

LEGACY APPLICATION MIGRATION WITH SERVERLESS COMPUTING: A MODERN SOLUTION FOR IMPROVED EFFICIENCY AND SCALABILITY

Overview

In an increasingly dynamic market, leading manufacturers are facing challenges with outdated legacy applications that hinder operational efficiency and scalability.

Cyient offered a legacy application migration service to one such manufacturing customer. The aim was to transform their legacy applications into a modern, serverless architecture. By migrating to a serverless model, the customer was able to improve operational efficiency, achieve better scalability, reduce costs, and gain competitive edge.

The new serverless architecture delivered benefits of improved efficiency, reduced maintenance costs, and the ability to swiftly respond to market demands.

The Challenge

Our customer, struggling with legacy applications built on outdated technologies, was unable to keep pace with changing market dynamics. The lack of scalability and operational inefficiencies significantly affected their business operations, while slow response to changing demands hampered growth potential.

Faced with increased competition, and data management requirements, our customer realized there was an urgent need to modernize their systems.

The Cyient Solution

We approached our customer's legacy application migration with a comprehensive solution that leveraged serverless computing. The team conducted a thorough assessment of the customer's existing applications to identify critical ones for migration. The solution focused on designing and developing cloud-native serverless functions, ensuring scalability, security, and cost-effectiveness.

Key elements of the solution included:

- **Application analysis and optimization:** Cyient experts meticulously analyzed each application to identify areas for optimization and efficiency improvements. They streamlined the application code, removed redundancy, and implemented best practices for serverless architecture.
- **Serverless function development:** Cyient developed serverless functions using platforms such as AWS Lambda Functions. These functions were specifically designed to handle individual tasks or events and were easily scalable to meet growing demands.
- **Data migration and integration:** Seamless migration and integration of data from the legacy systems into the new serverless architecture was a critical aspect of the solution. Cyient ensured proper data mapping and transformations, and implemented efficient data transfer mechanisms.
- **Performance optimization and testing:** Extensive testing and performance optimization ensured that the applications were fully functional and capable of handling high traffic and workload. Load testing, stress testing, and performance monitoring helped eliminate bottlenecks and enhance overall application performance.
- **Training and Support:** Cyient provided training to the customer's staff to ensure smooth transition to the new serverless architecture. Ongoing technical support was also offered to address any issues that could arise during the operational phase.

By migrating to a serverless architecture, the client achieved technological and process innovations.

The Results

- Migration to a serverless architecture improved operational efficiency, streamlined processes, and enhanced scalability. The customer could now handle fluctuating workloads without compromising performance or incurring high costs.
- The solution resulted in a 30% reduction in operational costs. Better resource utilization and optimized application performance helped achieve remarkable savings.
- Additionally, scalability enhancements allowed the customer to adapt quickly to consumer demands and market fluctuations.
- The solution helped the customer gain competitive edge in the manufacturing industry. They were able to deploy new applications and services faster, keeping them ahead of competitors. The serverless architecture also enhanced the reliability, availability, and functionality of their operations, ensuring uninterrupted service to their customers.
- Cyient's serverless migration solution enabled our manufacturing customer embrace modern, efficient technology and be future-ready with a scalable, consolidated infrastructure better suited to respond to industry dynamics.

DESIGNING TOMORROW TOGETHER

Cyient's solution for legacy application migration incorporated unique features, such as serverless computing, to enhance operational efficiency, scalability, and cost reduction. They developed serverless functions using platforms like AWS Lambda Functions to easily scale tasks based on customer demands. Seamless migration and data integration were ensured through efficient data mapping and transfer mechanisms. Extensive testing and performance optimization of applications eliminated bottlenecks and enhanced functionality, making them capable of handling high traffic and workload.

[cyient.com](https://www.cyient.com)

Cyient (Estd: 1991, NSE: CYIENT) partners with over 300 customers, including 40% of the top 100 global innovators of 2023, to deliver intelligent engineering and technology solutions for creating a digital, autonomous, and sustainable future. As a company, Cyient is committed to designing a culturally inclusive, socially responsible, and environmentally sustainable Tomorrow Together with our stakeholders.

North America Headquarters

USA
T: +1 860 528 5430

Europe, Middle East, and Africa Headquarters

UK
T: +44 118 3043720

Asia Pacific Headquarters

Australia
T: +61 3 8605 4815

Global Headquarters

Hyderabad
T: +91 40 6764 1000

