



OTTO QUANT

App for Financial Predictions Based on Unique Mathematical Models

Development service

An app for economic forecasts generation based on product owner's mathematical models

Business niche

Finance analytics and economic forecasting

Time spent on the project

1600 hours

Technologies we used

Docker, React, R, Django, AWS S3, Kubernetes

CHALLENGE

There are not many software solutions on the market that can independently generate financial forecasts

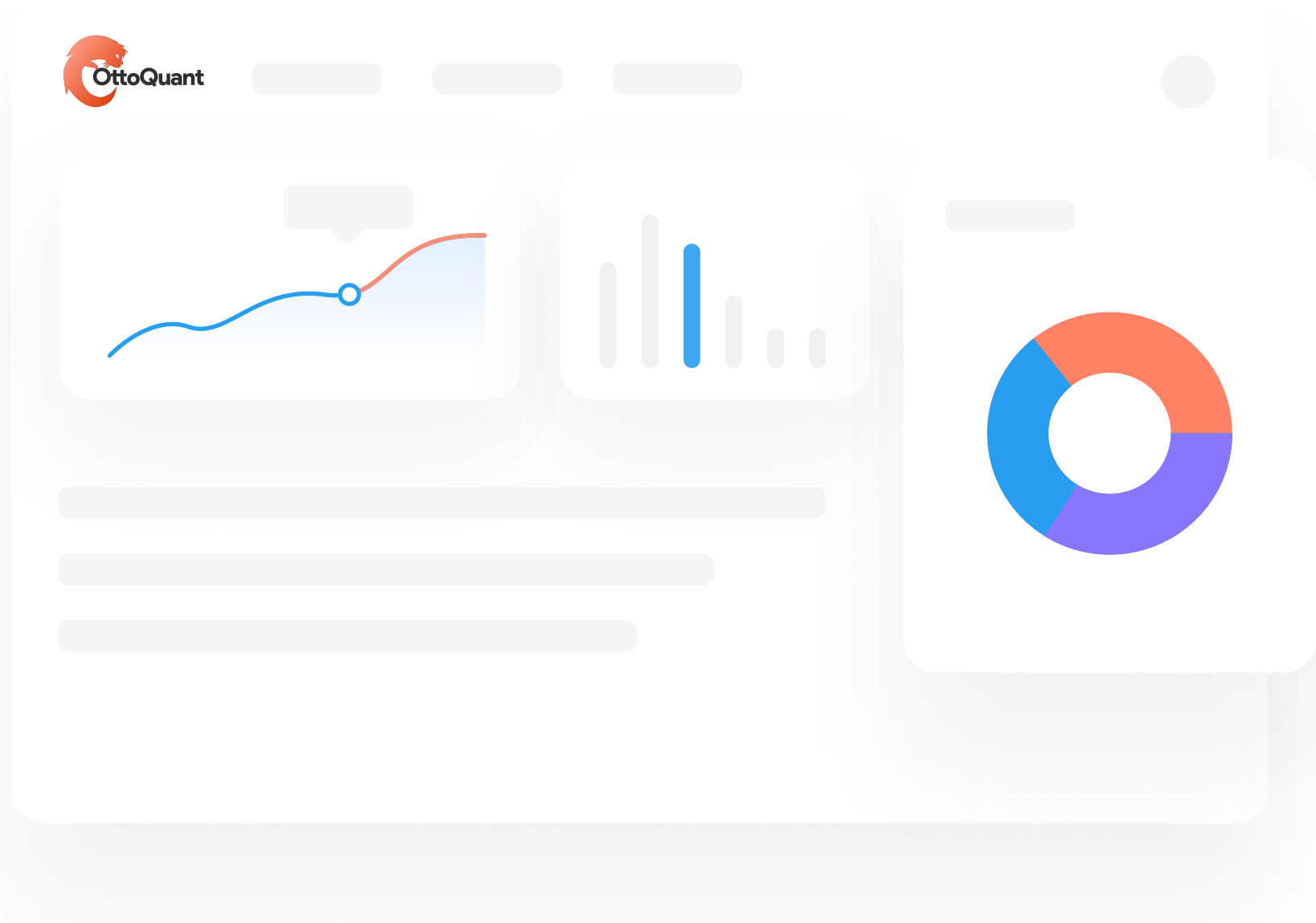
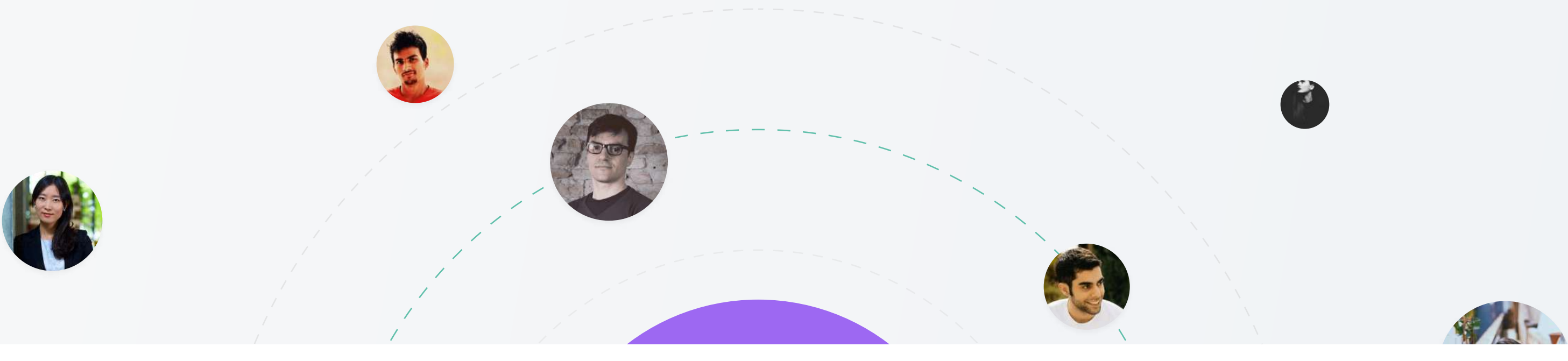
In addition, many niche professionals use outdated mathematical models, thereby producing incorrect results that do not benefit or even harm companies.

