



## 2020 CIO Cloud Data Management Initiatives

An Executive Brief Sponsored by Veeam

*50 Years of Growth, Innovation and Leadership*

F R O S T & S U L L I V A N

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## INTRODUCTION

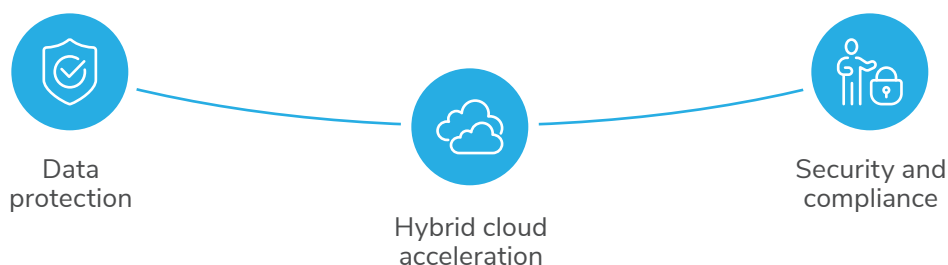
If you're like most C-suite professionals today, you're likely operating with a laser focus on three key imperatives:



In short, an important goal of digital transformation is to automate routine operational tasks without sacrificing service to customers and partners. According to results of Frost & Sullivan's digital transformation survey, 99% of businesses are engaged in some stage of a digital transformation. But the digital transformation journey is not without challenges. Businesses struggle with everything from skills gaps to security, from data migration to application performance.

Among global C-level business leaders surveyed by Frost & Sullivan about their companies' digital transformations, 44% said that improving customer experience and satisfaction was a key goal, and 41% cited improving operational efficiencies. Tactical steps toward achieving these goals include deploying automation to increase agility, leveraging data to make critical decisions, and streamlining operations to reduce costs.

Empowering and supporting your business with a set of services that overcomes these challenges can help move a stagnating digital transformation effort and deliver the results your company needs to succeed. Three areas to consider automating include:



This executive brief examines the challenges enterprise businesses face on the journey to digital transformation, potential solutions to overcome those challenges, and services that can help you on your journey.

## DIGITAL TRANSFORMATION: A BUSINESS IMPERATIVE FRAUGHT WITH CHALLENGES

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As a top executive in your business, you may find yourself in a delicate balancing act between driving revenue and streamlining operations, all while improving customer service. To help balance these key goals, most businesses are transforming their business using IT-based technologies, including cloud computing, advanced analytics, management platforms, machine learning, and artificial intelligence.

According to a recent Frost & Sullivan survey, many businesses are banking on cloud computing as a primary driver of digital transformation, with 78% saying support of a digital transformation is their main reason to adopt cloud infrastructure and services.

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Automating daily tasks and introducing new services can help create greater governance consistency and application and data availability across a geo-diverse, hybrid environment. But the path to transformation has its challenges:

- **In-house expertise is scarce**—Among global IT leaders, 57% cite “insufficient expertise” as a restraint in deploying their digital transformation initiatives.
- **Data security is a restraining factor**—Ransomware is of increasing concern, with businesses expected to fall victim every 11 seconds in 2020. Global ransomware costs are predicted to reach \$20 billion by 2021.<sup>1</sup>
- **Migration continues to be a challenge**—Among global IT leaders surveyed by Frost & Sullivan, 52% cited “migrating applications or data to cloud” as a key challenge that hinders their IT initiatives.

So while digital transformation can bring significant benefits, businesses need to embrace new tools and services to overcome these challenges and drive their company’s transformation forward.

