

AHEAD

UNLOCKING BUSINESS TRANSFORMATION:

Strategies for Successful Cloud Migration & Modernization

Cloud computing has become essential for enterprise scalability and agility. In fact, many AI and high-performance computing (HPC) workloads require elastic resources, distributed architectures, and advanced capabilities that only the cloud can provide.

The cloud enables businesses to rapidly scale operations, deploy innovative solutions, and respond to changing market demands. However, successful cloud migration and modernization requires careful consideration of business objectives, technical feasibility, financial models, and other factors.

In this whitepaper, we'll discuss the need for cloud transformation, the importance of addressing migration and modernization in tandem, and how AHEAD delivers cohesive strategies for successful cloud adoption.



The Key Horizons of Cloud Transformation

The cloud transformation journey for most organizations occurs across three different horizons: **infrastructure migration, workload modernization, and business transformation.**



Hybrid Cloud Migration

Traditional data centers and legacy infrastructure are holding back organizations from adopting innovative technologies. Cloud operating models, including hybrid and multi-cloud solutions, provide the flexibility and scalability needed to support future growth.



Application & Data Modernization

Many organizations have legacy applications and data silos that hinder cloud adoption. Modernizing these systems can unlock enhanced performance and enable compatibility with cloud-native environments. By adopting microservices, containerization, and other modern architectures, enterprises can reduce technical debt and further accelerate innovation.



