

# Amach's Cloud Optimization for Airlines

Helping airlines maximize the value of their cloud investments by eliminating waste, improving performance, and aligning cloud infrastructure with operational and business goals before migration occurs.

## Problem Statement

As airlines increasingly depend on cloud platforms to run mission-critical systems, many fall into the trap of migrating entire workloads without addressing legacy inefficiencies. This leads to inflated cloud costs, underutilized resources, poor scalability, and ongoing operational complexity.

### Key Issues:

#### Problem

#### Solution

#### Pre-Migration Waste Elimination



Migrating redundant or unsupported applications drives unnecessary cloud costs.



Conduct full rationalization and transformation to eliminate obsolete systems and optimize the footprint prior to cloud onboarding.

#### Cost Efficiency and FinOps



Lack of visibility into cloud cost drivers, idle resources, and over-provisioning.



Apply FinOps practices such as cost allocation, rightsizing, and idle resource management to optimize cloud spend.

#### Performance Optimization



Poor resource scaling during peak travel periods impacts the passenger experience.



Implement auto-scaling, load balancing, latency optimization, and real-time monitoring to meet performance needs.

#### Resource Utilization



Continuously running workloads and static resource allocations lead to waste.



Use serverless architectures, containerization, and storage tiering to optimize resource allocation and minimize idle costs.

#### Scalability and Flexibility



On-premises environments require significant capital investment to scale.



Leverage elastic cloud infrastructure that can scale up or down based on demand, with region-based deployments.

#### Security and Compliance



Growing security risks and complex compliance obligations for aviation data.



Implement cloud-native security controls, ID management, encryption, and compliance frameworks.

#### Governance and Automation



Inconsistent development standards and manual operations lead to inefficiencies and governance gaps.



Introduce policy-based governance, automation using IaC, and continuous optimization processes.

# Cloud Optimization Framework



## Discovery and Assessment:

Review current cloud infrastructure, workloads, and business objectives. Identify redundant systems, rightsizing opportunities & cloud readiness gaps.



## Pre-Migration Rationalization:

Remove non-essential workloads, unsupported applications, and redundant data. Prepare a lean, efficient workload for cloud migration.



## FinOps Implementation:

Apply cost governance models and automated scaling policies. Establish reserved instances, savings plans, and workload-based consumption models.



## Architecture Modernization:

Design modern cloud architecture using serverless, containers, and distributed workloads. Align architecture with business SLAs, compliance & performance requirements.



## Security and Compliance Alignment:

Integrate security frameworks with automated monitoring, threat detection, and access controls. Maintain ongoing compliance with GDPR & aviation regulations.



## Continuous Optimization and Governance:

Establish continuous cloud cost reviews, policy enforcement, and automation pipelines. Adapt configurations to match evolving business and regulatory needs.

## Benefits & Business Impact



### Cost Savings

Reduce cloud costs by 20 percent or more.



### Faster Migration ROI

Optimize scheduling and track hours with automated, compliant workflows.



### Improved Performance and Availability

Deliver high availability and system responsiveness during peak travel periods.



### Increased Resource Efficiency

Align infrastructure usage directly to workload demand, reducing idle consumption.



### Stronger Compliance and Data Residency

Ensure compliance with GDPR, regional data residency, and industry security standards.



### Operational Agility

Enable flexible scaling and rapid deployment of new capabilities aligned to business needs.



## Ready To Learn More?

Amach helps airlines optimize their cloud environments by modernizing workloads prior to migration, eliminating cost waste, and delivering scalable, efficient cloud operations aligned to aviation industry needs.

## Contact Us

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