



ubraine
UNITED IN SOFTWARE ENGINEERING

*Multi-platform app with unified secure access
to the data for Israeli company*

Industry: Retail
Israel

Customer

One of the largest companies in Israel, mainly engages in the import, production, marketing, distribution and sale of air conditioners and air conditioning systems to the domestic, commercial and industrial markets and maintenance of these products. In addition, the group is engaged in solutions in the area of energy Efficiency



Description

To accomplish its goals, customer decided to build an enterprise mobility solution consisting of:

- 1. Corporate mobile application for employees to be used on smartphones and tablets
- 2. Backend web service providing access to the corporate data sources The mobile part was expected to provide cross-platformity – running on two major platforms (Android and iOS). It required to provide ease of use on smartphones

Problem

In the last years, the web app has shown tremendous growth, but the customer has mentioned that the mobile experience doesn't meet user needs cause it worked on old technology, had low performance with complex checkout and ordering process. This poor user experience had a direct impact on the conversion rate and revenue. It became clear that to fall in line with current consumer and digital trends, a complete migration to a responsive website design was needed.



Technology stack

- Angular 4 TypeScript
- Node.js
- PHP (Laravel)
- MongoDB
- WebStorm
- AWS Elastic Beanstalk
- Jasmine
- Sass/Compass
- Ionic 3
- MySQL

Services

- Software Product Development
- Web Full-Stack Development
- Software QA & Testing
- UX/UI Design
- Mobile Development

Solution

Ubraine's team successfully delivered the solution, which was set to significantly facilitate daily interaction among the customer's employees.

We created 2 mobile applications with unified look & feel for the target mobile platforms.

The app aggregates regularly updated data from the corporate server. Integrated with an array of contact management systems utilized by the company's employees, the application serves as a single point of access to the business information on each employee providing for the following capabilities:

- Full-text search
- Search by name, phone number, ID, etc.
- Contact details view
- Recent and Favorites views

One of the most challenging and valuable (and also most resource-consuming) features of the application is the possibility to evaluate worker's performance and based on this data improve the workflow of the company

The solution not only allows to quickly search for contact information but also to retrieve a complete reporting hierarchy relevant to the employee under search.

In addition, thanks to being integrated to corporate organizational resources, the solution allows to have ongoing access to the documentation of all the company products, its warranty and the other useful data.

Challenge

During the implementation the team was to address several problems specific to the mobile business app integrated with a back-end system.

Lack of mobile device memory for processing and displaying large size product images.

The team optimized the memory utilization process by:

- Employing rational memory allocation
- Applying defragmentation techniques
- Smarter exceptions handling
- Performance bottlenecks related to retrieving and displaying search query results on smartphones.

In some cases search results may appear quite broad and, if not handled properly, will slow down their output to the device. The fast search-and-display capability was realized through:

- Enhancing results structure
- Optimizing data transfers
- Optimizing back-end database performance



Result

Since the customer has introduced the new mobile application to its employees, communication and access to the company products data across the 1,000-strong enterprise has never been easier.

The customer app stands out for usability, fast performance, and ergonomics, contributing to increased efficiency and productivity of the company's workers across multiple business units.

