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Balance speed and control to redefine service procurement

Enabling self-service access to cloud services while maintaining control of usage, compliance and security

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Consumption and a cloud-first strategy

Multicloud adoption is critical for organizations to maintain competitive advantage and continue to innovate. Pursuing a cloud-first strategy forces IT organizations to shift workloads from traditional environments to a variety of cloud providers. These new hybrid multicloud infrastructures can reduce the amount of control organizations have on their consumption of IT resources if proper precautions aren't taken. This lack of control can cause uncertainty regarding compliance, security and financial oversight.

Consumption describes the process of finding, comparing, ordering and provisioning certified IT services from the provider of your choice or creating new services to build and manage workloads. Managing consumption allows organizations to place central controls on the types of cloud resources their employees use to avoid common problems of vendor lock-in and rogue IT system use, commonly called shadow IT.

Today's industry leaders need a new cloud operating model that balances agility with control to help manage how they plan, buy and procure workloads across their hybrid multicloud environments.

Research methodology

A recently conducted IBM® Market Development & Insights (MD&I) survey pursued a deeper understanding of the challenges businesses face when managing environments in a hybrid multicloud world, as well as the potential benefits of using a cloud management platform. Of the 100 business and technology leaders surveyed, 40% are c-level, strategic vice presidents (SVPs) or vice presidents (VPs), and 60% are IT directors or managers or administrators. Their responses indicated that IT leaders crave resilient, scalable solutions that provide visibility across their hybrid multicloud world.

An expectation of self-service leads to inconsistency

The on-demand nature and digital transformation of the economy created an expectation of instant gratification that also exists in the workplace. Companies with slow IT procurement processes can't offer the speed that companies like Amazon, GrubHub, Netflix and Uber provide everyday consumers. Workers expect and seek out fast, self-service solutions that make daily tasks easier regardless of compliance with IT rules and regulations.

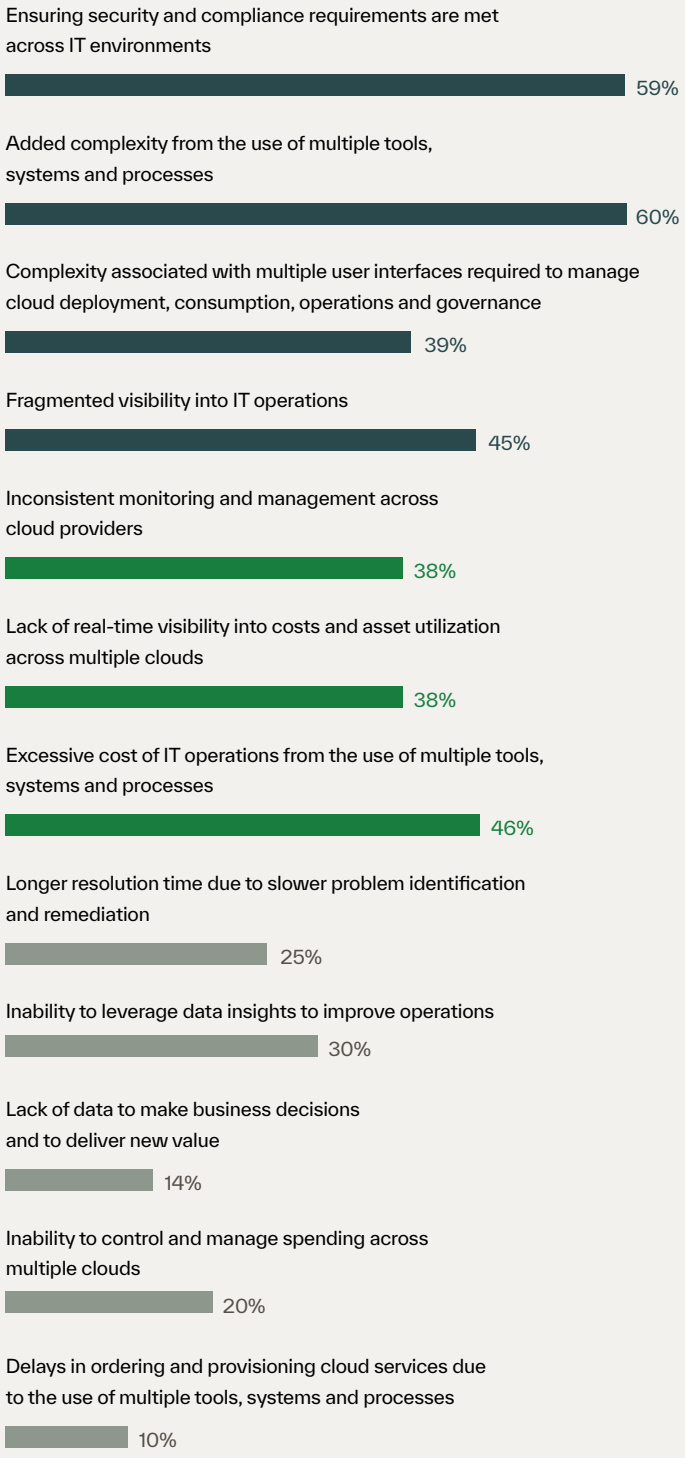
The added complexity created by the number and variety of solutions adopted across an enterprise—as a result of shadow IT—puts the company at risk. Companies need rules-based controls on cloud resources that provide visibility and consistency across cloud platforms without impacting ease of use. According to the MD&I survey, 94% of organizations report that controlled access to cloud services across all major providers through a single application is an important capability in managing a hybrid multicloud environment.

