

CARTAXI



CALL A TAXI FOR YOUR CAR

WHITE PAPER

2017

CONTENTS

SUMMARY	1
The PROBLEM	2
The SOLUTION	5
The MARKET	8
The BUSINESS MODEL	11
BUSINESS GOALS	14
TECHNICAL IMPLEMENTATION	16
ICO STRUCTURE	22
TIMELINE	24
USE OF PROCEEDS	26
TEAM	28
REFERENCES	31

SUMMARY

CarTaxi is a logistics platform for evacuating and transporting cars that integrates all tow trucks in a single application. It is a global mobile solution based synergistically on geolocation and blockchain + smart contract technologies.

CarTaxi is a working product that has been tested and is in operation in the Russian market. It is ready for global scaling and an explosive growth of market share.

The service has a global reach and has been already successfully launched in first cities.

The **CarTaxi** Company has put together an outstanding team of professionals who are developing the business globally from offices in San Antonio (US), Moscow (Russia) and Beijing (China).

The PROBLEM

Sooner or later, most motorists around the world need to tow a vehicle: your car, that of a family member, or even a rental car during a trip. The reasons are many: a breakdown, out of gas, an accident, or even moving a car to a new home.

The towing business is highly developed in places with high motorization (more on this in the “Market size” section). However, this market has a number of aspects that offer new opportunities for the development of IT-based services. **CarTaxi** takes this market to a new level of organization, transparency and convenience.

A CHAOTIC MARKET

The vehicle towing business has not yet been automated globally, the way Uber has done in the taxi market. Around the world this type of business is based on old dispatching methods that rely on human factors, and small to average clusters: in each city you have to look for the local operator and dispatcher phone numbers and then guess when exactly help will arrive.

With offices in San Antonio, Beijing and Moscow, CarTaxi is starting to radically change this outdated set-up in the towing services industry around the world. **CarTaxi**'s goal is to encompass the global market and establish a decentralized system of Client-Contractor transactions based on blockchain.

The wide divergence of owners of tow trucks leads to a number of problems.

EXTRA TRIPS WITH EQUIPMENT

When looking for and ordering from disparate tow truck owners it's inevitable that the choice will not necessarily be the best or the closest one, leading to delayed delivery and extra trips. This in turn affects the cost of service and waiting time. Such problems can be solved using the modern geolocation **system** used by **CarTaxi**, which eliminates the human factor.

NO FAMILIAR MOBILE APP

Global trends show that today users in all spheres of life prefer the familiar, simple, convenient and functional format of a mobile application with geolocation, similar to the way they are used to call a taxi around the world: to call a taxi in almost any city in the world, all you have to do is open the Uber app, which has virtually become a global standard. Using **CarTaxi**, a driver in any city will also know that to call a tow truck—a “taxi” for your car—all you have to do is open the **CarTaxi** app. Now this will be the standard!

PAYMENT SECURITY

The **CarTaxi** payment system uses decentralized blockchain technology to process payments worldwide which guarantees the safe transfer of funds and the completion of services.

CARRIER LIABILITY

Most countries do not require mandatory insurance against damage to transported cars. Should a car be damaged during transportation, getting compensation often involves a drawn-out court case against the carrier.

CarTaxi for Clients is the service provider whose liability for transportation is always insured. This means that you, the customer, can always be assured that your cargo is secured by a global service provider, **CarTaxi**, and that any damage will be compensated without unnecessary hassles.

The SOLUTION

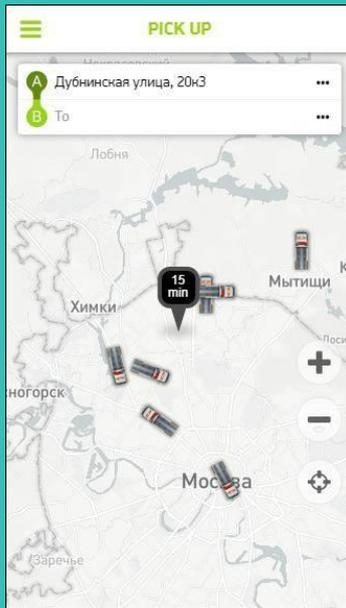
The **CarTaxi** service solves all these problems using modern technology, making it possible to call for road assistance of the same standard of service, wherever you might be. Now you can arrange a tow any time, anywhere. By combining geolocation with blockchain technologies and packaging them into an Uber-like interface familiar to users today, **CarTaxi** makes life simpler and easier for drivers around the world.

