As organizations evolve over time, so do their technology needs.

On-premises data centers that were built years ago are now expanding to cloud infrastructures. New SaaS applications like CRM make it easier to have a distributed workforce, and DevOps has started experimenting away from VMs to develop new apps on containers. This creates a multi-generational data sprawl that leads to data fragmentation and management complexity. Adding to this situation is the speed at which companies have to change due to new market requirements, changing global supply chain dynamics, and competitors’ moves. All putting pressure and strain on IT to support business growth and innovation.

Data is the new currency, and companies should see it as an asset, not a liability. Unfortunately, effectively extracting value from data to deliver a competitive advantage has been made challenging due to this multi-generational data sprawl. Today, most data environments are not where they should be for organizations to unlock their potential and accelerate business growth. This is what we call the Business Integrity Gap.

This gap is defined as the difference between where organizations are currently, trying to overcome existential data threats and the challenges they pose, and where they need to be in order to thrive and meet their digital transformation objectives. This gap holds organizations back, causing delay in market responsiveness, loss of market share and customers, and in the worst cases, damage to hard-earned brand reputation.
The five challenges that lead to the Business Integrity Gap

1. **Data fragmentation and failure points**
   By the end of 2021, based on lessons learned, 80% of enterprises will put a mechanism in place to shift to cloud-centric infrastructure and applications twice as fast as before the pandemic.¹

   As more and more technologies are added to meet new needs and demands, data is located across multiple environments, including hybrid and multi-cloud as well as remote and distributed environments, increasing the risk of data loss and compromising data recoverability. This mix of technology is unavoidable as IT evolves, new issues arise, and new technologies are created to solve them. Multi-generational technology causes data and workloads to fragment across the entire data estate, creating data silos in its wake. This makes it more and more difficult to ensure consistent recoverability across the environment.

2. **Increasing surface for cyber attacks**
   With inconsistent data security, access, and control across environments, there is an increased risk of data breaches, data leakage, ransomware, and unauthorized access to data. Data silos and the lack of consistent security policies across them, further increases these risks. As data spreads across the globe, there are more and more opportunities for security breaches. Gartner predicts that, "By 2025, at least 75% of IT organizations will face one or more attacks as free-rein researchers document a dramatic increase in ransomware attacks during 2020, pointing to sevenfold or higher rates of growth."²

   Additionally, as the entire global workforce went remote, more vulnerabilities were introduced as the protection and management of endpoints is not consistent, with every employee doing things just a bit differently. Organizations have had to rely on the infrastructure of the consumer as well, which has very different SLAs than in the workplace.

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Government and privacy requirements
Expectations with regard to compliance and privacy regulations such as GDPR, CCPA, and others have never been so high as with today’s more distributed workforce. These requirements are getting more stringent, especially when dealing with highly regulated industries, including healthcare, finance, and other sectors. Many organizations now have rules and procedures that need to be followed.

Consumers have also realized the value of their personally identifiable information (PII) and the consequences if it were to get into the wrong hands. According to Gartner, "By 2023, 65% of the world’s population is predicted to have their personal data covered under modern privacy regulations, up from 10% in 2020." This has put increased pressure and scrutiny on companies that are collecting personal data.

Inability to scale and innovate with market demands
The lack of readily available business data prevents organizations from gaining a first mover advantage with changes in the market. As per Gartner, "Indeed, 79% of business leaders state that they have hired their own technical talent directly to either deliver or manage technology." Organizations become unable to scale with demand, access data rapidly, and innovate with new workloads, like containers, for application modernization and DevOps.

Lack of automation and low productivity
Lack of automation and process efficiency negatively impacts IT by lowering productivity, which increases costs and prevents timely access to data. With a large number of multi-generational data sets and workloads, IT must rely on multiple tools to manage and protect their data. Without a comprehensive picture of data security, data recovery, data compliance, and data management, this is very time consuming and prone to human error. Automation and integration with all data systems are critical capabilities for IT to standardize on as the business scales. Unfortunately, IT organizations have seen their productivity plummet as their teams spend more time just keeping the lights on instead of supporting business innovation.

The cost of infrastructure also increases as there are no economies of scale across storage, processing, and other resources. Each of the tools used for management or security, for example, requires its own infrastructure and management and drives up capital costs as well.

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Intelligent Data Services delivered by Commvault present real solutions to overcome these five existential threats, close the Business Integrity Gap, and thrive. With 25 years of experience and more than 100,000 organizations relying on Commvault technology, our customers have undergone significant transformations – from the early client-server days, to server virtualization, to cloud and SaaS – and Commvault has been there every step of the way, supporting the latest cutting-edge technologies.

