As companies look to automate more of their content, modern content services must access and govern data from any deployment type — including the mainframe.

The Value of Modernizing Content Management Services for the Mainframe

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Introduction

Modernization for Any Deployment Type

This year, enterprises will generate 6.6ZB of data. Many conversations around enterprise data and digital transformation (DX) emphasize migration to the cloud, but the fact is that nearly one-third of enterprise data is stored on premises. The amount of enterprise data is growing twice as fast as consumer data — and that on-premises data includes mainframe data (source: IDC's Global DataSphere).

The volume and velocity of data continues to accelerate in all data environments. But the volume of data itself, including the mainframes, is not the problem. When we look at where data sits, the mainframe is a crucial part of the enterprise modernization strategy. Today's data is more diverse, distributed, and dynamic. And although this adds to its architectural complexity, it also increases its value.

Organizations must put information into motion to realize this value, so they are focused on both data latency and putting it into context for faster decisioning. This amplifies the need to unify, govern, access, and monetize data from any source — including the mainframe.

It is a delicate dance, keeping data in sync at scale, while guarding its accuracy and access and keeping governance and risk top of mind.

Timely availability of information is as important as having stable data with clear business policies around its implementation and role in decisioning. Maintaining data quality and addressing process and workflow alignment gaps are the biggest challenges to automating and sharing data across the organization (source: IDC's *Future Enterprise Resiliency and Spending Survey, Wave 1,* 2023).

AT A GLANCE

KEY STATS

» The enterprise will generate 6.6ZB of data in 2023, and nearly one-third of data is stored on premises.

» Technology modernization is a primary driver for nearly 60% of companies that deploy new content services.

» Over 65% of enterprises are using content services to improve the overall effectiveness/efficiency of business operations.

WHAT'S IMPORTANT

» Content is a critical part of enterprise data.

» A practical approach to content modernization and automation means flexible deployment choices.

» Companies want to connect the mainframe and the cloud in their content operations, as they optimize processes with governance and automation.

KEY TAKEAWAY

Companies do not have to migrate from the mainframe to modernize their content services technology stack.

Modern Content Management for the Mainframe

Content services have become a critical investment in improving collaboration and communication between remote/hybrid teams. They are a critical component of improving operational efficiencies and automation and centralizing information. That's why many organizations are reevaluating their content services to better understand and manage their content challenges, especially as a part of their overall modernization strategy.

When organizations still have large amounts of content stored on mainframes or in disparate repositories, the practical approach is to adopt location-agnostic solutions that extend to the mainframe and offer hybrid cloud capabilities to deploy effective content services. That enables agility as you modernize the content services technology stack and unify information silos.

Modern content services technologies can meet companies where they are — and where they might prefer to remain — to help them with data and content modernization. Flexibility is imperative when there are multiple ways of deployment. Much of the enterprise employs a mix of on-premises, private cloud, hybrid, and public cloud deployments for its content workloads (source: IDC's *Content-Centric Workflow in the United States Survey,* November 2022).

Pulling More Value from Content Data: Rewards and Risks

Companies want the reward that comes with data, but they must also consider the risk. Companies want to offer next-gen experiences for both customers and employees. They want to reduce the time to market when they build and deploy new products. This often requires unifying data silos and pulling more value from content, sometimes with fewer technical and IT resources while meeting compliance demands.

For success, these complex processes can require automation, low-code/no-code solutions, and governance that work together. Further:

- » Nearly two-thirds of companies have an automation strategy in place (according to IDC's *Future Enterprise Resiliency and Spending Survey, Wave 8,* 2022).

- » More than one-third (35%) of companies have a low-code, no-code program in place to enable business users to do their own development for building applications, automation scripts, workflows, and so forth (source: IDC's *Future Enterprise Resiliency and Spending Survey, Wave 8,* 2022)

- » The top data management priority in 2023 is the governance and control of data management processes, technology, and policies (source: IDC's *Data Composite Management Survey,* December 2022).

Benefits of Modern Content Management and Automation

Modern content services allow internal and external stakeholders to access what they need, when they need it, from the various enterprise systems in play. As such, these deployments can offer many benefits to the business.