In addition, only 15% of surveyed business and technology leaders have a strong sense of confidence in the tools and processes their companies have in place to ensure cloud governance and compliance. Companies want the assurance that risks are being prevented across all cloud providers in a way that monitors consumption, spend and management of these tools. IT leaders recognize that an ideal solution should balance the speed and ease of self-service cloud computing with the necessary control and visibility to ensure financial efficiency and reduce shadow IT.

Top challenges of providing access to cloud services and tools

Leaders lack a way to prevent shadow IT and ensure compliance requirements are met across IT environments that doesn't limit ease of use. According to the MD&I survey, the need to monitor security and compliance violations ranks among the top two primary challenges for organizations in managing across an entire IT environment. As organizations move to a hybrid multicloud environment, regaining control while providing services with speed become more difficult. IT leaders may develop solutions of their own or implement point solutions to help counteract their inability to maintain control, but these tools aren't always able to address the broader problems their organizations are experiencing.

Figure 1: Primary challenges in managing across an entire IT environment

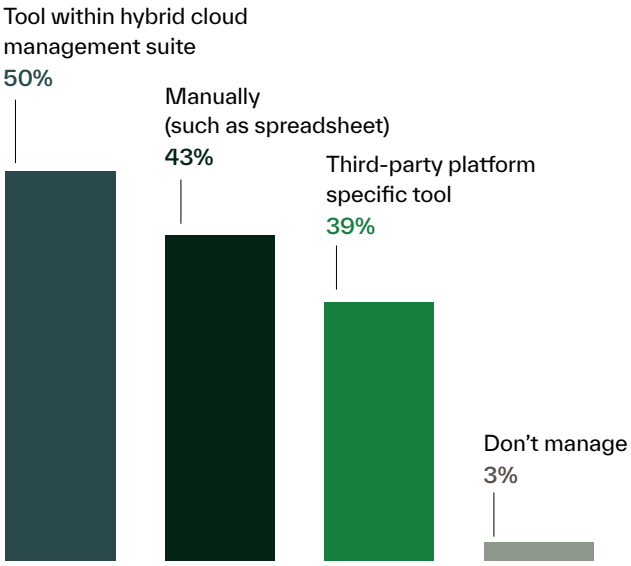


Exposure to risk through non-compliant tool use
With such frequent use of shadow IT, IT organizations no longer have control or visibility across the hybrid multicloud estate, and this puts the company at risk. Of the surveyed IT leaders, 59% state that ensuring security and compliance across IT environments is a primary challenge. Legislation, such as General Data Protection Regulation (GDPR), has only heightened the risks for organizations when they can't maintain data security across systems.

Despite implementing more automated methods to track use, such as rules-based insights, less than 20% of surveyed leaders strongly agree that they're effectively monitoring and managing their clouds. Leaders functioning in a hybrid multicloud world need to regain control over their consumption, security and compliance of the different workloads employed across the organization without impacting procurement speed.

Added complexity from the use of multiple tools, systems and processes
Companies can experience inefficiencies that could be improved through better visibility across their different cloud providers. These inefficiencies reduce the speed at which IT can operate. Of the surveyed IT professionals, 60% state that a primary challenge is the use of multiple tools, systems and processes, which can result in excessive operations costs. Tools within a hybrid cloud management suite, manual spreadsheets and third-party-specific platforms are a few of the approaches IT leaders take to help understand their company's cloud use.