As a result, our Intelligent Data Services Platform is future proof. It has and will adapt to your data management needs so that no matter what technology you are going to use next, you can effectively and consistently manage that technology and its associated data. All data management, data security, data compliance, data transformation, and data insights are handled from a single, simple unified platform across hybrid clouds, multi-clouds, and on-premises environments.

A future-proof Intelligent Data Services Platform

“With Commvault, we are ready for whatever the future brings. It delivers efficiency, reliability, and scalability.”

Tim Carben Principal Information Systems Engineer | Mitchell International
Our Intelligent Data Services Platform is the only one to offer:

**Unified customer experience**
Commvault provides centralized visibility and management, no matter where the data resides. This view can be customized via APIs to seamlessly reflect your entire environment. Now you can make changes rapidly in a click.

**Flexible delivery models**
Our Intelligent Data Services can be delivered to you the way you want.
- To retain full control of your environment and leverage your existing hardware, you can opt for our software subscription.
- If you don’t have time to manage a hardware and software vendor and prefer a turnkey deployment, you can opt for our integrated appliance.
- If you prefer to have the partner own or manage your environment for you, we have more than 7,000 partners ready to help.
- And finally, if you prefer to not to manage your infrastructure and pay as you grow, you can opt for our SaaS offering.

**Comprehensive end-to-end storage and workload support**
Commvault supports a broad range of workloads including physical servers, virtual machines, containers, databases, and SaaS applications – no matter where they reside, on-premises or in the cloud.

**Commvault Intelligent Data Services**
An integrated set of data services that tackles the top challenges when it comes to your data including data management and protection, data security, data compliance and governance, data transformation, and data insights.

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### Gartner 2020 Critical Capabilities for Data Center Backup and Recovery Solutions

| #1 | Vendor’s Product Scores for Physical Server Environments |
| #1 | Vendor’s Product Scores for Virtual Environments |
| #1 | Vendor’s Product Scores for Public Cloud Environments |

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6 Gartner, Critical Capabilities for Data Center Backup and Recovery Solutions, Nik Simpson, Santhosh Rao, Jerry Rozeman, Michael Hoeck, July 20, 2020
Commvault Intelligent Data Services: The details
Data management and protection

Data management and protection enables your organization to unify protection and management of data, for all workloads across on-prem and hybrid/multi-cloud environments. This includes management and protection of data and workloads from prior generations, including physical and virtual servers, as well as current and next-generation workloads like containers and SaaS. Unifying multiple generations of data helps mitigate the impact of data sprawl, and also enables you to rapidly recover your data cost-effectively and at scale, helping ensure business continuity and data availability.

"Data is our most valuable asset. We’re confident that it’s backed up, protected from threats, and ultimately recoverable, and that Commvault has the flexibility and scalability to meet future requirements across our evolving environment."
Loren Leveque Sr. Manager IT and System Networking | Woodward Inc.

Data security

Data Security helps organizations protect and recover from security threats including data breaches and ransomware, while controlling access to key data. Included in this service are Commvault’s advanced threat and anomaly detection—part of a multi-layered protection capability that helps mitigate the impact of threats to your data. Ransomware attacks are in the headlines, and with Commvault you can mitigate the risk of ransomware occurrences, or help accelerate your recovery efforts, in the event a ransomware attack does get through.

"We thought we had data loss... Commvault support helped us identify the problem, and we didn’t lose any data."
Phil Winder Chief of Information Technology | Delaware Dept of Corrections

Data compliance and governance

Data compliance and governance helps organizations manage data access to drive regulatory compliance and mitigate data privacy risks – critical components in managing enterprise data and controlling data sprawl. By providing visibility into data access and potential exposure, this data service assists organizations in adhering to data privacy regulations including GDPR and CCPA, and also enables organizations to efficiently and rapidly respond to information-related actions or requests including legal holds and other data demands.

"By migrating backup data to Commvault and leveraging the redundancy capabilities of Amazon S3, we have enhanced data protection compliance, disaster recovery capabilities, and real-time availability, especially for critical applications such as SAP."
Jundong Xia Sr Manager of IT Platform Management | Yantai Shinho
Data transformation

Data transformation allows organizations to seamlessly move data across environments for application modernization and flexible data usage. This includes enabling the shifting of workloads from legacy environments to cloud-native, SaaS, and containerized workloads, as well as repurposing data for different uses, needs, or lines of business, including DevOps/DevTest, marketing, analytics, security testing, and more. All of this helps enable business transformation as enterprises look to expand their ability to leverage their data to rapidly meet new market demands and accelerate growth.

