



USABILITY ■ PERFORMANCE ■ SCALABILITY

XPLG Nearshoring Success Story

CUSTOMER OVERVIEW

XPLG Ltd. is an Israeli company that has been creating trusted DevOps analytics tools for over 10 years and has even been named as a “Cool Vendor in IT Operation Analytics” by Gartner.

Their creation, a Log Analysis Platform for IT-applications, servers and cloud applications - is considered to be a breakthrough which unlocks the hidden value of log data.

To answer a growing demand for data visualization XPLG creates tools for advanced log analytics: their Log Analysis Platform helps to reveal tendencies and gain insights on how to navigate complex corporate digital ecosystems.





Log Analysis Platform provides log management that helps users troubleshoot, search, find, report, and visualize critical information gathered from logs of various software and hardware used by the organization.



COMPANY

XPLG Ltd.

WEBSITE

www.xplg.com

COUNTRY

Israel

PARTNERING WITH MOBILUNITY SINCE:

December 2016

MIGRATION TO NEW TECHNOLOGIES

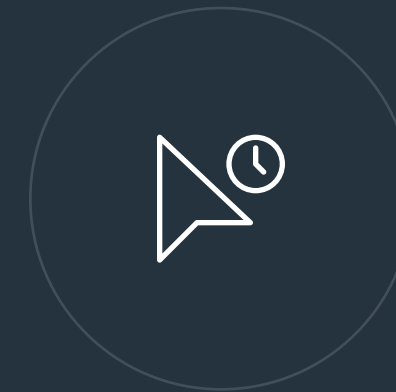
Having a mature product, XPLG wanted to upgrade its UI and migrate the existing platform to a newer technology that would:



