

Case study: CS20180505**Type:** Application integration, partner API design & implementation**Evaluation tags:** integration patterns, messaging design & implementation**Background**

DEF is a mobile only bank offering customers in Europe basic accounts and payment facilities. The bank has a customer base of 2 million spread across 2 countries and wishes to expand into 5 additional countries in Europe, targeting a total of 6 million customers.

Business problem

The current mobile only bank implementation is serviced by a backend which is obtained as a set of specific, point-to-point integrated services from a large bank. The integrations are designed and established using SOAP services. The bank uses its existing middleware and services landscape to service this mobile bank and the implementation is no longer scalable considering the target numbers. Additionally the SOAP services are designed to expose technical services and that adds to the limitations on their reusability.

Business requirements

- Overhaul the IT design so the bank can provide industry standard services (APIs), which are scalable to the needs of the mobile bank
- It must be possible for the bank providing backend services to offer the same to other mobile only banks as a means of business growth
- Implementation must be resilient and with zero downtime
- Implementation must consider potential variations in security and data handling requirements owing to local regulations and data protection laws

Expected delivery

- List of APIs and rationale behind the design
- Implementation of one of the APIs considering non-functional & security requirements (consider any API gateway availability)
- Explain the drawbacks and strengths of your logical design & implementation stack