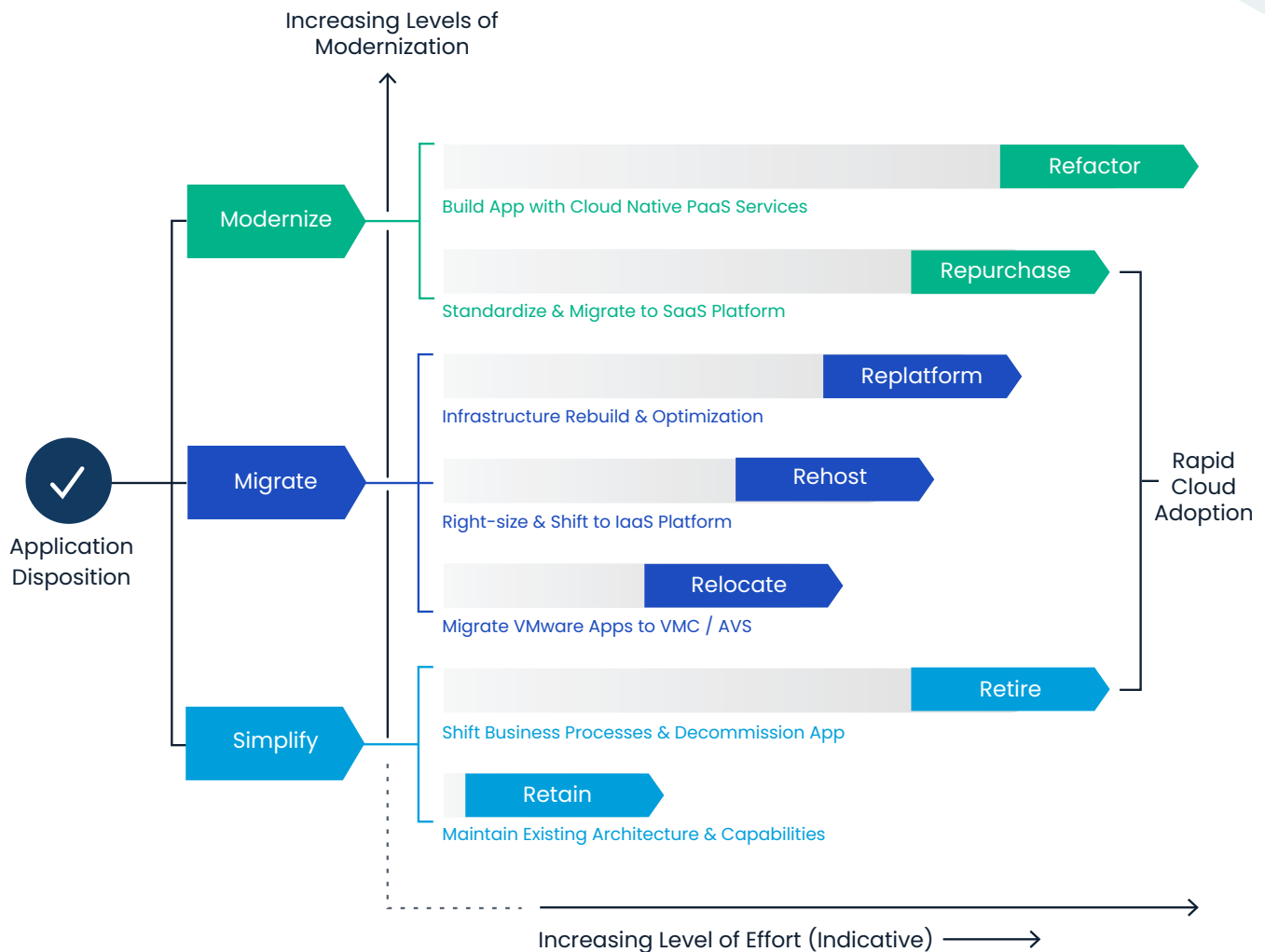
Business Transformation

Legacy business processes and workflows prevent many enterprises from operating efficiently, so organizational changes may be necessary to better support a modern cloud model and emerging AI use cases. For example, automating workflows by implementing platform engineering best practices can enhance operational efficiency.

An Application-Centric Approach to Cloud Transformation

Many organizations choose to migrate first and then modernize later, which is inefficient and more expensive. For example, simple lift and shift cloud migrations do not overcome the challenges of legacy systems and data silos because they do not reduce technical debt nor take advantage of cloud native capabilities.

Migration without modernization, therefore, doesn't unlock the full potential of the cloud. That's why organizations should consider integrating modernization efforts into their cloud transformation strategies from the outset.



Simplify

Before undergoing a cloud migration or starting a modernization project, it's important to evaluate which systems to retain or retire. Dependencies may require some applications to be maintained while redundancies and changes to business processes can enable others to be retired:

Retire

Updating old business processes and decommissioning legacy applications to consolidate workloads and reduce complexity. This can free up cloud migration resources and lower the long-term costs of IT infrastructure operations. Applications that are redundant, obsolete, or no longer aligned with business objectives should be retired.

Retain

Maintaining existing architectures and capabilities on-premises may be required due to compliance, data sovereignty regulations, or latency constraints. Many organizations adopt a hybrid infrastructure approach with certain workloads remaining in data centers or at the edge while moving the rest to centralized cloud platforms.

Migrate

Cloud architecture considerations include performance, financial, and operational requirements that vary by workload. Each workload can be migrated using the most suitable strategy:

Relocate

Moving entire groups of servers from on-premise platforms, such as VMware, to managed VMware in the cloud. This approach is often the fastest way to migrate to the cloud because there are minimal changes to the applications themselves.

Rehost

Shifting workloads to IaaS platforms with minimal changes to the underlying architecture. This lift and shift approach is suitable for simple applications with few dependencies but does not address the limitations of legacy applications.

Replatform

Optimizing infrastructure with native services from public cloud providers or leveraging managed services. This approach realizes more cloud benefits through improved operational efficiency and reduced management overhead while still maintaining core application architectures.

Modernize

Modernization should be executed concurrently rather than after the migration is complete to maximize the ROI of cloud adoption. Organizations should assess the suitability of workloads for modernization strategies based on business value and technical feasibility:

Repurchase Transitioning workloads to cloud-based SaaS applications for simplified management and maintenance. This is an ideal option for standard workloads that are not a core competency – such as CRM systems and HR platforms – freeing up internal engineering resources to focus on more strategic initiatives.

Refactor Rebuilding workloads specifically for cloud native PaaS solutions to maximize scalability and performance. This includes serverless computing, API-driven microservices, containerized workloads, Kubernetes deployments, and more. Although this requires the most effort, it can provide greater long-term benefits for business-critical applications.

