Successful Open API Deployment with comprehensive microservices design, development and automation strategy for a Global Tier 1 bank

The Challenge

- Client's legacy middleware platform was developed on TIBCO which was not scalable & cloud compatible
- Aggressive business plans (Open Banking API Partnerships) required new robust capabilities, which the existing middle-ware platform couldn't support
- Higher maintenance costs of existing on-prem based middleware application impacted the OPEX

Solution

- Co-designed a cloud native microservices solution architecture to migrate from TIBCO, using PCF Springboot
- Adopted NGA architecture pattern for microservice deployment
- BIAN L1 framework was used for defining the microservices
- Automation functional testing was induced for comparing responses between two applications (TIBCO & PCF Spring) at run time ensuring testing comprehensiveness
- Mass Certification (Bulk data testing - 15K customers/accounts) for simulating the production data patterns was used for auto-compare
- Adoption of Unify 2.0 CICD pipeline and tools (integrated bitbucket etc.) were leveraged. The principles of canary deployments were provisioned to enable 24*7 deployments (till UAT)
- Incremental migration of customers (staff first) to cloud while co-existing the remaining segment's in older tech. stack was channelized for smooth transition

Key Engagement highlights

- Legacy on-prem middle-ware platform modernization
- 82 OpenAPI's built and deployed in record time with 40+ member team
- In-depth domain expertise across Retail, Payments, Cards & Wealth Management
- Automated functional testing comparing TIBCO & Java Microservice responses at run time

Benefits

- Significant cost reduction with lower TCO and cloud enabled microservices architecture
- Decoupled business critical and changed frequently services.
- Built, tested and successfully launched 82 Open API's in a span of 6 months from inception
- 72 hours of average time taken to certify one API from scripting to execution
- Significantly reduced testing cycle time through automation and improved the time-to-market
- Go-live in much shorter time within the project budget