Content Services Are a Multitasker for Your Operations

IT and LOB leaders tell IDC that the top 3 reasons they deployed new content services in the past 12-18 months are (source: IDC's *Content-Centric Workflow in the United States,* November 2022):

- » Overall effectiveness/efficiency improvement of business operations

» Technology modernization (including shifting to the cloud and/or a services architecture)

» Centralization and/or consolidation of content services

Content services are a key component of modernizing operations and breaking down data silos that hinder access, productivity, and governance. They aim to aggregate content from many sources and improve visibility. Companies have embraced flexible deployment choices — including on premises and the mainframe — so a centralized and secure repository is key to facilitating access and eliminating those barriers.

A modern content strategy can offer cost savings in consolidating infrastructure and removing many manual, error-prone processes. By reducing complexity, it can also improve security and compliance. Today's technology helps the business scale to meet peak volumes and activity. And while there is growing interest in cloud-first applications, a mainframe preference — whatever the reason — does not have to frustrate that strategy.

Streamline Processes with Content You Trust

Modern content services — and the automation it enables — connect enterprise applications, and they streamline processes for a better user experience (UX). Improving the employee experience — from frontline workers to business analysts — leads to a better business outcome because, in the end, it's all connected in the overall operations pipeline. A better UX with simple automation tools can relieve employees of repetitive tasks and allow them to focus on higher-value activities, making them more efficient and prioritizing how they can deliver a positive impact on their business.

> Today's technology is changing the conversation about content itself.

A centralized repository helps ensure adherence to the company's process standards, which in turn can help to ensure regulatory or policy compliance. Intelligent document processing using AI/ML, combined with more traditional capture applications, can extract accurate unstructured content and metadata from documents for better classification in workflow and automatic application of governance and other policies. Better governance and greater control improve data trust and ensure compliance and content security, all to reduce risk and protect the business.

Today's technology is changing the conversation about content itself. When you trust your content, you will extract new insights to drive enterprise intelligence. Content is data, and data is actionable. Becoming a data-driven digital enterprise leads to innovation. Innovation — especially when paired with the recent leaps in AI/ML — allows businesses to differentiate, disrupt, and get to market faster with next-gen experiences and products.

Modernize Content Operations from Any Deployment

IT organizations can be overwhelmed, struggling to migrate complex services at scale. They require both automation and governance around ingress/egress and storage/retention. And for many public and private enterprises, the mainframe is still a critical part of the IT infrastructure.

Don't Just Run Infrastructure; Build Solutions

Developers are looking for technology partners to help because, even in these uncertain economic times, IT leaders want to spend less time "running" and more time — and investments — "building."

Legacy and technology debt can hinder innovation and modernization, but the mainframe is also still a vital part of many businesses' operations. So the market is looking for practical solutions that meet them where they are. They want to modernize, regardless of the deployment type.

While IT budgets are in flux, enterprise leaders tell IDC that the initiatives most immune to budget reductions after security are:

» Customer experience initiatives/projects

» Infrastructure and IT operation optimization initiatives/projects

» Workplace collaborations solutions

With the increase in data protection regulations at regional and corporate levels, buyers need their technology partners to provide improved data security and compliance features built around specific governance standards.

And then there is the problem of data silos. Most companies admit they have struggled to successfully eliminate them for better information synthesis, decision coordination decisions, and knowledge sharing across domains. The current challenges of sharing data/breaking down silos are an even mix of:

» Organization and people

» Data management and governance

» Process and automation

Content federation is key to connected knowledge, and aided by content analytics, it minimizes the effort in understanding what data exists and where it physically resides. It enables automated document generation and interactive communication, using the newest data available.

IT projects that show faster time to value are more immune to budget reductions. In fact, nearly 50% of companies tell IDC that they plan to increase budgets for their content management applications. The mainframe's role in evolving content workloads should be a part of the conversation when companies want to solve real-world business problems and reimagine the user experience around content-centric applications.

Considering Rocket Software

Mainframes have been the technical centerpiece for the enterprise for decades. Large organizations rely on them for their unsurpassed power, capacity, and security, as these features are critical to efficient and secure data delivery for business processes across disparate IT environments.