WHAT DOES THIS MEAN?

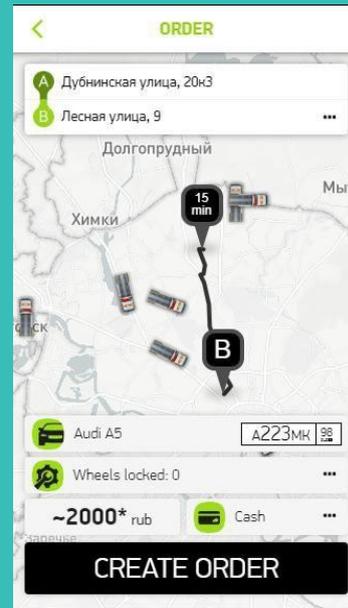
1. A GEOLOCATION-BASED MODEL

All owners of tow trucks in each region are connected to the **CarTaxi** service. A special application is installed for this purpose—an admin panel for partners. This means that, at any point in any city, a large number of tow trucks are available and ready to come as quickly as possible at minimal cost to the driver.

The client receives the fastest service for the minimum cost, without paying for extra trips with equipment.



Tow trucks near the requested location.



Order details and price base on CarTaxi's rate schedule in each region

2. BLOCKCHAIN TECHNOLOGY

The **CarTaxi** platform uses blockchain technology based on smart contracts with Ethereum. Blockchain makes the company's operations completely transparent.

PAYMENT

Payments are set up using smart contracts and blockchain technology, making this the ideal system for safely transferring funds between the client and the service provider, and guaranteeing that payment will be transferred only when the service has been rendered.

The blockchain system allows you to conveniently track the status of payments with each contractor. It maintains a database of orders, provides transparent accounting and offsetting various types of payments.

SAFETY OF TRANSPORTED PROPERTY

There is always the risk of damage to vehicles being transported and that raises the issue of liability for damage.

Using a decentralized payment system and smart contracts, the **CarTaxi** monitors the transportation process from the arrival and loading phase, to unloading at the end point. Smart contracts allow you to track the safety of the goods being transported.

The **CarTaxi** Service is promoting the principle of guaranteeing the safety of cargo during transportation. When using **CarTaxi**, the driver can rest assured that the towed vehicle is always under **CarTaxi** protection. You won't need to go through the courts for reimbursement from the carrier. **CarTaxi** simplifies this procedure, guaranteeing your vehicle's safety through an insurance fund—and handling any further recovery with the carrier.

The MARKET

SERVICES MARKET VOLUME — \$26 billion

ANNUAL GROWTH — 3-5%

The towing industry market is showing impressive volumes around the world. Based on US market research in 2016 [1], the US market alone was worth \$6 billion and posting annual growth of 2.5%. Based on the proportion of motorization in various countries, experts estimate the global market to be worth more than **\$26 billion**. China's market alone, where **CarTaxi** is being introduced, is almost twice as large as the US market and is worth an estimated \$9.6 billion.

