DIGITAL TRANSFORMATION DEPENDS ON ENTERPRISE DATA MANAGEMENT

THE INCREASING DATA MANAGEMENT CHALLENGE

Almost every organization is undergoing some form of digital transformation. Whether it is mobilizing the workforce, creating online customer experiences, enabling electronic supply chains, or providing real-time access to medical records or financial statements, the role of IT as a business enabler has never been more critical.

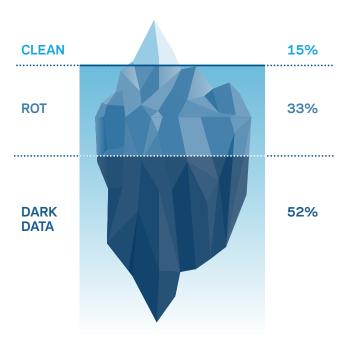
In turn this means your business is almost entirely dependent on data. Without timely, reliable and safe access to data and its associated apps, you cannot function. You could argue that data is one of the most valuable assets you possess – comparable with your employees, capital and intellectual property.

However, most organizations today are not managing their data as a strategic asset. Frequently it is treated as an administrative burden, with little to no knowledge of what it contains, who owns it or even where it is. This is especially true of unstructured data (emails, videos, documents, files), which make up the vast majority of the total and is the hardest to identify.

Why is it so hard? Several factors are contributing to the challenge:

- Fragmentation: In today's diverse IT landscape, corporate data can be located almost anywhere, from a variety of traditional storage drives to public cloud services such as Amazon and Azure, private clouds containing virtualized and containerized apps, mobile devices and personal cloud services such as Box.
- Volume: More data was created in the last two years than in all of human history¹. By 2020 the digital universe is estimated at 44 zettabytes² over 80% of it unstructured and the responsibility of enterprises to store somewhere³, including the estimated 60% of files that are copies of originals that add no value⁴.
- Complexity: The typical IT organization has accumulated hundreds of separate data management tools and component solutions over time in a piecemeal fashion, for individual functions such as backup, archiving, disaster recovery, copy management, etc. The lack of integration between these tools perpetuates complexity and cost, and inhibits IT's ability to respond to changing business demands.

85% INVISIBLE OR USELESS



Source: Veritas Databerg Survey 2016

IMPLICATIONS FOR THE DIGITAL BUSINESS

The inability for IT to see, control or regulate their corporate data in the face of these challenges has profound implications:

No Visibility or Control: You can't manage what you can't see. Without
the ability to obtain a clear line of sight into your data environment and
understand what is being stored, you cannot make proactive decisions
about what to keep, what to delete, or which availability or protection
services to provide. It is the IT equivalent of flying blind.



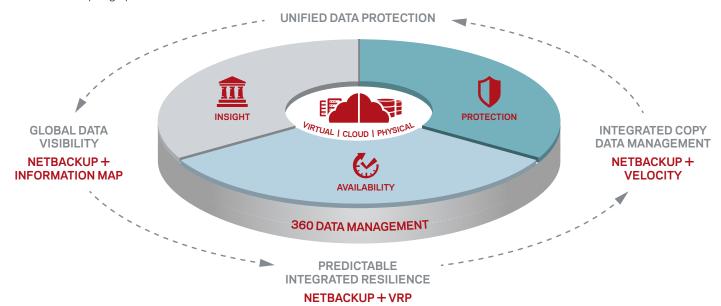
- Increased Risk: Regulatory requirements are having a greater impact on the way organizations manage their data. Organizations must be able to prove compliance with strict requirements for data handling, privacy and sovereignty in addition to local and industry-specific standards, and penalties for non-compliance are becoming more punitive. Data breaches are also becoming more widespread, potentially resulting in catastrophic damage to the company's reputation, not just financial loss.
- Unnecessary Cost: Many IT organizations do not have effective policies for their data, leading to employees and lines of business keeping everything forever. Not only is this inefficient and risky, it adds considerable unnecessary cost in acquiring ever more storage. Immediate savings could be made by deleting unneeded files or moving them to cheaper environments such as cloud or 'white box' commodity drives, but IT have been reluctant to for fear of reducing service levels or losing a valuable file.

