WHY DATA MANAGEMENT MATTERS RIGHT NOW
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1: THE EXPONENTIAL GROWTH OF DATA
Today’s organizations are seeing the fastest data growth in human history, and it’s conceivable that this trend has no end and will continue to accelerate exponentially. Fortunately, new technologies are available to meet these challenges and bring value to organizations in exciting new ways.

The amount of data that today’s IT departments must store, manage and protect is increasing at a phenomenal rate. Over the course of the last 10 years the market has seen a dynamic shift where the growth of unstructured data – including email, images, video, social media, documents and more – is outpacing the growth of storage systems.

Unstructured data is growing at a rate of 75% while structured data is growing at only 23%. Compounding this problem, many organizations must now retain content for longer periods of time in order to satisfy regulatory requirements. And the content itself is increasing in size as organizations must store larger and larger files, such as video recordings.

Many of today’s IT departments face this explosion in unstructured digital content with no effective means of managing it and all the liability or responsibility of its stewardship. Even worse, currently only 5% of this content is valuable in its current state. This means that only a fraction of the unstructured data is useful to an organization, even though it is stored on expensive racks of servers that cost millions.

The result is higher IT infrastructure cost, even as business is putting pressure on IT to do more with less. IDC estimates that 23% of all current data could be useful to organizations if properly tagged and then analyzed. However, only 3% has been tagged while only 0.5% has been analyzed.
2: DATA RETENTION POLICIES AND COMPLIANCE
Industry governance and compliance requirements as well as government regulations have changed the data retention model for most organizations. They are under intense pressure to maintain ever-increasing quantities of data in archives that meet the demands of e-discovery, FOIA, congressional inquiries, HIPAA and other compliance requirements. Because data now has a longer lifespan, each organization’s technology infrastructure, power and cooling needs are increased as well.
Meeting these demands requires a wide range of functionality for data management systems. Such solutions must allow organizations to search multiple data sources and classify data while simultaneously retaining chain of custody. In addition, these solutions must have the ability to define granular searches as well as finding and applying legal holds to documents. They must also be able to capture, archive, retain and access email and attachments with full fidelity and in their native formats.
3: Accessing Your Data
Today’s organizations must meet the objectives of their end users and ensure that the IT infrastructure provides efficient access to data when and where they need it. Each organization’s data must be accessible to more people than ever before, from remote locations and on multiple devices – ranging from smartphones to tablets and laptops. Business used to move at the pace of shuffling papers, but now it moves at the speed of a smartphone.

The use of mobile devices has also changed the way end users employ and manage their data. Users see email as an effective archive for their critical files, using the search capabilities of the email system to find specific files. While this helps them accomplish their day-to-day requirements, it creates a massive storage and data protection challenge.

Another data growth challenge is end users’ proclivity to attach files to emails. When users create workflows that leverage email as a collaboration tool it can also generate multiple copies of the same attachment. A document is mailed to the group; one or more people modify it and mail it back. This continues until the project is complete – storing multiple, slightly modified versions of the attachment(s). The same file is backed up multiple times; inactive data is backed up repeatedly.

These practices place strain on an organization’s infrastructure and create increasing demands for greater end user access. If an organization’s system cannot keep up with these demands, users may turn to shadow IT systems or use services such as DropBox which can put data at risk, storing it outside of the corporate firewall.
These issues can be solved by centralizing management. The right data management system can pull information from remote locations, securing, automating and making the process simpler for IT and transparent for end user. It should also have a ubiquitous interface, which allows users to access the data anywhere. However, your organization needs the right data management system with the controls in place to perform these functions in a secure fashion.
THE USE OF MOBILE DEVICES HAS ALSO CHANGED THE WAY END USERS EMPLOY AND MANAGE THEIR DATA.
4: GETTING VALUE FROM YOUR DATA
The tremendous growth in structured and unstructured data is challenging IT organizations with scaling storage, ensuring secure access to information and maximizing the value of data, all while reducing costs and increasing efficiency of their data centers.

The advent of Big Data is a direct result of organizations leveraging the value of stored content to drive strategic initiatives or identify industry trends. Organizations are no longer viewing content one dimensionally—used or created for one purpose only—but rather as a source of intelligence and value. As analytics evolve, additional value can be gleaned from older data sets; this requires the re-processing of content and drives the need to maintain data for extended periods of time.

However, developing any data analysis is limited and expensive if the data isn’t readily available. IDC points out that only 5% of data is valuable “in its current state.” For many organizations, the most difficult part of making effective use of Big Data is not storing or protecting the information, it’s accessing and compiling it in a useful way. At the same time organizations are paying more than they should using higher-cost storage without the proper strategy.

However, if a data management solution can meet cost, management and compliance needs while also making the data more useful, it can deliver particular value to the organization. Organizations can increase the value and usability of their information for Big Data analytics by simplifying and streamlining archive and retrieval. For example, centralized file content enables basic search across all files, but it also creates a platform for advanced analytics.
5: Choosing a Data Management System
How can an organization move data to a system that presents a lower cost, yet allows end users to access that data within their current workflow? The organization will see significant benefits from creating such an information repository that better leverages lower cost technologies and allows for improved data management and compliance.

Managing data is more than moving it from fast (expensive) storage to slow storage (less expensive) and back again. It’s about understanding the value of the information to the organization and providing it – in a cost effective way – to the people who need it. This could include the creator of the data, legal departments for litigation or compliance and even organizational leadership, who can use Big Data as an aid in decision making.

There are multiple ways to address the issue and each organization will organize its data management differently, depending on its particular needs. With the right data management system, an organization can:

- Centralize data management and increase the accessibility of information from remote offices and mobile workers while protecting organizational assets
- Scale back up and recovery to accommodate the rapid growth of data to ensure the availability of information
- Increase data’s value and usability for Big Data analytics by simplifying and streamlining archive and retrieval

When selecting a data management system, consider the following:

- A system that allows you to consolidate multiple sources of unstructured and semi-structured data into a single repository.
• The solution should also allow you to “drain” your production file servers of all the seldom accessed data. This allows OPEX costs to be reduced, and performance can be focused on the active data that needs it.

• Scalability and reliability are key. Look for solutions with no single point of failure which can scale out as required.

• As the data repository grows, it will become more cost effective at moving archived data from disk to tape and even to internal or external cloud providers.

• It’s important that the repository be able to reside on heterogeneous storage or media.

• Use of industry standard interfaces like CIFS, NFS, REST, HTTPS and even S3. This allows organizations to “on ramp” the data and provide interoperability with today and tomorrow’s technology.

• Having built-in (not bolted on) compliance and search capability can save the organization hundreds of man-hours.

• Allowing end users a “cloud like” interface via smart phone and tablets can really drive adoption of the consolidation efforts. Everyone will want to use the solution because they can find and use their information more easily.

• Creating unstructured data repositories can also allow organizations to get a jump start on Big Data efforts that are in progress or that are looking for useful data sources to drive fledgling initiatives.
THE ORGANIZATION WILL SEE SIGNIFICANT BENEFITS FROM CREATING SUCH AN INFORMATION REPOSITORY THAT BETTER LEVERAGES LOWER COST TECHNOLOGIES AND ALLOWS FOR IMPROVED DATA MANAGEMENT AND COMPLIANCE.
ViON has over 35 years of experience in managing and protecting data, meeting some of the most stringent requirements of government agencies and private enterprises. With ViON’s approach, you are not locked in to a single technology or manufacturer; ViON can integrate the right solution into existing infrastructures to save time and money. ViON serves customers across the federal government, in the public sector including state and local government, education and health care, and commercial accounts.

ViON does not take a one-size-fits all approach, but works with customers to create design solutions that meet specific organizational objectives. Today there wide range of technologies are available to address different issues. Cloud, in particular, allows organizations address this challenge at internet scale. ViON uses industry-leading technologies that can include:

- Private cloud to provide dynamic, user directed, allocation of IT resources.
- Object storage to increase the flexibility of where data is stored, while increasing the knowledge of the data being stored.
- Leveraging disk cache to improve the user experience when accessing deep archive.
- Energy efficient tape and optical systems for long-term archiving.

ViON helps organizations rethink their data storage strategy, turning their data into information and unlocking new value. We offer an active archive system that is low cost and highly scalable with inherent data protection. An archive usually stores cold data, but an active archive does not; it stores data that’s still centralized, living, and useable. Primary files and email can operate on high performance storage
while archive files and attachments can be stored on low cost storage. Organizations have full access to all files.

Once data is centralized ViON creates disposition. Some data can sit on cheap storage. 90% of unstructured isn’t accessed after 30 days. Over 98% of files are NEVER accessed after 90 days. The system automates moving data to lower cost storage, but makes it transparent. End user can operate without any noticeable difference in access.

This approach enables organizations to take a strategic approach to archiving by leveraging existing storage and managing it more effectively. ViON automates the centralization of information to a purpose-built archive, enabling organizations to better manage and protect their file content while maintaining and improving access to the archived content.

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