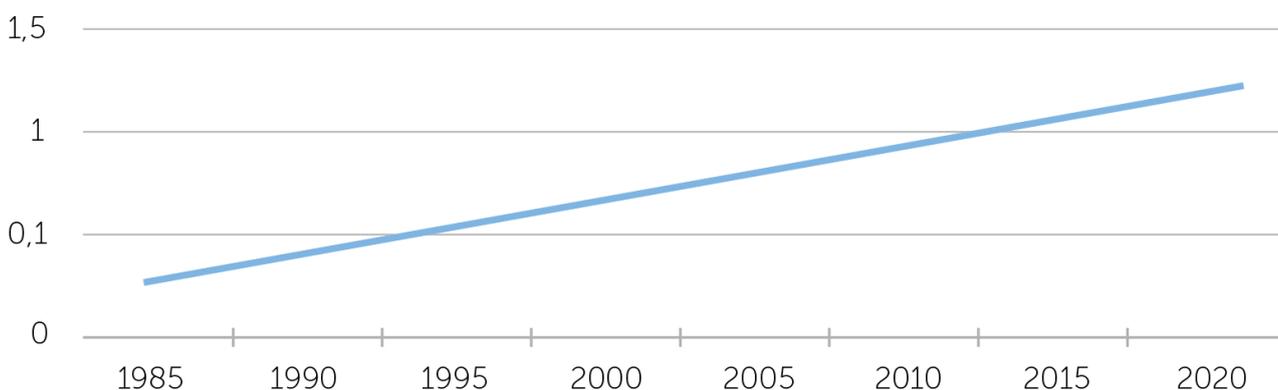


Figure 1. The number of cars in the world, billion units

The number of cars in the world passed the one billion mark in 2010, according to Whardsauto research.

Given that motorization is expanding at 3-5% per annum around the world, the towing market will see the same growth. By 2022, the car towing market could well reach \$32 billion.

POINTS OF ENTRY

CarTaxi's strategy is to cover the global market, starting with the most convenient entry points. So, the business was started, the product tested and the service launched in the region with the most favorable conditions, minimum costs, the fastest start. Our criteria for the choice of country were based on its potential market structure, legal environment, penetration of mobile services, and other factors.

Thus, we chose the Russian market, followed by the US and Chinese markets. **CarTaxi** is already operationally active and functioning fully in Russia, where the app has become #1. Full-scale testing is being conducted to scale the service up globally. Also, our offices in San Antonio and Beijing are actively connecting partners—i.e., tow truck owners—to our system. Connecting each new region through **our partner system** appears to be the best approach. It has proved itself well with the worldwide Uber service, so CarTaxi chose precisely this approach.

As the first global service of its kind, **CarTaxi**'s goal is to capture up to 20% of the world market and become the #1 name in the minds of drivers around the globe.

The timeframe for reaching benchmarks based on the sequence of new markets being connected is described further in “Business development goals.” Over the next 5 years, **CarTaxi**'s annual revenue target is \$0.97 billion (see Figure 4—Revenue targets).



Figure 2. CarTaxi offices as of Aug 2017

The BUSINESS MODEL

The **CarTaxi** project offers the most easy-understand monetization model.

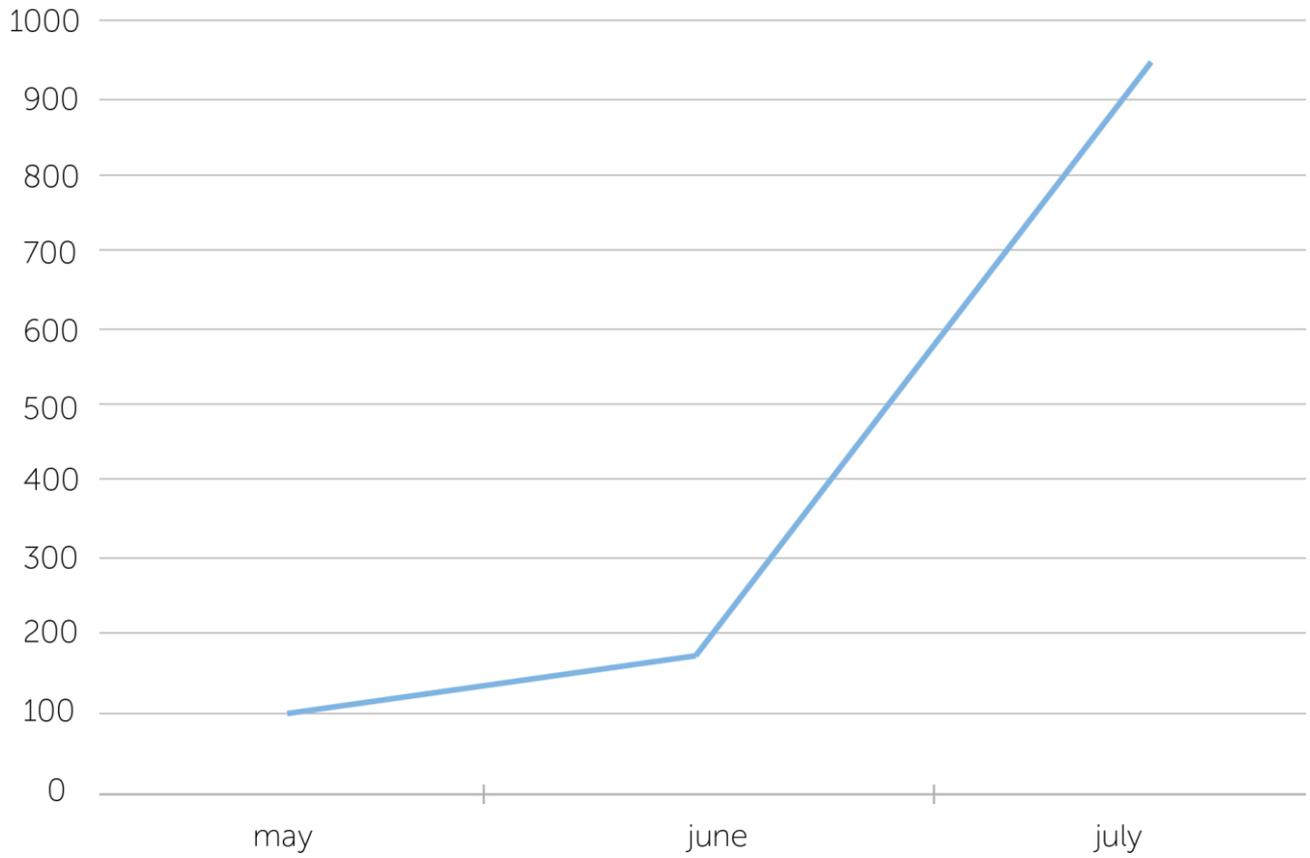
The **CarTaxi** service is monetized through commissions charged for tow truck services. Depending on the region, the commission ranges from 10 to 20% of the cost of the service.



