



CASE STUDY

SMS CAMPAIGN WORKFLOW AUTOMATION FOR A CPAAS GLOBAL MARKET LEADER

Accelerated time to market and optimized resource utilization

Client Background

In many markets, sending app-to-person (A2P) or bulk SMS requires the sender to register the purpose of their traffic with the relevant mobile operators or certain central authorities. The purpose of the SMS campaign workflow is to automate this registration process, beginning with A2P 10DLC (10-digit long code) traffic. The client is a CPaaS (Communication Platform as a Service) global market leader. The growing regulations mandated moving all their customers' SMS campaigns from short code to long code traffic before a strict deadline. With a large aggregator customer base, the client was only able to migrate a few customers per day because the 10DLC registration process involved manual coordination between several external and independent entities. The client's key objectives included:

- Design and build a solution to automate the 10DLC campaign registration process.
- Minimize the manual intervention needed when coordinating with external entities.
- Build an automated call back process to propagate changes from the central campaign authority.
- Build an end-to-end automation test suite to test the solution before deployment.

Xoriant Solution | Key Contributions

The client needed a solution that could meet all the regulatory requirements and be implemented quickly while adhering to their standards and processes. Drawing from Xoriant's extensive cross-domain expertise in telecom and software engineering, Xoriant's team

KEY BENEFITS

- Optimized resource utilization for mission critical tasks by automating integration with 3 external entities – a task which had to be done manually earlier.
- Accelerated and increased the migration of customers from short code to long code traffic.
- Reduced the turnaround time for campaign registration.
- Achieved an accelerated time-to-market with new features since considerable efforts were reduced by relying on automated testing.

developed and deployed a service to address this in under three months. Our key contributions for the client included:

- Design and implementation of an event-driven workflow that coordinates with all external entities and completes the campaign registration process using Apache Kafka.
- Implementation of a robust exception handling and retry process in the event of failure during campaign registration using Spring retry with exponential backoff.
- Implementation of additional gRPC APIs to help system administrators monitor/review the progress of campaign registration process.
- Design and implementation of an end-to-end, behavior-driven development (BDD)-based automation test suite covering functional and integration testing.

Client Testimonial



From project ideation to delivery, Xoriant engineering teams demonstrated strong domain knowledge and expertise. Their engineering contribution in workflow automation accelerated the migration of our customers from short code to long code traffic, reducing turnaround time for campaign registration.



Technology Stack

**Java | Spring Boot | MySQL | JPA-Hibernate | gRPC | Docker-Kubernetes-Helm |
Apache Kafka | Redis | GitLab**



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