Cloud Migration to AWS: Benefits & Strategies

Welcome to our comprehensive guide on migrating to the AWS Cloud. This presentation explores the benefits of cloud migration, strategic approaches, and proven methodologies to ensure a successful transition to Amazon Web Services. We'll cover everything from the fundamental concepts to practical implementation strategies.



Why Migrate to the AWS Cloud?



Scalability

Dynamically adjust computing resources up or down based on demand. This elasticity eliminates capacity planning concerns and allows businesses to handle traffic spikes without performance degradation or overpaying for unused capacity.



Agility

Deploy new applications in minutes instead of weeks. Accelerate innovation cycles with rapid prototyping and testing. Leverage AWS's global infrastructure to expand your business worldwide with minimal friction.



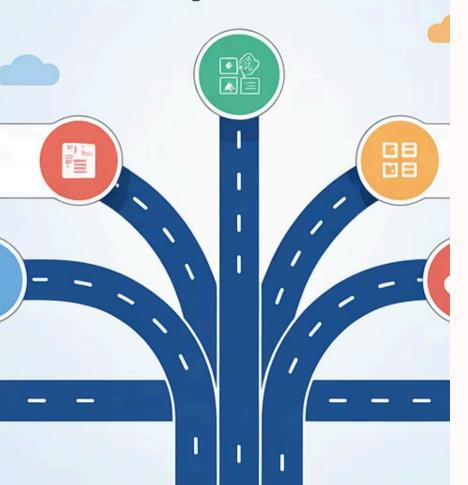
Cost Savings

Replace capital expenses with operational expenses through the payas-you-go model. Eliminate hardware maintenance costs, reduce data center footprint, and optimize spending with detailed usage visibility and resource management tools.



Security & Compliance

Benefit from AWS's sophisticated security infrastructure, continuous compliance certifications, and automated security tools. Implement security controls at multiple layers with centralized management and monitoring capabilities.



Overview: Cloud Migration Strategies

AWS has defined seven distinct migration strategies, commonly known as the "7 Rs". Each approach addresses specific business needs, technical requirements, and organizational constraints. The right strategy depends on your specific application portfolio, business objectives, timeline, and budget constraints.

"Choosing the right migration strategy is critical to realizing the full benefits of the AWS Cloud while minimizing risk and disruption to your business operations."

The 7 Rs: Key Strategies Explained







Rehost

"Lift and shift" applications without code changes. Quickest migration path with minimal modification. Suitable for legacy applications and tight migration timelines. Uses tools like AWS Application Migration Service.

Replatform

"Lift, tinker and shift" - make targeted optimizations while maintaining core architecture. Balance between speed and optimization. Examples include migrating databases to Amazon RDS or containerizing applications with ECS.

Refactor

Redesign applications to be cloud-native, leveraging AWS-specific features. Most complex but highest long-term value. Enables microservices, serverless architectures, and advanced AWS capabilities like Lambda and DynamoDB.

The remaining strategies include **Retire** (decommission), **Retain** (keep on-premises), **Relocate** (hypervisor-level moves), and **Repurchase** (switch to SaaS alternatives like Workday or Salesforce).

Best Practices for Successful Migration



A successful migration requires thorough planning, cross-functional collaboration, and continuous monitoring. Organizations that follow these best practices typically experience fewer disruptions and faster time-to-value.

1 Assessment

Conduct comprehensive discovery of your application portfolio, infrastructure dependencies, and data requirements. Identify security requirements, compliance needs, and performance baselines.

2 Stakeholder Alignment

Establish clear governance with defined roles and responsibilities. Set realistic expectations about timeline, costs, and potential disruptions. Ensure executive sponsorship and cross-team buy-in.

