

Data Management Must Replace Storage Management

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INDUSTRY

Data Storage Management Software

SOLUTION

Komprise Intelligent Data Management

BENEFITS

- Storage vendor and platform agnostic
 - On-premises and cloud storage data management
 - Standard storage protocols based
 - Data migration
 - API Integration
 - Non-intrusive for end users

Storage Silos Create Direct and Indirect Costs

It is common today for enterprises to be storing multiple petabytes of data. IT and business executives want to use that rapidly accumulating data to create new value for customers and to improve internal processes for market-place gain. Their storage requirements often exceed the capabilities of their legacy storage solutions, so they add more storage systems and extend to the cloud.

While expanding the number of storage systems and data platforms meets the immediate operational need, it also results in storage silos. These silos add cost, hamper visibility, create management complexity, and raise data security risks. Enterprises are at a tipping point of cost and complexity when it comes to unstructured data management.

The Limits of Storage Management for Data Value

While the cost per unit of storage capacity is generally decreasing, increasing storage requirements are outpacing these declines. This puts pressure on IT budgets. And so, IT departments look to their storage vendors for data management. But these solutions tier proprietary blocks of data within their storage or to the cloud. This is not ideal as it locks up the data.

A company may look for insights from its storage systems for data management decision-making. However, typically, storage analytics live in the vendor's proprietary hardware and software stacks. And because these tools require data to be on their platform, these solutions limit analysis for enterprise-wide understandings of its data landscape. This is especially problematic in today's hybrid cloud storage ecosystem, where IT organizations are storing data across several on-premises systems and in one or more clouds. As well, enterprises are unable to leverage the full compute power of the cloud when data tiered to the cloud is trapped in vendor file systems.

These diverse storage platforms and data silos result in visibility issues which inevitably result in missed opportunities to provide new value through further data analysis. A recent survey found that two-thirds of business and IT managers believe that most of their organization's data value remains untapped.¹

Manage Data, Not Storage

Yet, as the saying goes, every problem comes with an equal or greater opportunity. But it requires new thinking.

and tools. Today's need is to create a layer and solution outside of storage that can:

- Deliver visibility and granular search across multiple storage systems and clouds
 - Provide analytics and insights on data types and usage to inform storage decisions
 - Enable actions based on that analysis
 - Fully use data wherever it is stored, especially in the cloud

Data Management Software (DMS) lives outside the storage system. DMS enables IT leaders to understand, orchestrate, and intelligently place data based on cost, performance, regulatory compliance, legal, and value creation priorities.



DMS Benefits and Capabilities

Data Management Software brings broad benefits such as:

- **Gains visibility into file data.** DMS creates new visibility into file storage. What files do we have? Who is using them? How much? When? What data is used frequently? What data is stale, cold, or should be deleted? In other words, the DMS application creates insights into an organization's file data.
 - **Maximizes savings with file-level tiering.** By understanding enterprise data across the entire environment, decision-makers can uncover cost-saving opportunities. These savings start with tiering inactive data to less expensive storage and freeing up the most expensive storage for the most active data. DMS solutions maximize savings by tiering the entire file off the storage and active backup cycles, not just the data blocks. The storage savings can be significant but are generally dwarfed by the savings of eliminating cold files from recurring backups.
 - **Accelerates data migrations.** Planning and executing migrations to avoid application downtime

1. [https://www.businesswire.com/news/home/20200901005035/en/
New-Industry-Research-Shows-the-Volume-and-Value-of-Data-Increasing-Exponentially-in-the-Data-Age](https://www.businesswire.com/news/home/20200901005035/en/New-Industry-Research-Shows-the-Volume-and-Value-of-Data-Increasing-Exponentially-in-the-Data-Age)

Most data living on expensive primary storage does not belong there. DMS solutions enable organizations to identify that data and get it out of the way.

and disruptions may take weeks or months to complete. To accelerate and simplify migrations, DMS solutions should deliver global search across storage and cloud silos. They should use analytics to identify exactly the data needed and migrate just that virtual dataset into a new NAS, data warehouse or cloud analytics application.

- **Facilitates data monetization.** In addition to saving money through intelligent file tiering, DMS enables enterprises to leverage previously siloed and cold data for new uses. It can enable data lakes or feed data to AI applications in the cloud.

In short, data management software puts the data first. It goes beyond storage efficiency techniques, enabling organizations to derive the greatest value from their data by placing data at the right place, at the right time, for the right service.

Key Criteria for Evaluating DMS Solutions

Look for the following characteristics in a modern data management solution which will optimize savings and future-proof data:

- **Storage vendor and platform-agnostic.** The software should work transparently and independently across leading storage and cloud environments. This allows IT departments to retain their existing storage systems with no vendor lock-in yet manage data holistically across these systems.
- **Analytics.** DMS should analyze data wherever it lives, whether on-premises, across storage namespaces, in backups, in the cloud, or across multiple clouds. The solution should be able to analyze data for tactical and strategic decision-making without first moving it, requiring agents, or the need to be in front of data access.
- **Policy-based data migrations.** DMS solutions should automatically and continuously move data to the right storage based on business priorities, cost, or monetization opportunities.
- **Preserves native access at every tier including cloud.** Users should be able to directly access moved data in the cloud or on-premises without going through the data management software or original storage. Native data access allows users, such as researchers, to leverage new tools in the cloud against that data. Additionally, moved data should carry forth all permissions and attributes. Essentially, the solution should enable dual access as files or objects of the moved data.



Manage Data, Not Storage

- Unstructured data growth and storage proliferation are urgent problems that IT organizations can no longer ignore.
- Data outlives storage—so why manage data through a storage silo? IT organizations need data-centric management that is a separate layer working across storage and cloud to analyze and move data without creating lock-in.
- Data management provides the visibility required to gain a holistic understanding of the storage landscape. This means that IT can make storage decisions that maximize the value of data, optimize storage costs, and increase agility.

- **Standard protocols.** DMS products that work with standard storage protocols such as NFS, SMB, and S3 allow users to analyze data in place without the need to rehydrate data or convert data from a proprietary format. By avoiding a proprietary, locked-in scheme, the solution allows flexibility for the organization regardless of the storage systems they have now or will add in the future.

- **Non-intrusive for end-users.** The solution should stay out of the hot data path and be capable of throttling its actions as needed to ensure storage performance is the priority. Files the solution has moved should remain available to end-users, and the tiering should be transparent without requiring users to change the way they access and share files.

Moving from Storage Management to Data Management

Today, the question should not be about how to manage storage, optimize it, and decide what array to buy or cloud storage to rent next to keep up with enterprise data growth. Rather, the question is how to manage data most advantageously. Save money, yes. But also enable business processes and create maximum value.

At a minimum, organizations should use Data Management Software to survey their data and understand what they have before moving it to another storage system or making their next storage system purchase. A DMS solution can continually optimize data placement for both cost savings and new revenue—transforming traditional storage management into a data-driven value chain practice. ■

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