Financial analysis plays an important role in making management decisions. In particular, it helps to make management decisions related to strengthening the financial and economic condition of the enterprise. The main purpose of financial analysis is to obtain information that gives an objective assessment of the financial condition of the enterprise. At the same time, the head of the company is most often interested not only in the current financial situation of the enterprise but also in its future.



Client/Target audience

The owner of this solution is a scientist who has been engaged in statistics of various economic indicators all his life and has his own mathematical models for predicting various indices based on his own scientific works. The application is designed for those who need a high-tech tool for financial forecasts.



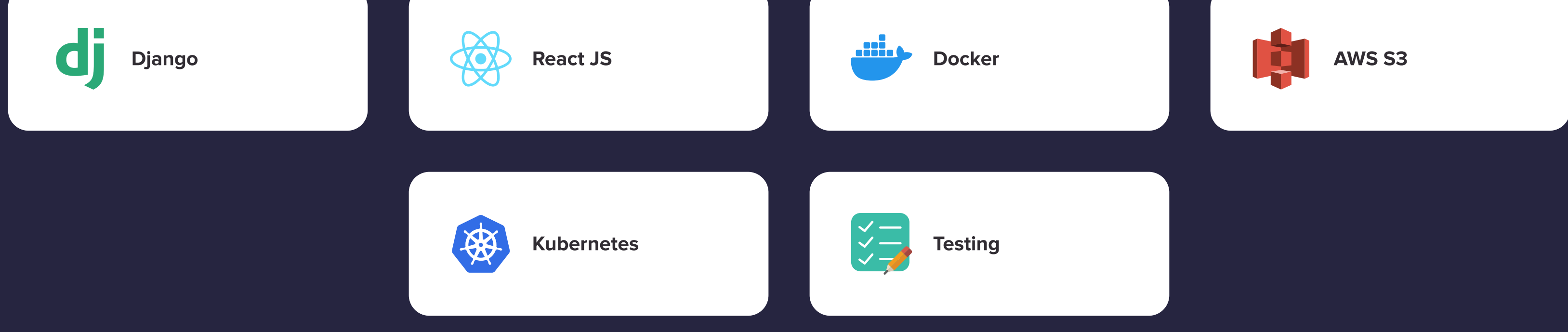
Product overview

Product owner, within their scientific activities, develop effective mathematical models that allow automating tasks that previously were solved manually by financial departments of companies, relying only on their own (and often irrelevant) experience.

