DD Planet
Digital Development

CUSTOM WEB AND MOBILE DEVELOPMENT

www.ddplanet.com

Facts & Figures

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18
years in business

500+
projects

Top
20
Web integrators
Tagline

Top
50
Digital Production
Tagline

RU

TAGLINE AWARDS 2019

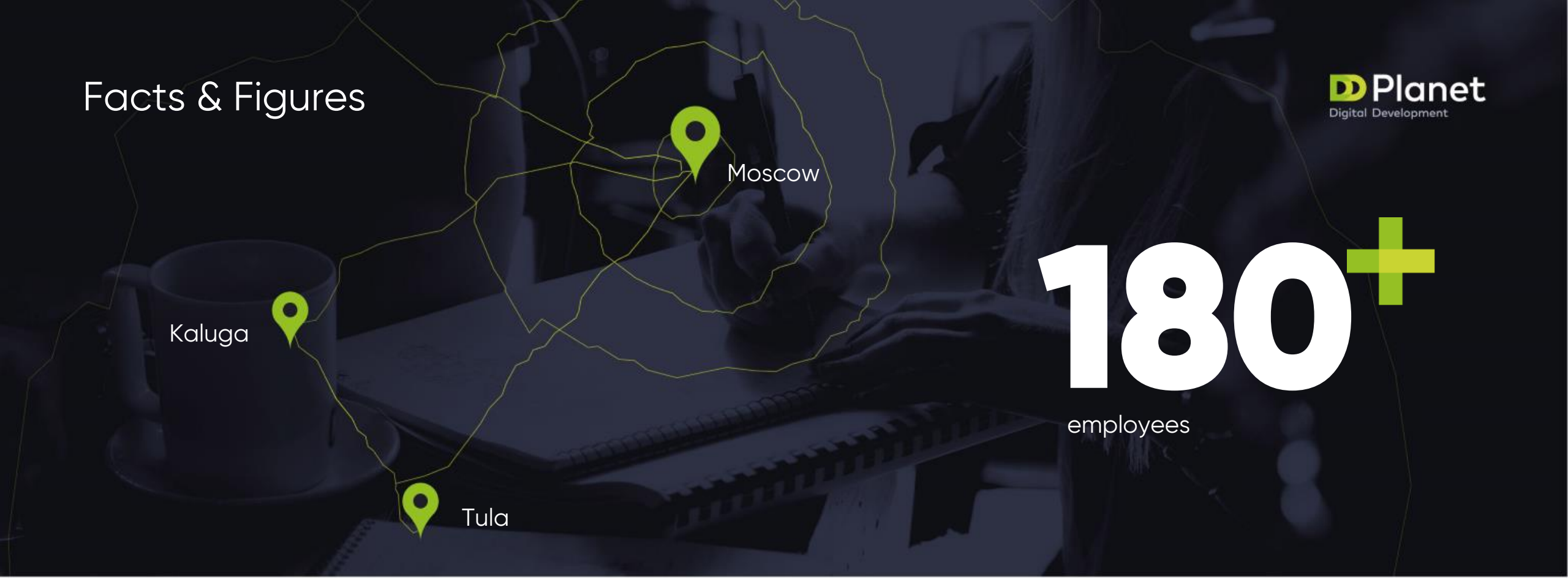
GOLDEN SITE

COMNEWS AWARDS 2019

Silver
Microsoft Partner

The winner of industry awards

Facts & Figures



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180+

employees

Moscow, Russia

Office B402, 11 building B, Derbenevskaya Qy.

Tula, Russia

Office 209, 58, Zhukovsky St.

Kaluga, Russia

Office 301, Room 2, 11, Michurina St.

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COMPLEX PROJECTS

Real-time systems, large-scale highload portals with **large amounts of data (calculated in terabytes) and high traffic (calculated in millions of users).**

Different formats:
web services, mobile applications, web applications, system utilities, information and analytical systems.

Different business areas: CRM, ERP, BPM, SaaS, B2B, B2C, integration projects.

How we do it

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Modern development paradigms:

- Agile
- Scrum
- DevOps
- DataOps

Advanced technological solutions:

- Microservices
- EventData Architecture
- Containers
- Big Data
- Machine Learning
- Data Science

Highload systems development methodologies:

- multithreading
- sharding
- replication
- scaling
- caching
- mapR
- queues
- long polling

How we do it

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Engineering and design:
Axure, Mockflow, Sketch, Figma, Adobe Photoshop.

Version control and project management: Git, Azure DevOps, Jira, MS Project, Gitlab.

Web development:
.NET, Angular, Vue, React, SignalR.

Mobile development:
Xamarin, React Native.

Database:
MS SQL, PostgreSQL, SQLite, MongoDB, Redis, Elastic Search, ClickHouse.

Message Brokers:
RabbitMQ, Apache Kafka.

Testing:
Unit testing, Selenium, Jmeter.

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AN EXAMPLE OF A HIGHLOAD PROJECT PROCESSING HUGE AMOUNTS OF DATA

STAR Purchasing Service

Morphological search for purchases with subsequent data analytics
star-pro.ru

More than 600 thousand users per month, **6 TB of data** to search. Integration with all trading platforms and directories.

Data sources

DS1,DS2,DS3 – FTP data sources (~100000 XML daily).