But mainframe applications and data are often disconnected from processes, people, and customer interactions, resulting in operational inefficiencies, increased costs, and heightened compliance risk. This is especially true in hybrid scenarios where business data and documents are created, accessed, analyzed, and managed across mainframes, open systems, and cloud.

Rocket Content Services enables organizations to bridge mainframe, distributed, and cloud tools with a single technology fabric that unifies and governs critical business data and information. Rocket Content Services delivers an open, flexible, and scalable architecture to manage large volumes of business-critical data and information.

Organizations can capture, govern, and deliver digital content and assets generated by people, applications, and machines at web-scale volumes and at high-performance levels on demand. With Rocket Content Services, organizations can realize efficient data management throughout the content life cycle, making it accessible to individuals and processes whenever and however it's needed.

Rocket Content Services enables the following:

» **Break down information silos across business and technology ecosystems.** Teams can connect applications, streamline processes, and simplify user access. Rocket Mobius helps businesses reimagine and automate content-rich business processes — from the mainframe to the cloud — while complying with dynamic privacy and regulatory demands.

» **Connect legacy systems with modern business processes designed with modern tools.** Rocket Content Automation bridges mainframe, distributed, and cloud technologies with a single, end-to-end technology fabric so organizations may achieve faster time to value, derive more value from their data, and mitigate compliance risks and costs.

» **Improve operational performance, strengthen internal controls, and meet compliance requirements by automating business quality and data reconciliation and by systematizing governance and auditing.** Rocket Audit & Analytics has a modern event architecture that follows your business, key calendar events, and critical systems in real time. Low-code tooling gives audit, financial, and IT professionals the tools to transform business performance, improve cycle times, and dramatically lower costs.

» **Deliver compelling data and information to customers, partners, and staff at scale.** With Rocket Cypress, technology teams may benefit from lower costs through document automation and flexible deployment options. Business owners can benefit from ad hoc document workflows, empowering teams across digital and paper landscapes. Such interactions then deliver documents integrated with critical systems such as SAP for personalized and mass communications to the web, email, print, and integrated APIs.

» **Capture output from applications, manage data storage, and provide fast and secure access to users.** Rocket EOS 360 automates, secures, and standardizes the output management process, thus lowering output management costs, increasing the efficiency of business workflow processes, and increasing compliance with regulatory requirements.

Challenges

According IDC's May 2023 *Future Enterprise Resiliency and Spending Survey, Wave 4,* investments in workplace collaboration solutions are quite immune from budget reductions. But companies are still concerned about inflationary costs and staffing in light of recession fears, even as the amount of data and demands on IT continues to grow. They're finding it moderately difficult to find data engineers, especially for the LOB role, and they find the timely analysis of data to be a top challenge.

When it comes to analytics, Rocket does expose numerous data feeds and low-code audit/analytics capabilities. However, this requires internal IT tooling to provide users with access to that information. It also requires some customization for its analytics reporting and BI integration as compared with competitors that have more "out of the box" solutions. That might be too complicated for some users with few developer resources.

For those customers with their own internal IT resources, Rocket supports modern API standards, developer tooling, sample code, and free access to software. However, it does not currently offer developer training, an online developer community, or hosted events or conferences specifically for developer education.

Conclusion

Companies are generating more and more content, and they want to do more with it — like they do with all of their business-critical data. From a practical standpoint, companies also want to manage their content workflow with their existing infrastructure, and for many, that includes the mainframe. This requires a modern content strategy that connects the mainframe and the cloud for content operations, while optimizing processes with governance and automation.

Rocket offers modern content services for the mainframe, understanding its role in business operations and addressing the challenges of securely connecting legacy systems with modern processes. With flexible deployment options top of mind, Rocket Content Services can manage and automate large volumes of information without compromising data control and governance.

About the Analyst

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Amy Machado is a research manager for IDC's Enterprise Content and Knowledge Management Strategies coverage. She also collaborates on Intelligent Document Processing research. Her advisory program examines the fundamental redesign of content services and related use cases that are transformed by digitization and the application of innovative technologies.

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https://www.rocketsoftware.com/solutions/content-services.

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