

2025

Cloud Services and Migration



Admin

AI Forge LLC

9/14/2025

CASE STUDY

Client: Customer Confidential

Industry: Retail & eCommerce

Location: Chicago, IL, USA

Duration: 6 Months (January 2024 - June 2024)

Project Overview

Customer a leading mid-sized retail company with a rapidly expanding digital presence, was facing scalability and performance issues with its on-premise legacy systems. With increasing customer traffic, growing product catalogues, and the need for high availability, Customer partnered with AI Forge to execute a complete cloud migration to Amazon Web Services (AWS).

Objectives

- Migrate legacy infrastructure (ERP, web servers, data warehouse) to AWS
- Reduce infrastructure costs and downtime
- Improve scalability and response time during peak demand
- Establish DevOps practices for CI/CD pipelines
- Ensure full security compliance (PCI DSS, GDPR)

Team Structure

- Project Manager (1): Oversaw timelines, risk mitigation, and stakeholder alignment
- Cloud Architects (2): Designed the AWS architecture and migration strategy
- DevOps Engineers (2): Built automation, CI/CD, and IAC using Terraform
- Security Lead (1): Ensured compliance and security controls
- Data Engineer (1): Migrated and validated data workloads
- Application Developers (3): Re-platformed and tested applications for the cloud



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Technology Stack

- Compute: Amazon EC2, AWS Lambda (for microservices)
- Storage: Amazon S3, EBS
- Database: Amazon RDS (MySQL), Amazon Redshift
- Networking: VPC, CloudFront, Route 53
- DevOps Tools: Terraform, Jenkins, GitHub Actions, CloudFormation
- Monitoring: CloudWatch, Datadog
- Security: AWS IAM, AWS Config, GuardDuty

Migration Timeline and Phases

Phase	Duration	Key Activities
Assessment & Planning	Jan 2024 (3 wks.)	Application & infra discovery, TCO estimation
Architecture & PoC	Feb 2024 (2 wks.)	Architecture approval, PoC for ERP migration
Data & App Migration	Mar-Apr 2024	RDS setup, EC2 migration, app re-platforming
Testing & Optimization	May 2024	Load testing, tuning, security audit
Go-Live & Handover	Jun 2024	Final switch, training, documentation

Results & KPIs

- 99.99% uptime post-migration
- 30% cost reduction in infrastructure spending
- 60% faster page load time and API responses
- 3x improvement in deployment frequency using CI/CD pipelines
- 100% compliance with PCI-DSS and GDPR audits



CASE STUDY

Customer Feedback

"AI Forge delivered exactly what they promised-zero downtime, faster systems, and peace of mind. Our team now deploys features in hours instead of days." – CTO

Key Takeaways

- Cloud migration isnt just about lift-and-shift-rearchitecting improves performance.
- Strong planning, automation, and testing are critical to reducing risks.
- Team structure and clear responsibilities enable seamless execution.

Ready to modernize your legacy infrastructure? Contact AI Forge for a tailored migration roadmap. Visit our website for all our offerings

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