CODESKA

Product development Company
for Land and Maritime Logistics

WE ARE
ENGAGED IN

- WEB APP
- DESKTOP APP
- MOBILE APP
- DATA SCIENCE

- DIGITAL ADVISORY
- INTEGRATIONS
- MESSENGER BOTS
- ANALYTICS

EXPERTISE

Owner & Founder

10 years experience in maritime logistics:
ship handling and chartering, port forwarding
and agency service

*«When I first saw industry imperfection,
I tried to fix it and was fully satisfied with the
effect. That was the start of something great,
and still, we have plenty of work to do!»*

Lead Architect

Multimodal logistics 5 years: railway, air, sea
and land transportation, warehouse logistics
and forwarding

*«In my opinion, there should be as little ineffective
work as possible in the world. IT products must
stop striving to replace people. Instead, you
should make IT products to help people.»*

WE CAN HELP YOU WITH:

1. **Supply Chain Management Systems**
   - software development for warehouses, distribution centers, couriers, logistics services, finance and other departments
   - fleet management and assignment of drivers to the fleet
   - setting tasks for drivers and routing, tracking cars on routes
   - optimal amount of transport on the route: excess or lack of transport on a certain route
   - last-mile delivery courier routing, etc.

2. **Warehouse & Manufacture Management Systems**
   + **retail and distribution accounting:**
       - automatic packing lists for reducing the role of human factors
       - picking goods, reducing the number of errors in orders
       - tracking the states of packaging and checking orders
       - tracking metrics such as assembly speed, etc.
   + **warehouse & distribution center accounting systems:**
       - keeping records of output and raw materials
       - tracking rejects at the production stages using neural networks
   + **integration of new solutions with the customer's accounting system, etc.**

3. **Web platform for documentation**
   - automation of document circulation using optical character recognition of documents and their data
   - synchronization with the client's accounting system, etc.

4. **Mobile application**
   - all of the above inside your smartphone with a notification system

5. **Messenger Bots**
   - all of the above included to your favorite messenger in your smartphone

6. **Data Science and Visualization**
   - optimization and data collection from retail outlets
   - defect and anomaly detection
   - market analysis and prediction of possible regional market changes
   - financial analytics and transportation cost reduction, etc.

ADVANTAGES

⤤ CODESKA vs MANUAL WORK

Any manual work means that you inefficiently lose time and resources.Human errors may also lead to financial losses. Codeska analyses and propose the most effective products to reduce manual work.

⤤ CODESKA vs ERP SYSTEMS

We don't say they are too bad. We don't say we come to help you to get rid of it.
Codeska preaches an efficient approach and reasonable solutions that may integrate with every your ERP system.

⤤ CODESKA vs BAD SOLUTIONS

Instead of using big box solutions that are rather hard to implement in all departments, Codeska provides microapp solutions that are quite easy to learn, don't take much budget, and able to integrate with each other.
We dive deeply into your processes and make apps that are suitable for your employees.

⤤ CODESKA vs UNSTRUCTURED DATA

Usually, there's no problem with how to get data. The major problem is the way you use it. Our Data Scientists create excellent and precise algorithms for logistics and commercial industry purposes. Check our cases below for more information.

⤤ CODESKA vs SUPERFICIAL APPROACH

Creating software is one thing, but making it useful and convenient for the user is another. We may ask lots of questions, We dive deeply into your processes, and in the end, get something exceptional and valuable for you and your employees.

CASES

ОБРАТКА

DIGITAL PLATFORM FOR GROUND CONTAINER TRANSPORTATION BY TRUCKS

Fully developed and integrated by the Codeska team, Obratka helps the management to hire and use container trucks and manage the fleet with a built-in TMS system. Implementing this platform reduced freight rates up to 30% and allowed fast truck processing in destination points.

Obratka also uses Machine Learning to predict freight rates and decrease logistics staff's everyday routine with calls and emails, making the process as much automated as it can do. A mobile app for drivers with tracking is also included.

Task / Request

Our client came with technical documentation and asked to develop system that automatically matches consignor and carrier. The main goal of implementing this system was to decrease costs and enter Ukrainian market with this product.

Relevance / Problem

Ground container transport automatization.
This software is dedicated to relieve transport managers, has its own built-in TMS system and mobile application for drivers.
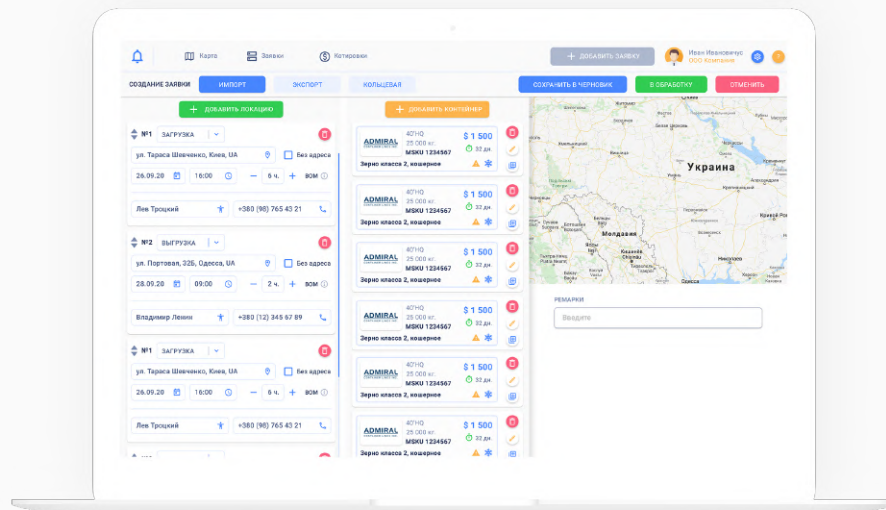Obratka decreases time and increases probability to find suitable cargo/transport for the customer's needs.

Solution

We were finding right solution by making several iterations. Our team focused on the main features and found that technical documentation lacks some roles. So, we dived deeply into the industrial reality and rewrote it.

Thus, carrier and hired driver got different functionalities and the screens of creating the order, route planning and GPS data collection were optimized during collaboration with focus group.

Project Page: eobratka.com

Project Status:

Date
July 2018 ~ Dec 2018 *(dev. 1st iteration)* | Mar 2019 - Aug 2019 *(dev. 2nd iteration)* | Nov 2019 - Mar 2020 *(dev. 3d iteration)*
Mar 2020 - Sep 2020 *(released, working)* | **Sep 2020 - Present** *(working on new iteration)*

Developed	**Team**	**Users**	**Target Audience**
Web App & Mobile App	8 people: BackEnd&FrontEnd, Mobile dev., QA, UX/UI, PM.	Transporting about 150 TEU every month after release	B2B, Freight forwarders, Truck logistics, Commodity trade

blor

AUTOMATED RECOGNITION OF TEMPLATE DOCUMENTS

Special software based on Machine Learning algorithms created by Codeska for automated recognition of template documents. At this moment, BLOR works with Bills of Lading issued by container lines and fully kills manual work by managers as they don't need to put data into their ERP system by hand.

The special 'Export' function makes it a one-click procedure with a total speed up to 15 seconds per document and highest quality recognition by fields. BLOR supports all container lines documents in pdf and jpeg files and our team is getting ready to process with home BLs, invoices, and other types of templates.

Task / Request

We wanted to create software that not only recognizes and returns text massive but knows which kind of documents it recognizes and returns information to necessary fields fast and accurately. We also wanted to make data extraction to ERP systems as easy as possible.

Of course, all of these processes are secured, and we do not store any confidential commercial information.
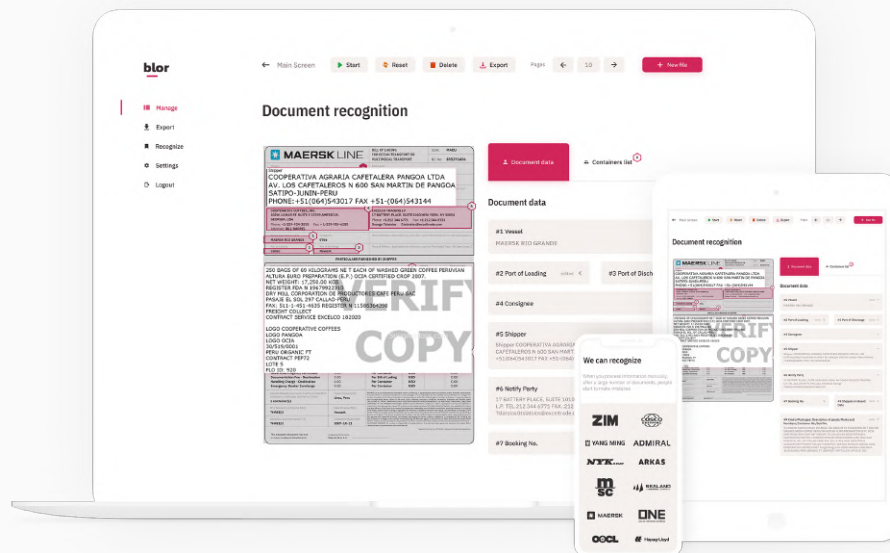
Relevance / Problem

Most logistics companies, especially that work in container transportation, have bad practice of manual input of document data into their ERP system. This practice leads to human mistakes and extra work that may lead to higher operational costs.

Solution

We decided to use Machine Learning technologies and special neural network for this application. Using algorithms made by our science team, we managed to get 99% of accuracy and up to 15 seconds of recognition time for the document.

Moreover, we developed and implemented one-click extraction to ease managers`everyday routine.

Project Page: blor.com.ua

Project Status:

Date	Developed	Team	Users	Target Audience
Feb 2020 ~ Sept 2020 *(dev.)*	Web	5 people: Data Science,	Up to 250 in 3 month	B2B, Freight forwarders,
Oct 2020 - Present *(released)*	Application	BackEnd&FrontEnd. UX/UI, QA	after release	Co. with a large workflow

DOCTOR TEU

SEA CONTAINER TRACKING SOLUTION

The web application we made to ease the tracking of containerized cargo by all participants of the supply chain. Managers can save, track, and manage the saved container list and look where the container is on the world map.

With our technologies, one may always get alert at the messenger and/or e-mail in case of situations that need special attention to occur. Our technologies may predict such variants and react accordingly

Task / Request

The product was created after we were witnesses of a real case when the manager of a freight forwarder company didn't update the status of the container and this led to financial losses due to demurrage that needed to be paid.
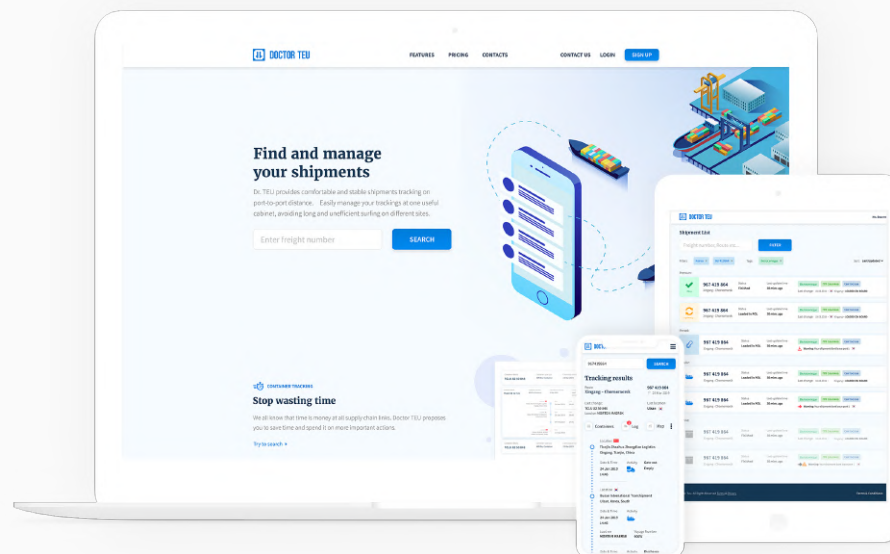
Relevance / Problem

Dr. TEU traces containers loaded to the ship and alerts when something goes wrong, e.g. ETA is not correct, a client forgot to take a container at the destination port.

Dr. TEU also has a special management list to save shipments and Data Science groundwork of probabilistic logics to implement in the future.

Solution

We made a Web application with a view to mobile application in the future. In MVP format, we made container tracking from three sources of information and different types of alerts.

Project Status:

Date	Developed	Team	Target Audience
Oct 2018 - Apr 2019 *(dev.)*	Web Application	4 people: BackEnd& FrontEnd, UX/UI, PM	Freight forwarder, Shippers, Consignees, any company that involved into supply chain and wants to track cargo in container.

