THE NEW FRONTIER FOR DATA:
BEYOND DATA STORED TO DATA MANAGED

Datadobi

As the explosion in enterprise data approaches epic proportions, data center managers find themselves scrambling to ensure that budgets stay on track, environmental footprint is reduced, risk stays low, and data availability is never an issue. The challenges are only getting worse.

In 2021, research firm Gartner estimated that unstructured data represented 80-90% of all new enterprise data and was growing three times faster than structured data. In 2020, ZDNet reported that overall data growth was on track to increase more than 40% annually. In 2018, research firm IDC projected that new data creation will reach 179.6 ZB or 179.6 billion terabytes globally by 2025.

Data center and cloud managers aren't shying away. They recognize the limitations of today's hybrid models that combine on-premises storage with public and private cloud options.

They understand that the future of strategic data management lies with an approach that both optimizes strategies built on hybrid models for data storage and allows them to:

- Maintain visibility and control over the data
- Ensure that data can be relocated and protected in a secure manner
- Keep storage costs within budget
- Meet corporate sustainability initiatives

IN THIS E-BOOK, WE LOOK AT:

1.0

CALL FOR DYNAMIC UNSTRUCTURED DATA MANAGEMENT

The growth in unstructured data fuels many of the challenges that data center managers face every single day – both from an infrastructure perspective and a business perspective.

INFRASTRUCTURE FOCUS				BUSINESS FOCUS		
Cloud Adoption	Tech Refresh	Data Consolidation	Datacenter M&A	Data Governance	Risk Managment	E-Discovery
Data Protection	Chargeback/ Showback	Cost Optimization	Data Reorganization	Privacy & PII data	Rights Management	ML/AI

Unstructured data, and the challenges it raises, is in large part driving a new line of thinking among forward-thinking data center and cloud managers: one that seeks to align data management strategies with overall company strategies.

There are several key areas where dynamic unstructured data management can make a difference at the enterprise level.

1 COST REDUCTION AND BETTER RESOURCE USAGE

- Driving down costs across the data center is always a major initiative in most corporations.
- Cloud transformation has been seen as the primary tool for reducing costs in the data center.
- IT leaders must balance traditional, on-premises compute requirements against cloud and off-premises initiatives.

2 CO2 REDUCTION

- 53% of enterprises already have a formal carbon footprint reduction program.
- Storage vendors and cloud platform operators are promoting their ecological goals.
- Understanding data and keeping it in the most appropriate place can help companies achieve carbon footprint reduction objectives.

3 RISK REDUCTION

- A great deal of unstructured data is unprotected:
  - Many companies do not conform to the 3-2-1 policy of data protection for unstructured data.
  - With the advent of Ransomware, keeping a third copy is essential.
- Data retention equals risk: About a third of data stored in any data center is likely to be redundant, obsolete or trivial (ROT).
- Data sovereignty:
  - Is the data in the right location?
  - Is its location violating any internal or external policies?

4 DATA LEVERAGE (GET MORE VALUE FROM DATA)

- With the right processes and tools, it is now possible to quickly take control of data and exploit its hidden value, transforming it from a liability into an asset.
- Enterprises of all sizes can reuse old data for new purposes, thanks to technologies and computing power that weren't available a few years ago.

2.0

DATA STORED IS NOT DATA MANAGED

Unfortunately, large amounts of data today is simply stored and as such becomes a liability instead of an asset. It may be stored on-site, which makes it more visible, which (in theory), means it should be easy for business owners to access it when it is needed. As unstructured data volume exploded, public cloud options offered a cost-effective path to needed capacity and flexibility. Now though, costs are becoming unpredictable, and coupled with the downside of potential vendor lock-in, and the reality that the cloud may not be the appropriate place for the data to begin with, this option is less attractive.

Today's hybrid models try to strike the right balance, storing data both locally and remotely across multiple storage vendors and cloud providers. But the siloed solutions make it harder to maintain visibility and control, and to track business ownership. This lack of traceability creates two significant problems. First, the distributed model severely limits the ability to allocate infrastructure resource consumption to business stakeholders, exacerbating budget, and environmental cost challenges. Second, without clear ownership, data may be stored forever – even when it has become redundant, obsolete and trivial (ROT), raising serious questions about what to do with it. When data has reached the end of its useful life, and is still stored, it consumes valuable space that could – and should – store relevant data.

These models also make it hard to move or copy data, so that it is available in the proper channel as need arises – and then return it to a more cost-effective storage tier when less likely to be accessed.