1 “Top 5 Cybersecurity Facts, Figures, Predictions and Statistics for 2019 to 2021,” CyberCrime Magazine, September 23, 2019

## USING AUTOMATION TO DRIVE DIGITAL TRANSFORMATION

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To transform IT processes without burdening in-house staff or sacrificing customer service, businesses need to introduce automation. Automating routine tasks allows your business to:

- **Overcome expertise/staffing gaps**—By automating older, legacy systems for critical yet everyday tasks like data protection and recovery, you free your staff to refocus their efforts on training, innovation, and the digital transformation that you need for your business to thrive. Additionally, as the baby boomers who are largely responsible for the administration of traditional IT systems retire en masse, a sudden and major expertise gap on legacy systems will exist. Migrating to new systems will help attract a younger workforce that has primarily been trained—and is only interested in—working in a cloud-native environment.
- **Ease migration challenges**—By automating the movement of workloads or data from legacy systems to virtualized, containerized, or cloud-based environments, you enable greater flexibility, fast environment deployment, and the ability to better serve your teams and, in turn, your customers.
- **Ensure security and compliance**—Automating governance enables businesses to set, monitor, and act on policies consistently, with far less manual intervention than in the past. This makes your environment safer and protects your brand.

So what kinds of services can help automate these functions and mitigate your challenges to digital transformation? Let's look at three areas of focus that can help.

- **Data protection modernization**—Automating how you backup and restore data in the event of data loss.
- **Hybrid cloud acceleration**—Using automated services to help enable workloads and data to be used across multiple infrastructures or environments.
- **Data security and compliance**—Using automation to help protect critical data and ensure that it is handled in accordance with all applicable regulations.

## DATA PROTECTION MODERNIZATION

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Data is the key that unlocks competitive advantages for today's digitally transformed enterprise. It can help businesses make more intelligent decisions, improve marketing, and enhance customer service. Among global IT decision-makers surveyed by Frost & Sullivan, 81% cited better management of their growing data stores as a reason to adopt cloud computing and cloud services.

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Based on its significance to the enterprise, data protection is of the utmost importance. Security and compliance breaches can spell disaster for an organization, creating a lack of trust among customers, brand damage, and the possibility of steep fines for non-compliance.

Data backup is one mode of protection. Creating duplicate data sets allows you to fail over to a secondary location in case of a system outage and also protects you should cybercriminals threaten the integrity of your data. But businesses are starting to take a more holistic view of data protection, integrating backup and recovery, security, and governance under a single business discipline.

**“ 75% of business leaders surveyed cited challenges with backup and recovery as an issue in deploying their hybrid IT strategy.”**

Despite the recognition that a more comprehensive strategy for data management and protection is required, many businesses are struggling with backup as one aspect of their overall IT security plan. Specifically, 75% of business leaders surveyed cited challenges with backup and recovery as an issue in deploying their hybrid IT strategy. Another 56% of global IT leaders said they have difficulty ensuring their backup and recovery processes cover all workloads, including cloud.

In addition, most legacy backup methods and systems are too cumbersome and labor-intensive to handle cloud-based workloads. Consider:

- **Legacy systems are not as flexible** as cloud-native workloads and often cannot quickly and easily back up data with the speed or recovery time necessary to ensure that your business stays up and running.
- **Legacy systems don't allow strong visibility across multiple infrastructures** regarding the health and status of your data protection. Among business leaders surveyed by Frost & Sullivan, 74% cited insufficient visibility as a challenge that restrained their cloud and IT initiatives.
- **Some legacy backup formats—particularly tape—can “trap” the data**, meaning it cannot quickly or easily be ingested and leveraged for data analytics or artificial intelligence (AI) services. Data may first need to be shipped to a secondary data center, loaded onto infrastructure and potentially coded to be read by the backup infrastructure—activities that your business must wait for before data is usable.

### What You Need in a Data Protection Solution

Your business needs a modern data management service that can mitigate these challenges. The right service offers:

- **Protection for all data**—All of your data must be protected, regardless of where or on what type of infrastructure it is housed. Whether on the premises or cloud-based, or

hosted in a third-party facility, all of your data requires consistent backup procedures. Services that address growing ransomware threats are optimal.

