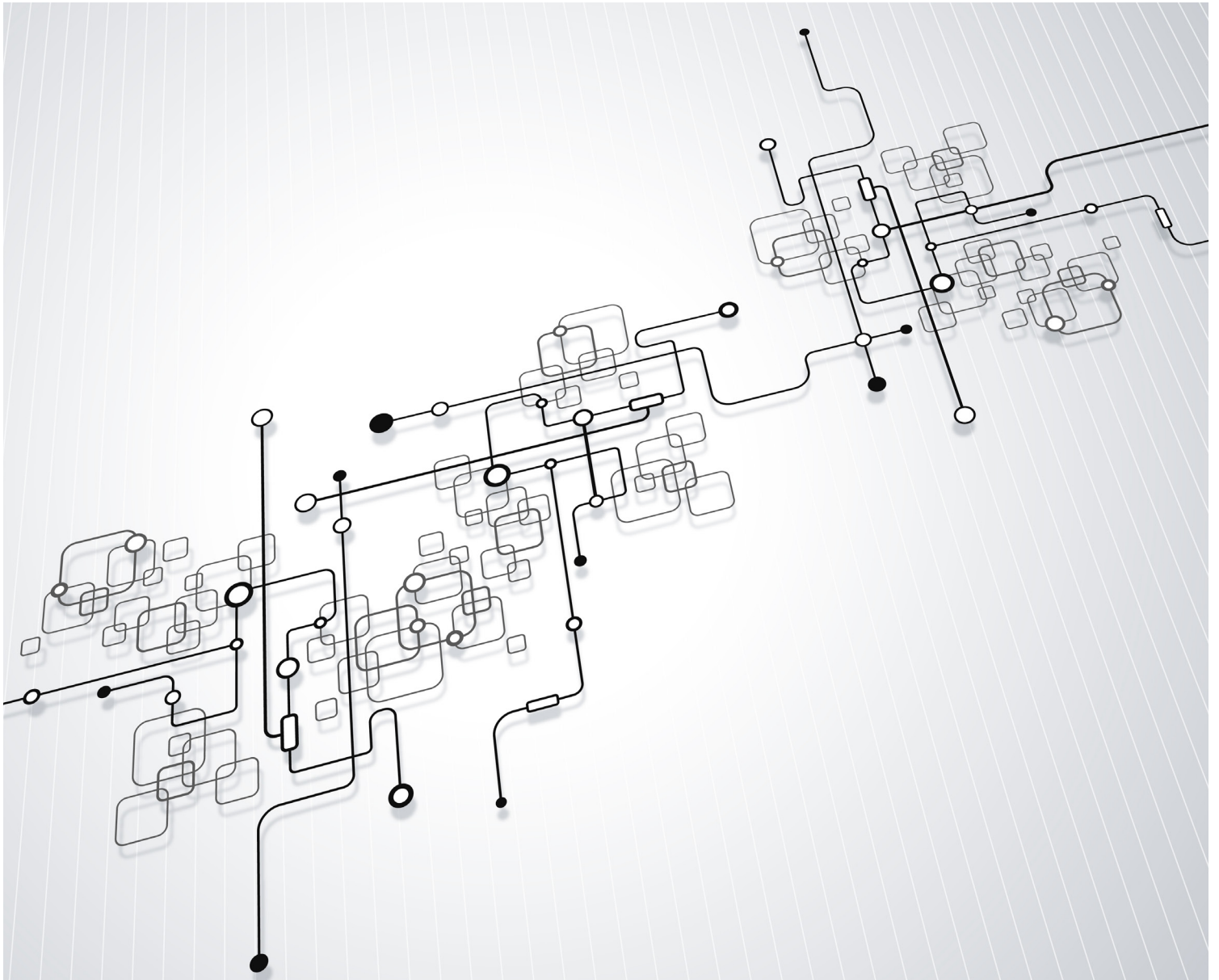


# CIO

NEED TO KNOW

## GUIDE



How CIOs Can Reduce Costs and Lower Risks  
by Driving Improved Information Economics

# How CIOs Can Reduce Costs and Lower Risks by Driving Improved Information Economics

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If you're like most CIOs and other top-level IT decision-makers, you've probably deployed a range of technologies, processes and methodologies to help you manage explosive data growth. You've probably invested heavily in virtualization to optimize your servers, and you're probably utilizing technologies such as storage tiering, deduplication and compression to maximize your storage infrastructure and investment.

However, no matter how much you may have invested in technological solutions, you are not adequately addressing all of the myriad challenges of data growth if your organization is not applying sound information lifecycle governance practices to the management of data and records. And if your organization is like most today, there is a long way to go toward achieving best practices in information economics.