In turn, we received the task to transfer the obtained mathematical calculations to the software environment and create a full-fledged application in which each user could use ready-made algorithms for forecasting, or build our own and share them with other users.

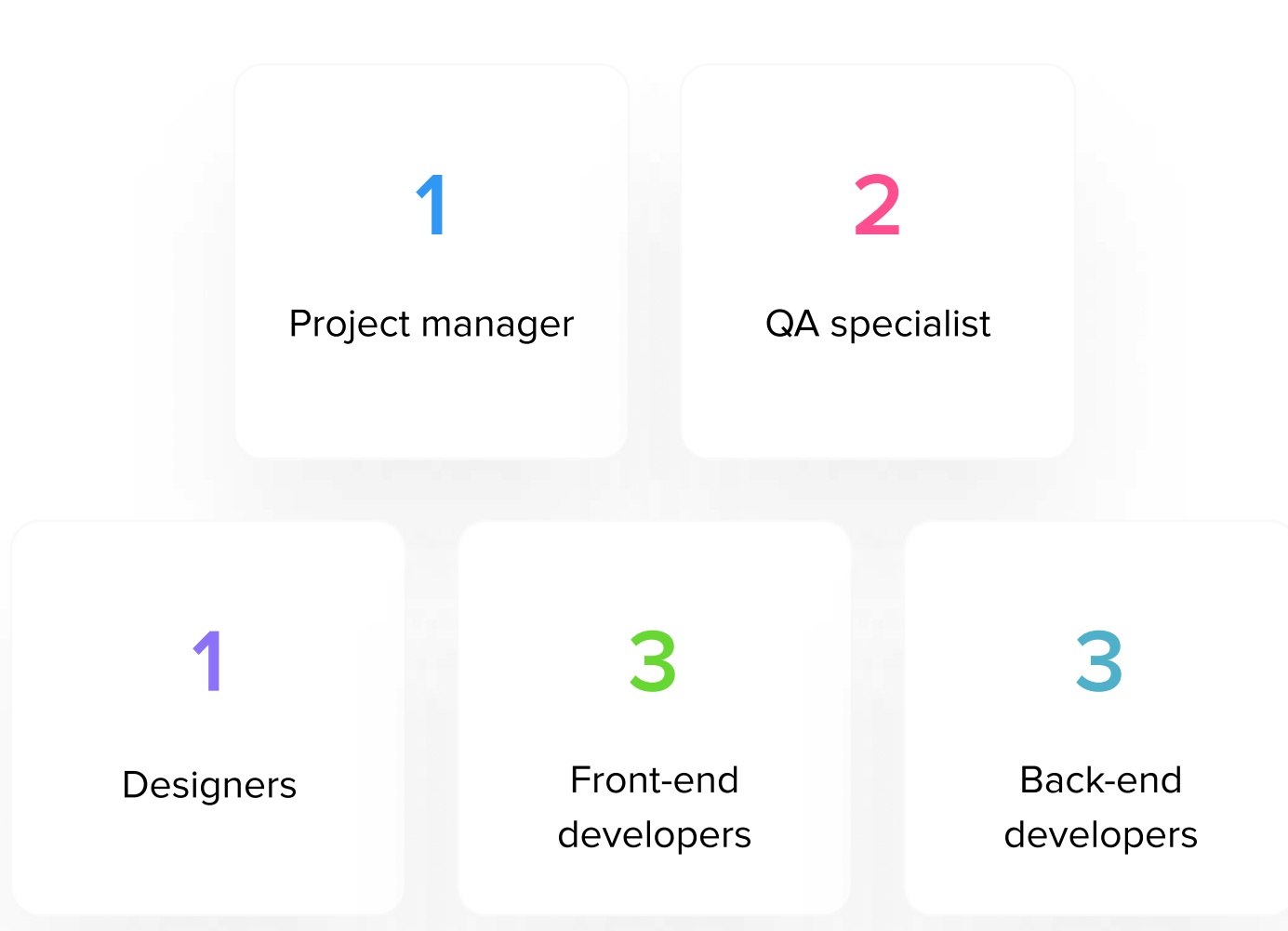
Our approach

We have built a user-oriented application where each of the users can create own projects. Each project in this service is a separate Docker container deployed on Amazon web servers. All mathematical calculations are written in R - the programming language.