- **Automated backup and recovery activities**—You need a service that can automate your backup processes with an ability to back up and recover from any infrastructure, to any other infrastructure, whether the same or disparate. Look for services with multiple recovery options to meet your business's needs—for example, services that can restore an entire file share, a point-in-time backup, or down to the granular file level.
- **Visibility into all primary and backup data sets**—You need a service that can show you the health, integrity, and compliance of your data within a single pane of glass, regardless of where the data is stored.
- **Use of advanced analytics, machine learning, and artificial intelligence**—Intelligently discover and remediate common backup issues proactively. These “intelligent” data protection services can also predict when you will need additional storage space and flag potential compliance issues before they occur.
- **Data access and migration**—This is needed across multiple applications or services, regardless of where they reside, enabling increased mobility across disparate infrastructures through application programming interfaces (APIs). Optimal services also guarantee that backup copies of data are clean—meaning the data has not been corrupted and is ready for use in different applications than those through which they were generated.

Automating these functions with a modern data protection service will also lessen the staff burden for these tasks, enabling staff to refocus their efforts, get additional training, and execute digital transformation tasks.

## HYBRID CLOUD ACCELERATION

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For most businesses, the road to digital transformation includes an IT shift from being a cost center to a strategic enabler of the business. This includes being able to serve the business with new services that will enhance productivity and efficiency, as well as help to streamline operations and reduce cost.

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To become a strategic enabler of business benefits, the organization typically needs to overhaul legacy IT infrastructure to support faster service deployment, easier scalability, and greater cost-efficiencies. For most businesses, such an overhaul includes cloud infrastructure because of the cloud's flexible, on-demand, and cost-effective nature. As IT makes strategic choices about

the best infrastructure to support each workload, the result is often a hybrid IT environment that includes multiple clouds, hosted environments, and private data centers—each using different protocols and services.

Many businesses struggle with challenges integrating these multiple infrastructures (on-premises or hosted, physical, virtual, containerized, or cloud-based), making it difficult to achieve a cohesive, hybrid environment. Among surveyed global IT leaders, 52% cited “migrating applications or data” across environments as a key challenge that hinders their IT initiatives. Sixty-one percent cited challenges integrating data center and cloud workloads. Another 74% cite incomplete visibility across the total environment as a challenge. Multiple platforms not only create integration issues but also require different skill sets and time from more resources—which costs more money to manage. It is also more challenging to estimate capacity required to store data across multiple infrastructures, which can also add to your bottom line.

**“ Many businesses struggle with challenges integrating these multiple infrastructures (on-premises or hosted, physical, virtual, containerized, or cloud-based), making it difficult to achieve a cohesive, hybrid environment.**

### What You Should Look for in a Data Management Solution

Data management solutions can ease hybrid IT challenges and make your path to hybrid easier by:

- **Offering unified visibility and management of data** across the hybrid environment.
- **Providing automated data movement/migration** using a single, common file type that enables data to be stored, backed up, or migrated from any infrastructure to any infrastructure, regardless of differences in file formats.
- **Assuring data continuity and availability** to any workload, anywhere in your environment.
- **Unifying cloud backup, restoration, disaster recovery, and data migration** into a single solution that can manage, protect, and provide data mobility.
- **Offering capacity planning and management** through use of intelligent solutions that know your data and can proactively suggest appropriate storage space for now while enabling you to plan for future data growth.



By choosing a service that allows you to back up and move data across a variety of infrastructures, you enable your business to use data anywhere that it is needed, at any time, while also ensuring that the data is available, clean, and compliant when a user or application needs to use it. This facilitates a hybrid environment and makes it easier to leverage your key data to improve your business results.

## DATA SECURITY & COMPLIANCE

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Data security is an ongoing struggle for businesses because the nature of threats is ever-evolving. Protecting against threats is especially difficult across multiple infrastructure environments because consistent governance across disparate infrastructures can be hard to achieve and time-consuming to maintain. But the business cost of not protecting data is even steeper. It is estimated that cybercrime will cost \$6 trillion by 2021.<sup>2</sup> Being able to ensure the integrity of your cloud-based data is critical; among business leaders surveyed by Frost & Sullivan, 74% said that security incidents led them to repatriate cloud workloads back to the premises data center.

Among all cybercrimes, of the greatest concern is ransomware—a type of software that either threatens to publish a targeted business's data or, more commonly, prevents access to the victim's data until a ransom is paid. Cybercriminals are increasing their efforts, with some predictions stating that every 11 seconds a new business will be the victim of a ransomware attack on its data. Estimates show that ransomware damages could reach \$20 billion by 2021. Healthcare—which collects patient data ranging from health to financial and credit—is likely to be the most commonly targeted industry.<sup>3</sup> Your chosen data protection solution needs to provide not only backup copies of your data in case of a ransomware attack but also audit capabilities to show that your data integrity remains intact. Such audits should be part of your core solution, rather than a costly add-on.

**“ Among global IT leaders, 69% cited the “inability to meet compliance requirements” as a challenge when implementing their hybrid IT strategy.**

Compliance is also a growing concern, with more governments and industries enacting regulations around data security and privacy. Among global IT leaders, 69% cited the “inability to meet compliance requirements” as a challenge when implementing their hybrid IT strategy. Seventy-four percent said an inability to meet compliance requirements had caused them to repatriate one or more workloads from the cloud. You need a data protection provider that ensures compliance of your data through all backup and restoration processes.

2 “Top 5 Cybersecurity Facts, Figures, Predictions and Statistics for 2019 to 2021,” CyberCrime Magazine, September 23, 2019

3 Ibid

## What to Look for in a Secure Data Management Solution

Modern data management solutions integrate security and governance directly into their platforms, automating these tasks. The best providers are integrating advanced intelligence into their security tooling to ensure faster, more proactive detection of potential issues that could impact compliance, as well as to instigate changes necessary to ensure security and compliance, regardless of changes occurring within the environment. You need a solution that can:

- **Assess security and compliance guidelines** based on pre-defined parameters.
- **Ensure compliance** with GDPR, CCPA, HIPAA, and other applicable regulations.
- **Protect against increasing ransomware threats.**
- **Offer data immutability** if desired.
- **Show workload and application integrity** through patch and application testing.
- **Ensure data integrity** through reporting.

Automating security and governance enables businesses like yours to apply consistent rules and protections around your data across every infrastructure your business uses. It helps ensure the integrity of your data, as well as confidence in your brand.

## THE LAST WORD

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As you digitally transform your business, it becomes more critical than ever to leverage data to streamline operations, improve productivity, enhance customer service, and drive topline revenue. To ensure that your data is safe, compliant, and available to anyone in your organization that needs it, whenever and wherever they are, data protection is a must. Relying on infrastructure providers to protect data leaves your business vulnerable.

Beyond protecting key data and ensuring its availability across your entire IT environment, the best data protection and management solutions enhance your digital transformation, offering benefits not available with legacy solutions. That's why savvy data protection providers are integrating migration, security, and compliance features into their solutions, enabling you to ensure the security of your data and compliance with local regulations, all while accelerating your journey to a true hybrid cloud.

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## THE VEEAM ADVANTAGE

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Veeam has emerged as a frontrunner in the data backup and recovery space, in part by innovating and extending its industry-leading platform to offer an end-to-end solution in the data management space. The platform integrates data protection and mobility, as well as security and compliance management, into a single platform that can handle data protection on nearly any infrastructure your business chooses to use.

By adopting Veeam's backup and replication platform, customers have access to one of the most modern solutions on the market. This enables organizations to free tied up resources in the vast overhead of legacy data protection and focus them on the core innovation projects needed.

Data that is not flexible can't take part in the rapid adoption of cloud services. Without it, organizations are limited in how fast they can move. Veeam's hybrid cloud solutions help make data free and fluid across any cloud without any hardware, software, or licensing barriers.

And keeping data safe, secure, and compliant can take multiple teams of people. Veeam's data security and compliance solutions rapidly automate protection, security, and compliance reporting to enable the return of tied up costs and resources back to the business.

The result is well-protected data that can be leveraged across a hybrid environment. This gives you the ability to accelerate your business and its digital transformation by ensuring the availability and integrity of your critical data.

To learn more about Veeam Cloud Data Management Platform, visit

<https://www.veeam.com/cloud-data-management.html>.

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