Other challenges to the way that data is handled today, specifically related to supporting key data management strategies, include:

- The ability to keep the data synchronized across different environments
- Adequate protection against human and machine errors, as well as malicious attacks
- The ability to verify data integrity during mobility operations
- The ability to manage multiple copies in different locations

As organizations recognize that much of the data they create and store is a critical asset, the call for a strategic approach to data management becomes more urgent. Answering that call, with an approach that meets several infrastructure and business needs, lies at the heart of a new model: one built on a company-wide strategy for unstructured data management.

When data lives in multiple places, there are no easy questions:

Who owns it?

Is the data stored in the right location?

How does the data age?

How do I manage the data's lifecycle?

How do I manage the costs of this data?

Is it protected?

How risky is this data?

How do I manage the CO2 impact of storing data?

3.0

THE NEXT-GENERATION OF DATA MANAGEMENT

Next-generation data management allows organizations to treat and use data dynamically, recognizing that the relative worth of data has a shelf life. At the core, next-generation data management strategies offer a way to introduce data mobility – needed now more than ever to keep data where it needs to be – either close to the user and applications for seamless access or archived at a lower cost until the clock runs out and it can be deleted. When data is mobile, inefficiencies that can quickly consume the budget are reduced as well.

While some may claim that today's hybrid models eliminate silos, the reality is that distributed models can build more walls than they tear down. Moving beyond the silos created by today's hybrid models requires data management that makes it possible to understand the data and to know what to do with it and take the necessary actions.

The goal should be a sustainable data management strategy built on an understanding of:

- Why certain datasets need to be stored
- Where those datasets are stored
- Who owns the datasets
- The costs of the datasets stored
- What value the data has so that appropriate actions can be taken depending on operational and business needs

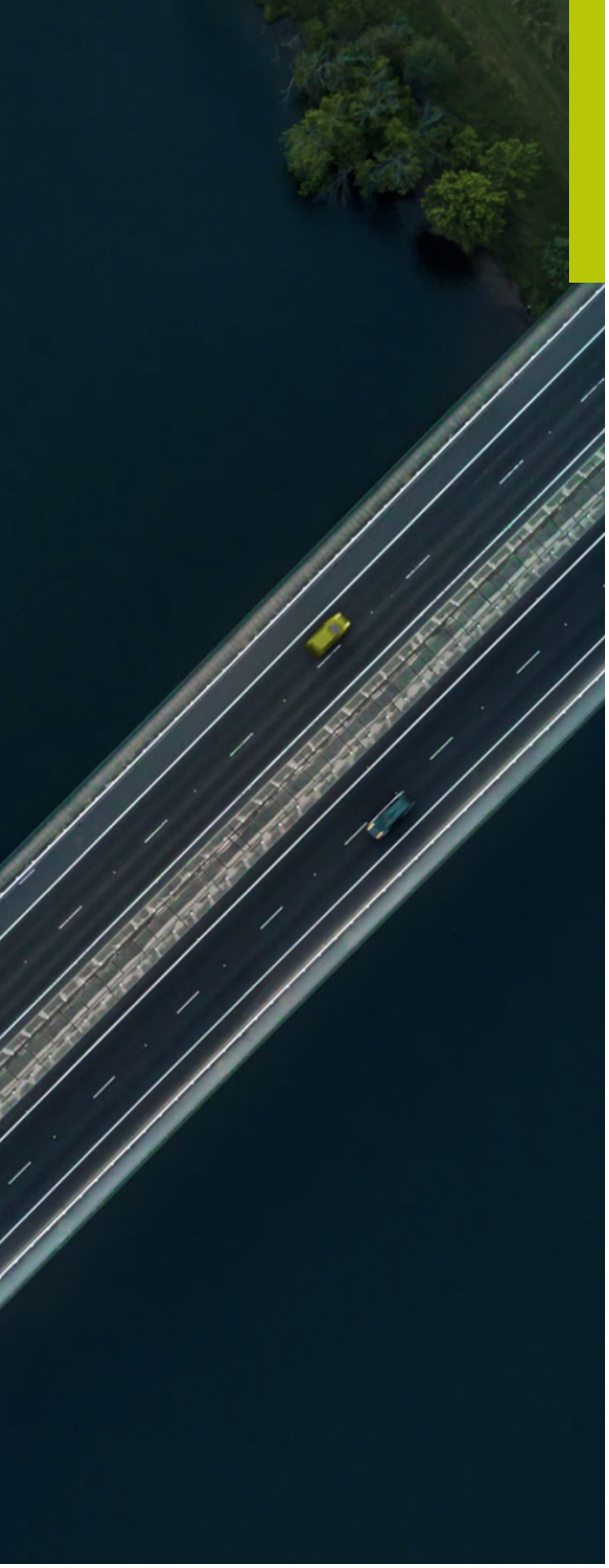
Data center and cloud managers recognize that managing data, regardless of where it resides, is essential to success. Keeping data under control requires a single interface that allows users to navigate among and between myriad storage platforms with ease – regardless of vendor – optimized resources, and a way to avoid creating more silos whenever possible.

