AWS FOR MIGRATION

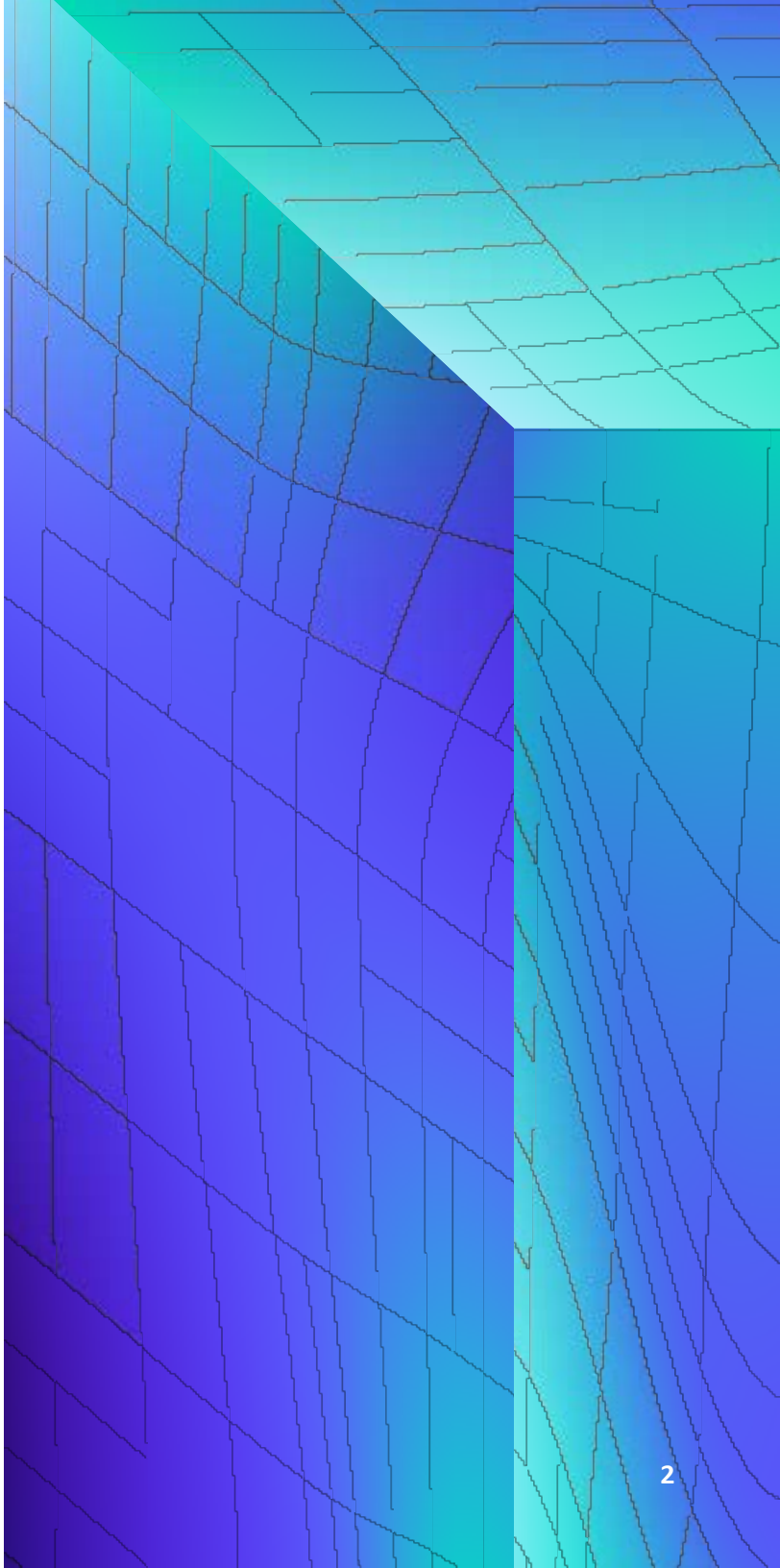
Migrate to modernize on AWS with Infosys

How to accelerate business transformation through cloud migration

In collaboration with

Infosys cobalt

Table of contents



Introduction

Organizations across every industry want to become more agile so they can innovate and respond to changes faster. Faced with ever-increasing disruption, these organizations must also find ways to differentiate their businesses to stay competitive. For many organizations, moving to the cloud quickly is the best first step to modernization and transformation. In this eBook, we will explore recent industry trends driving organizations to accelerate their cloud migration and share how Infosys, an AWS Migration Competency Partner, helps customers migrate and modernize on Amazon Web Services (AWS) to achieve broader business transformation.

"Modernization programs involving large and complex legacy applications often pose a risk of business disruption. By crafting an optimal modernization strategy supported by a multi-layered de-risked methodology, we ensure zero-disruption modernization for our clients. Our collaboration with AWS, along with our vast execution experience complemented by the Infosys Live Enterprise Application Development Platform, part of Infosys Cobalt, enables us to accelerate our clients' digital journey."

— Gautam Khanna, Vice President & Global Head, Modernization Practice, Infosys

Why migrate to AWS?