At the moment, in the Russian market, where the service is already up and running successfully, a 15% commission is being charged. The same rate has been confirmed in the US and China.

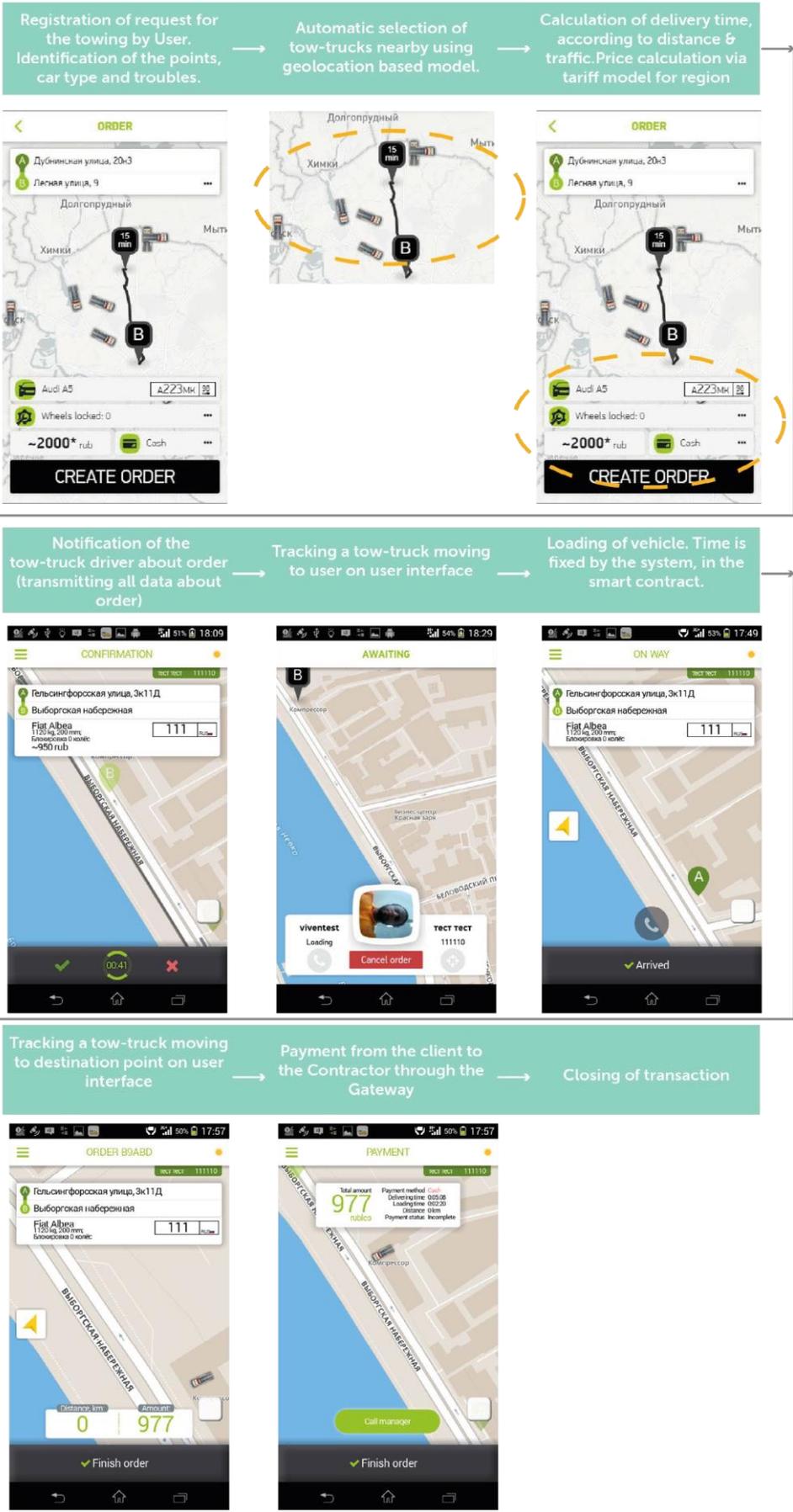
Rates are calculated automatically and are consolidated within each region. This ensures that customers are receiving the best service possible for the best price.

