Telecommunication

Development of a digital control center for real-time feedback and prognosis

For a globally operating, highly profitable telecommunication corporation, comSysto is developing a software product that generates decisive KPIs for analysts. Data are collected from various sources and prepared for decision-making processes.

Requirements

• Fast evaluation of new ideas and data sources
• Generation of important information for web analysts
• Creation of relevant KPIs for various business units
• Development of dashboards for TV screens at several locations
• Development of a desktop and a mobile application

Technologies

• Infrastructure: AWS (EC2, Elastic Beanstalk, EMR), Docker, Ansible
• Data Engineering: MongoDB, Spark, EMR
• Data Science: R, Spark
• Web: AngularJS, D3, SASS, Bootstrap, NodeJS, ExpressJS, REST, OAuth2
• Test automation: Jenkins
• Continuous Delivery: Docker, Ansible, Jenkins

Procedures and Methods

• Kanban
• Rapid prototyping
• Fast minimum-viable-product iterations
• Xtreme programming

Advanced Analytics/Data Science

• Construction of features and impact evaluation in machine learning models
• Data preparation and imputation
• Time-series analysis for smart KPI monitoring
• Creation of a warning system and identification of influence factors
• Prediction of customer behaviour using non-linear regression
• Monitoring of the performance of machine learning models