

Overcoming Critical Roadblocks to Intelligent Manufacturing and Agile Operations

Lack of data sharing across disparate systems hampers transformation efforts and increases risks from cyberattacks

By Peter Bartolik

Manufacturers must transform quickly to gain and retain competitive advantage through improved management of their data; yet, they're hampered by multiple challenges:

From large global manufacturers through all segments of the supply chain—even across more agile new entrants to manufacturing—companies face common challenges that significantly slow transformational efforts, including:

- **Growing exposure to cyber threats**
- **Data disruptions leading to lost revenue and decreased profitability**
- **A lack of scalable automation and process efficiencies**
- **Requirements to scale, innovate, and adapt to changing customer demands at breakneck speed**
- **Intensifying governmental regulations and environmental, social, and governance pressures**

Manufacturers are increasingly at risk from cyberattacks because many of the process control systems and IT platforms embedded in their devices, facilities, and equipment use older, less secure technology. Additionally, reliance on disparate and siloed technologies prevents needed data integration across the business.

These data challenges make it difficult to gain timely insights—insights that will accelerate digital transformation, enable more timely decision making, and improve processes related to supply chain, plant operations, finance, and compliance/regulation.

Leveraging data for a true competitive advantage

To become future-proof, manufacturers must reimagine and rearchitect their data management strategies to harvest the value that currently eludes them. Data has great value, but only to the extent it can be accessed, shared, and mined for business insights.

“Only 16% of manufacturing executives say that their company has captured value from data and analytics to date,” [write analysts from the World Economic Forum and Boston Consulting Group](#). “While many have implemented at least some use cases, only 37% have managed to scale applications beyond specific areas of a plant.”

The main reason for this lack of value capture is the data sprawl experienced by many manufacturers. It's the result of data scattered across legacy applications, more modern and open on-premises platforms, and increasingly cloud-based and SaaS applications and data environments. This multigenerational data sprawl not only creates barriers to getting a single consistent view of data, it also massively increases costs and forces companies to find and retain the technical skills needed to manage an extensive range of IT systems, technologies, and platforms.

“Manufacturers must be able to scale and innovate with a more holistic and complete view of data, while at the same time reducing costs and their data footprint by taking advantage of the cloud,” says Mark Jow, EMEA vice president, technical engineering with Commvault.

Enabling legacy systems and workloads to transform and migrate to cloud environments through intelligent data services will make it easier to:

- Collect data from many platforms and systems
- Clean and normalize data to ensure consistency and compliance
- Securely migrate critical data and applications – including SAP HANA and other ERP systems – to more cost controllable cloud environments
- Analyze data to improve outcomes

Gaining advantage with intelligent data services

A modern data management approach provides availability of data across on-prem, cloud, and hybrid environments. Intelligent data services provide visibility and access to all data through a single control plane and management layer. Key advantages include:

- Agility to shift and repurpose data across environments for application modernization and cloud-first initiatives
- Data security to mitigate risks associated with the increasing surface for cyberattacks, including reduced risk related to ransomware
- Comprehensive and measurable data compliance and governance
- AI-driven data insights to achieve operational efficiency, cost savings, and competitive advantage

Critical capabilities with Commvault and Microsoft Azure

Commvault’s portfolio of Intelligent Data Services is built on Microsoft technology and leverage Azure cloud services for agile, scalable data management and data protection. With a single cohesive solution to protect, manage, and recover data—regardless of what it is and where it is—manufacturers can significantly reduce the range and cost of skills and resources required to manage and protect data, as well as reduce the number of tools and systems used to do so.

Commvault’s software-as-a-service (SaaS) offering, Metallic, provides additional safeguards to mitigate the effects of cyberattacks. The solution includes comprehensive layered and air-gapped security and meets new requirements often mandated by regulatory agencies and corporate boards. A flexible delivery model enables manufacturers to safeguard all data regardless of where they are on their digital transformation journey. Organizations can adopt a phased approach to transformation that provides best-in-class data protection regardless of where data currently lives and how an organization needs to deploy data services—from on-prem to cloud and SaaS options.

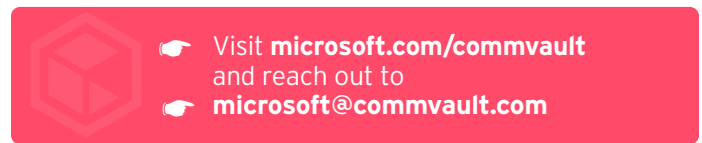
Microsoft and Commvault work together to help manufacturers lower costs related to data management and data protection, allowing them to invest more in innovation. With Commvault’s recently released capabilities extending across the Microsoft cloud, manufacturers can utilize intelligent data services to speed adoption of Dynamics 365 to accelerate transformation efforts.

The required shift to intelligent data services

When data is protected and managed intelligently, it becomes a competitive advantage, creating greater efficiencies, increasing customer retention, mitigating risk, and accelerating rapid innovation—all factors that lead to increased profitability and sustainability.

Commvault’s Intelligent Data Services help manufacturers accelerate their digital transformation efforts and mitigate risks associated with supply-chain challenges and competitive forces. Data is more secure and rapidly recoverable should a cyberattack or other major disruption occur, while insights from data are significantly improved. Outcomes are measurable, essential business objectives are achieved in less time, and protection from cyberattacks is comprehensive.

Learn how Commvault and Microsoft can help your organization transform.



Visit microsoft.com/commvault and reach out to microsoft@commvault.com

Commvault Intelligent Data Services deliver:

Data Management and Protection	Data Security	Data Compliance and Governance	Data Transformation	Data Insights
Unifies data management and protects data at scale for all workloads across on-premises and hybrid/multi-cloud environments.	Advanced detection, multi-layered protection and rapid recovery from security threats including ransomware and data breaches.	Help ensure compliance with data access regulations and requests, including managing and remediating data risks, as part of a broader data governance strategy.	Seamlessly move and repurpose data across environments, enabling containerized workloads for application modernization, security testing, IT operations, and other business needs.	Use artificial intelligence-driven data insights to drive efficiency and optimize IT processes; anomaly detection to mitigate ransomware and other data breaches; protection of sensitive data.