Figure 3. Sales dynamics for CarTaxi services as of Jul 2017



X2-3 WEEKLY GROWTH

BUSINESS PROCESS MAP



BUSINESS GOALS

BUSINESS DEVELOPMENT

The main product has been designed, tested and launched, demonstrating strong performance in the start-up market.

The purpose of investment and key project development goals are:

1. EXPANDING TO NEW MARKETS

- 2017-2018: Achieving full coverage and dominance in the CIS market (launching platform).
- Q1 2018: Launching operations and covering the US and Chinese markets.
- 2018-2019: Organizing entry points to markets in all significant regions: India, Southeast Asia, South America, Eastern and Western Europe.
- By 2020: Achieving dominance in US and Chinese markets.
- By 2022: Achieving dominance in all active regions.

The main means of expanding are running PR campaigns to attract core players in the market and establishing a system to connect partners in each new location.

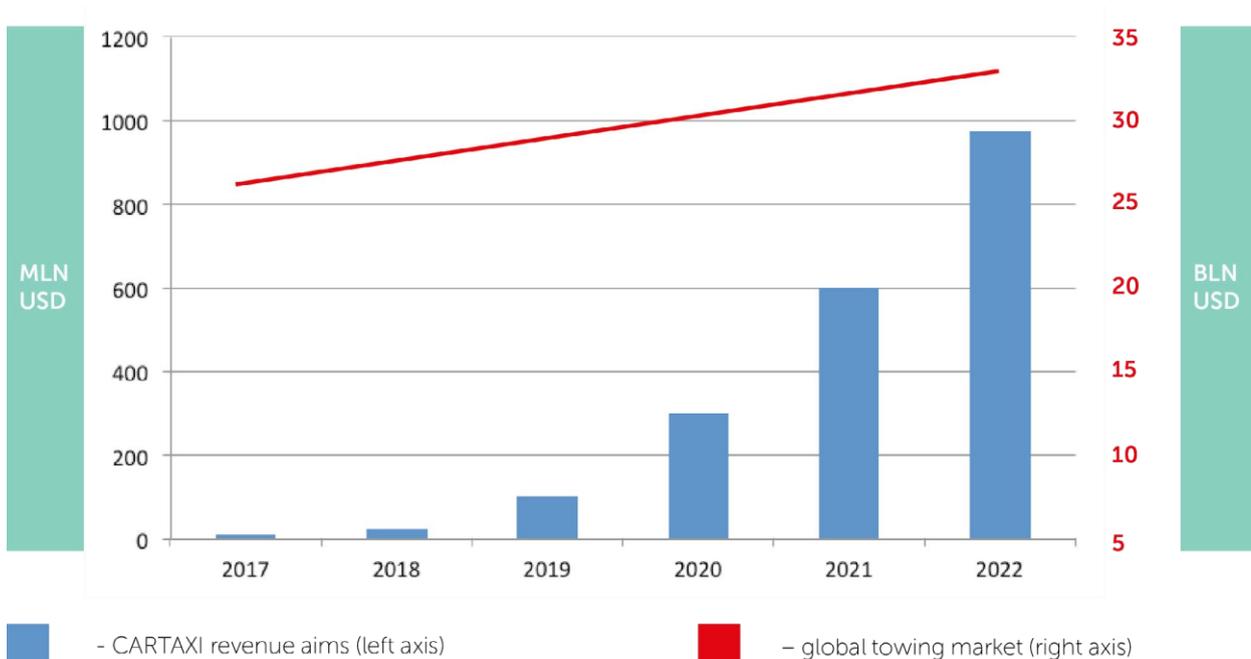
2. SUPPORTING AND DEVELOPING THE SERVICE.

