Build a more intentional hybrid cloud: The key to continuous innovation

IBM

Table of contents

Accelerate the impact of AI with an intentional hybrid cloud

Business today is dynamic, complex and diversified, and IT leaders are faced with dynamic, complex and diverse challenges. You must balance innovation and speed with flexibility, agility and security—and create IT environments that can adapt to spikier workloads and interdependent applications and leverage growing data across the enterprise and at the edge to optimally scale AI. A recent IBM Institute for Business Value study found that, while 80% of businesses surveyed have begun to experiment with AI, 60% of organizations are not yet developing a consistent, enterprise-wide approach to generative AI.[1]

Another report shows that over 72% of the 750 IT professionals and executive leaders surveyed are on both private and public clouds,[2] which makes seamless integration, data synchronization and robust security across multiple environments an ongoing challenge. Therefore, it's imperative to break down silos between these environments so your organization can function seamlessly. Ensuring IT environments across your ecosystem work together seamlessly and connected is the foundation for accelerating the impact of your data and scaling AI.

Open at the core to extract more value
How can you better manage and extract more value from your increasingly complex IT environment? You can accomplish these goals by building your cloud and on-prem infrastructure on open-source technology. An open approach can create a connected IT infrastructure that lets you access your data where it lives, leverage workloads for optimal operations, develop and deploy applications where needed most, and scale AI. In addition, open-source technology provides flexibility by working within your IT architecture.

Intentional cloud adoption leads to successful digital transformation, which remains at the forefront with 95% of CEOs surveyed still pursuing a digital-first strategy to achieve their top business priorities.[3]

By creating a platform that integrates private and public clouds, and on-premises systems, you'll effectively maximize the value of your investments, creating an IT environment that accelerates the impact of data across the organization and supports AI algorithms and models at scale.

A seamless integrated and connected hybrid cloud

Partnering with IBM empowers enterprises to transform their IT with a series of progressive steps. This way, enterprises can build on existing investments and get the benefits of cloud incrementally, often starting on-prem, rather than waiting for a complete rebuild on public cloud. In addition, a modern hybrid cloud approach can create business value that might currently be constrained by silos, limiting processes and data across disparate environments.

An effective hybrid cloud approach will help you achieve 6 key business outcomes:

1. Increased business acceleration
2. Higher developer productivity
3. Increased infrastructure efficiency
4. Verified risk and compliance management
5. Long-term strategic flexibility
6. Accelerated AI at scale

A hybrid by design approach breaks down significant barriers and overcomes challenges resulting from a complex and often disconnected IT estate. Hybrid by design unlocks value by providing consistency and being intentional across platforms, processes and people—and can deliver upwards of 3.3 times ROI.[4]

Maximize the value of IT investments

The role of hybrid cloud as a source of strategic competitiveness has become vital. Businesses that can orchestrate across clouds and IT infrastructures and create an application-development platform that runs on any provider's cloud with workloads that execute seamlessly across multiple clouds—will reap the advantages of a fully connected IT. Deepshikha Antes, Global Red Hat® Strategic Partnership Leader with IBM Consulting®, asserts: "CTOs responsible for making hybrid cloud architecture environments that integrate seamlessly are in a pivotal time right now. Scaling to meet demands, managing risk and keeping up with rapidly changing technology are key steps to turn innovative ideas into business value."[5]

No matter what your business and IT transformation goals are, an intentional hybrid cloud approach can help you:

1. Foster greater innovation and reduce time to market.
2. Protect your data and manage regulatory changes.
3. Simplify complexity in your infrastructure while streamlining your operations.
4. Quickly adopt new technology while shifting your CapEx to OpEx with flexible consumption models.

An integrated and connected, hybrid—multiple cloud and on-prem—infrastructure helps ensure access to data when and where it's needed. What's more, it helps optimize physical, capital and human resources while gaining multivendor portability and eliminating lock-in—with security at the core. It's all in the service of creating a delightful experience for users that's nimble, flexible and cost-efficient—transforming your business.