FOR DATA CENTER AND CLOUD MANAGERS, THE BENEFITS OF STRATEGIC DATA MANAGEMENT INCLUDE:

Immediate visibility into unstructured data

Ways to organize data that makes sense to internal customers

The ability to easily take action on the data to meet internal customer objectives



BUILDING A FUTURE-PROOF MODEL
FOR STRATEGIC UNSTRUCTURED DATA MANAGEMENT

Meeting the most pressing infrastructure and business needs, next-generation models for strategic data management will:

- Offer full visibility to the data stored in on-premises systems and public cloud
- Provide adequate analytics and reporting to help business and application owners make decisions quickly
- Provide trend analysis and recommendations.
- Index and search for data reuse
- Report on system utilization and frequency of access
- Identify orphaned and dark data
- Identify and dispose of unnecessary and unwanted data
- Simplify workflows on data ownership claims and security assessments
- Identify access and update/modification frequency
- Classify data

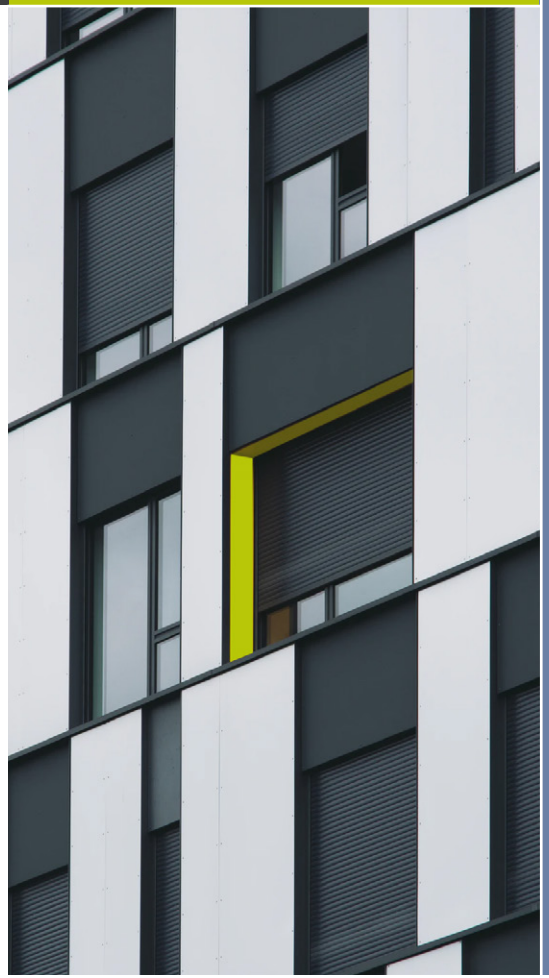
An effective approach to creating the data management strategy begins with an analysis of the enterprise's data storage, and leveraging the metadata collected in the analysis to:

- Develop a deeper understanding of the content
- Provide insights to make informed decisions on infrastructure optimization
- Plan for the correct data placement
- Discover ways to reuse data more effectively across the organization
- Identify datasets that can pose potential risk to the organization

These characteristics, combined with the ability to support seamless data movement between on-premises or hybrid-cloud infrastructure provide the flexibility and agility needed from data management strategies now – and in the future. Meeting the demands for control, availability, protection and re-use of data ensures that budgets are met and new opportunities are created for putting data to work for all stakeholders.

4.0

WHAT TO LOOK FOR



- Is the solution vendor-neutral?
- Does the solution scale to handle not only large amounts of capacity but also billions of files/ objects?
- What kinds of insight and intelligence can the solution provide?
- Does it support major file and object storage protocols, regardless of where the asset is deployed and consumed?
- How does the solution ensure synchronicity?
- What tasks are automated?
- How does the solution verify data integrity?
- What does a typical implementation look like?
- How does the solution eliminate the risk of lock-ins?

CONTROL UNSTRUCTURED DATA GROWTH THROUGH VISUALIZATION, ORGANIZATION, AND ACTION.

See how Datadobi can help at: storagemap.com

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