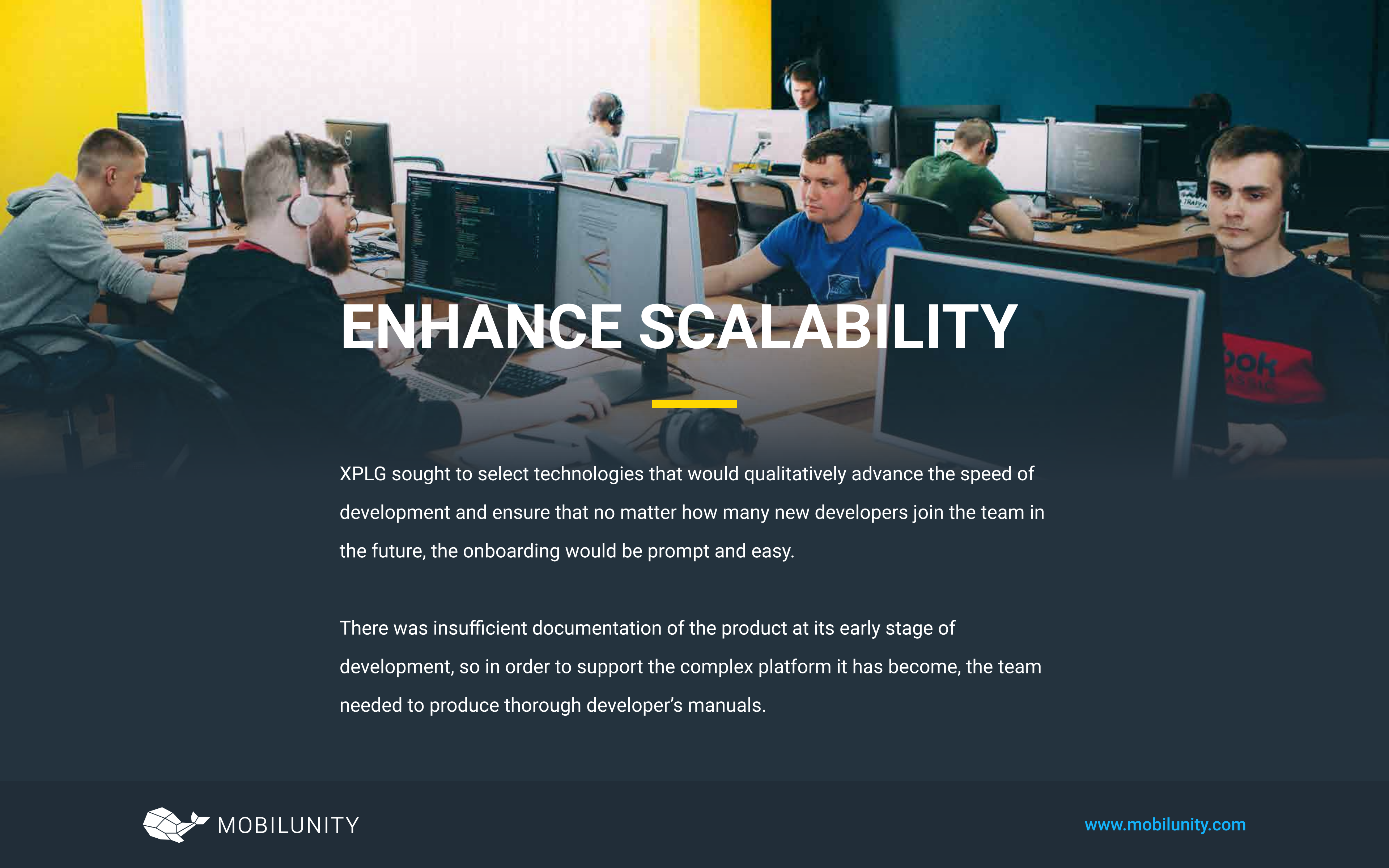
foster a positive user experience



ensure that the application would withstand increasing the data load



and allow for a higher speed of response



ENHANCE SCALABILITY

XPLG sought to select technologies that would qualitatively advance the speed of development and ensure that no matter how many new developers join the team in the future, the onboarding would be prompt and easy.

There was insufficient documentation of the product at its early stage of development, so in order to support the complex platform it has become, the team needed to produce thorough developer's manuals.

IMPROVE COMMUNICATION WITHIN THE TEAM

XPLG tried its hand at outsourcing before, but it seemed as though they dealt with PMs more than developers. This led to frequent miscommunications and time lost on transferring tasks from team to team.

They needed to find a better way to work with a distributed team.

Which is what led XPLG to Mobilunity so that we could build a dedicated team of skilful frontend developers to undertake migrating the frontend of the application to the latest version of Angular.

THE TEAM & TOOLS



Jira

PROJECT MANAGEMENT TOOL



Scrum, Agile

METHODOLOGY



Front-end Developers



QA Engineers



Head of R&D



Backend Developers



QA Engineers



CREATING AN EFFICIENT AND OPEN WORK ENVIRONMENT

The Mobilunity's dedicated team model provided a direct contact between the XPLG's in-house backend and Mobilunity's frontend teams without any limits on format or frequency of communication.

At the onboarding stage of the project the dedicated team from Ukraine visited the Israeli HQ of XPLG. This broke the ice between peers and allowed a frank dialogue between colleagues who shared the same values and strive for the same goals.

The agile project management approach empowered the team on both sides to define their own way of comfortable interaction: any team player can reach out to any peer and receive feedback as fast as possible.

These close ties and free communication flow boosted efficiency significantly by eliminating any inconveniences that might be associated with the teams being based in different countries.

BRINGING PERFORMANCE TO A NEW LEVEL

The original user interface was developed with Java static web-pages, while the backend was developed on Java. Data has been passed back and forth in bits of HTML code. The decision was made to migrate the project's frontend to the newest version of Angular and use Redux store to organize the code.

It allowed for switching to a single page application and using RestAPI for faster and smoother data exchange between backend and frontend. The page rendering speed has grown extensively and the cross-platform compatibility was improved.

TECHNOLOGIES



FRONTEND

Angular



FRONTEND

TypeScript



FRONTEND

Redux



FRONTEND

JavaScript



FRONTEND

AngularJs



FRONTEND

Karma



FRONTEND

HTML5



FRONTEND

CSS



BACKEND

Java

MIGRATING TO NEW TECHNOLOGY WITHOUT DAMAGING A MATURE PRODUCT

As XPLG is a well-positioned company with dozens of enterprise level customers and an extremely complex product; it was chosen to introduce changes step by step, as in, replacing Java with Angular page by page.

This approach made it possible to preserve old features crucial for their customers and introduced new technologies, gradually switching to a more usable UI design, boosting performance, and building a solid foundation for extending the product's capabilities in the future.