“With an already-robust Commvault deployment in place, we’re now leveraging Commvault’s cloud capabilities to shed ownership of our technology infrastructure; We’re investing heavily in the cloud to keep our IT operations running. The software solution from Commvault fills gaps in native cloud tools and has cut across every use case McDonald’s Cloud Services team requires, providing optimized and effective backups across databases. Commvault’s solution tunes performance across AWS and Microsoft Azure cloud servers and drives cost savings through deduplication and compression. McDonald’s realizes value from a trusted, innovative team with Commvault.” View case studies >

Douglas Leonard Director – Cloud Services | McDonald’s Corporation

Data insights

Data insights enables organizations to apply machine learning and artificial intelligence (AI/ML) to drive insights from their data and use that to optimize and automate IT process. There are many examples of how Commvault does this. This includes automating the placement of data into its appropriate storage tier based on SLAs and usage patterns, to right-size cost and performance. It also includes pattern recognition to identify sensitive data such as personally identifiable information (PII) and ensure it is appropriately protected. All of these examples help organizations reduce costs, reduce risk, and facilitate process automation.

“Data governance is not a nice to have, it’s a necessity. Commvault Activate™ enables us to govern customer data universally and reduce risk.”

Chris Kiaie Managing Director | ORIIUM
Why more than 100,000 organizations rely on Commvault

More than 100,000 organization rely on Commvault to help them do amazing things with their data. Commvault has been innovating for more than 25 years and with our platform you can manage a vastly diverse mix of data workloads and environments at scale with the simplicity of a unified customer experience. This is what we call our No-Compromise Architecture.

Niche players

While niche players offer simplicity, it often comes at the cost of supporting a small set of use cases in a limited environment. As soon as you need to evolve, adding SaaS applications or containers, you need to add another point solution increasing the complexity and cost of your data management over time. Leading back, slowly but surely, to the data fragmentation and failure point we discussed earlier. Finally, these niche players, in order to maintain their simplicity, support just one kind of technology, so they are not future-proof and become barriers to innovation.

The legacy vendors

Vendors who are more established have built use cases and expanded the environments they support over time. However, unlike Commvault, most of them did not have the right architecture on day one and instead did this through acquisitions. This made their customer experience fragmented and their deployment and management complex and costly. While supporting a broad environment when it comes to storage, legacy vendors fell short on innovation when it comes to workloads and in addition to their complex architecture, their customers are now forced to consider new vendors for SaaS or containers protection.

With Commvault’s No-Compromise Architecture, customers can have the simplicity and unified customer experience they want for the breadth of environment and workloads they need, deployed in the manner that works for them. The best of both worlds.

Simply go from cloud, to the edge, and back again

The power of Commvault is realized through “The Power of And,” or the ability to seamlessly manage across cloud and on-premises environments for optimized delivery of data services in today’s hybrid cloud world. Together, Metallic SaaS and Commvault HyperScale™ X meet customers’ needs for scale, security and performance, at any phase of the digital transformation journey.

For companies who prefer to manage their own infrastructure, operating on premises, HyperScale X delivers data services with full control of the environment. As those companies extend to cloud, adopting SaaS applications or bringing on secondary cloud storage for airgapped ransomware protection, Metallic™ provides opportunities to seamlessly extend to cloud-delivered services, while managing everything through a single user experience, with the Commvault Command Center™.
On the other hand, customers with cloud-first strategies can adopt Metallic – not only for management of SaaS applications and endpoints – but also for a broad variety of hybrid cloud workloads. Inevitably, companies will have data sets on premises while they transform to cloud, and by pairing HyperScale X as an on-premises extension of Metallic, they can manage and restore on-premises data without impact to performance. Rather than waiting up to 10 days to restore data, they can seamlessly manage at the edge, while still realizing all the benefits of a SaaS-delivered solution.

The typical customer journey is anything but typical. By enabling organizations to quickly and seamlessly migrate data, applications, and services to the cloud, on-prem, or to the edge, the power of AND delivers an unmatched competitive advantage, enabling IT to respond to changing business requirements fast.

**Commvault portfolio**

Commvault’s offerings are available through multiple flexible delivery models, including software, an integrated appliance, and as-a-service via Metallic. All of which are centrally managed through the Commvault Command Center™.