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CTOs need to unify disparate environments to ensure scalability for rapid growth while building on legacy tech investments.[5]

Transform IT for more innovation

By integrating and connecting across all IT environments,
you'll be able to:

Modernize and deploy apps anywhere
Increase productivity and accelerate time to market by modernizing and deploying apps anywhere with AI. Companies are eager to unlock AI at scale but need help building the right tech foundation in the right place. Those companies with existing systems have found themselves struggling with ROI bottlenecks and an inability to handle advanced workloads, which holds them back from innovating.

Leverage all data effectively where it resides
To effectively scale AI, organizations must consider data quality and location, access and preparation, security and compliance, and sensitive data protection, as well as storage and compute-intensive requirements. With a more intentional hybrid cloud approach, clients can leverage data across the enterprise, reducing silos that slow down innovation and create bottlenecks.

Optimize and maximize the value of IT investments
IBM's hybrid cloud strategy is about meeting you where you are in your journey. You don't have to replace what you have or rebuild from the ground up. Instead, you can optimize your existing environment and leverage the power of a truly hybrid ecosystem. IBM Consulting can help you bridge the gap between concept and marketable products.

An open and integrated ecosystem

Hybrid cloud fuels AI outcomes
An open, hybrid cloud approach is the foundation for driving business value and scaling AI in 3 key ways.

1. **Connect IT environments and create an integrated hybrid cloud platform.**

   Streamline your DevOps and create a connected cloud and on-prem infrastructure built on open-source technology. This method allows you to access your data where it lives—whether on-prem, in the cloud or both; optimize your workloads for optimal operations; and build your applications where you need them most. How do we help you achieve this unity in the face of diverse and disparate environments? We accomplish it by leveraging Red Hat® OpenShift® open-source architecture to provide frictionless interoperability across private and public clouds, and on-prem environments.

   With Red Hat OpenShift underpinning an open hybrid cloud architecture, you can build a single operating system and a container orchestration platform that enables you to deploy applications without any hardware dependency. This process creates an open hybrid cloud approach that provides the greatest degree of flexibility because it's vendor agnostic and simplifies how you can more securely distribute, integrate and manage workloads across digital ecosystems.

2. **Accelerate application modernization with generative AI.**

   Utilize AI-powered application modernization to enable enterprise agility. IBM® watsonx Code Assistant™ for Z is designed to help businesses leverage generative AI and automated tools to accelerate their mainframe application modernization. Watsonx Code Assistant for Z follows the application modernization lifecycle, creating value by increasing developer productivity, reducing costs and risks, and leveraging curated foundation models. By rapidly and continuously migrating and modernizing applications, your business will efficiently scale new workloads and drive innovation in the service of delivering exceptional customer experiences.

3. **Access and leverage data across IT environments.**

   Access your data faster with seamless data mobility across on-prem and cloud storage options and give teams the right data at the right time by removing silos and experiencing faster response times. Optimize your IT investment by virtualizing your on-prem data storage solution and making your data and applications available in the cloud. This way you can access your data where you need it most, while reducing redundancy and creating a unified and consistent experience in the cloud. We also offer automation integrations that help make the most of your storage solution investments.

   With our premier storage offering, IBM FlashSystem®, you can create a bridge for your data and applications to move between your on-prem and off-prem storage solutions. You also can easily move the storage characteristics, data and applications from on-prem to production in the cloud. This offering, designed to improve performance and efficiency, enables you to streamline administration and operations across on-prem, cloud, virtualized and containerized environments. What's more, doesn't require your team to have specialized skill sets.

