VMware Multi-Cloud Adoption Framework
An outcome-focused approach
# Table of contents

Introduction ................................................................................................................................................................. 3  
Audience ..................................................................................................................................................................... 3  
Business strategy leads the way .................................................................................................................................... 3  
Multi-cloud adoption framework .................................................................................................................................... 3  
The Maturity Assessment .............................................................................................................................................. 4  
Executive workshop ..................................................................................................................................................... 5  
The journey models ...................................................................................................................................................... 5  
  
  App and Cloud Model ................................................................................................................................................. 5  
  Digital Workspace Model .......................................................................................................................................... 6  
  IT Value Model ......................................................................................................................................................... 7  
A Well-Architected Cloud Framework ............................................................................................................................. 7  
Implementation ............................................................................................................................................................ 8  
Conclusion ................................................................................................................................................................... 8  
  
  Resources .................................................................................................................................................................. 8
Introduction
Moving to cloud requires a proactive, thoughtful strategy—an approach that explores opportunities for value in new areas of the business; improves current capabilities and processes to drive down costs and respond faster to changing customer demands; and establishes a prescriptive path that enables IT to serve as a strategic partner to the business and its customers.

Based on experience and best practices, VMware has developed a multi-cloud adoption framework to help organizations accelerate their cloud journey and achieve their goals faster. The framework leverages an outcome-focused approach to clarify business and IT outcomes, assess the current state, determine a strategy to achieve the specific outcomes, and identify the steps required for the journey. It also leverages the VMware Cloud Ready Framework™ for implementation guidance to plan, build, secure, modernize and operate the target environment.

Audience
The intended audience for this white paper is technology executives (CTO, CIO) and solution and cloud architects who are responsible for translating business requirements into technical capabilities to support their organization’s digital transformation initiatives.

Business strategy leads the way
The starting point for any strategic initiative is determining the outcomes the business needs and a clear understanding of the gaps in current capabilities, competencies and culture. Business needs drive IT challenges, which require new or improved IT capabilities to achieve the requested business outcomes.

![Figure 1: Turning business needs into business outcomes.](image)

To have a real impact on the business, the conversations should span the full spectrum. Otherwise, it will be a struggle to explain how IT is creating value for the business. It is important to have these discussions upfront and early. It is equally as important to have an architecture that looks out across this entire continuum and helps you make informed, long-term decisions that drive value for your business.

Multi-cloud adoption framework
VMware has developed a multi-cloud adoption framework to help simplify and streamline the journey to multi-cloud. Leveraging an outcome-focused approach, our framework provides a prescriptive set of organization-centric guidance and methods to facilitate conversations and to develop a mid- to long-term strategy and roadmap. It can help you explore business needs, desired state of the capabilities and expected outcomes. It also helps to identify the best model and starting point, and to ensure proper tracking based on key success metrics.
The framework consists of five steps: Maturity Assessment; Executive Workshop; Journey Models; Well-Architected Framework; and Implementation. Figure 2 provides an overview of each step.

Figure 2: The five multi-cloud adoption framework steps.

Let’s take a deeper dive into each framework step.

**The Maturity Assessment**

The first step is to assess and determine the needs of your organization. This involves clarifying your desired business and IT outcomes. You also need to understand your current business situation, key challenges and implications. Perform a comprehensive evaluation that addresses the following areas:

- **Current strategy and scope:** Start by understanding the current and desired level of support and culture within your organization to adopt technology as a means for digital transformation and innovation.

- **Business outcomes and goals:** Focus on the “why” aspects of change, and the value expected from the transformation. This will help ensure your investments accelerate your transformation and overall ability to achieve your business outcomes. Common stakeholders include the CEO, CFO, COO, CIO and CTO.

- **Leadership, governance and processes:** Identify the leaders in governance, defining the participant’s role in the projects, and having a good understanding of processes to proceed with the strategy. Common stakeholders include CIO, CTO, CISO and organizational Legal teams.

- **People, tools and enablement:** Identify the people who perform various roles, responsibilities and relationships within an organization, as well as the current set of tools, vendor-specific products and level of standardization and adoption, and identification of the approach to enablement and training of IT teams.

- **Infrastructure, data and platforms:** Determine your current and desired infrastructure, data management, and platforms and level of standardization required to deliver services.

- **Applications and development:** Describe your current and desired strategy for designing, building, updating and maintaining applications.

- **Security and operations:** Describe your current and desired strategy for keeping the required security posture, as well as the current and desired operating model.

These areas are assessed at a high and broad level of context so you can identify and capture all the possible key elements to your business success.
Executive workshop

The next step is brief and yet crucial: to engage with executives and stakeholders of your organization and start to envision the journey needed based on the information discussed and evidence collected. This is done by: reviewing your current strategy, capabilities and culture; aligning IT and business outcomes; creating and documenting a vision for the transformation; and gaining consensus across your organization.