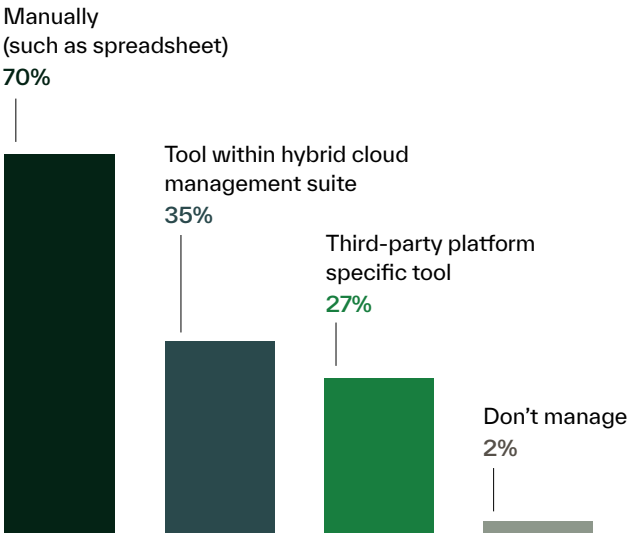
Figure 2: Ways companies manage cloud usage



Without an effective strategy, inefficient management of cloud use can limit your ability to meet your organization's needs, and employees may look for rogue alternatives. Delays in ordering and provisioning cloud services due to the use of multiple tools, systems and processes affect 10% of surveyed leaders' organizations.

Complexity associated with multiple interfaces required to manage cloud consumption
The added complexity associated with multiple user interfaces required to manage cloud deployment, consumption, operations and governance is a primary challenge for 39% of survey respondents. The complications are a result of the variety of compliant and non-compliant resources provisioned by employees. Only 5% of the IT leaders surveyed strongly agree that they're effectively able to monitor and manage their cloud spend. Most surveyed IT leaders track costs manually. However, some are using tools within a hybrid cloud management suite or a third-party, platform-specific tool.

Figure 3: Ways companies manage cloud costs



A lack of control of an organization's cloud costs can result in excessive spending and inconsistency across business units. Enterprises can spend hundreds of thousands of dollars due to this inability to control employee spend on unnecessary approved tools and shadow IT. According to the MD&I survey, 38% of IT leaders consider inconsistent monitoring and management across cloud providers a primary challenge. Many IT leaders actively try to train talent across systems to avoid the use of different approaches. With a single consumption interface, your enterprise team members won't need to conduct consumption training across multiple providers and can decrease the difficulty of onboarding new team members. This change also helps eliminate the need to retrain current team members on your team's various cloud accounts and minimize the number of credentials needed. A single interface helps manage and control costs without impacting the speed your team needs to procure services.

Recommendations for regaining control in a hybrid multicloud world

Enterprises need a clear path to multicloud management that allows users to access services and tools at the speed they need while balancing the control IT organizations require. To achieve this goal, you need to minimize risk by providing security-rich access to compliant tools and services, standardize access to pre-approved tools and services, and reduce the complexity from using multiple tools, systems and processes.

Minimize risk by providing security-rich access to compliant tools and services

Standardize access to pre-approved tools and services

Reduce the complexity from using multiple tool systems and processes

Minimize risk by providing security-rich access to compliant tools and services
The ability to have IT leaders curate and define configuration standards in a single internal marketplace can help their users understand what services tools are readily available to them. At the same time, teaching users what resources are approved for use is also important to minimize procurement of unapproved tools. When different business units use the cloud their own ways, IT departments lose control. A cohesive solution that balances fast access with control can allow IT leaders to curate security-rich and properly compliant configurations.

When users access a pre-provisioned, self-service marketplace, they know that all featured configurations are approved. This process reduces the chance that the team will seek an external source and engage in shadow IT. Rogue configurations will no longer create security violations that put your company at risk for exposure. Having technical validation allows you to know that all workloads are in operation, compliant and security rich.

Standardize access to pre-approved tools and services
Of the survey respondents, 94% report that controlled access to cloud services across all major providers through a single application is an important capability in managing hybrid multicloud environments. This feature allows IT architects to publish approved services from cloud providers, such as Amazon Web Services (AWS), Microsoft Azure, Google Cloud, IBM Cloud™ and VMware, in a known marketplace. By aggregating tools and services from multiple cloud providers in a single interface, users can more quickly access the services they need instead of tracking multiple logins across different provider dashboards.

