IBM **Services**

IBM Cloud Architecture Design

How IBM provides a roadmap that includes a technical strategy and step-by-step plan to help improve deployment success

74% of IT leaders with a cloud architecture design completely agreed that it positively impacted the success of their organization's journey to the cloud.[1]

That's because successful adoption of hybrid multicloud requires a sound blueprint. Without a blueprint, you can experience inconsistent workload deployment and placement policies, inhibiting a successful move to cloud. The drawbacks affect your entire IT estate. The increasing complexity of infrastructure, security and resilience can further slow your momentum and create unintended risk.

A sound blueprint consists of a clear technology strategy, target architecture and associated component designs, and a roadmap that satisfies your business requirements, protects your workloads, addresses your architectural decisions and helps enable consistent management. It should also support your current and future investments with the flexibility of open technologies when applicable.

What's a formal cloud architecture design?

A formal cloud architecture design is a sound blueprint that provides the guidance needed to help mitigate inhibitors. It helps you achieve intercloud movement and consistent management for increased business value, flexibility, revenue growth and cost control. Organizations with a formal plan display significantly higher levels of success across all objectives, are more likely to achieve desired improvements from moving to the cloud and can address and mitigate challenges experienced during their cloud journey.[2] 95% of enterprises who have a plan say that "a formalized cloud architecture design helps improve the success of an organization's journey to the cloud—and helps maximize business value."[1]

IT leaders state a cloud architecture design can deliver:

- Improved security
- Maximized availability
- Increased ability to integrate workloads across hybrid IT and cloud environments
- Reduced complexity and increased standardization

93% of organizations with a cloud architecture design said they knew how to secure business-critical systems—both traditional and in the cloud. Only **50%** of organizations without a cloud architecture design said the same.[1]

98% of organizations with a formal cloud architecture design said that they were achieving their business availability and uptime agreements "well or very well" when moving to the cloud. Without a formal design, **16%** of respondents who had made the move to cloud said they weren't achieving their availability goals "at all well."[1]

Our approach to cloud architecture design

By capturing your business requirements and technology needs, IBM delivers an infrastructure and platform strategy, roadmap and ideal design that integrate security, resiliency and management models into a business-ready plan.

We recognize the need for hybrid cloud solutions that protect traditional investments and enable organizations to benefit from the hybrid multicloud model. Our approach is designed to support any technology—IBM or otherwise—and is well suited for clients who have embraced multiple cloud vendors to meet business needs. By understanding the challenge and complexity of hybrid IT environments, IBM provides unique value beyond cloud-only needs.

Based on your unique business needs, our workload-driven approach to scoping an ideal design provides you with the multivendor choices that can deliver a cloud transformation that's designed to maximize business value.

The outcomes of IBM Cloud Architecture Design
As seen in Figure 1, our experts work collaboratively with you to accelerate your Journey to Cloud. Validated by a proof of concept, this approach includes multicloud management, automation and container adoption that help modernize your IT environment by providing the following components and outcomes.

86% of organizations with a cloud architecture design said they were able to integrate workloads across hybrid, cloud and IT environments and they met this objective either "extremely well or very well." **41%** of those organizations without a cloud architecture design agreed they weren't achieving this objective at all.[1]

44% of organizations with a cloud architecture design said they achieve standardization across the cloud landscapes "extremely well." Only **7%** of enterprises without a cloud architecture design said they achieve their objectives "extremely well."[1]

The time to value of IBM Cloud Architecture Design

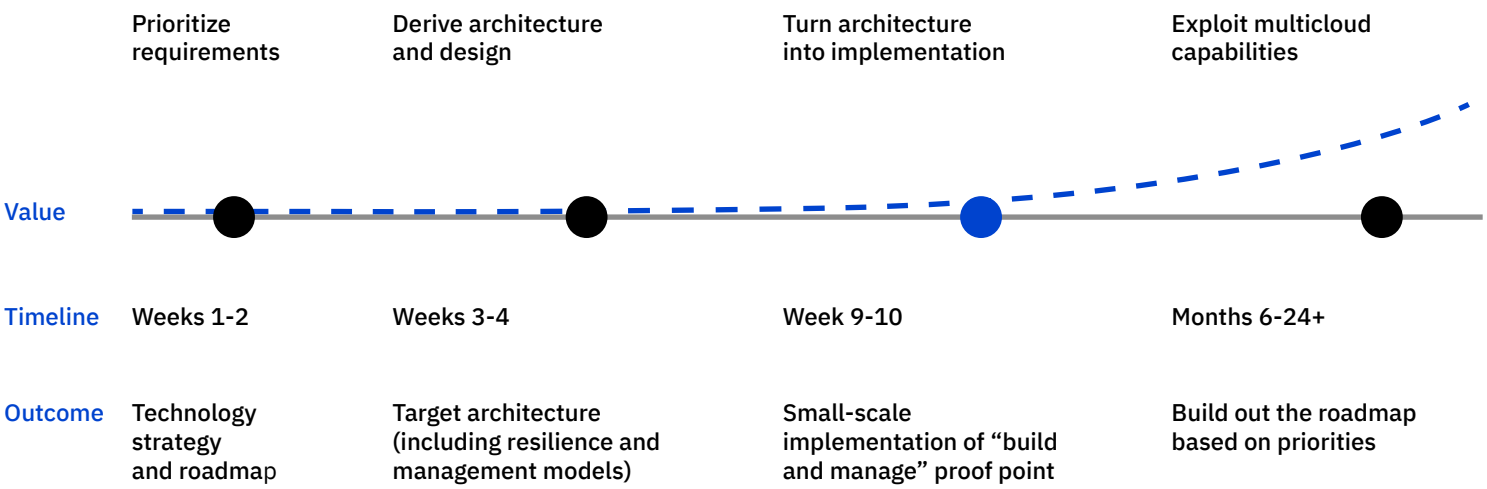

Figure 1. The time to value of IBM Cloud Architecture Design

The components of IBM Cloud Architecture Design

Component

Outcome

A cloud technology strategy and roadmap defines the technical strategy and approach for a hybrid multicloud solution that meets your needs. Combined with a cloud technology architecture, this component can deliver an implementable design for the target cloud solution that encompasses your requirements.