- Continuously scaling the platform according to newly connected regions. Integrating new cities into basic rate schedules.
- Maintaining the platform (load testing).
- Developing additional functionality including linking insurance partners in appropriate regions.

CarTaxi's strategic goal is to win up to 20% of the market worldwide in 5 years and to generate \$970 million in revenue by 2022.

CARTAXI REVENUE TARGETS

Figure 4. Revenue targets



TECHNICAL IMPLEMENTATION

SYSTEM ARCHITECTURE

Terms

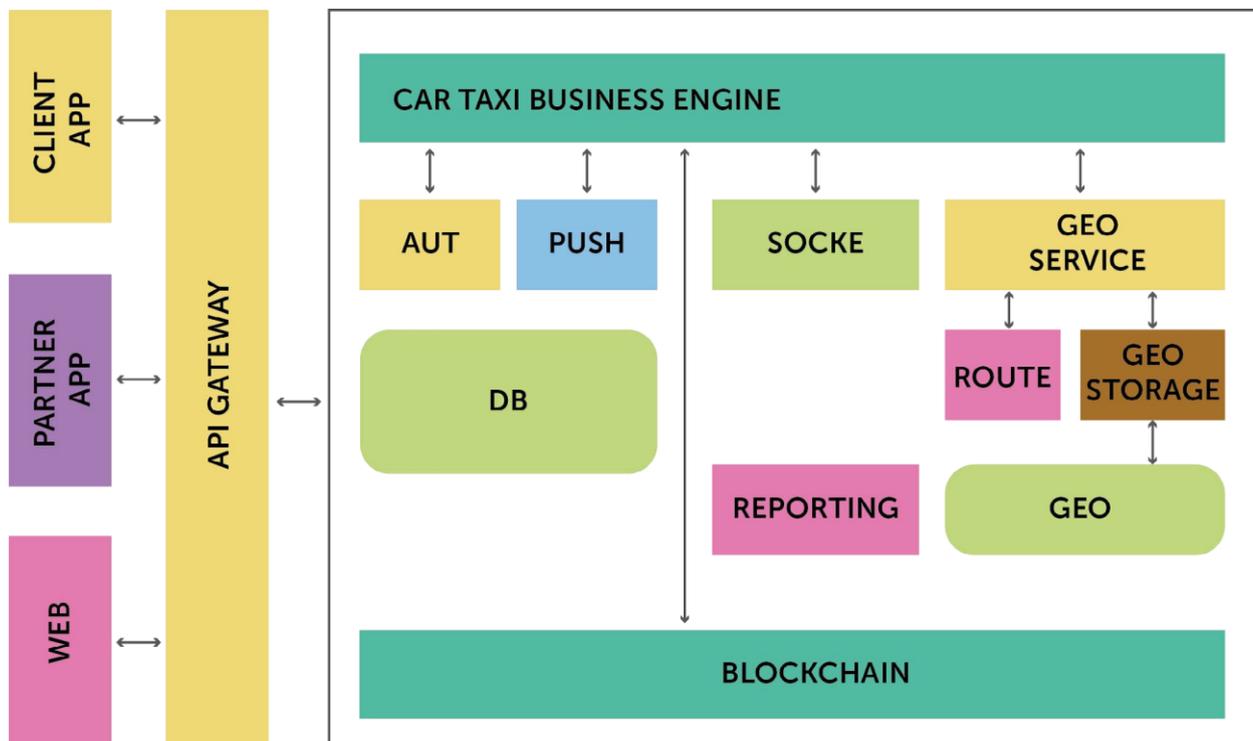
1. Service: a comprehensive automated information system called **CarTaxi**, which provides for the transportation of vehicles using tow trucks.
2. Geolocation: the coordinates of the vehicle's current location
3. Customer: the consumer of the Service
4. Contractor: the tow truck driver, the service provider.