Here's an example: At any given time in today's typical enterprise, 1% of corporate information is on litigation hold, 5% is subject to regulatory retention requirements and 25% has current business value.<sup>1</sup> This means that approximately 69% of the data that most organizations are managing, protecting and storing is unnecessary.

The costs and risks of holding onto that amount of unnecessary data are staggering. Even if you are using the most sophisticated storage technologies, you are still spending exorbitant amounts to store that data. Plus, your organization is exposing itself to the possibility of crippling e-discovery expenses by holding onto unnecessary data: The cost of e-discovery averages \$18,000 for each gigabyte of data that has to be reviewed, according to one survey.<sup>2</sup>

In the past, CIOs may have been reluctant to be the drivers of records and information management processes and policies, perhaps seeing the responsibility more in the domain of compliance officers, records managers or legal departments.

But with the explosive growth of electronic records — which are managed by IT — it no longer makes economic or political sense for the CIO to take a back seat. Poor information economics impacts IT budgets more than any other aspect of the business, so the CIO has an obligation to be a strong and powerful voice in advocating for improved information economics.

Here's what CIOs need to know about information economics and why improving information economics is critical to their future and the future of their enterprises.

### The challenges of data growth

Managing data growth is a significant challenge for CIOs and other IT leaders. The amount of data being created and stored is doubling every three years, and the largest percentage of new data — by far — is of the unstructured variety.<sup>3</sup>

This data growth is unstoppable, driven by changes in how organizations operate, the growth of social media, IT consumerization, the opportunities engendered by big data analytics, cloud computing and other major trends that are reshaping virtually every aspect of business.

At a time when IT budgets are under intense scrutiny, CIOs must take a strong leadership role in information management or else they may be exposing themselves and their organizations to unnecessary expenditures and considerable risk, including:

- **Rising infrastructure costs:** The more information you are storing, the more it's costing you. And the more information you are storing that you don't need — or if you are storing low-value data on primary storage devices — the more money you are wasting

<sup>1</sup> [Benchmark Report on Information Governance in Global 1000 Companies](#), Compliance, Governance and Oversight Council (CGOC), September 2010

<sup>2</sup> ["E-discovery costs: Pay now or pay later,"](#) InsideCounsel, May 23, 2012

<sup>3</sup> ["The Digital Universe in 2020: Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East — United States,"](#) IDC, February 2013

in your IT budget. To keep storage costs reasonable in the face of exponential data growth, it is imperative to get rid of data you don't need and to manage all of your information in a way that is appropriate to its value at each stage of its lifecycle. This means as data gets older and is being saved only for legal hold or archives, it should be stored on your less expensive repositories. And as it reaches the end of legal or regulatory obligations to save it, it should be disposed of in a consistent and legally defensible manner.

- **Potential failure to meet service-level agreements:** Keeping information unnecessarily, or failure to move it off production devices as it ages, can have a significant impact on the performance of your entire infrastructure. In fact, it could even pose a threat to the organization's ability to meet its SLAs. If unnecessary or older data is clogging your production storage devices, you are likely slowing their performance for your most critical applications. If this is a problem now, it will become even more of a problem in the future, as the volume of transactions increases and as organizations turn to more expensive devices — such as solid-state drives — to improve application performance.
- **Compliance risks/violations:** The CIO is part of a team — and can be the leader of a team — working together to protect the organization against unnecessary risk. Improper or inconsistent management of information can pose a huge risk, particularly in today's environment, in which regulators in all industries are becoming much more scrupulous and vigilant in uncovering and punishing violations. The challenge is being exacerbated by the growing volume of unstructured data, such as social media, SharePoint, enterprise collaboration applications and email, which must be stored for a specified period of time and requires access in a timely manner. One financial services firm recently was forced to pay a total of \$9 million for significant email system failures. It's not just about producing data when required, but also about protecting it and making sure it is not destroyed too soon or too late.
- **Oppressive e-discovery and litigation fees:** A huge expense and source of immense risk and frustration for many firms is e-discovery. According to one study several years ago, corporations spent an average of \$3 million per case on e-discovery.<sup>4</sup> Think about it: If it costs \$18,000 to go through a single gigabyte of data, you can save that amount — per litigation event — for every gigabyte by which you reduce your storage infrastructure. What's more, you can save additional money by managing your data more carefully, so that when you do have to go through discovery, you are much more capable of identifying where specific data is located and then retrieving it. In addition to e-discovery, better information management will help your organization avoid costly litigation losses or settlements. Today, many companies settle cases rather than go to trial simply because they want to avoid lengthy and costly e-discovery challenges.