ACCELERATE CLOUD ADOPTION WITH PLATFORM ENGINEERING

[Platform engineering](#) has rapidly become the go-to operating model as cloud and on-premise infrastructure teams have evolved to support DevOps, [site reliability engineering \(SRE\)](#), and cloud native technologies. Implementing and scaling platform engineering can build the foundation for efficient cloud operations.

Best practices for platform engineering include: CI/CD pipelines, infrastructure as code (IaC), containerization, and orchestration with Kubernetes. These capabilities enable organizations to automate deployments and ensure consistent environments in the cloud while maintaining governance and security.

Contact AHEAD to learn more about [Platform Engineering](#).



AHEAD for Cloud Migration & Modernization

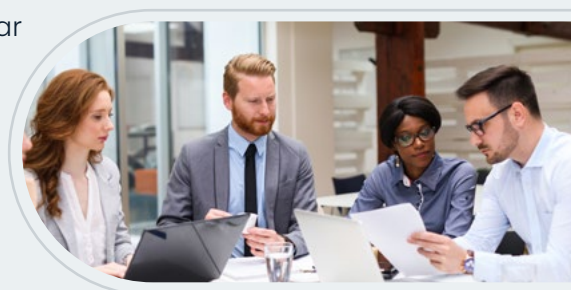
AHEAD is a leading enterprise solutions provider with decades of experience in [cloud computing](#) and [application modernization](#). We have the expertise to combine migration and modernization into a cohesive strategy that leads to 25-50% faster cloud migrations compared to traditional models, and 10-35% lower total cost of ownership.

[AHEAD Rapid Assess](#) fast-tracks your cloud migration planning through a highly structured, data-driven approach that delivers real business outcomes. We combine detailed, automated technical assessments, financial modeling, and security-first strategies into a single, actionable roadmap – giving you everything needed to confidently move forward.

HOW AHEAD ACCELERATED CLOUD MIGRATION FOR AN INTERNATIONAL INSURANCE COMPANY

A large international insurance company and 17-year AHEAD client ended its contract with the manager of its data centers and needed to find a place for 400+ applications. They partnered with AHEAD and leveraged our deep cloud experience to move their applications to AWS and Azure using our wave-based approach.

After an initial assessment of applications and infrastructure, AHEAD over-delivered on the first quarter proof of concept goal with 25 apps deployed to the cloud. Some applications were also migrated to SaaS solutions or rehosted to new data centers. As of 2025, the client has successfully moved 150 applications to the cloud, with more planned in the future.



Along with rapid cloud assessments, AHEAD also offers comprehensive cloud advisory services that align your migration strategy with your specific business objectives. This includes a **Modernization Readiness Workshop** and detailed financial analysis to evaluate the costs of different migration scenarios. The target architecture is then defined and prioritized to ensure critical applications are migrated first.

Following in-depth discovery and planning, we kick off our “Migration & Modernization Factory” for rapid execution. This structured framework involves a wave-based approach where we rehost and replatform applications in phases depending on priority. The migration incorporates automation, pre-built workload accelerators, and application mapping as needed to deploy services, stage apps and data, and perform QA, testing, validation, and remediation.

Through workshops and assessments, AHEAD also identifies workloads suitable for refactoring or containerization to optimize them for modern cloud infrastructure. Our experienced platform engineering team can implement best practices to [enhance efficiency and productivity](#) across your organization. We also have over 500 code accelerators and pre-built patterns for a rapid and efficient modernization process.

After migration, cloud operations are transitioned to your internal teams with a focus on change management for effective functioning in the new environment. This includes automating operations as much as possible along with continuous modernization and cost optimization efforts to maximize the efficiency of your hybrid cloud operating model.

AHEAD also offers additional services for [Cloud FinOps](#) to optimize your infrastructure costs, and [Cloud Security](#) to implement security best practices. Our engagement options include advisory and implementation services for specific needs as well as fully managed services.



[Contact AHEAD](#) today to schedule a discovery workshop and learn how we can accelerate your cloud migration – securely, cost-effectively, and strategically.

AHEAD

Combining cloud-native capabilities in software and data engineering with an unparalleled track record of modernizing infrastructure, we're uniquely positioned to help accelerate the promise of digital transformation.

Visit us at ahead.com.

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