To boost innovation, respond quickly to changing demands, and drive business transformation, organizations are migrating their infrastructure and applications to AWS. Modernizing on AWS enables streamlined operational practices that lead to measurable results.

On average, migrating to AWS delivers:

20%
average infrastructure cost savings[1]

66%
increase in administrator productivity[1]

43%
faster time to market for new features[1]

29%
increase in staff focus on innovation[1]

45%
fewer security-related incidents[1]

While migrating to AWS offers many benefits and opportunities, successful migrations take planning and expertise. Organizations also need to understand the challenges they're likely to face as part of the process.

With an experienced AWS Migration Competency Partner such as Infosys by their side, businesses can anticipate those challenges and accelerate their cloud journey to achieve benefits faster.

1 "The Business Value of Migration on Amazon Web Services," The Hackett Group, 2022

Why cloud, why now?

By migrating some or all of their digital assets to the cloud, organizations across every industry can achieve transformational results. They can move and innovate faster, modernize aging infrastructure, scale globally, get better insights from their data, and restructure organizational models to create better customer experiences.

Business drivers for migrating to cloud

1. **Cost reduction**
2. **Agility and staff productivity**
3. **Improved security and operational resilience**
4. **Hardware/software end-of-life**

5. **Data center consolidation**
6. **Digital transformation**
7. **Going global quickly, mergers and acquisitions**
8. **New technologies (AI/ML and IoT)**

Accelerate your cloud journey with Infosys Cobalt

Infosys Cobalt is set of services, solutions, and platforms that helps power and accelerate the enterprise adoption of AWS. Customers can take advantage of the full potential of AWS and Infosys Cobalt to expand innovation that offers 35,000 cloud assets and over 300 industry cloud solution blueprints. With Infosys Cobalt, customers, receive the guidance and tools they need for migration, transformation, and management of workloads in the cloud.

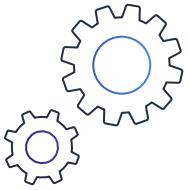
Infosys Live Enterprise Application Development Platform, part of Infosys Cobalt, helps in simplifying and accelerating the client's cloud journey to AWS, supporting various modernization patterns. It codifies Infosys' experience from 10,000+ modernization proects into a combination of custom tooling and AWS services to bring hyper-automation across the migration and modernization lifecycle.

Infosys migration and modernization services on AWS

Cloud application migration services

Simplify the complete journey of migrating legacy applications to AWS. Infosys Live Enterprise Application Development Platform provides app-centric recommendations for cloud migration strategies with the right mix of open source and native cloud services, IaaS, PaaS, and SaaS.

It automates provisioning of end-to-end environments; application migration, including technology and platform upgrades; application containerization and deployment; database migration; and mainframe rehosting, helping enterprises' cloud journey to be faster, simpler, and more cost-efficient as they migrate to AWS.



Cloud application modernization and cloud-native development services

Build solutions with a modern, future-proof architecture that is cloud-enabled and is continuously evolving to cater to changing business needs, unlocking the full power of AWS.

Infosys Live Enterprise Application Development Platform includes ready reference architectures, simplified extraction of business rules from complex legacy applications, creation of new data models, provisioning of modern full-stack environments, and automation of cloud-native application code with integrated DevSecOps and observability.

Cloud application migration services

Application remediation/re-platform:
Enables a guided refresh of the application technology stack, making it cloud-compatible and minimizing technology debt.

Application migration/remediation to containers:
Assesses application readiness and automates the needed configuration and code changes to containerize applications on leading container platforms like Amazon Elastic Container Service (ECS)/Amazon Elastic Kubernetes Service (Amazon EKS).

PaaS adoption:
Leverages PaaS services to realize application architecture benefits from serverless, automated management, and DevOps-enabled scaling of application technology infrastructure.

Database migrations:
Enables factory-based migration from proprietary RDBMS on-premises to public cloud-managed database services like Amazon Relational Database Service (Amazon RDS). Reduces database licensing costs by leveraging OSS DB engines like PostgreSQL or MySQL.

Windows workload modernization on AWS:
Reduces cost and minimizes licensing restrictions by modernization of Windows workloads to AWS. For example, run SQL server on EC2 Linux, move workloads to Amazon Aurora, containerize Windows applications with Amazon EKS, go serverless with AWS Lambda, or leverage a microservices-based architecture.

Mainframe workload migration to AWS:
Allows customers to re-host mainframe workloads to low-cost emulators on AWS to bring agility, accelerate performance, and reduce costs. Helps customers create new user experiences and application scenarios hosted on AWS, externalizes rules, upgrades technologies, and reduces development cycles with advanced tools for APIs.

Cloud application modernization and cloud-native development services

AI-first application development:
Leverages generative-AI capabilities to assist developers to code better and faster, through guided workflows and IDE plugins.

Monolith to microservices transformation:
Transforms mainframe or other legacy monolithic applications and batch jobs to cloud-native microservice architecture while moving to the cloud, leveraging AWS CaaS or PaaS services and management tools.

