ALTIMETRIK®

Modernization made real with a Secure, Reliable & Scalable Online Payments Platform

APAC based Government Payments Regulatory Agency
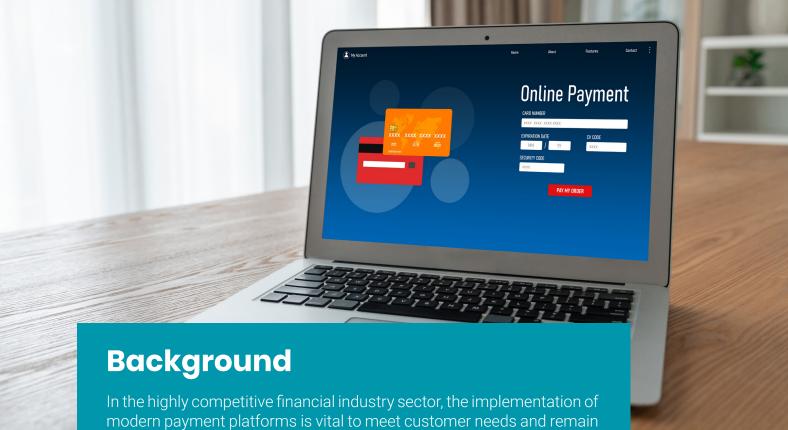
Key highlights

40%
cost reduction

3X
availability and
scalability improvements

2X
release velocity
improvements

Background

In the highly competitive financial industry sector, the implementation of modern payment platforms is vital to meet customer needs and remain relevant. Our client, a Government Payments Regulatory Agency needed to build a secure, reliable, and scalable Online Payments Platform using an event driven microservices architecture and open-source technologies. The resulting platform was designed from the scratch to be built as a highly scalable, secure, and efficient payment solution. Using Altimetrik's practitioner-led and accelerator-based approach, the client's product was created with better reliability, increasing agility, thereby enhancing the customer experience. By adopting domain best practices, such as in-sprint automation and platform-based API (Application Programming Interface) automation, financial services companies can accelerate their development and deployment of new services, keeping pace with the rapidly changing regulatory frameworks and bringing innovative products to market faster.

Our client aimed to create a competitive marketplace for local SMB players to support their retail business. Altimetrik, with its strong domain expertise in payments, was chosen as the partner to implement payment reconciliation processes.

Pain Point

The client required the creation of an event-driven microservice architecture with stateless services and asynchronous messaging for reconciliations and guaranteed delivery of transactions. The architecture needed to be built on open-source technologies such as Spring Reactive, Redis, Kafka, Cassandra, and ELK (Elastic, Logstash, Kibana), and have high security with oAuth2 for authorization, payload encryption, mTLS for server communication, timeout, retries, and circuit breakers.

End-to-end Solution Roadmap

Altimetrik implemented BDD for in-sprint automation, a platform for API automation and faster deployment, and PyTest with Robot Framework using FwK libraries.

Faster Delivery

Six-week Event driven microservice architecture with stateless services & asynchronous messaging

Reconciliations & guaranteed delivery of transactions

Capable of reinitiating transactions from any step

Open-Source & Secure

Built on open-source technologies Spring Reactive, Redis, Kafka, Cassandra, ELK

Highly secure with oAuth2 for Authorization, Payload encryption, mTLS for server communication

Timeout, retries & circuit-breaker.

Rapid Validations

BDD for in-sprint Automation

Platform for API automation and faster deployment

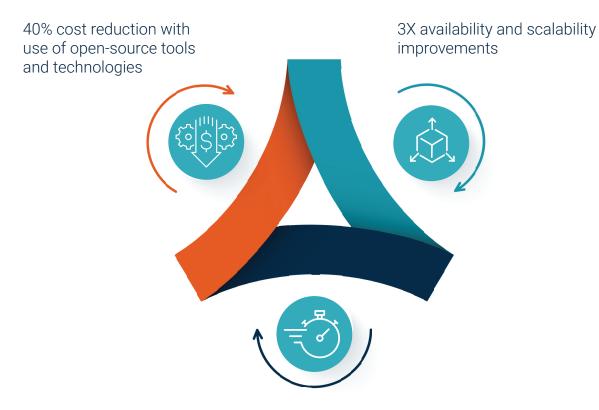PyTest with Robot Framework using FwK libraries

Availability & Scalability

Highly Available with fail-safe, no single point of failure

Highly scalable with RT < 10ms & Throughput of 1000+ tps with further scale-up

Individual component scalability

Results

40% cost reduction with use of open-source tools and technologies

3X availability and scalability improvements

2X release velocity improvements through Altimetrik Accelerators

About Altimetrik

Altimetrik is a Digital Business and Digital Transformation company focused on delivering business outcomes with an agile, product-oriented approach. Our digital business methodology provides a blueprint to develop, scale, and launch new products to market faster. Our team of 5,500+ practitioners with software, data, cloud engineering skills help create a culture of innovation and agility that optimizes team performance, modernizes technology, and builds new business models. As a strategic partner and catalyst, Altimetrik quickly delivers results without disruption to the business.