Components

1. A mobile app for clients, implemented on iOS and Android platforms, to call a tow truck and manage orders.
2. A mobile app for partners and contractors, designed to receive orders from customers, continuously updating the geolocation and managing the business processes of the working session.
3. An administrative web interface to manage service operations.
4. A subsystem of business processes, designed to model and manage the service business transactions.
5. An authorization service to authenticate and authorize users.
6. A service to establish the cost of travel, designed to calculate the preliminary cost of travel based on the location of the source and destination points of the route.
7. A coordinate storage service to store contractor movement history.

8. A dictionary service to provide an interface for accessing reference information, brands and models of cars, their mass, dimensions and ground clearance.
9. A push notification service, for sending notifications to participants in business transactions.
10. A service for sending socket messages to participants of business transactions.
11. A service that works with geodata, storing and processing the location of each contractor.
12. A route planning service that selects the best contractor and the best route for an order.
13. A rate zones service as an interface to manage rate zones and their parameters.
14. A report service designed to generate and store reports on the operation of the service.
15. Blockchain.

System architecture flowchart



MOBILE APP FOR CLIENTS

A mobile app for clients has been implemented on IOS and Android platforms and provides these services to customers:

1. Register the user.
2. Manage Vehicle List.
3. Set up payment methods linking bank cards to your account.
4. View order history.
5. Automatically detect user geolocation and display location on a map.
6. Set up an order for vehicle transportation and establish the start and end points of the trip, the car, the payment method, and any comments.
7. Preliminarily calculate the trip cost based on the data entered, and details of the cost based on the rate zone.
8. Issue promo codes for orders and offer the choice of a non-cash payment method.
9. Cancel an order during execution.
10. Provide real-time tracking of contractors on an interactive map.
11. Notify the customer of the contractor's approach.
12. Evaluate orders after execution.

MOBILE APP FOR PARTNERS

A mobile app for partners has been implemented on the IOS and Android platforms and provides the following functions to the partners of the Service:

1. Receive and execute customer orders.
2. Manage the availability of contractors.
3. Send contractor location coordinates.
4. Notify contractor about new orders and Service messages.

5. View order history.
6. View contractor's current balance in the system and the history of settlements.

ADMINISTRATIVE WEB-INTERFACE

The administrative panel provides functions for handling the operation of the service by company employees and partners.

Key Features:

1. Manage contractor accounts
2. Manage customer accounts
3. Manage user and partner accounts
4. Manage orders
5. View statistics by orders and contractors
6. Monitor the location and availability of contractors in real time on an interactive map
7. Monitor the performance of components and system nodes
8. Manage rate zones
9. Manage promo codes

SUBSYSTEM OF BUSINESS PROCESSES

The business process subsystem is designed to manage **CarTaxi** business processes. A business process is a set of interrelated activities or tasks aimed at generating a specific product or service for customers. To provide a graphic description of the activity, BPMN 2.0 standard business process flowcharts are used.

Current business processes of CarTaxi:

1. Register customer.
2. Register contractors.
3. Register customer order.

4. Activate promo code for a discount.
5. Reset contractor password.
6. Set up contractor work session.
7. Link bank card to client account.
8. Provide business processes services aimed at improving the interaction of users and partners with the Service.