Extraction, processing, systematization

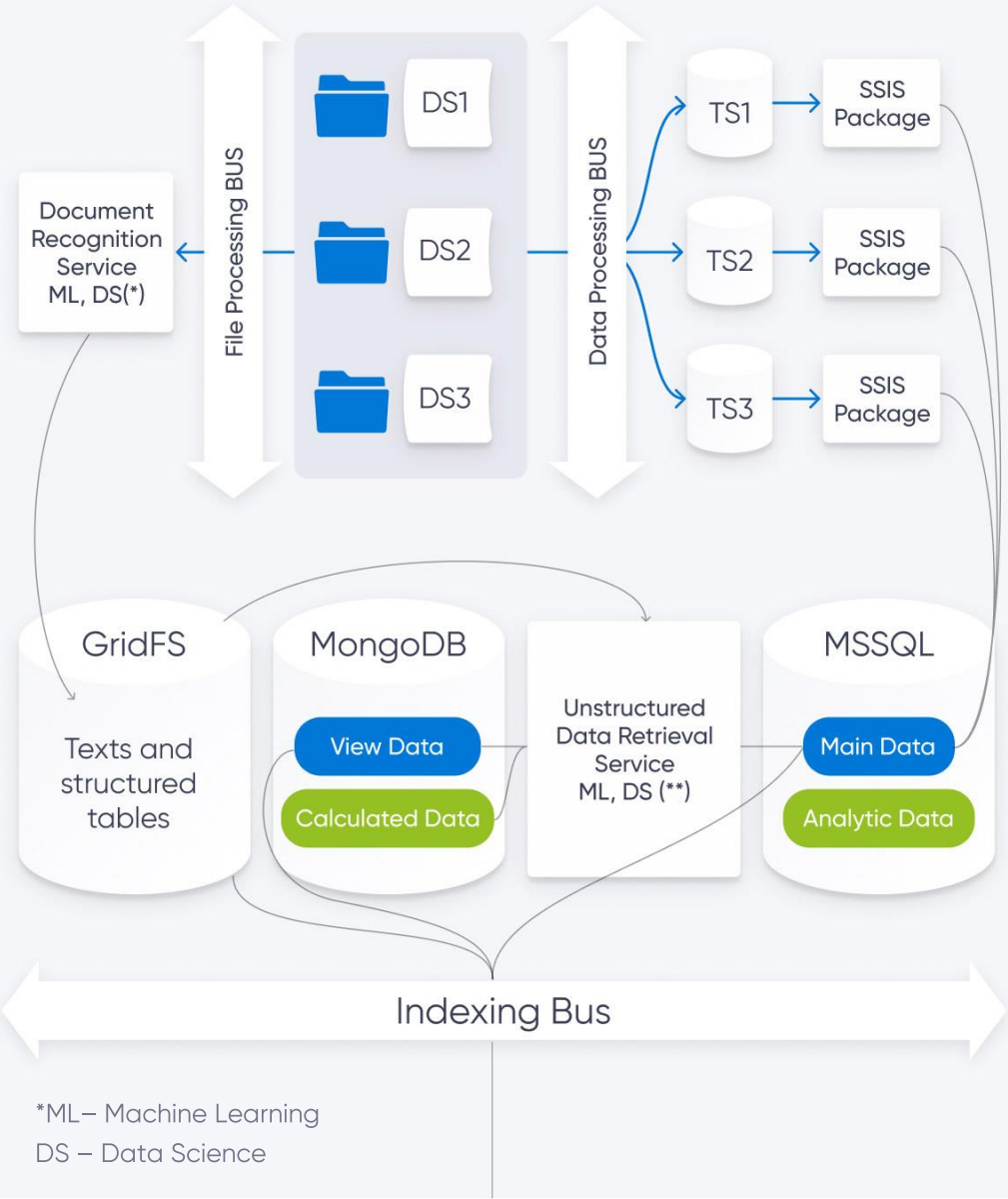
Document Recognition Service ML, DS(*) – recognition system for scanned text and tables (from Word, Excel, PDF, images).

File Processing Bus – distributed service for multithreaded downloading and saving files.

Data Processing Bus – integration with procurement sources.

Data is extracted through **FTP** upload and **API**. Then through the parsing system they get to the database and then are collected in a single storage DWH (~2 terabytes) on server MSSQL.

GridFS contains~**10 million extracted texts and tables from PDF files, and MongoDB contains structured data and texts from file tables. Machine Learning is used to obtain the final information.**



*ML– Machine Learning
DS – Data Science

STAR Purchasing Service

Morphological search for purchases with subsequent data analytics
star-pro.ru

Real-time data update

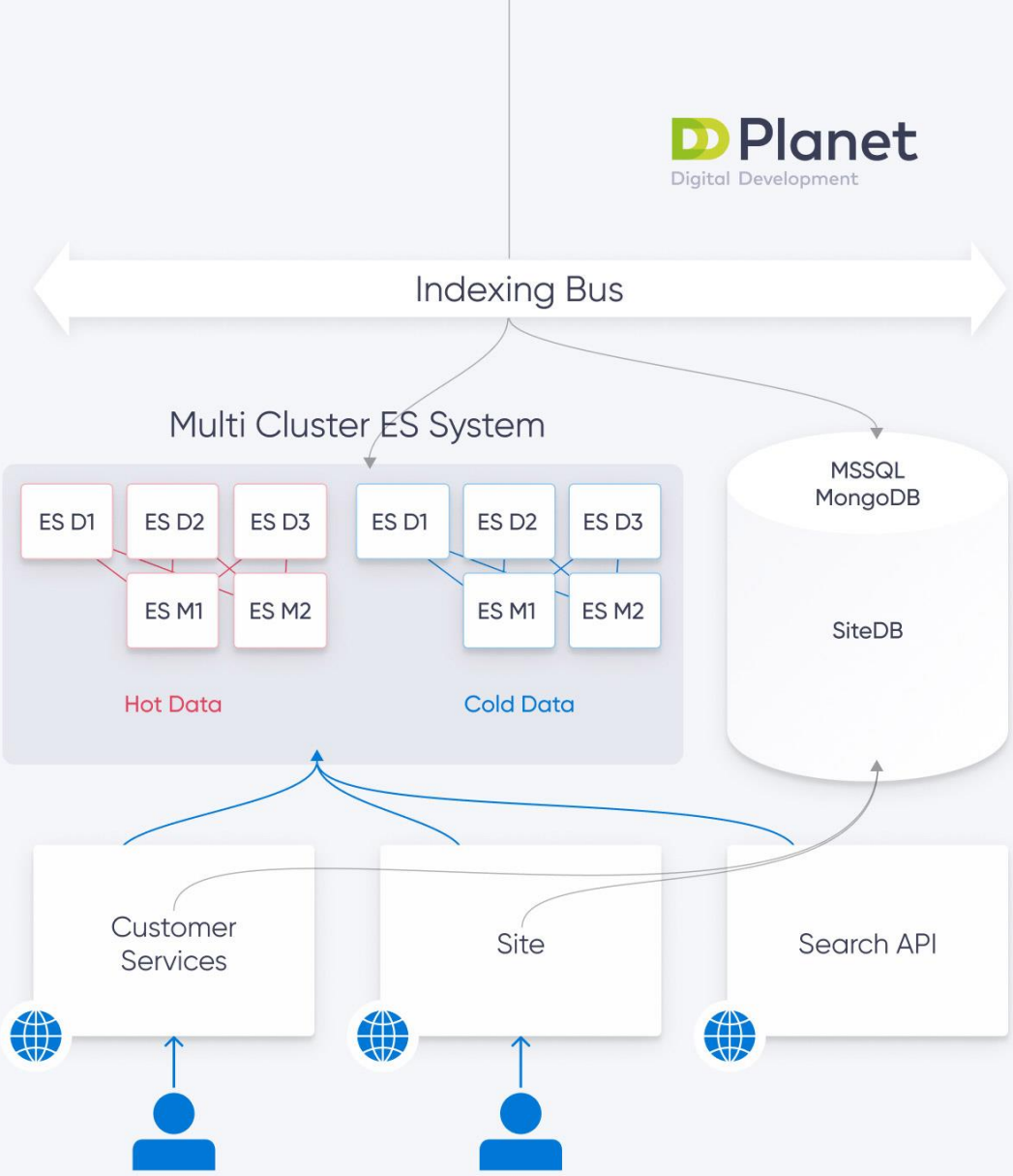
Indexing Bus – data indexing system in **ElasticSearch**. Provides real-time data updating, limits the load from mass data indexing, distributes data between the most used "hot" data (**hundreds of gigabytes**) and rarely used "cold" (**Big Data, terabytes**).

Indexes and search organization in **ElasticSearch** are realized through a complex multicluster highload distributed system, the composition of which amounts to **dozens** of powerful virtual machines.

Between each stage of import, the information is transmitted through a queue system.

Data usage

The end user has access to three services: **Search API, Site, Customer Services***. Each of them can independently determine in which data source the request is needed (hot or cold), knows how to combine data from these sources.



*Search API – API software integration search.

Site – full-text procurement search service.

Customer Services – analytic services for purchasing databases with the ability of full-text search .

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AN EXAMPLE OF A FINTECH PROJECT

Financial marketplace Viberu.ru

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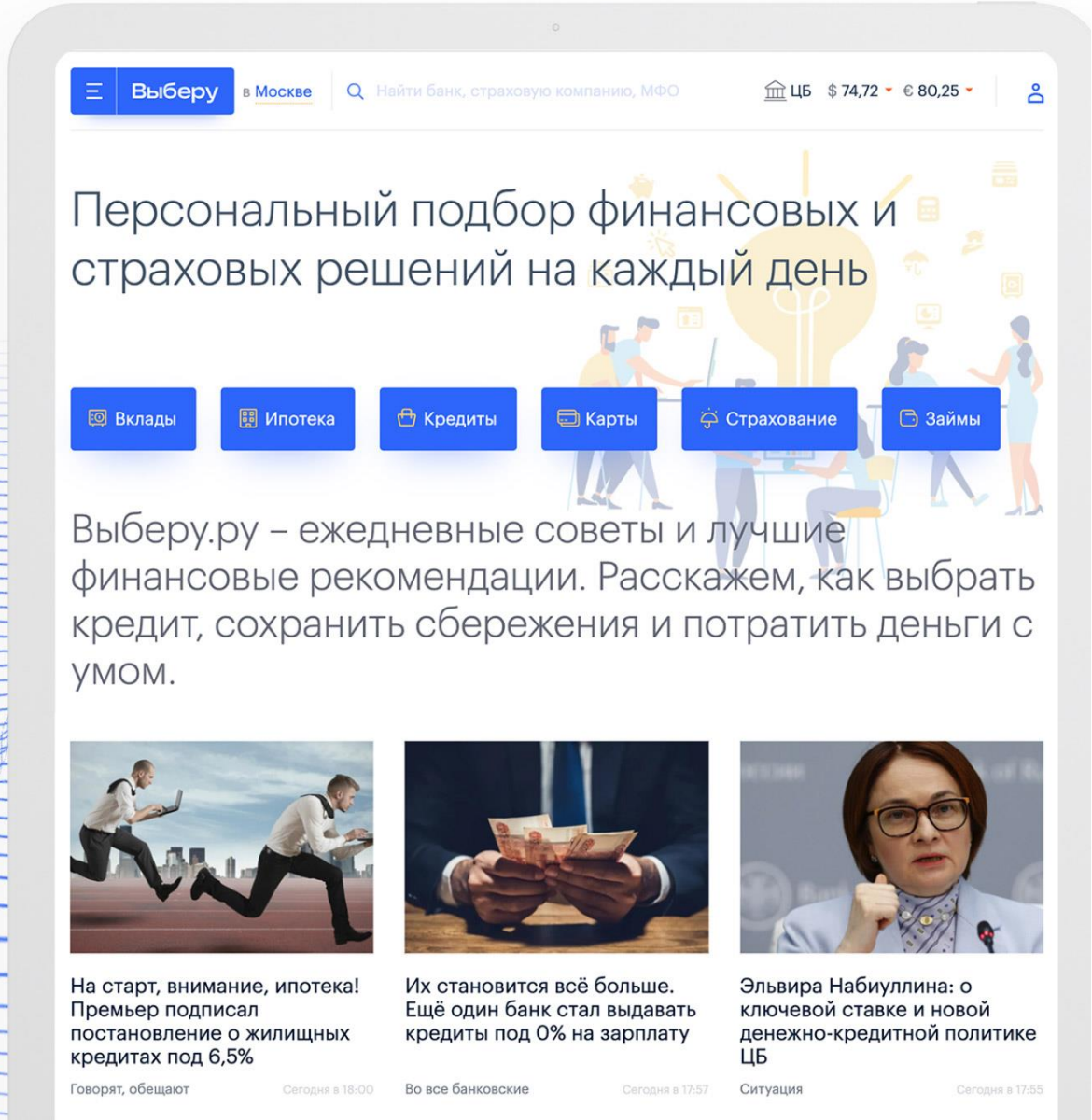
vbr.ru

- Online aggregator of banking and insurance products.
- **Number 1 in terms of speed** among the main financial web services. The project entered the list of socially significant Internet resources of the Russian Federation, **the winner of the Runet Prize 2017 and ComNews Awards 2019**.
- Highload project: **more than 3.5 million** users per month, about 1000 connected partner organizations, several thousand products.
- **Integration** with leading banks, microfinance and insurance companies, private pension funds.



Financial marketplace Vyberu.ru

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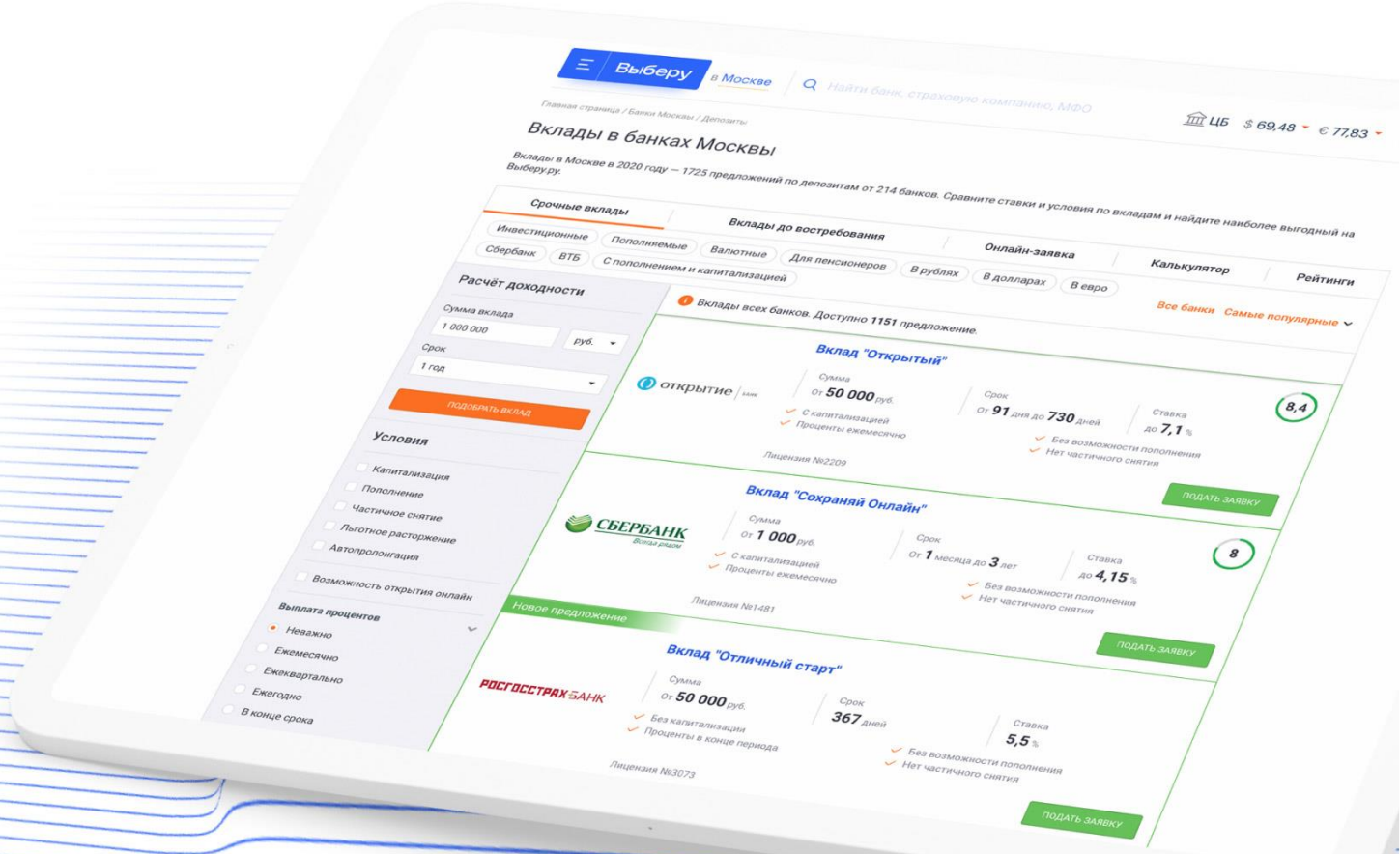
vbr.ru

- The site is built on microservice architecture, banking calculators - on React-components.
- The backend development of the project was carried out by the latest version **ASP Net Core 3.1**.
- In the frontend, the latest version of **ASP Net Core** was used and integration with **React** was implemented.
- The platform is packaged in **Docker containers** and launched on a **cluster of Linux servers**.



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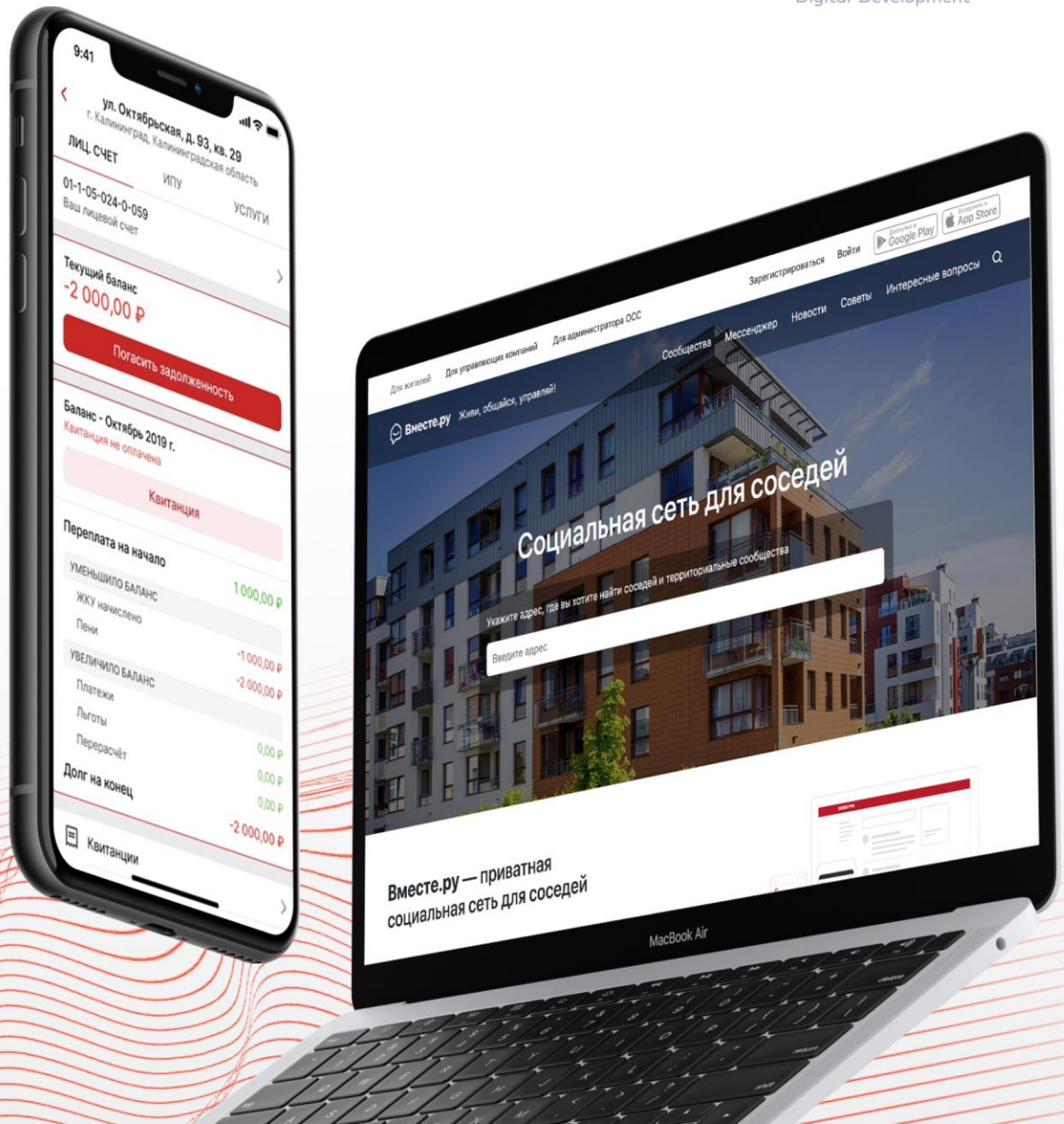
AN EXAMPLE OF A CROSS-PLATFORM PROJECT

Vmeste.ru

Large-scale information platform and social network for neighbours

vmeste.ru

- **Authorization / registration of users with the ability to confirm the private account through public services.**
- **Adding real estate**. The user can add the N-number of their real estate (both rented and those that are in his property / cohabitation).
- **News feed** (news, polls, events, etc.) is updated in real time.
- **Communities** by home, city, district, and region.

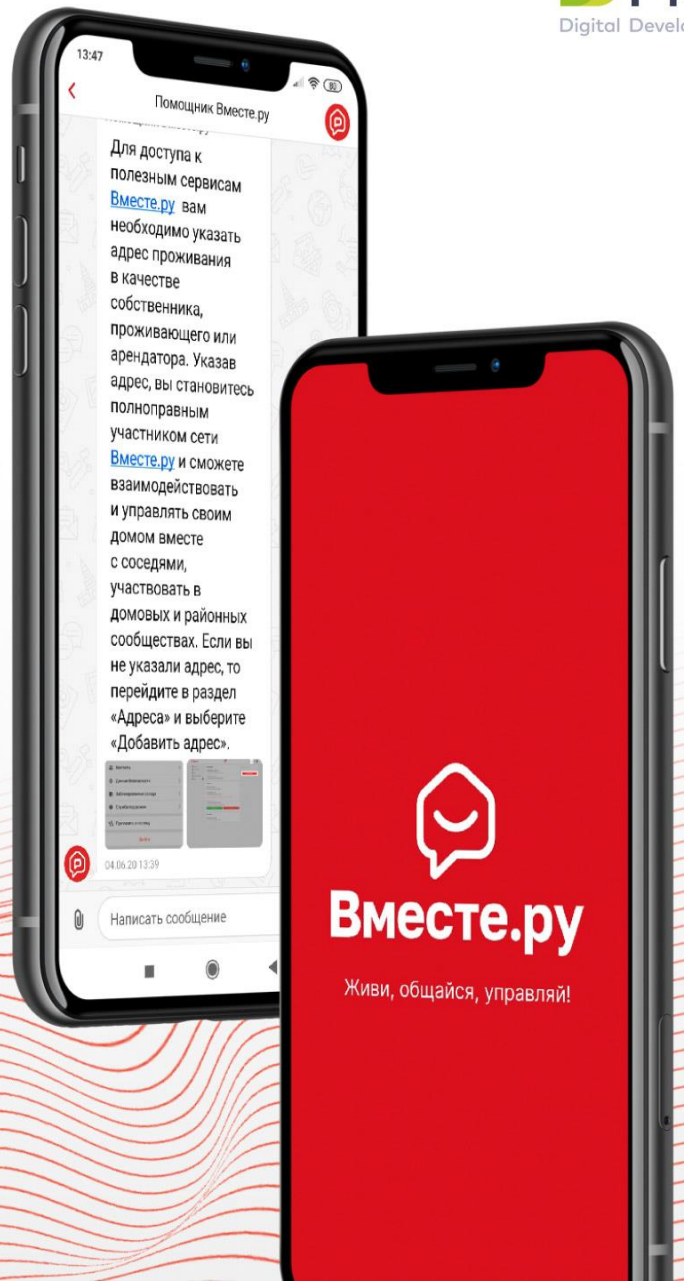


Vmeste.ru

Large-scale information platform and social network for neighbours

vmeste.ru

- **Communication with the property management company and ability to pay for utilities.** You can manage your personal account, pay bills, indicate individual metering devices data, create and track applications to the controller's office.
- **A complex messenger** with 3 types of chats (contextual, group chats and personal messenger).
- Self-written **admin panel**.
- **Several tens of thousand** of registrations in the service.
- A large-scale project with **several dozen developers** in a team.
- Backend development on **C#** and **ASP.NET Core**.
- To store the history of chat messages and search through it the **Elasticsearch** was used.
- We used **MongoDB t**o store notifications.



Vmeste.ru

Large-scale information platform and social network for neighbours

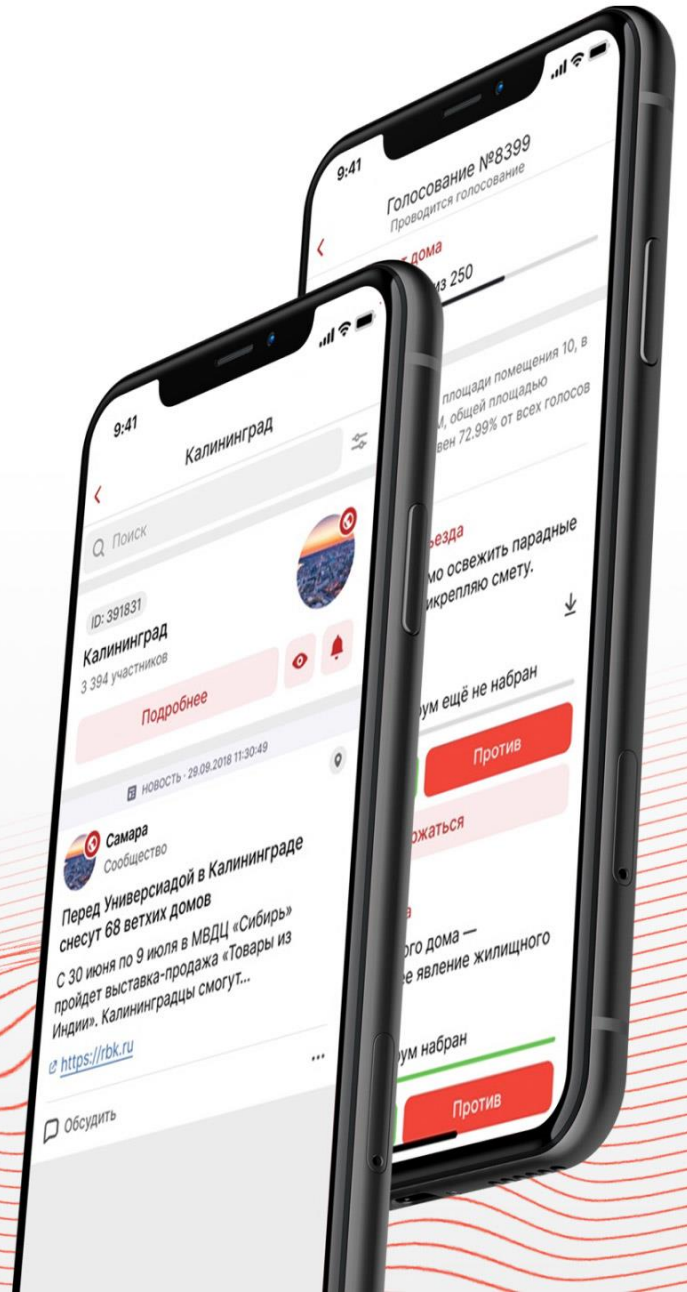
vmeste.ru

- Frontend was implemented with modern **ReactJS** framework.
- The mobile application was written in **Xamarin** framework. The combination of cross-platform and native mobile development.
- **More than 50%** of the code is written once and is used on two platforms.