Figure 3: Benefits of the Executive Workshop.

The journey models

Your vision and strategy will lead to specific journeys that are required to meet your business needs. These journeys define the specific capabilities needed to address your prioritized business outcomes and challenges.

After your journey model is selected, you can assess your capabilities relative to that model using the industry standard Capability Maturity Model Integration (CMMI). Automation can capture your current state and future state data in real time and quickly map out a gap analysis. You can then create timelines and workstream priorities that best fit your desired outcomes.

The output from this step includes a high-level assessment of the current state, detailed gap analysis graphs, and a KPI impact analysis. The models are described in the following sections.

App and Cloud Model

App and cloud modernization must be done simultaneously to achieve success. Using our App and Cloud Model, you can assess your current competencies across three areas. Modern Infrastructure evaluates your cloud infrastructure and operating model, across public, private and multi-cloud. Modern Platforms allows you to assess your ability to reduce app complexity through abstraction interfaces, accelerate application deployment, and enable apps to operate on diverse data sets. Digital Enterprise addresses how well your IT and Development teams can support modern software development and modernization methodologies, as well as their ability to deliver and manage any app on any cloud on any device.
Designed to help accelerate your digital workspaces and digital business objectives, the Digital Workspace Model identifies the steps needed for your End User, Infrastructure, and Security teams to modernize current processes and systems, helping you more easily support employees across devices regardless of location. Using this model, you can rate your current competencies in application deployment, client management, enterprise mobility management, and the other areas defined in the model. This will help you understand which competency areas are most important for your IT organization to strengthen.

**Figure 4:** App and Cloud Model.

**Digital Workspace Model**

**Figure 5:** Digital Workspace Model.
IT Value Model
The IT Value Model describes the steps needed for Infrastructure, Platform, Developer and Security teams to increase their operating model maturity and lay the foundation for modern applications and digital businesses. Using the model, you can assess your current competencies in virtual infrastructure, private cloud, infrastructure as a service (IaaS) and the other areas to understand which competencies need to be strengthened.

Figure 6: IT Value Model.

A Well-Architected Cloud Framework
There are several well-architected frameworks that exist in the market today; however, they primarily focus on individual public cloud providers with an emphasis on cloud-only deployments. In contrast, VMware environments span across different deployment models, such as private cloud (on-premises), public cloud and hybrid cloud. As organizations increasingly adopt multiple cloud providers to support their business interests, a need has emerged to offer prescriptive guidance and best practices supporting multi-cloud deployments.

Figure 7: VMware Cloud Well-Architected Framework pillars.
VMware can deliver comprehensive guidance to support you throughout your multi-cloud journey. The VMware Cloud Ready Framework is a well-architected framework that provides implementation guidelines and recommendations to help you build reliable, scalable, secure and operationally efficient cloud environments.

**Implementation**

The final step in the framework is to implement the solution. This may involve several types of activities including:

- Defining the scope and requirements for the implementation.
- Deploying, configuring and integrating environments. This includes Software-Defined Data Center (SDDC) configurations and native cloud integrations, integrating and configuring cloud management, and designing and implementing network connectivity. It also includes implementing a mobility platform that will allow you to move workloads between your environments on demand.
- Migrating workloads, refactoring existing applications or building new applications. This includes creating a migration strategy based on business goals and constraints; discovering and analyzing the environments and mapping application dependencies; mapping the source infrastructure to the target infrastructure; creating a testing schedule and contingency plans; and, finally, bundling, scheduling, executing and validating the migrations.
- Protecting and securing the network, workloads and data. This includes designing and implementing threat detection, antivirus and malware endpoint detection and response capabilities; security policies, firewall rules, IDS/IPS, security groups and security profiles; and application security via micro-segmentation.
- Defining new roles and skills, automating operational processes and increasing visibility across the environment. This includes assessing your current skills, identifying gaps, and providing relevant training. It includes defining and automating processes such as workload provisioning, service catalog management, showback/chargeback, service level management and configuration management. It also includes defining and implementing metrics and monitoring, dashboards, and centralized logging.

Be sure to leverage a holistic approach that streamlines and standardizes your implementation to help ensure reliable, scalable, secure and operationally efficient cloud environments.

**Conclusion**

As technological innovation continues to accelerate, the need for continuous digital transformation will become even more pressing. The VMware Multi-Cloud Adoption Framework leverages VMware experience and best practices to help you accelerate your multi-cloud journey and realize business outcomes faster.

**Resources**

- [VMware Multi-Cloud Adoption Framework website](#)
- [VMware Professional Services website](#)
- [VMware Cloud Ready Framework website](#)
- [VMware Multi-Cloud Solutions website](#)