LAYING A FOUNDATION FOR SCALABILITY

Angular and Redux ensured the optimal structure of the project and made the code reusable. It imposed an additional level of discipline on the team with specific requirements to what and how they should do things within the project.

- It eliminated the natural mess in the code and enabled using components (small units of the application) to accelerate similar functionality development.
- The onboarding of new developers got quicker as code was simple to read.
- Another important step was adding a QA engineer to the Mobilunity team to create and maintain the knowledge database that contains all information about XPLG's application development.

A photograph of three men sitting in director's chairs in a room with yellow walls. The man on the left is wearing a black t-shirt and blue jeans, pointing both index fingers up. The man in the middle is wearing a white t-shirt and dark pants, also pointing his index finger up. The man on the right is wearing a black t-shirt and dark pants, pointing both index fingers up. They are all smiling and looking towards the camera.

PROJECT OVERVIEW

RESPONSIBILITIES DISTRIBUTION

The experienced Frontend developers put together by Mobilunity are responsible for progressive implementation platform's UI upgrade, including:

- Developing the solution's architecture,
- Production, modification and maintenance of web application UI,
- Enhancing UI performance,
- New features delivery,
- Updating the application layout and migrating it to the new Angular framework,
- Tailoring user experience,
- Implementing designer's concept with HTML, CSS, and JavaScript,
- Contributing to the back-end experience and collaborating on APIs,
- Testing the UI usability during development,
- Carrying out unit tests and bug fixing.

MOBILUNITY'S QA ENGINEER CHOSE TO USE CONFLUENCE FOR INTERNAL WIKI STORING OF THE MANUALS, BROKEN DOWN INTO FOUR PARTS:

Components description:

Description of the units already developed on Angular-Redux/store that could be reused when developing similar functionality.

Usability

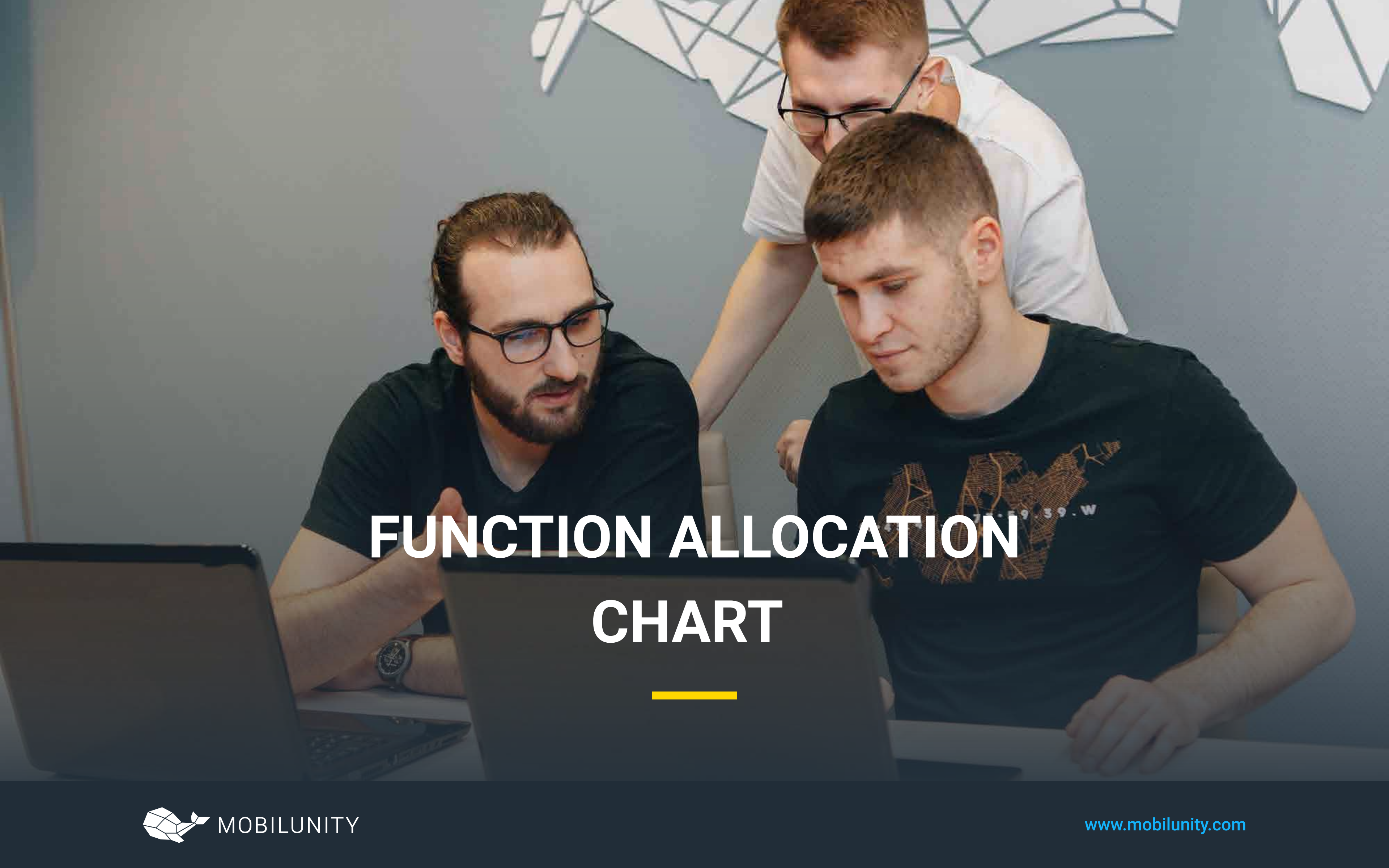
Description of UI design approaches and ways in which system interacts with the user to unify them across the old and new parts of the application.