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<sup>4</sup> "Budgeting for E-Discovery: Understanding Pricing Models for Cost Control and Transparency," FTI Consulting, 2011

## Focusing on information lifecycle governance

In order to control costs and reduce risks, CIOs need to make sure that they not only have systems and processes in place to improve information lifecycle governance, but also strive to achieve a best-practices approach. Whether the CIO takes charge of this initiative or drives it as part of a team, it is a responsibility the CIO cannot ignore.

What does it entail? Here are a few critical factors:

- **Eliminating digital debris**, which means putting in place technologies (such as tiering and deduplication) as well as policies that enable the organization to get rid of unnecessary data.
- **Using more sophisticated analytics** to extract value from data as it is generated more rapidly to simplify and automate management over its lifecycle.
- **Establishing consistent — and enforceable — policies and processes** to ensure the proper retention of data, including consistent and legally defensible destruction.

A successful approach to information governance will lead to improved information economics. Information governance is “the discipline of managing information according to its legal obligations and business value, which enables defensible disposal of data and lowers the cost of legal compliance,” according to the Compliance, Governance and Oversight Council (CGOC).<sup>5</sup> Information economics is the result of successful information governance and can be defined as the discipline of analyzing the production, distribution and consumption of information.

Here’s a way for CIOs to think about it: The information created by the organization has tremendous value and, in fact, may be the organization’s most important asset. At the same time, however, the value of the information is offset by the costs to store, access and manage it — and by the risks associated with having it, including compliance, security, data protection and e-discovery. The goal in improving information economics is to develop the ability to control information costs and risks while increasing the value derived from your data — in essence, improving the profit margin on storing and utilizing information.

## Improving information economics

The benefits of improved information economics are significant. Enterprises will be able to:

- Lower IT infrastructure costs
- Improve IT performance
- Reduce the risks of regulatory noncompliance
- Reduce the risk of litigation losses
- Lower e-discovery fees
- Support ongoing data growth — including growth of unstructured information such as emails and social media — in a more cost-efficient and compliant manner

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<sup>5</sup> Ibid, Footnote No. 1

For CIOs, the question is not **why** the organization should improve information economics, but **how** to improve information economics. Here are some of the keys:

- **Benchmark** your current environment so you know what information you have, where it is located and how it is being categorized and tagged, and whether it is being managed according to compliant retention policies. Many organizations have information spread across a wide range of silos — which could be separate offices, departments or applications — but it is critical to ensure that information governance policies are managed consistently across the entire enterprise. A benchmark will help the CIO understand where there are challenges and what must be done to overcome them. Do you know how much data you have and where it is being stored? What data being storing should be destroyed? You need answers to these and many more questions.
- **Collaborate** with the necessary partners within the organization, whether legal counsel, compliance officers, records managers or individual business managers. Improving information economics is typically an endeavor that will spread across departments and functions, just as the information created by the organization is spread across departments and functions.
- **Identify, classify and locate information** so that the organization can ensure that all information is being properly tagged and categorized. The quality of your data and your ability to identify where it is and what it is are critical steps to improving information economics. By taking these steps, you will be able to make decisions about which data to retain, which to destroy and where and when it should be moved during the course of its lifecycle.
- **Establish policies and processes** for information management and governance that can be communicated, monitored and enforced across the entire enterprise. This includes retention and destruction policies, as well as policies for classifying and tagging data, prioritizing it and moving it to appropriate storage devices for each step of its lifecycle. Don't think this is just a function for compliance and records managers: It is absolutely critical for the CIO and the IT organization. According to one survey, 50% of IT departments never use a retention schedule when disposing of data.<sup>6</sup>

## Conclusion

Improving information economics is critical for CIOs and IT leaders. It will lead to lower IT costs and reduced risks for the entire enterprise. In fact, information economics is as important as any technology initiative in the organization and should not be left solely to the discretion of compliance or records managers. In reality, because information governance is so critical to the management of IT budgets, savvy CIOs are recognizing they must take a leadership role in driving improved information economics.

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<sup>6</sup> Ibid, Footnote No. 1

The first step is to understand that this is not an endeavor that you must face alone. IBM has been a leader in helping enterprises define and measure the value of information economics. By working with IBM, CIOs have the opportunity to not only manage data growth, but also ensure that they are getting the most business value possible out of all the data created by their organization. With the volume of data being created doubling every three years, getting data under control today will pay off dramatically in the future.

Are you ready to improve your information economics?

**Contact IBM at** <http://www.ibm.com/ILG>.