155 000 lines of clean code in the project

(50 000 - in iOS, 37 000 - in Android, 68 000 - in Core).

About **200 screen** forms were realized in the app.



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NEURAL NETWORKS, DATA SCIENCE, MACHINE LEARNING

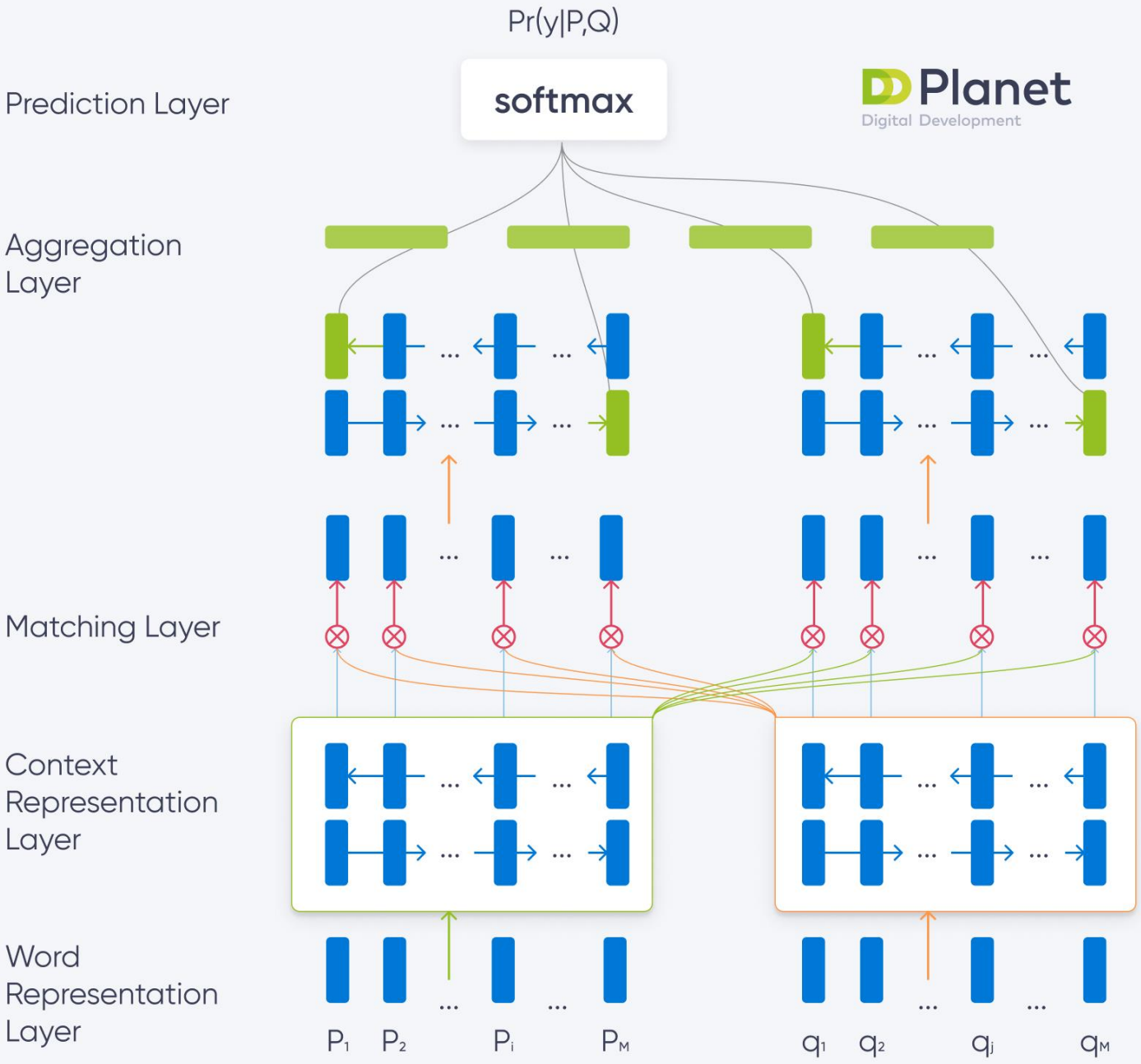
Similar phrase search technology (ML, DS)

Classic full-text search usually does not take into account synonyms and contextual meaning of words.

For example, the phrases “red wood” (mahogany) and "blue pen" differ from the phrase "red pen" equally in one word. But semantically the “red pen” is much closer to the “blue pen” than to the “red wood”.

We solved this problem with the help of neural networks. Using **Bilateral Multi-Perspective Matching** technology, we built a phrase search based on the **Paraphrase Identification** approach.

With it’s help you can analyze 2 text objects (phrases, sentences, etc.) and determine whether they have the same meaning.



Definition of units of measure in the text (ML, DS)

