AMVICORE TECHNOLOGIES PRIVATE LIMITED

CASE STUDY

Cloud Modernization for a Scalable, Secure & Resilient Enterprise

Engineering Innovation. Enabling Transformation. Empowering Growth.

INDUSTRY	Retail & E-Commerce
SOLUTION AREAS	Cloud Computing | Cloud Migration | DevOps | Infrastructure Modernization | Application Modernization



1. Project Overview

A rapidly expanding retail and e-commerce organization was experiencing limitations with its traditional IT infrastructure. Applications were hosted on on-premises servers that required significant infrastructure management, manual maintenance, and periodic hardware upgrades. During seasonal demand fluctuations and promotional campaigns, the organization struggled to maintain consistent application performance and availability. The business recognized the need to modernize its technology infrastructure and adopt a flexible cloud architecture capable of supporting increasing workloads, improving resilience, and accelerating software delivery.

2. Business Challenges

- **Infrastructure constraints:** Existing servers had limited capacity to accommodate increasing business demand.
- **Scalability issues:** Handling traffic spikes required additional infrastructure planning and manual intervention.
- **High operational overhead:** Maintaining physical infrastructure increased IT administration efforts.
- **Deployment complexity:** Application releases depended on manual deployment procedures.
- **Business continuity risks:** Disaster recovery and backup processes required improvement.
- **Application modernization needs:** Legacy applications were not fully optimized for cloud-native environments.
- **Security concerns:** The organization needed stronger cloud security, monitoring, and governance capabilities.

3. AmviCore's Solution

AmviCore designed a business-focused solution to address the organization's challenges and establish a scalable foundation for future growth.

Cloud readiness assessment

Evaluated applications, infrastructure dependencies, workloads, security requirements, and migration priorities. Developed a migration roadmap based on business criticality and technical complexity.

Cloud infrastructure migration

Designed and implemented migration approaches including rehosting, replatforming, and refactoring, as appropriate.

Cloud-native architecture

Introduced modern architectural patterns using microservices, containerization, API-driven communication, and managed cloud services where appropriate.

Containerization and orchestration

Designed container-based deployment environments to improve application portability, consistency, and scalability.

DevOps and CI/CD automation

Established automated build, testing, deployment, and release pipelines to improve development efficiency and deployment reliability.

Cloud security and governance

Implemented identity and access management, encryption, network security, configuration controls, and centralized monitoring.

Backup and disaster recovery

Designed backup strategies, recovery procedures, and business continuity mechanisms aligned with application recovery objectives.

4. Technology Capabilities Applied

- Cloud architecture and consulting
- AWS, Microsoft Azure, and Google Cloud

- Cloud migration and modernization
- Microservices architecture
- Docker and Kubernetes
- Infrastructure as Code
- DevOps and CI/CD
- Cloud security and governance
- Monitoring and observability
- Backup and disaster recovery

5. Implementation Approach

1. Infrastructure discovery and cloud readiness assessment.
2. Cloud architecture design and migration planning.
3. Landing zone development and security configuration.
4. Application and database migration.
5. Application modernization and containerization.
6. CI/CD implementation, performance testing, and deployment.
7. Post-migration optimization and continuous monitoring.

6. Business Value Delivered

The initiative was designed to deliver practical operational and strategic value. Expected benefits included:

- Improved application scalability during peak demand.
- Greater infrastructure flexibility.
- Reduced dependence on physical infrastructure management.
- More streamlined software deployment processes.
- Improved application availability and resilience.
- Enhanced security and infrastructure visibility.
- Better disaster recovery preparedness.
- Increased readiness for future digital initiatives.

7. Business Impact

The organization gained a technology foundation designed to support business expansion, changing customer demands, and continuous digital innovation.

KEY TAKEAWAY

AmviCore helps businesses modernize legacy infrastructure, migrate mission-critical workloads, and adopt scalable cloud architectures that improve agility, resilience, and operational efficiency.

Let's Build What's Next

Whether you are modernizing legacy systems, developing a digital product, adopting AI, migrating to the cloud, integrating enterprise applications, or strengthening cybersecurity, AmviCore Technologies can help turn your technology vision into business value.

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Publication Note

This document presents an illustrative case study developed to demonstrate AmviCore Technologies Private Limited's service capabilities and approach. The client profile, scenario, implementation details, and business outcomes are representative examples and should not be interpreted as a claim of a completed client engagement. Before publishing as an actual client success story, replace the illustrative information with verified project details, approved client references, and substantiated performance metrics.

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