

Success Story

Developing a car maintenance app for an Abu Dhabi-based automobile company



Client:

Abu Dhabi Based Automobile Company

Industry:

Automobile

Country:

UAE

Our Role:

Product Engineering

About the Client

The client is an Abu Dhabi-based Special Purpose Vehicle (SPV) dealer, providing end-to-end online automobile solutions dealing in spare parts, garage or repair services, and vehicular insurance. It empowers businesses to set up an online marketplace to improve their bottom their bottom lines and build better

customer relationships. More than 30,000 users in UAE utilize these services and hundreds of businesses set up in the Abu Dhabi Global Market (ADGM) securely manage their services using the provider's technological solutions.

Services Used



Product Engineering

Technology Stack

-  React Native
-  spring boot
-  aws
-  PostgreSQL
- REST API



The Situation

The client wanted to bring together all sorts of car maintenance requirements including insurance, availability of spare parts and tyres, repair services and so on into a single mobile app. Additionally it wanted to empower several businesses that were coming up in the ADGM, the city's financial center, to gain a prominent foothold in the market through app-based services.

To develop a mobile and web-based application specifically catering to the region's customer base, the client required a technology partner who is seasoned in understanding the targeted market. Daffodil Software was their natural choice due to our award-winning mobile app development capabilities, in addition to extensive knowledge of UAE's customer preferences.

After thorough brainstorming Daffodil built a developmental roadmap that planned the inclusion of the following features in the respective mobile and web apps:

- Automobile brand and variant associated master data and the data related to inventory must be detail-oriented and capable of being easily migrated to storefront systems.
- Include location-specific store identification for timeliness and provision of easy tracking of doorstep services.
- Provide fast and accurate search capabilities across the onboarded stores and their constituent inventories.
- Build the app's UI seamlessly integrating the Arabic language with bespoke customer-centricity.
- Create provisions for adding unstructured data to register new vehicles and link with insurance policies.

The Solution

The Daffodil team set out to develop the customer-facing mobile app and admin-facing web app with clearly defined milestones as per the SPV dealer's vision for the completed solution. The frontend for the mobile app was developed on React Native with the backend on Spring Boot. The various customer and business-centric features that added up to the final solution were as follows:

Flexible Master Data Aggregation

New registered vehicle entities are created to be merged with the master data of the application. This means that several terabytes of unstructured data are to be added to AWS S3 buckets so that they are structured to be categorized easily. Every car brand has multiple variants and models which need to be in order so that users can claim insurances without a hitch.

User accessibility in the insurance claiming module was made top notch this way.

Capturing Vehicle And User Profiles

UAE users can take pictures of their Emirates ID and Optical Character Recognition (OCR) converts images to text creating a registration card for each user profile. The registration card is then linked with the respective vehicle. Field workers of insurance providers can also use the app for this purpose and the app is calibrated to work seamlessly in areas where the network bandwidth is not satisfactory.

Quick-response Recovery And Doorstep Services

The user's location is tracked through their mobile devices to find the closest marketplace for them in the financial district. In case their vehicle needs to be recovered, the location tracking is made accurate for fast recovery of the vehicle to the garage. Repair services can also be booked for doorstep services for which additional calibration has been integrated for quick arrival and servicing.

Status, Searches And Reporting

Elastic search has been built into the application for easy querying of the service inventory, store lists and insurance policies. Stores are indexed based on location and the services availed can be tracked for their status until completion. Comprehensive reports around the service deliveries can be arranged into charts and dashboards for various stakeholders.

The Impact











The automobile solutions app developed by Daffodil helped the provider make a significant mark as a prominent contributor in the ADGM's efforts to make UAE a global hub for technology companies. Businesses in the ADGM have improved their post-pandemic revenue streams as their customers can now manage all their car needs from a single app. The SPV is gaining recognition as one of the leading success stories of the ADGM.

About Daffodil

For more than 20 years, Daffodil Software has been a trusted software technology partner to organizations across the globe. We take pride in our ability to look beyond technologies & deliver innovative solutions.

Daffodil is a CMMI level 3 accredited organization with innovation, tech agility & process orientation rooted deep within the core. Our team of 1000+ technologists strive to shape the tech industry and help businesses elevate their value proposition through technology.

Technology Partnerships & Certifications

 Silver Application Development partner  Silver Collaboration and Content	 Premier Partner	
		
		

Awards & Accolades

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