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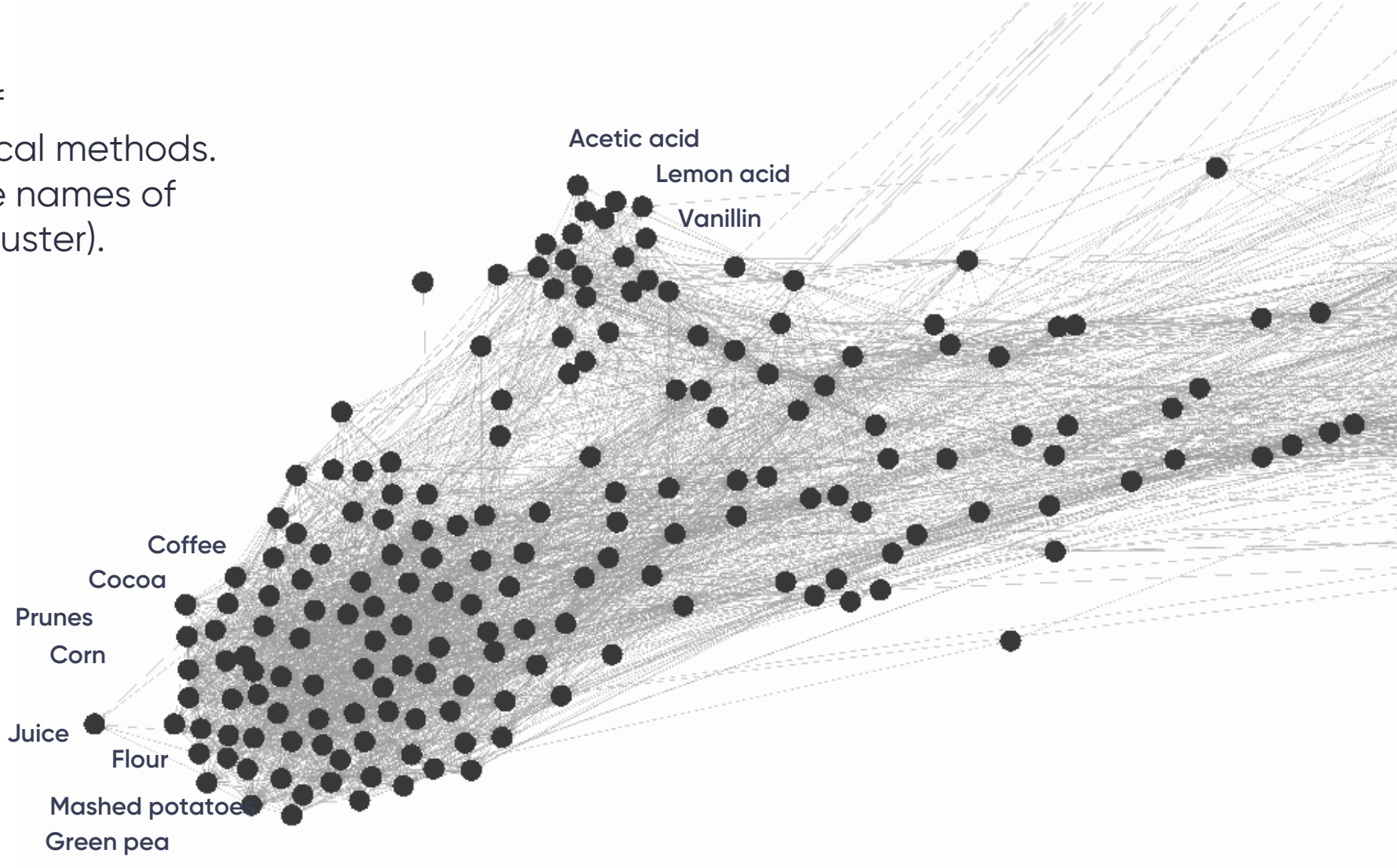
At one of the projects we needed to extract units of measure and the number of medicine from a text object. We used multi-label classification based on neural networks.

A text object	Determined unit
eye drops **1%, 5 ml** - vials / with a dropper in the set / - cardboard packs	**5 ML** 1 VIAL
capsules **250 mg, 6 pc**. - contoured cell packaging - cardboard packs	**1500 MG** 6 PC
pills **50 mg, 10 pc.** - non-cell contoured packaging **(160)** - cardboard boxes	**3200 MG** 160 PC
solute for intravenous and intramuscular injection **10 mg/ml, 1 ml** – ampoules **(10) -** cardboard packs	**10 ML** 10 ampoules
lyophilisate for the preparation of a solution for subcutaneous and intramuscular injection, **1 dose** - vials	**1 DOSE** 1 VIAL
solute for intravenous and subcutaneous injection, **60 million ME/ml** - disposable syringes with needle safety device, **0,8 ml (48 million ME)** -1-**№10**	**0,8 ML** 48000 thousand units

Determination of the degree of compliance text phrases (ML, DS)

We built a proximity graph of goods/services using statistical methods. This graph allows to unite the names of goods/services in a group (cluster).



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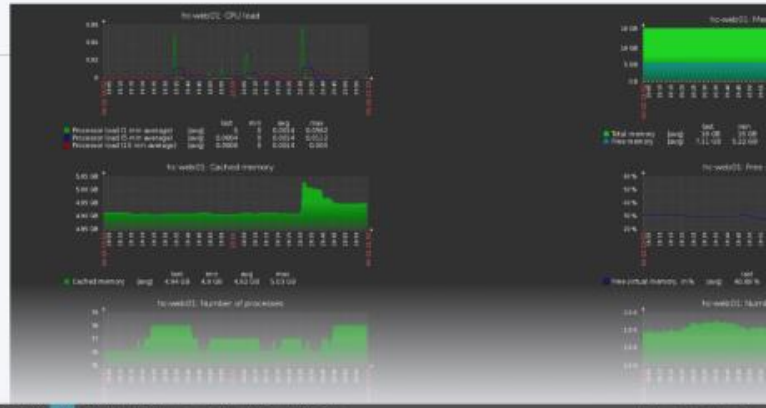
SUPPORT & SLA

Support & SLA

We carry out a three-level server monitoring system.

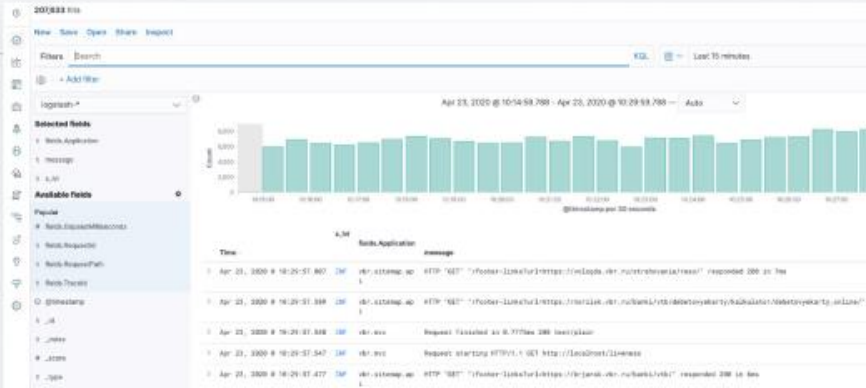
- Report on key server metrics and service availability (**Zabbix**).
- Real-time monitoring of program code and its performance (**New Relic**).
- Detailed reports of all software components (**ELK**).
- All systems automatically send abnormalities alerts.
- Monitoring allows you to quickly identify the causes of problems during app operation: errors in the application itself, lack of server resources, incorrect system configuration, etc. With it's help you can also determine the availability of all system nodes.

