

# A mobile push notifications platform for retail bank

Success story

Cloud-enabled AWS hub transforms customer communications



Mobile push notifications to support multiple business functions



Near real-time digital banking



Supports PSD2 requirements

OPEN APIs



CLOUD



PLATFORM ENGINEERING



## THE CHALLENGE

### Build a cloud-enabled push notifications platform to transform customer communications

- As part of its digitalisation strategy, the retail bank wished to implement a new “push” mechanism to deliver important notifications to customers in a timely, contextual and personalised manner across mobile channels
- The bank required an Agile delivery model, comprising scrum methodology, to deliver a minimum viable product quickly, then to progress to a production version
- The ideal solution should be cloud-based, including all standard apps, and some new custom apps, including Kafka apps and a CICD pipeline to enable continuous integration

## THE ENGAGEMENT

### A ground-breaking solution comprising two parts:

#### PUSH NOTIFICATIONS PLATFORM

- GFT developed and deployed the apps and configured them as standard software apps to simplify management and security. Apps included HDF, Scylla DB, Vault, Consul, EKS (Amazon Kubernetes) and all were aligned with the bank’s security appetite
- A total of 31 apps were developed/configured, including Kafka-based data streaming apps, REST APIs, API gateway, system interfacing Amazon SNS (sends push), Rules Engine (data analysis engine) and a reporting app. All apps were built using Java and deployed to Kubernetes
- During the engagement, GFT worked in sprints, organised across scrums, focused on business requirements and core platforms. All deliveries were prioritised and delivered against an agreed schedule

#### CICD PIPELINE BUILD

- Jenkins run on Kubernetes, application built to Docker images with streamlined deployment to Kubernetes
- Build custom-made Builder Image leveraging strong in-house GFT proprietary knowledge & expertise
- Full security build for CICD pipeline (authentication & authorisation)

## THE BENEFIT

### A cloud-enabled, API-integrated, scalable communications hub

- The bank can now process bank transactions in the AWS cloud with renewed technology fundamentals while building on its cloud infrastructure
- Time to market is much faster and new features can be added quickly and easily
- A permanent reduction in operating costs, eliminating the need for speculative investment in hardware
- A scalable strategic platform that enables near real-time customer communications
- Using Kafka event streaming provides more immediate customer engagement, driving greater efficiency in customer communications and more immediate actions and responses to changes in customer circumstances