Портьє

APARTMENT BUILDING MANAGEMENT SOLUTION

Web and the mobile application made by Codeska to manage apartment buildings and to ease management companies' communication with residents and tenants. Mobile applications are designed especially for them to pay bills in time, know all news concerning their flat/building, and place orders for repair.

Management companies get full web application and may place house news, collect bills, and manage orders right in one clearly understandable software environment.

Task / Request

We found a company who decided to make an experiment and to help us implement this application. They also asked to make some new features like synchronization of administration dashboard and payments with their ERP system, security button and many more.

Relevance / Problem

We collected different complaints from apartment building management companies about miscommunication with residents and tenants and due to their usual tight daily schedule bills are not collected in time.
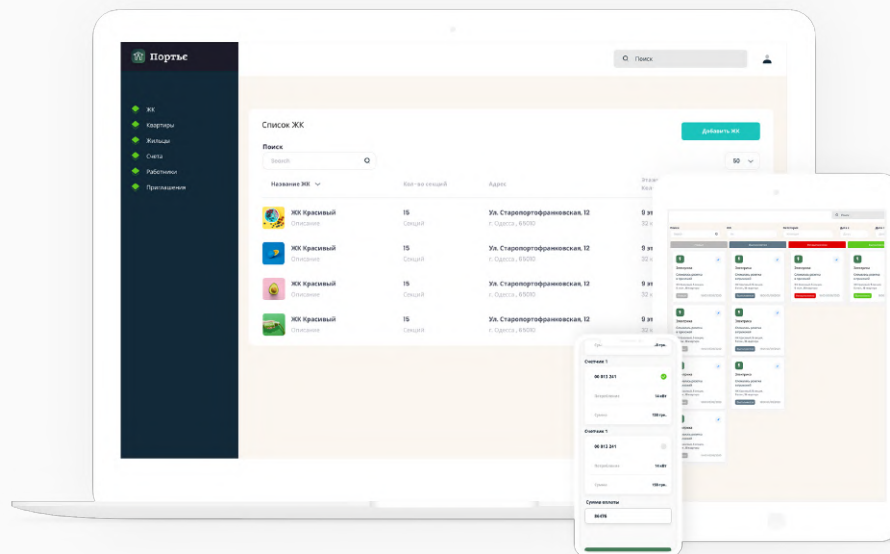All of the stated above is usually followed by complex internal procedures in management companies.

Solution

Architecture of the software lies in the communication between mobile application used by residents and web application that is used by administrators of management companies.

Their smooth interaction is possible because of tailor-made software engine and new technologies we implemented to handle the high load.

Project Page: ops.portier.live

Project Status:

Date
July 2020 - Sept 2020 *(dev)* | Sept 2020 - Oct 2020 *(integration)*
Oct 2020 - Present *(released)*

Developed
Web, Desktop & Mobile
App, Chatbot, etc

Team
7 people: BackEnd&FrontEnd,
Mobile dev., UX/UI, QA, PM.

Users
More than 300 user
per every house

Target Audience
B2B, B2C - management
companies and house tenants

FLDR

FIELD MANAGEMENT SOLUTION

Web and the mobile application projected by Codeska for small and medium farms and agronomists with small but convenient WMS system, that integrates with ERP system of customer.
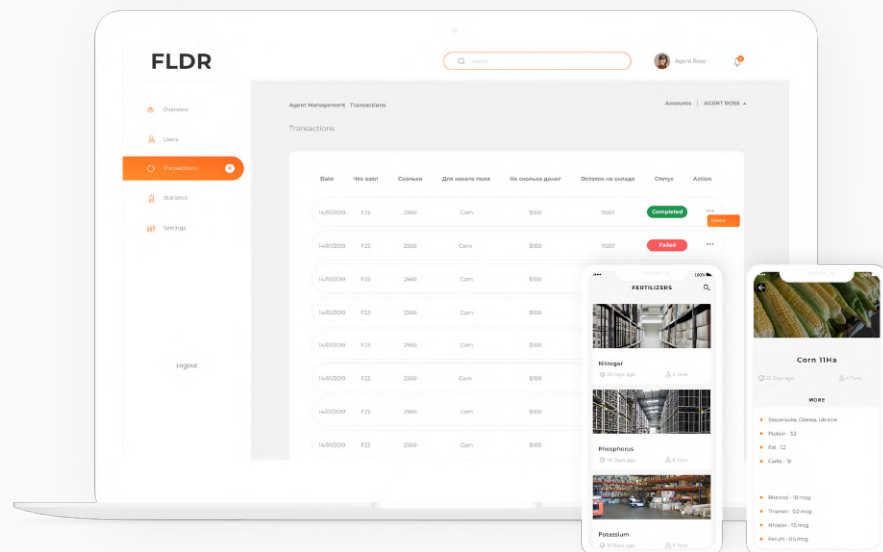
Task / Request

We were asked to develop a system with elements of WMS, Field management and mobile application for agronomists. Architecture of system implied integration of modules into system and making UX/UI as much simple as possible.