Zabbix



New Relic

ELK



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OUR TEAM AND RATES

Our team

Grigory Burdenko
CEO
Experience 22 years

Anton Boev
CIO
Experience 13 years

Yuri Basalov
Team Lead
Experience 10 years

Dmitry Nikulchev
Team Lead
Experience 9 years

Timur Gaifulin
Team Lead
Experience 9 years

Alexander Abashin
Team Lead
Experience 6 years

Irina Stepina
Technical translator
Experience 3 years

Golubnichaya Yana
Project manager
Experience 5 years

Fedor Maimurov
Project manager
Experience 10 years

Pavel Kuznetsov
Head of mobile development
Experience 11 years

Evgeniy Kasianenko
Head of front-end development
Experience 6 years

Denis Gorbachev
Head of development team
Experience 8 years

Vladimir Kazakov
Head of development team
Experience 11 years

Alexander Okun
Head of System Administration
Experience 17 years

+70 engineers

Rates

Specialist	Duties	usd / hr
Management		
Project Manager	Planning, overseeing and leading projects	60.00
Business Analyst	Collecting and analyzing data for potential business expansion	60.00
Design		
Art-Director	Design concept	70.00
UI\UX- Designer	Interactive web designs	50.00
Technical Designer	Site interfaces and graphics	35.00
Web Analytics		
Web Analytics Developer	Collect, measure, and analyze data	45.00
Usability specialist	Focus primarily on the customer experienceas they interact with software or a website	35.00

Rates

Specialist		Duties	usd / hr
Development			
Chief Technology Officer		Oversee technical projects	60.00
System Architect		Developing a technical architecture of the project	50.00
QA (Quality Assurance) Specialist (auto)		Performing routine inspections and quality tests	40.00
QA (Quality Assurance) Specialist (manual)		Performing routine inspections and quality tests	30.00
.NET	Team Lead	Set and maintain visions for development teams	80.00
	Senior Developer	Development	70.00
	Developer	Development	50.00
Python	Team Lead	Set and maintain visions for development teams	70.00
	Senior Developer	Development	60.00
	Developer	Development	50.00
FrontEnd (React, Angular)	Team Lead	Set and maintain visions for development teams	70.00
	Senior Developer	Development	60.00
	Web-Developer	Use markup languages to create user-friendly web pages	50.00

Rates

Specialist		Duties	usd / hr
Development			
Mobile (Xamarin, React Native, Native)	Team Lead	Set and maintain visions for development teams	70.00
	Senior Developer	Development	60.00
	Developer	Development	50.00
Support			
Devops		Setting up the server environment.	70.00
System Administrator		Maintaining, updating, and upgrading software and hardware plus troubleshooting technical problems	50.00
Technical Writer		Prepare, review, revise, and maintain technical documents	30.00
Content Manager		Create and edit content	25.00
Copywriter		Copywriting	25.00

Ставки

Specialist	Duties	usd / hr
Social Media + Marketing		
Senior Marketing Technologist	Ensuring marketing strategies complementan organization's overall goals	40.00
Digital Advertising Specialist	Setting up and managing advertising campaigns	35.00
Senior SEO specialist	Analysis of site architecture and opportunitiesfor improvement	50.00
SEO specialist	Managing all SEO activities such as content strategy, link building and keyword strategy to increase rankings on all major search networks	35.00
Social Media Manager	Targeting audiences with social content, analyzing, testing, and optimizing strategies, and driving brand awareness	35.00

We look forward to cooperating with you!

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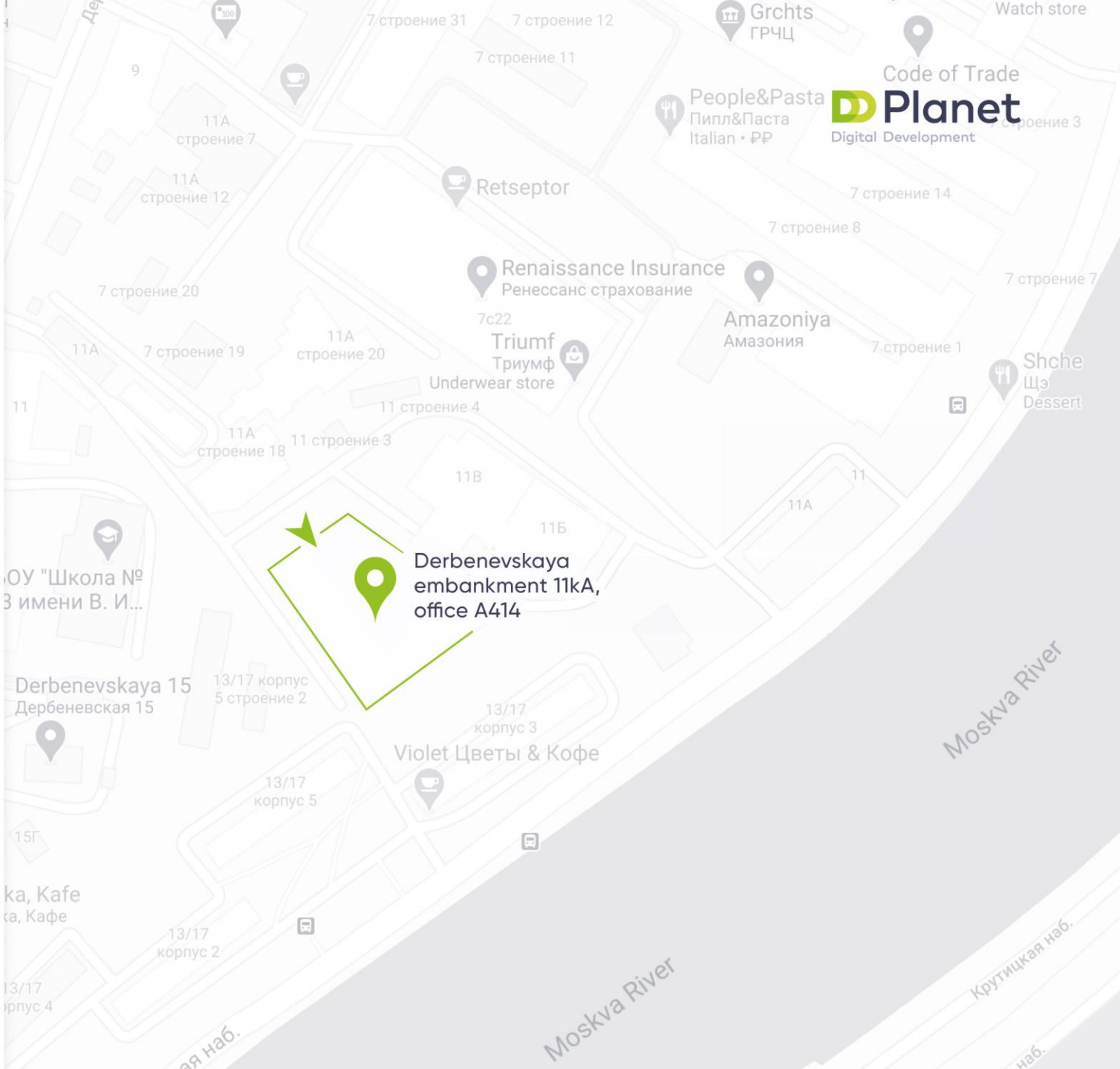
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