**Commvault software**

- **Commvault Backup & Recovery** ensures data availability for all workloads across cloud and on-prem environments and delivers reliable, cost-optimized data protection through a single extensible platform.

- **Commvault Disaster Recovery** ensures business continuity and verifiable recoverability across cloud and on-prem environments and delivers replication, disaster recovery, and compliance reporting from a single extensible platform.

- **Commvault Complete Data Protection** is a bundle that combines Commvault Backup & Recovery and Commvault Disaster Recovery to deliver a unified backup and disaster recovery solution.

- **Commvault File Storage Optimization** allows organizations to improve storage efficiencies while eliminating redundancy, lowering costs, and reducing data risks through the identification and removal of obsolete, duplicate, or redundant data.

- **Commvault Data Governance** manages data access across the data environment through a streamlined framework for data risk management that helps define, find, manage, secure, and remediate critical or sensitive data.

- **Commvault eDiscovery & Compliance** provides a fast, efficient, scalable data collection solution that enables fast, efficient responses to legal and compliance requests.
Commvault storage

- **Commvault HyperScale™ X** is the next generation of Commvault's scale-out integrated appliance and reference architecture, accelerating hybrid cloud adoption and delivering comprehensive data management for all workloads from a single, extensible platform.

- **Metallic™ Cloud Storage Service** provides a simple, secure, and air-gapped storage target in the cloud that is fully integrated into our software, SaaS, hybrid cloud, and appliance-based backup offerings, easing the move to cloud-based data protection.

- **Commvault Distributed Storage** provides a single, scalable storage solution for workloads for multi-protocol support across block, file, and object storage with native application, hypervisor, container, and cloud integration to consolidate your storage siloes.

Metallic Software-as-a-Service

- **Metallic™ Backup for Microsoft Dynamics 365** offers comprehensive data protection for CRM applications.

- **Metallic™ Salesforce Backup** for industry-proven SaaS backup of production and sandbox environments.

- **Metallic™ Office 365 Backup** to safeguard your Exchange, OneDrive, SharePoint, and Teams data – with the simplicity of SaaS.

- **Metallic™ Endpoint Backup** for fast and secure laptop and desktop protection for today’s remote workforce.

- **Metallic™ VM & Kubernetes Backup** offers backup, recovery, and total protection for all your data, from cloud-native to on prem – Azure VM, Kubernetes, Hyper-V, VMware, and more.


- **Metallic™ Database Backup** is the essential safeguard for protecting Microsoft SQL, Oracle, SAP HANA, and Active Directory from ransomware and other threats.
Commvault portfolio delivery models

Commvault offers four delivery models so you can align your asset with protection solution. For example, you can protect your SaaS application with a BaaS protection solution. Regardless of the delivery model, all Commvault products are centrally managed in the Commvault Command Center™ for a seamless experience, increasing the productivity of your IT team with a consistent interface.

- **Software** For IT teams that need complete control of your environment, Commvault software includes flexible payment options that are customer managed and owned.

- **Integrated appliance** Full control of the environment with a turnkey data management solution that is customer managed and owned and available through a validated reference architecture.

- **Partner managed** A partner managed service customized by experts.

- **as-a-Service** Managed by Metallic™ with pay-as-you-grow options.

Summary

Commvault’s Intelligent Data Services closes the Business Integrity Gap, enabling organizations to execute on their digital transformation strategy and accelerate business growth. Data is protected across the enterprise, throughout the transformation journey, so IT can focus on innovation, strategic initiatives, and driving efficiencies for a competitive advantage. Data is leveraged to drive insights and advancement, with minimal risk to the business, across hybrid cloud, multi-cloud, and on-premises environments through five Intelligent Data Services.

**Data management and protection**
Rapidly recover your data cost-effectively and at scale.

**Data security**
Detect, prevent, and recover from ransomware attacks and other data breaches.

**Data compliance and governance**
Manage data access to drive regulatory compliance and mitigate data privacy risks.

**Data transformation**
Seamlessly move data across environments for application modernization and flexible data usage.

**Data insights**
Apply machine learning and artificial intelligence (AI/ML) to optimize and automate IT processes.

Commvault’s **No-Compromise Architecture** delivers a simple, yet consistent experience, regardless of data and workload location, and completely independent of the deployment option you choose.

To learn more about Commvault Intelligent Data Services, please visit [commvault.com](http://commvault.com)