AUTHORIZATION SERVICE

The authorization service is designed to authenticate and authorize system users, and to authorize requests between system components. The service works using the Auth protocol. Auth is an open authorization protocol that allows you to give a third party limited access to protected user resources without having to pass a login and password to the third party.

TRAVEL COST CALCULATION SERVICE

The travel cost calculation service provides an interface for the preliminary calculation of the trip cost based on order information.

The factors considered in calculating the cost include: contractor location, time of job, distance from start to end point, contractor load factor, car weight, and so on. The calculation uses the rate zone in which the order has been made.

COORDINATE STORAGE SERVICE

The coordinate storage service is used to store contractor trips during an active work session. Based on data on contractor movement, the final cost of the order is based on the rate zone.

ROUTE PLANNING SERVICE

The route planning service is designed to evaluate the customer's order and select the best contractor.

The system of choosing the optimal contractor is based on AI technology and considers such parameters as the contractor rating, location relative to the client, traffic conditions, and more.

BLOCKCHAIN TECHNOLOGY

The service uses blockchain technology based on the Ethereum platform's smart contract. Main points for using smart contracts include:

1. Registering accounts of contractors and partners.
2. Registering customer accounts.
3. Setting up an order and managing its lifecycle.
4. Implementing mutual settlements with contractors and partners.

ICO STRUCTURE

The CTX token:

Tokens will also be used as a method of payment for the service, along with fiat currency and the main crypto-currencies (bitcoin, ether).

SYMBOL: CTX

CarTaxi will offer 500,000,000 CarTaxi tokens (66%) in two tiers: pre-ICO and ICO.

The total number of announced tokens will be 750,000,000. Funder tokens will be frozen for sale for a period of 5 months from the date of the ICO.

Type of tokens: utility

The CarTaxi service redeems and burns tokens at the cost of 25% of transportation revenue.

Placement details:

PRE-ICO	
TIMING	Start date: 26 Aug 2017 End date: 09 Sep 2017
OFFERING SIZE	12.500.000 CTX (2,5%) To be sold at special pre-ICO price = 3 048 ETH (~\$687,5K) Pre-ICO is considered successful if more than 492,9 ETH (~ \$ 150K) collected, otherwise all the funds are transferred to pre-ICO participants
PRICING	1 CTX = 0,000239 ETH 1 CTX ~\$0,072 (on date 10.08.2017) Yield – 85% to ICO-price 1 ETH = 4101 CTX
SECURE OFFER	- Multi-signature wallet - CTX tokens are issued to investors only

ICO	
TIMING	Start date : 09 Oct 2017 End date: 09 Nov 2017
OFFERING SIZE	487.500.000 CTX (97,5%)=216 186 ETH (~\$48,75M)
PRICING	1 CTX = 0,000443 ETH 1 CTX ~\$0,134 (on date 10.08.2017) 1 ETH = 2255 CTX
SECURE OFFER	- ICO funds held in Escrow -Multi-signature wallet -CTX tokens of Founders are non-transferable upon ICO completion – locked for 5 month through a smart-contract function

TIMELINE

2016 – 1Q 2017

- Developed and debugged software
- Passed the chain from the prototype to alpha and beta versions of the service.
- Formed a strong team of operational offices and a development team..
- Launched the service on the first test market, Russia.

2Q 2017

- The service is launched and successfully operates in the Russian market.
- Up to 50% of the contractors in the Russian market are already connected to the service: Infrastructure has been prepared for the explosive growth and takeover of the Russian market.
- Partners are selected to quickly connect contractors in offices in the USA and China.

3Q 2017

- Pre- ICO and ICO period
- Continuing coverage of the Russian market.
- Continue preparing infrastructure to commence operations in US and China.

4Q 2017

- implementation of the insurance system for transported cars. Selection of insurance partners in the CIS, USA, China.
- Implementation of the blockchain technology into the architecture.
- Expansion of the tariff area bases for the new connected cities in each country.
- Platform support (load testing in new regions).

2018

- Massive promotion in the US and Chinese markets
- Opening representative offices in India, South America, Southeast Asia, Eastern and Western Europe to collect partners for the connection of contractors.
- Platform support
- Scaling the system.

2019

- Massive promotion in connected markets.
- