



RoundForest



Client: RoundForest



Site: roundforest.com



Industry: e-Commerce



Country: Israel



Size of the Team: 4 people



Duration: 9 months, ongoing



Technologies Used:

APACHE
CASSANDRA

RABBITMQ

GOOGLE
BIGQUERY

jetty://
JETTY

MONGODB

REDIS

POSTGRES

mockito
MOCKITO

SPRING

ANSIBLE

logstash
LOGSTASH

JUnit
JUNIT

ANGULAR

S3
AWS S3

BOOTSTRAP

EC2



OUR CLIENT

RoundForest is a young data-driven eCommerce start-up helping consumers worldwide discover relevant products and make better shopping decisions. Their solutions optimize every step of the consumer's purchase path by adopting data analysis and predictive analytic technologies. RoundForest is currently reaching more than 10 million users a month.

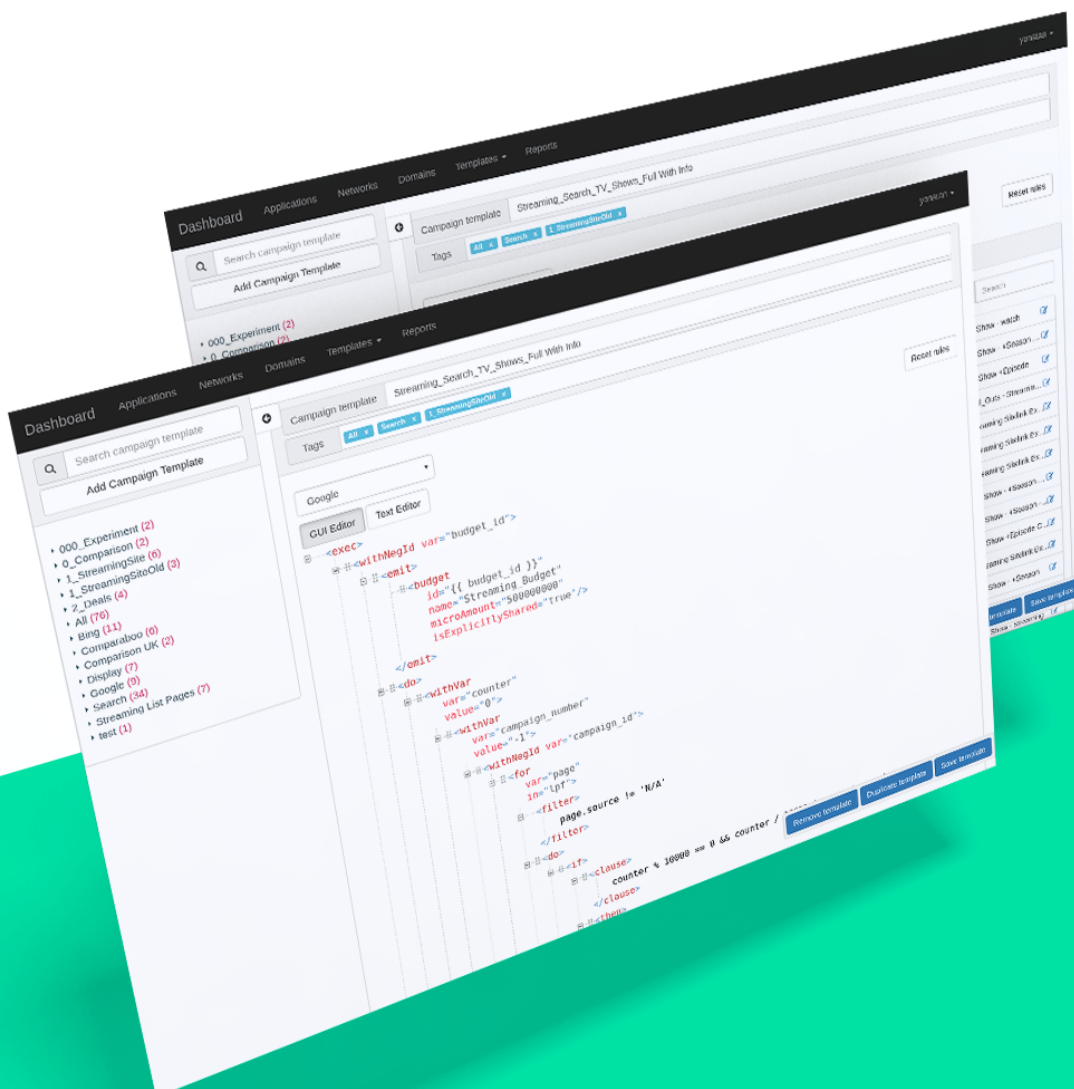




BUSINESS ISSUES

RoundForest tasked our developers with creating an application for setting up advertising campaigns based on a list of products being sold in an online shop. Building such an application came with a number of difficulties:

- ▶ Application must allow keywords' price corrections in real time
- ▶ Keywords' prices must be calculated according to a relevant algorithm
- ▶ Application must analyze huge amounts of data in real time
- ▶ Analyzing time is limited due to the constant flow of new data
- ▶ Using distributed databases necessitates allocation blocks employment
- ▶ Application response time must be fast

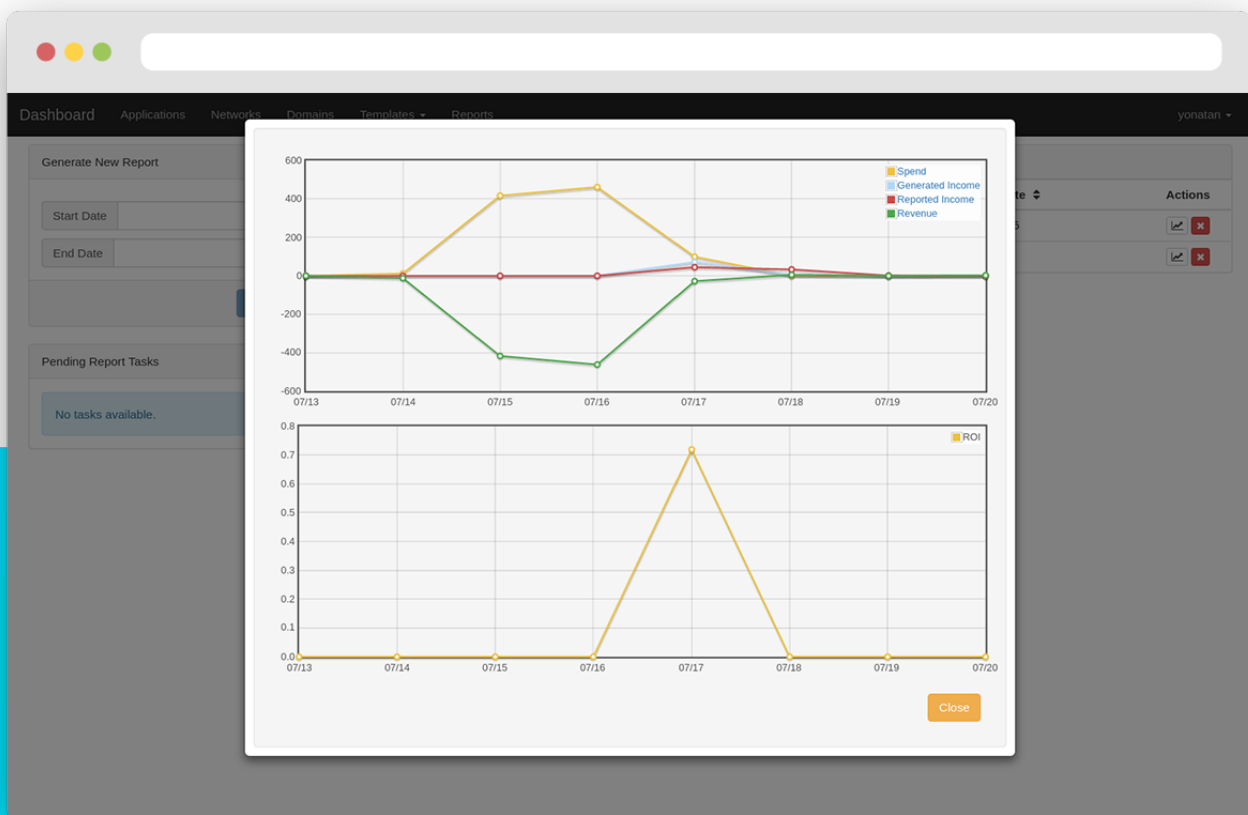




SOLUTIONS

With all client's demands in mind, our team developed the advertising application for analyzing product lists, automatic advertising campaigns creation, keywords selection and uploading advertisements to Google, Bing and Facebook advertising programs. All the data is arranged in a complicated tree-like structure with filters at every level designed to narrow down the core audience by age, gender, language or internet history.

Keywords' and advertisements' pay-per-view prices are altered in real time according to analytical data derived by the chosen algorithm. Application can increase separate keywords traffic in order to achieve baseline information or to make it reach top positions. Online shop managers can monitor and control application actions via the web interface. The application manipulates huge amounts of data in real time using distributed databases, requiring 15 allocation blocks connected by a local network at the development stage. Future database expansion will require the employment of a larger number of servers.



BUSINESS VALUE

RoundForest uses this application to promote its own online shops. One of the main tests was conducted before the Black Friday. Within one week the application managed to draw more than a million visitors, leading to a huge increase in sales and therefore in RoundForest's income. Using the newly developed application the company also provides services for third-party e-Commerce projects.