

**A LEADER IN FINANCIAL COMMUNICATION SOLUTIONS MIGRATED FROM A MONOLITHIC LEGACY APPLICATION TO MICROSERVICES ARCHITECTURE WITHIN 90 DAYS.**

**CASE STUDY**

## A CASE STUDY ON APPLICATION MIGRATION WITH A MICROSERVICES ARCHITECTURE



A leader in financial printing and communication solutions with more than 50 years of industry experience wanted to migrate their application to advanced Java with a microservices architecture to better handle scalability, speed, application security, and quality assurance.

## PROBLEM STATEMENT

Our client has been a pioneer and trusted partner to the financial, legal, and corporate communities for five decades, providing secure, innovative solutions to complex content and communications requirements.

The client's original application was built on a huge monolith architecture written on an Oracle platform with Oracle Forms 2000 and back-end comprising several batch processes written in Java Struts, which handled everything from user registration to login to editing and servicing content.

Being tied to a single monolithic architecture, the client faced the following challenges

- Scaling the application on top of the existing code base was difficult
- Building additional features increased complexity, slowed down development, introduces bugs, and makes testing cumbersome
- Slower time to market for newer product & services
- And downtime of the application was way too long

To overcome these challenges, the client wanted to upgrade their decade-old system applications to the latest Java code with a microservices architecture to meet new business models and customer expectations and was on the lookout for a digital transformation partner for end-to-end migration and support.

## BUSINESS GOALS



Migrate old core Java application to latest Spring Java without affecting UI/UX



Browser compatibility, glitch-free development process, and enhanced security



Higher scalability with API's and improved quality assurance



Faster time to market for each incremental release



Uninterrupted delivery of product and services

## SOLUTION



Zuci Systems initiated this project by evaluating the client's existing IT infrastructure to define the success metrics, which helped the project team and client to understand the business goals before starting the project.

With this information, Zuci quickly viewed the underlying business rules and processes running their system, making it easy to identify and modernize the application to event-driven, highly scalable microservices-based architecture within three months.

## HOW ZUCI SYSTEMS HELPED?



Requirement gathering and research of old methods of process handling, and provided a strategic roadmap for easy adoption of microservices



Conducted unit and integration testing to not only improve the development process but also help document the behavior of the components and avoid any future regression bugs



Put together a strategy for the containerization of migration process, with a set of achievable metrics, including



Zero downtime upgrades



Roll-forward bug fixes



A continuous deployment process to reduce time to market for future releases

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## HOW ZUCI SYSTEMS HELPED?



Converted the 50000 Java lines to only a 10000 lines advanced JAVA program, which is more readable and even easier to understand



Used CI/CD pipeline for faster release by automating the execution of unit and system, and integration of test cases



Our team also incorporated a rich responsive user interface and along with cross-browser support



Lastly, deployed complete end-to-end migration to the microservices architecture, followed by ongoing support to stakeholders with workshops and Q&A sessions

A graphic showing a group of five business professionals (three women and two men) in a meeting, looking at a tablet held by one of the men. The image is overlaid with a blue geometric pattern of interconnected lines and dots.

**BUSINESS OUTCOME**

**World Class**  
user experience across devices

**Zero**  
downtime errors

**150%**  
data security & governance

**69%**  
increase in overall  
operational efficiency

**78%**  
increase in  
employee productivity

**61%**  
reduction in  
development cost

ROI realized in  
**5 months**

## TECH STACK





**REDEFINE YOUR DIGITAL LANDSCAPE WITH API & MICROSERVICES ARCHITECTURE**  
**CONTACT US TODAY AND START YOUR DIGITAL JOURNEY**

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