PROEKSPERT

Software, design and data services

Case Study

Project

Cloud migration and control tool development for remote devices

How a green tech company used cloud migration to enable remote control and monitoring for its products, providing comfort and new services to end users.

The cloud creates new ways to engage customers

Existing product, new advantage

Our client is one of the market's leading manufacturers of technology products for building services and green tech. Their product portfolio contains several electrical-, heating-, and hot water appliances, plus home accessories and small commercial solutions.

Their strategic goal was to make it possible to remotely manage and monitor all their premium devices in the near future. In addition to the comfort of using and maintaining installed devices, this would make it possible to serve and interact with their end users in a new and more efficient way.

The client needed the solution to be stable and cost-efficiently scalable.

Experience counts

Since Proekspert had already developed similar systems for previous clients, we had experience and practical solutions at hand. We had a scalable and cost-effective cloud solution to allow devices to be connected, making near-real-time data highly available on a large scale. We also have experience in building apps that enable remote management and monitoring for technicians and different types of end users (experts, consumers, etc).

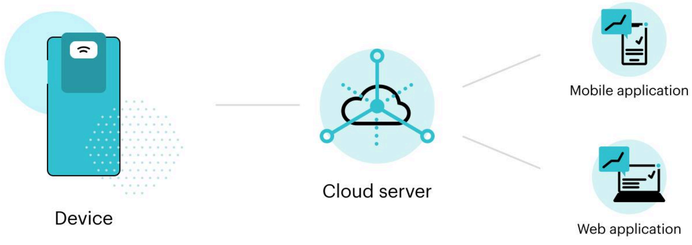
Building the service backbone

To meet the demanding needs on both product- and user sides, Proekspert built the system architecture so that it's scalable, efficient, and modular. The cloud solution was developed as a central device and user data management system. It interacts with devices and mobile and web applications.

Tools for technicians and end-users

Both applications now serve as a common operating platform for a wide range of devices, enabling remote control and monitoring, statistics, and notifications for maintenance of malfunctions.

The solution reduces on-site visits, helps to identify sub-optimal performance early, and offers fast reaction in the case of errors.



Impact on the client business

- End users have the capability to prevent potential problems through improved monitoring and control interface.
- Installers can support and maintain devices more easily and at a lower cost.
- The online service our client provides is superior quality, highly available, reliable and, most importantly, cost-efficient.

Services provided

Architecture for secure cloud IoT solutions
Device and third-party system cloud integration
IoT remote access application (web and mobile) development
Secure cloud hosting and maintenance
Descriptive and predictive analytics
Data modeling
Data warehouse architecture and development

Tech stack

MS Azure
C#
.NET core
MS SQL
Azure Kubernetes
Docker
ReactJS
iOS and Android

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