Serverless solutions:
Implements short-lived use cases using AWS serverless offerings to leverage elastic scalability and optimize costs.

Cloud integration services:

Accelerates the design and build of application integration with cloud PaaS services that enable communication between decoupled components within microservices, distributed systems, and serverless applications such as Amazon API Gateway, AWS Lambda, and Amazon MQ.

New-age database adoption:
Modernizes applications for evolving use cases (document store, wide column stores) by embracing AWS Cloud-native DBaaS services and Amazon Aurora, Amazon DynamoDB, Amazon Keyspaces, and Amazon Neptune.

DevSecOps services:
Enables the DevSecOps framework to take into consideration the existing tooling strategy and future requirements. Builds the DevSecOps pipeline by leveraging AWS services like AWS CodeNipeline, AWS PodeDeploy, AWS PodeBuild, and AWS PloudFormation as part of automation.

CASE STUDY:

Kmart Australia accelerates business transformation on AWS with Infosys

Challenge:

Kmart Australia, a leading Australia-based retailer, wanted to retire its mainframe and modernize its core merchandise system to improve agility and responsiveness and deliver a better customer experience. The old mainframe system struggled to scale to meet future needs, and Kmart Australia knew that the changes to the system would be costly and time-consuming.

Infosys and AWS Solution:

Infosys helped Kmart Australia re-host merchandise, inventory, and supply chain applications running on mainframe infrastructure to the cloud on a mainframe emulator with minimal changes to the application code base. Infosys Live Enterprise Application Development Platform (previously known as Infosys Modernization Suite) accelerated the migration journey through its automated solutions for code migration and data migration. At the same time, the client took slices of the mainframe applications off and re-built applications as capability-bound microservices that could interact with other parts of the business in a truly digital fashion.

Results:

Kmart Australia's mainframe application migration and modernization on AWS with Infosys enabled the business agility needed to deploy and scale new offerings and deepen customer engagement. The migration moved 34 applications comprising 19,000 components, 1.4 TB of data, around 4,000 job instructions, and over 900 user screens. Only 1 day after the client's merchandising applications went live on Micro Focus and AWS, batches were running successfully, data flowed to other systems, and reporting ran successfully. The time it took to replicate the database decreased from over 7 hours to less than 1 hour, and API execution sped up from 3.5 seconds to 1.2 seconds. Modernization of mainframe applications on the AWS Cloud will help unlock more than 20 million Australian dollars in savings over 3-4 years.

By unlocking the data trapped in the legacy system, Kmart Australia was able to feed analytics cases across multiple strategic programs such as loss prevention and inventory optimization. The modernized applications helped in scaling the business by increasing the growth of network stores.

Kmart

From humble beginnings in Burwood East, Victoria in 1969, Kmart built a promise of an affordable lifestyle for all Australians. It was the beginning of a trusted Aussie icon that has revolutionized the way Australians and New Zealanders shop.

Today, Kmart has more than 300 stores across Australia and New Zealand, serving millions of customers every year. It's goal is to continue to innovate the shopping experience, delighting customers with low prices for life in every store, in every aisle, and online - every time you shop.

CASE STUDY:

European postal and logistics service provider achieves digital readiness and reduced costs by migrating to AWS

Challenge:

The client is a leading postal operator and a growing parcel and omni-commerce logistics partner in Europe, North America, and Asia. They were faced with an urgent need to make their business digital-ready with high scalability and 24X7 availability of services. It was imperative for them to modernize their aging technology platforms to meet customer expectations and drive growth. In addition, they also wanted to overcome the cost involved in operating on-premises infrastructure and proprietary software stacks. They needed a solution that would leverage the cloud for business innovation and market differentiation while increasing efficiency and reducing operational costs.

Infosys and AWS Solution:

Infosys partnered with the client to develop and adopt a phased cloud adoption to capitalize on the benefits of an elastic infrastructure while continuing to modernize the software layer. Starting with technology refactoring and a fault-tolerant and scalable architectural foundation, Infosys consolidated software licenses, replaced expensive technologies with cloud-native AWS alternatives like RDS, and replaced the existing ESB platform with a cloud-native, open source microservices architecture.

Results:

As a result of the migration to the AWS Cloud, the client has been able to move towards establishing a highly resilient and scalable technology foundation to support a digitally ready business. For instance, a critical application performance metric improved to 99.9%, and the platform delivered 100% application availability during a record peak period. In the process, the client has also been able to realize infrastructure cost savings of 1 million USD per year and an additional $400,000 USD savings due to a reduction in database license costs.

Ready to get started?

With Infosys Cobalt, migrations to AWS are accomplished quickly and securely without undue business interruption. Improve agility, innovate faster, and improve cost-efficiency by migrating to AWS with Infosys.

AWS has helped thousands of businesses successfully migrate to the cloud and is the industry's most comprehensive and mature cloud platform. Infosys and AWS work closely with businesses at every stage of the migration journey—from assessing business needs to planning and executing the migration—and deliver proven tools, methodologies, and expertise that ensure an accelerated, hassle-free migration to the cloud.

Learn More

In collaboration with

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aws PARTNER Migration Services Competency