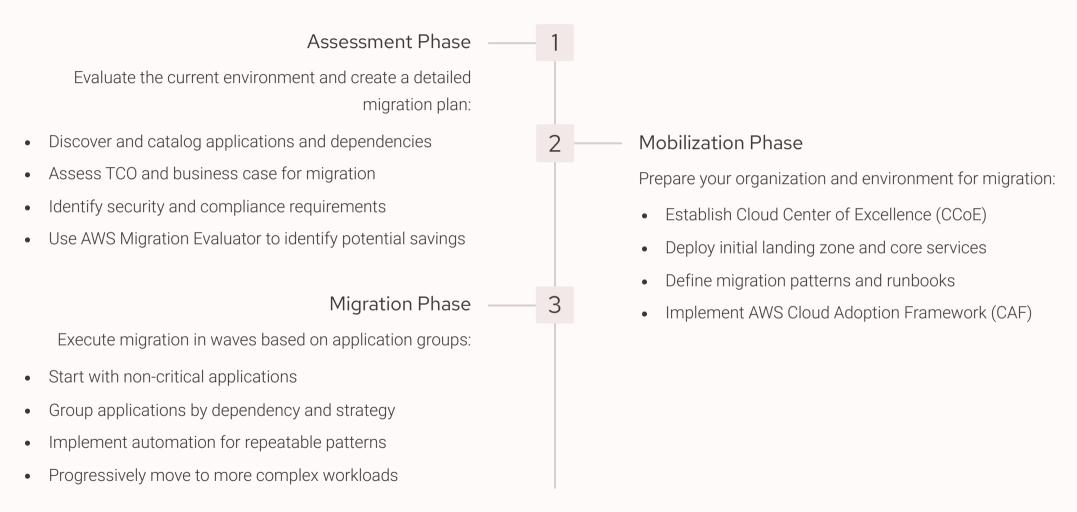
3 Testing

Implement comprehensive testing protocols for applications, infrastructure, and data integrity. Perform user acceptance testing and simulate failure scenarios before cutover.

4 Monitoring

Deploy monitoring solutions before, during, and after migration. Track data replication, application performance, and user experience metrics throughout the process.

Phased Approach to Migration

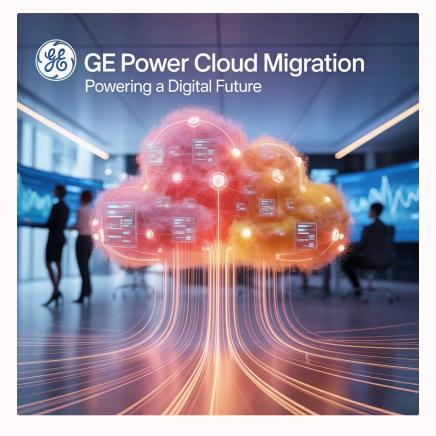


Organizing migrations into waves helps manage risk and allows teams to apply lessons learned from earlier migrations to later ones.

Tools and Real-World Examples

Essential AWS Migration Tools

AWS Migration Evaluator	Assesses current environment and provides TCO analysis
AWS Application Discovery Service	Maps dependencies between applications and infrastructure
AWS Database Migration Service	Migrates databases with minimal downtime
AWS Application Migration Service	Automates lift-and-shift migration of applications
AWS Control Tower	Sets up and governs secure multi- account AWS environment



GE Power Success Story

- Migrated 500+ applications to AWS
- Reduced costs by 52%
- Improved application availability to 99.99%
- Decreased time-to-market by 35%

Key Takeaways: AWS Cloud Migration

1 Multiple Business Benefits

Cloud migration delivers transformative benefits including enhanced scalability, significant cost savings, improved business agility, and strengthened security posture.

2 Strategic Approach

Choose the right migration strategy (rehost, replatform, refactor, etc.) based on application characteristics, business goals, and organizational constraints.

3 Planning & Automation

Success depends on thorough assessment, stakeholder alignment, and a phased approach. Leverage AWS tools and automation to accelerate migration and reduce risk.

Take Free Practice Test

Online Course

