

# AltexSoft Helped a TMC Automate Rail Booking

iOS (Objective-C/Swift), Android (Java), Selenium, Appium





A blue rectangular sign with rounded corners, mounted on a yellow metal structure. The sign features the words "TICKET OFFICE" in large, white, sans-serif capital letters. Below the text is a white arrow pointing to the left. The sign is secured with metal brackets and bolts at the top.

TICKET OFFICE



## Background

Our client is a large TMC, continuously enhancing the capabilities of its booking platform. One of the recent additions, a rail booking module, targets the European market and complements other online products—flights, hotels, and car rentals. Europe has a dense, well-developed railway network, which makes trains a convenient travel mode.

Specialists from AltexSoft extended the client's engineering team that automated rail booking. We participated in mobile app development, UX design, analysis of new markets, and DevOps activities.





# Business Challenges

Rail booking automation solved the following business challenges.

**1.**

Make the client's booking platform a one-stop shop for all corporate travel needs

**2.**

Gain a competitive advantage over other TMCs



# Value Delivered

## **1** Creating a unified booking flow across countries

Instead of linking directly to numerous providers, the client built an integration with a train ticket aggregator, Trainline, which accumulates inventory from carriers across 45 countries. Yet, the mediator doesn't completely solve a critical problem of European railways — lack of unification. Carriers have different tariffs, requirements for passenger information, additional services, booking steps, and so on. Our UX designers elaborated a single booking flow that allows passengers to choose and buy tickets across rail suppliers conveniently and consistently.

## **2** Implementing rail booking into iOS and Android apps

Besides the website, the TMC runs mobile versions of the platform for iOS and Android. The augmented team designed two separate rail booking modules, using the latest available native technologies (such as SwiftUI for iOS) and MVVM (Model-View-View-Model) architectural pattern. MVVM enables the complete separation of the user interface and business logic, which makes it easier to run unit tests and maintain the code.

**3**

### Accrediting integrations

The implemented rail booking functionality was verified and gained necessary accreditation from three nationwide railway companies — Rail Delivery Group (former ATOC, the UK), Renfe (Spain), and SNCF (France).

**4**

### Ensuring fast delivery and high availability of the platform's features

Our DevOps team built and maintains CI/CD pipelines to support the platform in the AWS cloud. This approach allows for faster delivery of code changes and quick troubleshooting with minimum downtime so that the end-user experience is not affected.

# Approach And Technical Info

The project started a year ago and is ongoing. At different stages, the following AltexSoft specialists have augmented the client's team: a project manager, two UX designers, an Android engineer, two iOS engineers, two QA engineers, DevOps engineers, and a product analyst.

The technology stack included:

iOS

Objective-C

Swift

Selenium

Android

Java

Appium



# Get In Touch With Us

## ALTEXSOFT US SALES HQ

654 Matsonia Dr,  
Foster City, CA 94404  
+1 (877) 777-90-97  
[solutions@altexsoft.com](mailto:solutions@altexsoft.com)

