

Developing Mobile Apps for Analytics-Driven Auto Insurance

A global leader in mobile telematics and analytics services turned to Altoros to enable data-driven auto insurance across 5 countries.



14
applications



5
countries



100,000+
installations

The Customer

Founded in 2010, the customer is the world's leading mobile telematics and analytics provider. Using IoT, machine learning, and behavioral science, the organization focuses on developing solutions for the connected car experience. The company's systems are widely employed by auto insurers, governmental agencies, etc.

The Need

The provider had a software development kit (SDK) for building mobile applications around auto insurance. These applications were developed on demand for a particular customer or a region.

With a shortage of in-house Android expertise, the company turned to Altoros to create 12 applications for drivers in 5 countries (including 15 cities in the USA) and 2 applications for a specific insurer. All the 14 applications were to provide auto insurers with relevant data—such as mileage, a number of incidents, an overall driving style, etc.—to deliver optimal insurance plans.

The Challenges

Under the project, the team at Altoros had to address the following issues:

- All the applications were to be built using the customer's SDK, thus having the same core under the hood. However, the changes made to any application must not affect the functionality of others;
- To ensure efficient maintenance and support of the delivered solutions, it was important to achieve unification across the development approaches and codebase;
- With no ready-made solution on the market, highly customized data charts had to be implemented.

The Solution

Engineers at Altoros worked out an approach, which allowed for introducing code changes to a particular application without affecting the others.

Employing such best practices as inheritance principles and code review, our team ensured a unified approach to software development.

Developers at Altoros delivered a custom framework capable of visualizing the aggregated telematics data in sophisticated, yet explicit charts.

Finally, our engineers developed a scoring system, which evaluated the overall driving style based on the telematics data. This promoted safer roads as drivers got rewards/bonuses from auto insurers for high scores.

The Outcome

Partnering with Altoros, the company developed 14 mobile applications—serving auto insurance industry—fully customized to local user needs in 5 countries (including 15 different cities in the USA). One of the delivered solutions crossed the threshold of 100,000 installations, while the rest has an average of 1,000–5,000 downloads from the Google Play Store.

Brief results of the collaboration

- With 14 mobile applications customized to local user needs, the customer serves auto insurance industry in 5 countries, including 15 cities in the USA.
- One of the developed applications features 100,000 installations from the Google Play Market, while the others have an average of 1,000–5,000 downloads.

Technology stack

Platform	Android
Programming languages	Java
Frameworks and tools	RxJava, Google Play Services, Google Maps, Facebook SDK, Picasso, MPAndroidChart, OkHttp, Mockito
Databases	SharedPreferences