Housing all approved tools within a single experience offers your team the benefit of choice with consistency. Of the surveyed leaders, 45% expect to benefit from using a cloud management platform by being able to manage IT consistently across traditional data centers and multicloud environments. Across business units, users can quickly take advantage of a variety of cloud providers and avoid vendor lock-in. By enabling the portability and flexibility enterprise team members need to apply the appropriate cloud resources for specific benefits, your organization can increase productivity, maintain control and reduce the occurrence of shadow IT use.

Reduce complexity from the use of multiple tools, systems and processes

By integrating cloud and traditional IT service management order tracking and approval workflows together in a single view, companies have clearer insight into what tools and services are being used within the enterprise. In the MD&I survey, 88% of IT leaders indicate this integration is an important capability when managing a hybrid multicloud environment. Using a single management experience, you can verify your consumption, better adhere to budgets by business unit and minimize complexity through approval cycles.

Any time a user needs to procure a service, each individual's request should be configured to undergo a technical and financial approval cycle. Surprisingly, only 24% of surveyed companies are realizing the value of using rules-based insights to manage cloud cost and use. Financial approvers need the ability to select from a defined budgetary unit, track budget adherence against orders, review the original budget status and provide reasons for denial when evaluating each request.

The approval cycle clearly establishes procurement best practices through a single integrated process to estimate costs, place orders and provision services. The process provides users the ability to track where they are in an approval cycle and learn from the approver's feedback, which reduces the complexity of procuring a service.

A single tool designed for ease of use can increase control

Creating an enterprise self-service marketplace enables IT leaders to regain control by helping ensure that any procurement goes through proper approvals while instantly giving users access to pre-approved services from a variety of providers. This process is especially important to establish now, as 86% of enterprises expect to maintain or increase the number of cloud providers they're using in the next two years, according to the MD&I survey. To maintain control, enterprises must provide a unified multicloud management platform that can minimize risk by providing security-rich access to compliant tools and services, standardize access to pre-approved tools and services, and reduce complexity from the use of multiple tools, systems and processes.

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Why Kyndryl?

Accelerating digital transformation with cloud is a key area that enterprises focus on for innovation. Most organizations view their future cloud environments as both hybrid and multicloud. In a hybrid approach, clients run applications across private, dedicated and public cloud infrastructures. In a multicloud approach, they use multiple cloud providers to support a breadth of enterprise workloads.

The Kyndryl point of view on managing hybrid multicloud IT environments is based on a strategy that offers clients choice with consistency using Kubernetes and container-based technology. Customers can prevent vendor lock-in through the support of a standard, container-based approach to application portability with Red Hat. They also can access a self-service platform with consoles focused on the necessary areas around consumption, DevOps, operations and governance.

This strategy can enable a multicloud model through the support of essentially any hosted Kubernetes-based environment on virtually any public cloud footprint. With its services and solutions, Kyndryl can accelerate clients' digital transformations wherever they are in their journey and deliver business value through cloud transformation, minimizing risk and using existing investments.

Kyndryl's integrated multicloud management platform helps clients manage workloads across multiple clouds and current data centers, providing them with:

- A digital, self-service user experience to consume, deploy, operate and govern across all clouds and data centers
- Agility and speed through modern technology, automation and self-service
- Reduced risk through integrated governance and management
- Lower costs by leveraging cloud and automation
- Visibility and control across the full estate, from the traditional Information Technology Infrastructure Library (ITIL) to the site reliability engineer and DevOps-driven cloud-native approaches

The way to help organizations manage multicloud environments is to provide management capabilities that offer visibility, governance and automation across the hybrid multicloud environment. These capabilities include multicluster management, event management, application management and infrastructure management, plus integration with existing tools and processes.

For more information

Kyndryl has deep expertise in designing, running and managing the most modern, efficient and reliable technology infrastructure that the world depends on every day. We are deeply committed to advancing the critical infrastructure that powers human progress. We're building on our foundation of excellence by creating systems in new ways: bringing in the right partners, investing in our business, and working side-by-side with our customers to unlock potential.

To learn more about how Kyndryl Multicloud Management Platform can simplify and optimize your hybrid IT environment, contact your Kyndryl representative or visit us at kyndryl.com

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