Connected World.
Connected Experiences.

Tech Mahindra

CASE STUDY

Monolith to Microservices Development & Support for a Leading Bank in Australia

OVERVIEW

The customer is a leading provider of banking financial solutions in Australia, and they were looking to migrate all their channel services to cloud to enable a scalable , reliable, and resilient platform for their consumers. As part of this vision, they have embarked on an ambitious target to migrate all monolith solutions to microservices architecture on cloud. This engagement focuses on how we migrated global channel services from a monolith Java platform to microservices, enabling seamless communication with upstream and downstream systems and leveraging inbuilt frameworks for cloud native enablement.

CLIENT BACKGROUND AND CHALLENGE

The client needed to migrate to a scalable platform as their current monolith solution on Java was difficult to scale specific functionalities by transaction volumes. They were also facing difficulties to decommission services that are not being consumed in the current solution, thereby leading to redundant infrastructure and increased operational cost. In addition to the increase in cost, there were also challenges due to the inability to orchestrate process flows in the monolith platform and move to cloud due to tight coupling with upstream and downstream systems

OUR APPROACH AND SOLUTION

Tech Mahindra helped the leading banking financial institution in implementing a business-driven transformation to microservices based architecture for their global channel services.

- We setup the first high-end capability Microservices Squad in an onsite / offshore model for rapid delivery of microservices in a fast track mode, leveraging Java / SpringBoot / Microservices on AWS which was developed based on the MQ request/response, event driven, adapter and external config store design pattern.
- Our solution enabled fast and independent release cycles by delivering microservices with containerization (Docker) and support with end to end AWS delivery capabilities.
- Migrating to microservices-based architecture also enabled ownership of delivery to user acceptance and support to production deployment with AWS services like AKS, Fargate, and so on.
- We also enabled the SDLC with Rally for project management using Sprint based delivery aligned to the client's target roadmap and other tools for delivery (git, JFrog, Jenkins, SonarQube etc. for build and source code management and configuration) thereby improving scalability. This provides the capability to perform automated testing using automated and integration test suites, which can capture the test summary report of all the functional scenario in single execution, performance/chaos testing using Scala and Gatling.
- Tech Mahindra provided support for the deployed microservices with an 24X7 onsite / offshore model leveraging tools like Splunk, Grafana, and managed customer SLAs/SLO/SLIs, to improve business continuity

BUSINESS IMPACT

25% reduction
in infrastructure costs through containerization and services optimization

Increased flexibility
in rendering existing services or orchestrating new functionalities with existing services

Increased ability to adapt
to changing business requirements and new functionalities

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