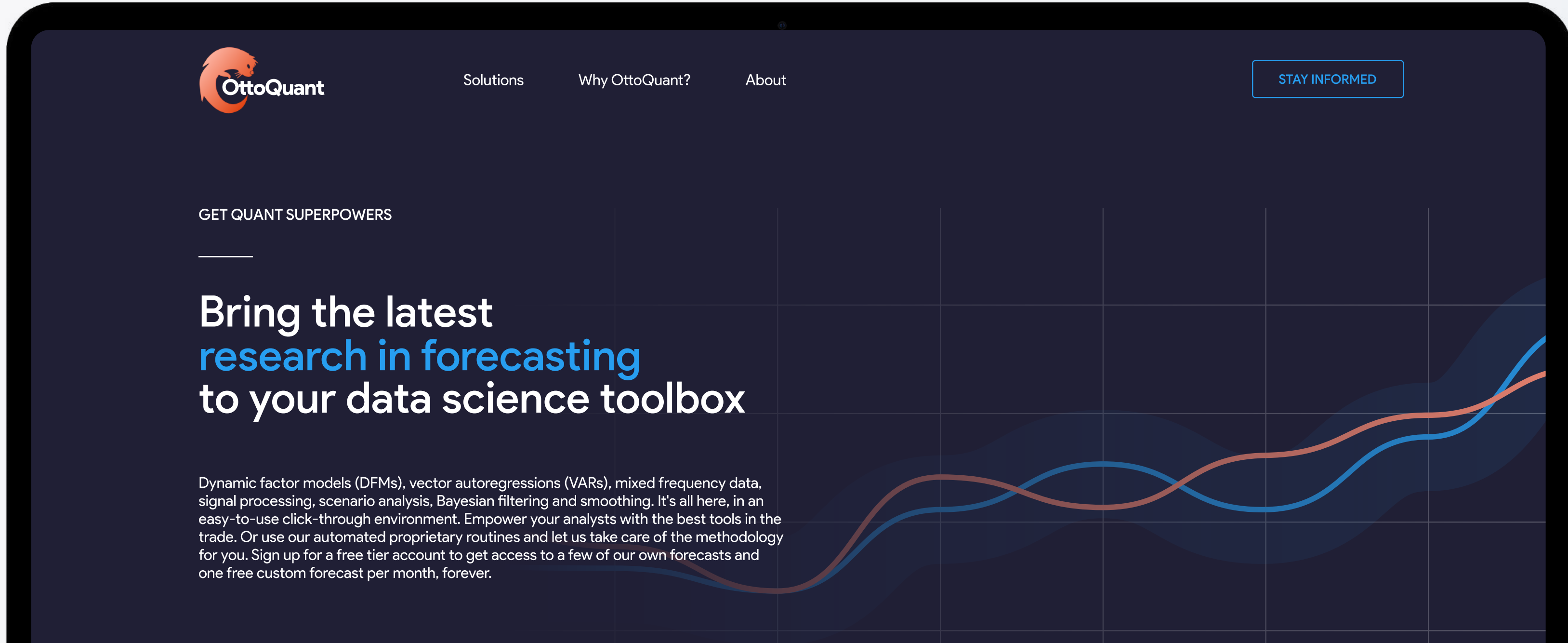
Our development team

Our development team consisted of 10 specialists. Despite the small team, we managed to implement the project within established deadlines.



Solution overview

As a result, we received a comprehensive solution for economic forecasting. This app is based on the principles of terminal functioning. Here users can create separate accounts, with their own tariff plan (Free or Premium). This is very convenient if the particular user is engaged in economic or scientific activities.

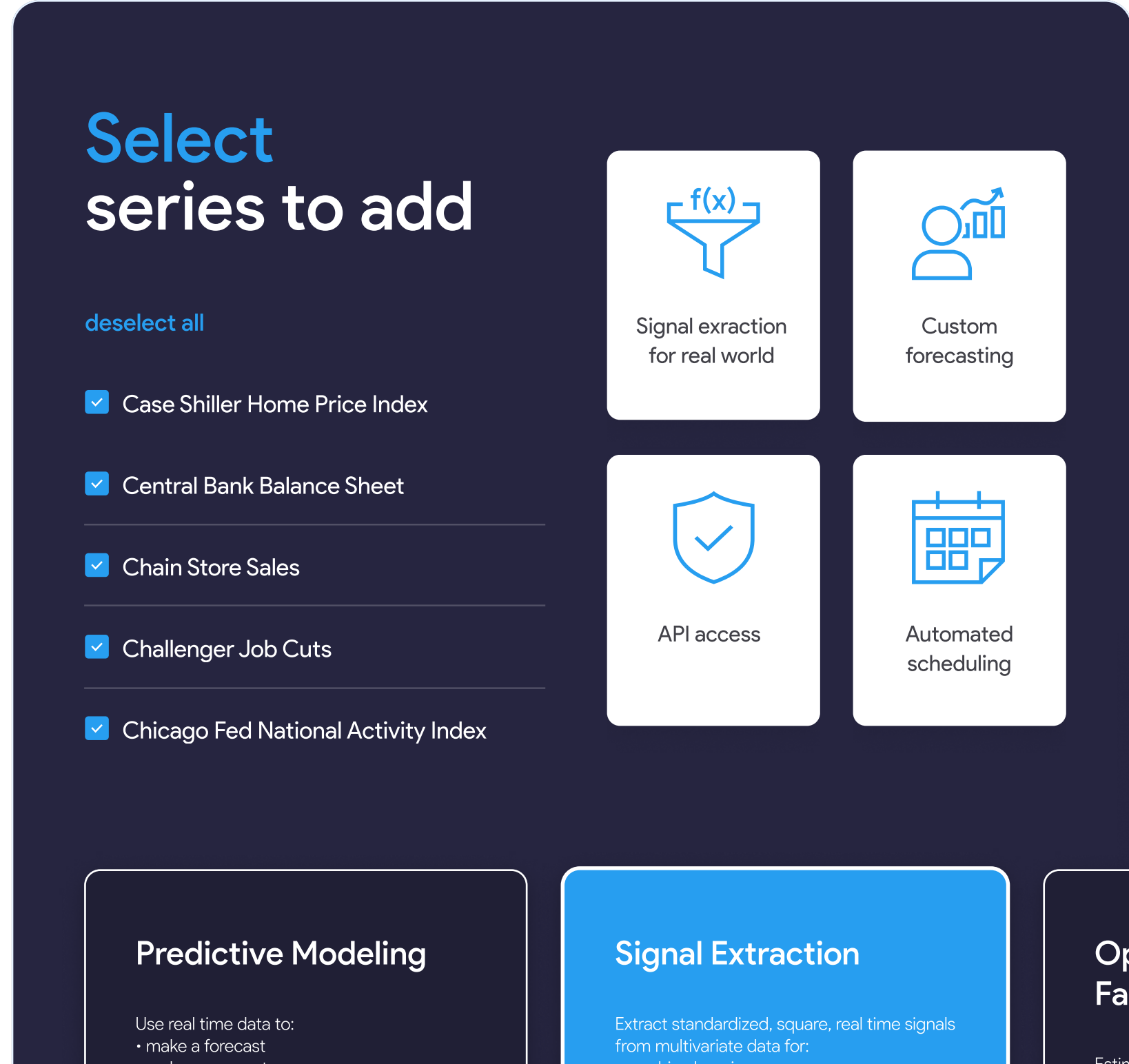
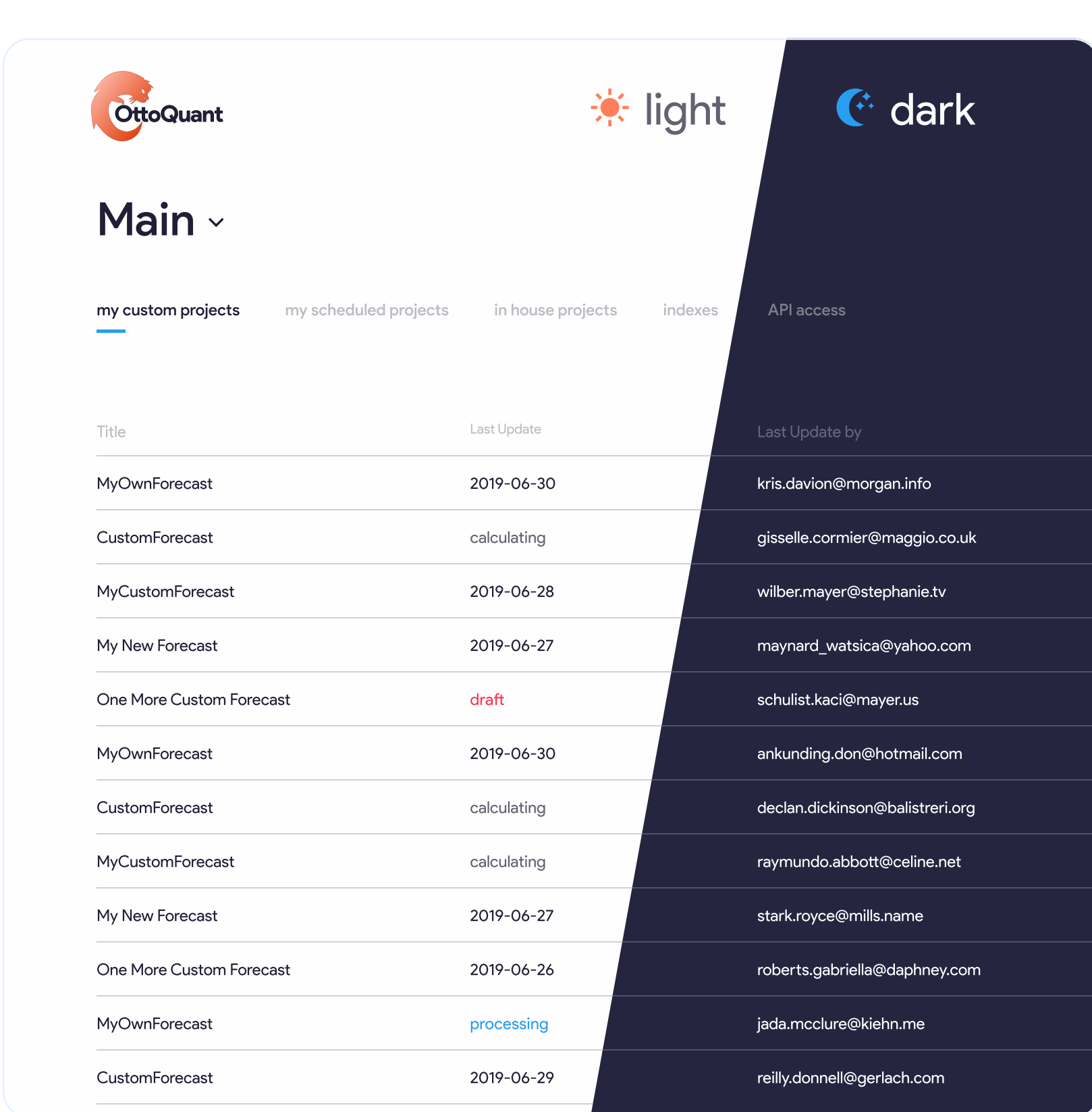


If the user works for several companies at once, the terminal acts as a separate workspace for the user.

PM at OwlLab: Ivan Selivanov

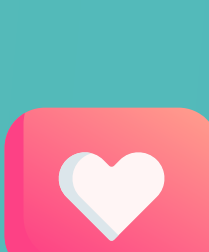
Basic features for users:

- Users can view research results both in their personal accounts and in their mails - at a selected interval, in the form of tables and graphs;
- 2 types of forecasts: popular predictions (e.g., the Dow Jones index), and custom forecasts that the user can build on the basis of available data;
- Premium account users can submit APIs with their own custom predictions for third-party services. This is a very useful feature that gives others real-time access to the user's own research;
- Two user-friendly themes (light and dark);



Features of the constructor of mathematical models:

- In UI we have created a convenient menu for mathematical models building. It includes a huge number of indicators (region, time period, degree of approximation, etc.);
- The system remembers the settings of the forecast at all stages of building, by creating a draft. Thanks to this, the user can close the app window in order to return to any time convenient for him/her and continue working;
- Also, users have the opportunity to download their own script in the form of a table.



Thanks for watching!

Talk to us and get your project start

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