Backend RestAPI:

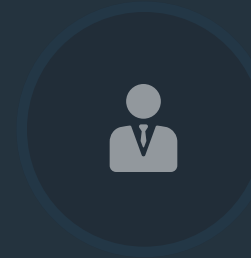
Description of API endpoints for data types that allow for smooth data exchange between frontend and backend.

Functionality description:

The interdependencies of different units and specific functional scenarios that help to troubleshoot the system when introducing new features.



FUNCTION ALLOCATION CHART



HEAD OF R&D

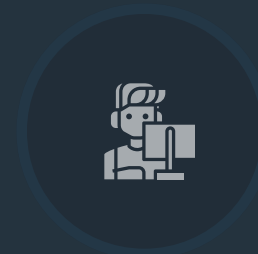
Responsible for overall supervision. Task management and prioritizing on the tasks, sprint planning, selecting and approving technologies, releases planning and delivery supervision



Front-end Developer

4+ years of experience

Responsible for architectural solutions, performance improvement and delivering new features, updating the application layout, maintaining and migrating it to the new Angular framework.



Front-end Developer

3+ years of experience

Responsible for tailoring UX; HTML, CSS, and JavaScript; updating and maintaining new design and UI; collaborating on APIs; usability tests and bugs' fixing.



QA Engineer

1,5+ years of experience

Responsible for various virtual environment configurations to test the compatibility and transferability of the applications to cover the needs of customers.

WORKFLOW AND TASK MANAGEMENT

01

At the beginning of the sprint, a joint call is held to share the results of the previous sprint and to plan the execution of the next sprint's tasks.

02

Sprints are planned by the Head of R&D of XPLG.

03

Daily communication is flexible and both parties can discuss current issues and tasks when they have a need.

04

Having a technical background and being a Java developer himself, the Head of R&D of XPLG is the one who plans sprints and assigns tasks for all team members.

05

Every team player has his/her own part of the project, so related tasks are assigned in Jira to the responsible person.



CURRENT OUTCOME

With Mobiliunity's model of team augmentation, XPLG has successfully extended their developers' crew with high-performing programmers based in Ukraine.

The dedicated team model and support from Mobilunity's side helped XPLG leverage communication within the joint team and ensure expected results in a timely manner.

The migration is currently in progress, but noticeable acceleration of the development and positive feedback received from XPLG's customers prove that the efforts are put in the right direction.

Knowledge database is growing to be an efficient tool to keep track of the technical approaches as well as the business logic behind the product features and this will eventually facilitate product's development in the upcoming years.



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As XPLG continue to grow, Mobilunity continuously delivered high quality, exceptionally talented people and resources for us. We expect to continue and develop our work with Mobilunity in the near future.



Haim Koschitzky
CEO at XPLG