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   Even further, by promoting openness and cohesion across the ecosystem, hybrid cloud opens the door to increased business value by expanding innovation.[6]

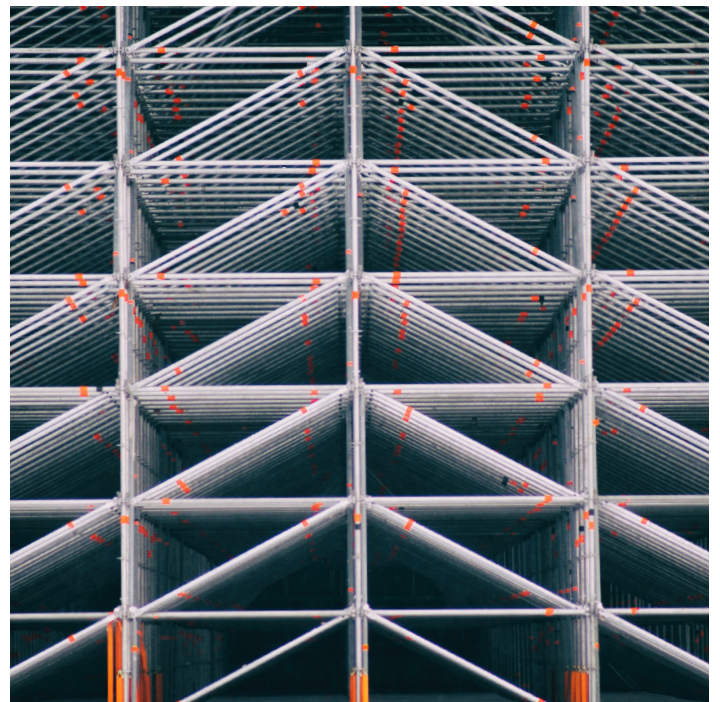**Hybrid cloud creates innovative possibilities**

Together with IBM, you can create a seamlessly integrated and connected hybrid cloud environment that's modern and maximizes the business value of your IT investments cost-efficiently with flexible consumption models.

Meet complex market demands with a hybrid cloud strategy that breaks down cloud silos and clears the path for more innovation, enabling you to unlock the full potential of your entire technology ecosystem and realize increased business value.

Let's get to work

At the heart of IBM Consulting is IBM Garage™, a collaborative, hands-on approach to developing innovative solutions to business challenges. The IBM Garage methodology lives at the intersection of business strategy, design, technology, culture and innovation as a co-creation lab. Together with our clients, we workshop the practices, develop the technologies and provide the expertise their business needs to help chart a transformation journey from ideation to prototyping and beyond.

IBM Garage is at the core of our mission to be the catalyst to make the world work better. It exists to help businesses such as yours meet the challenges of today and prepare for those of tomorrow.

Client successes:
Scaling AI with
hybrid cloud

Delta Air Lines, a leading global airline,
has innovated its flight experiences by
upgrading to a hybrid cloud environment
at scale.

Learn how they did it →

By integrating its entire ecosystem
with hybrid cloud, CVS Health promoted
business transformation, reduced
costs by two-thirds and transformed
clients' experience.

Learn how they did it →

Genus Power Infrastructures Ltd., India's
top maker of smart meters, used IBM
FlashSystem for its data foundation,
speeding its move to hybrid cloud.

Learn how they did it →

Drive business transformation

Learn how to extract maximum business value from IBM's open hybrid cloud approach.

[Explore our solutions →]

1. The CEO's guide to generative AI, IBM Institute for Business Value in collaboration with Oxford Economics, May 2023.
2. Cloud computing trends and statistics: Flexera 2023 State of the Cloud Report, Flexera, 05 April 2023.
3. Why 95% of CEOs have a digital-first strategy—and why cloud partners come first, IDC, 28 July 2022.
4. Based on an IBM Consulting 5-year ROI model projection for hybrid by design journey built on 50- plus client engagements. ROI methodology: topline growth, productivity gains and cost reduction. IBM Consulting Economic Value Model.
5. Why Open Source Turned Out to Be the Right Solution for Two Visionary Brands,
6. Mastering hybrid cloud, IBM Institute for Business Value, May 2022.

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