A technology strategy aligned to business value, optimizing costs and flexibility based on open standards and an architecture and design that delivers the right fit service layers and deployments for your workloads.

Cloud service management architecture produces the technology model to consistently and effectively manage the complex multicloud landscape.

A management framework and recommended toolsets based on a uniform set of capabilities and uniform view.

Cloud resiliency architecture integrates resilience capabilities that are aligned with business requirements to protect critical workloads running in multicloud and interdependent workloads in the traditional environment, which link business and IT strategy.

A resilient technology platform with tiered resilience capabilities based on the unique needs of your workloads that helps support and protect critical workloads by integrating resilience, availability and recovery along with security capabilities and enhanced compliance.

Use cases

01

Define technology choices to meet workload deployment needs using a systematic approach

Problem: When organizations have disparate and ad hoc plans to extend existing IT investments, they don't achieve the full value of cloud due to sub-optimal workload placement, increased complexity of the IT estate and lack the ability to remain competitive.

Solution: IBM Cloud Architecture Design helps provide a systematic approach to workload placement decisions—separating service-layer selections, deployment model options and cloud service provider choices. This approach enables clients to define and make the best technology choices for current and future workload placement.

Business benefit: With a solid strategy and supporting decision model, clients have a new level of agility when considering new technologies, services and service providers. The technology strategy roadmap helps clients complete their initial platform selection within 4 weeks and accelerate their cloud journey, improving the ability to use cloud-native capabilities.

02

Reduce costs and simplify resilience with customized hybrid multilcoud strategy

Problem: Many companies lack the in-house skills and resources needed to design an effective resilience strategy and architecture, which impacts their ability to continue business operations during an unplanned disruption event.

Solution: IBM Cloud Architecture Design can deliver a hybrid multicloud strategy across a rapidly growing footprint aligned to unique business needs. By integrating cloud-based resilience with disaster recovery as a service, backup as a service and infrastructure as a service, this strategy helps protect the business and reduce risks associated with organizational transformation enabled by modern cloud platforms.

Business benefit: Get effective resiliency designs completed faster with a new architecture that takes into account tighter regulatory and compliance requirements. Significantly reduce disaster recovery test and recovery timelines, generate automated audit trails for compliance and enable repeatable resilience testing with predictable outcomes.

03

Achieve workload portability across cloud service providers with a unifying architecture

Problem: An inability to get the full value of cloud due to sub-optimal workload placement is common for organizations. Constraints as a result of vendor lock-in, further limit your ability to keep pace and capitalize on new opportunities.

Solution: With IBM Cloud Architecture Design, organizations can craft a unifying architecture that provides a consistent approach to managing deployments across hybrid multicloud environments.

Business benefit: Clients can help reduce complexity, revenue growth and increased cost control by transforming IT infrastructure and operations in a way that provides an open and scalable hybrid multicloud environment to orchestrate workloads across cloud estates.

04

Gain efficiency through a unified management view across platforms and deployments

Problem: When constrained by vendor lock-in, organizations have fragmented management and lack visibility across the enterprise and cloud service providers, negatively impacting productivity and talent retention.

Solution: The IBM Cloud Architecture Design approach creates a management framework that helps harness new technologies and services and reduce operations complexity. The resulting unified view across environments can be implemented as a third-party or self-managed solution, so organizations can adapt as needed. These designs also offer opportunities to improve analytics and reporting on cloud use across the enterprise

Business benefit: With the ability to effectively manage IT infrastructure and operations to address multicloud needs, organizations can experience cloud spend cost savings. The single-pane-of-glass consistent view across platforms allows the organization to orchestrate and manage workloads with seamless portability and visibility.

“It is important to have a complete roadmap so it helps you stay focused, not purchase and consume more than necessary, keeps staff on task and allows you to properly skill tasks, and ensures for proper management and reduction of complexity overall.”

— CIO, financial services industry[3]

Successful cloud adoption is critical for businesses to remain competitive—so is a well-planned strategy. Our approach to managing hybrid multicloud IT environments is based on an achievable plan, working design and a proof of concept that help speed your cloud journey and minimize trial and error.

IBM Cloud Architecture Design helps provide you with a comprehensive technical strategy, architecture and roadmap for increased business value, flexibility, revenue growth and cost control. Visit ibm.com or contact your representative to learn more about the value of IBM Cloud Architecture Design.

Learn more →

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1 How cloud architecture design accelerates cloud deployments, IBM Services, March 2020.

2 Renewing IT In The Cloud Era: 10 Steps CIOs Are Taking Now, Forbes Insights, 2019.

3 “Cloud Architecture Design.” IBM Market Development and Insights, 24 October 2019.

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