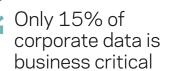
A new approach is needed. The business needs to take control of its data and turn it to strategic advantage while managing growth, risk and cost.

A NEW FOUNDATION: ENTERPRISE DATA MANAGEMENT

The ability to transform your data into a strategic business asset starts with providing three core capabilities that address the challenges outlined above:

- Insight: Visibility is a pre-requisite to identifying and classifying the huge volumes of files being stored, to informing decisions regarding retention and compliance, reducing risk and managing storage more efficiently.
- Availability: The ability to reliably move and orchestrate workloads across a heterogeneous IT landscape, including multiple clouds - is necessary to maintaining business resiliency and cost effective on-demand access to apps and data under changing conditions.
- Protection: The IT environment must be reliably preserved to ensure it is always safe, intact and accessible with no service disruption; this demands scalable, fast and efficient backup & recovery of any environment (virtual, physical, open source or cloud) without disrupting operations.





The Databerg Report, Veritas, 2016 In order to achieve the breakthroughs required, these capabilities need to be applied across the entire IT landscape in a scalable, consistent and manageable manner rather than in silos with isolated effect.

This means adopting a *software-based approach*, with the ability to span across many different environments regardless of the underlying infrastructure, and to apply policies centrally rather than multiple separate points.

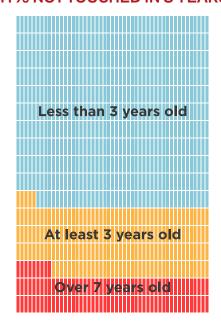
But given increasingly high expectations from the business, it is no longer enough simply to provide these three capabilities independently – even if they are state of the art solutions. It is necessary to *integrate* these capabilities to further reduce complexity, streamline operations, and find synergies that otherwise are not achievable.

REMOVING THE BARRIERS WITH VERITAS 360 DATA MANAGEMENT™

A 360 approach to enterprise data management brings a fourth element to the equation: convergence between the key capabilities of insight, availability and protection into combined solutions that offer greater business value. For example:

- Visibility and control: Quickly obtain visibility of your data and take action from a single aggregate viewpoint, to inform business decisions, align protection policies, delete unwanted data or copies, and predict future resource needs.
- End to end resiliency: Go further than backup and disaster recovery as separate
 procedures by proactively moving apps and their associated data intelligently via
 orchestration and automation as needed to meet uptime or capacity demands.
- Optimization of resources: Allocate infrastructure resources correctly the first time, without under- or over-provisioning, and streamline the provisioning process by providing self-service data access and the ability to proactively handle peaks in demand.
- Risk management: Quickly identify areas of data risk and make informed decisions about remediation, assess your regulatory compliance readiness, monitor data access patterns and enforce policies independently of underlying infrastructure.

41% NOT TOUCHED IN 3 YEARS



Source: Veritas Genomics Report, 2016

THE VERITAS™ APPROACH TO 360 DATA MANAGEMENT

Veritas provides enterprise data management to tens of thousands of global customers with an award-winning **portfolio** of **insight**, availability and **protection** solutions. These solutions can confidently be adopted as needed to meet your data management needs, and are backed by world-class support and services.

data environment has not been touched in 7 years

Data Genomics Report,
 Veritas, 2016

Now, Veritas is building on this proven foundation to pioneer 360 data management, with integrated solutions that offer much greater simplicity, consistency and operational efficiency. Importantly, these solutions all leverage our market leading Veritas

NetBackup™ product family, extending its reach from backup and recovery for cloud, virtual and physical environments to become a foundational platform for unified data protection. Customers can leverage their existing NetBackup as the foundation for 360 Data Management with three new integrated solutions:

- 1. Global Data Visibility. With direct integration between NetBackup and Veritas™ Information Map you can:
 - Transform your existing backup data into actionable intelligence: Optimize your storage resources by gaining rapid visibility into your data environment from the NetBackup catalog, to inform decisions to delete, archive or move files to the public cloud without requiring separate steps or lengthy processes to analyze and extract the metadata.
 - Match policies to data value: Guard against under- or over-protection that can increase complexity and cost, by assigning the appropriate data lifecycle policy to the backup process based on deeper understanding/visibility of the data vs assumption or trial and error.
 - Forecast future demands: With data growing at an average of 39% per year, you need the ability to identify capacity needs and confidently plan for data and application migration, and to understand precisely which data can be moved to public cloud services safely.
- 2. Predictable, Integrated Resiliency. With direct integration between NetBackup and the VeritasTM Resiliency Platform (VRP), you can:
 - Enable predicable application recovery: Orchestrate complex application recoveries with a single click, regardless of the underlying infrastructure, by automating both the recovery procedures of multi-tier applications in the desired order.
 - Ensure disaster recovery readiness: Execute single-click, non-disruptive NetBackup recovery rehearsals at any time to help ensure proactive/predictive Disaster Recovery assurance or compliance to internal or external business continuity mandates or regulations.
 - Achieve any service level: Centrally manage and monitor application resiliency for all service level objectives from RTOs
 and RPOs in hours to seconds or minutes, with visibility and control of data availability. Service objective templates allow for
 simple management across both backup and replication as data transport layers.
- 3. Integrated Copy Data Management. With direct integration between NetBackup and Veritas Velocity™ you can:
 - Reduce storage by 60%: By provisioning virtual copies on demand from your NetBackup environment, you eliminate the separate processes to create, store and manage physical copies, while also streamlining the backup window and improving service levels.
 - Provide rapid and secure data access: Improve agility by making data available to test and development teams, service analytics and reporting requests when and how they need it, all while safeguarding sensitive data.
 - Simplify your infrastructure: As Velocity integrates seamlessly with NetBackup, infrastructure silos are minimized without a disruptive rip-and-replace or re-architecture of your backup.

That 41% may contain as much as 9.5 billion files and could be costing you \$20.5 million per year to manage"

Data Genomics Report,Veritas, 2016

WHY VERITAS

Veritas is trusted today to provide enterprise data management to organizations of all sizes, including 86 percent of global Fortune 500 companies. Veritas is unique in providing solutions that are software-based, vendor-agnostic, and infrastructure independent, uniquely focused on the value of information rather than the underlying environment.

Organizations need to manage their data as a critical asset, with solutions that reliably protect the right data, help ensure resiliency and ondemand access from anywhere, and reduce the risks and costs of storing their ever-increasing amounts of data throughout the globe.

The always on nature of digital business also demands the removal of the artificial barriers between these frequently siloed capabilities, to reduce complexity, streamline operations, and benefit from synergies that otherwise are not achievable.

By providing unique integrations for data visibility, resilience, copy data management, virtualization and cloud protection services, Veritas enables you to accelerate your own digital transformation while leveraging an existing investment, and establish a reliable foundation for the future with 360 Data Management.

We invite you to explore the new possibilities presented by 360 Data Management and join us on the journey.

Visit www.veritas.com to learn more about protecting your information with 360 Data Management.

ABOUT VERITAS TECHNOLOGIES LLC

Veritas Technologies LLC enables organizations to harness the power of their information, with solutions designed to serve the world's largest and most complex heterogeneous environments. Veritas works with 86 percent of Fortune 500 companies today, improving data availability and revealing insights to drive competitive advantage.

Sources:

- ¹ Big Data: 20 Mind-Boggling Facts Everyone Must Read, September 2015
- ^{2.} IDC Digital Universe Study, 2014
- $^{\rm 3.}\,$ 12 Very Shareable Stats on Big Data, Bridg, September 2015
- 4. IDC Report "The Copy Data Problem" 2015

Veritas Technologies LLC 500 East Middlefield Road Mountain View, CA 94043 USA +1 (650) 527 8000 1 (866) 837 4827 veritas.com

For specific country offices and contact numbers, please visit our website. https://www.veritas.com/about/contact.html



V0297 11/16