Relevance / Problem

A big quantity of small/medium farms with land up to 3 000 hectares usually don't take much care about their processes for a variety of reasons.
90% of their data is traditionally put by hand by agronomists, warehousing is not digitalized properly and this leads to losses.

Solution

We provided web and mobile application where web was designed for warehouses and financial management and mobile application is used by agronomists to track their material consumption per field (e.g. fertilizers). We also envisaged absence of mobile connection in the mid of fields, made security features and set automatica export of data into ERP system of customer.

Project Status:

Date	Developed	Team	Users	Target Audience
Mar 2019 - July 2019 *(dev.)*	Web & Mobile Application	7 people: BackEnd&FrontEnd, Mobile dev., UX/UI, QA, PM.	Farms at the South of Ukraine	B2B and B2C - farms and agronomists working at farms

LITTLE SISTER

CARGO FLOW SCIENCE SOLUTION

Web application made for data visualization and to improve performance of sales department of freight forwarding companies. Analyzing is made from different huge databases and thus reveals cargo flows on all the way of end-to-end supply chain, abling managers to find new customers 80% faster than by usual Excel way.

Task / Request

On of freight forwarder companies situated in Ukraine tried to solve the issue and asked us to create an application that may ease managers`everyday routine work.

Relevance / Problem

Sales managers of freight forwarding companies usually use Excel files of huge size (more than 40,000 lines) trying to sort and get data from customs and port databases to find new clients and close deals.

Solution

The solution we provided lies in the field of web application combined with Data Science algorithms. That was a must because of customs and port databases filled by local managers by hand. This resulted in inconvenient perception of information while using it.

Project Status:

Date	Developed	Team	Users	Target Audience
Jan 2018 - Mar 2018 (dev.)	Web Application	5 people: Data Science, BackEnd&FrontEnd. UX/UI, QA	NDA	B2B - freight forwarding companies and their managers

DATA SCIENCE & MACHINE LEARNING TECHNOLOGIES

The importance of Data Science and Machine Learning cannot be underrated.
Here's how we cope with many problems in the industries by using these technologies:

Logistics

Data Science and ML algorithms are used to route optimization, making you know where is shortage or oversupply of fleet on your routes.

Machine learning is also used for forecasting demand, trying to predict prices/loading/total market situation and forecast it at least for a week.
Using large sample of data, we can use so-called monitoring of anomalies, which is very useful for security reasons (hijacking, drunk drivers etc.).

Combining with Computer Vision technologies, we make powerful products from that.

If you didn't find your industry but you know it can be useful for you - we will gladly help!

Commercial
(trading, shipping,risk management):

We use Data Science in different way to make so-called probabilistic logics, where we analyse the market and predict situations and count it at percentage level.We use a wide variety of algorithms and pick the most suitable or use different - it depends on the task type.

Machine Learning technologies can also be used in controlling the quality of production at factories and plants, lowering product defect rates.

Agriculture

Data Science in Agriculture can be used in different ways: from market and risk management (see commercial) to field management, weather forecasting and plant's life: we may use lots of photos to determine plant diseases.

TESTIMONIALS

CISS Group Ltd
Dmitry Filipchyk, CEO

We cooperated with Codeska to automatize our documentation.
They also provided us with some great ideas and improved
processes.
While the survey is a very sensitive industry, we're very satisfied
with Codeska work and looking forward to reaching heights with
them as our digital partners.

Global Ocean Link
Andrew Dunaev, Managing Director

Codeska team created a pack of products that we use. They
were also involved in our software development and showed great
professionalism and a deep understanding of logistics processes.
We appreciate their work and continue to cooperate with the
Codeska as our biggest IT partner.

CONTACTS

Let's talk about our possible partnership!

Or text me if you have any questions!

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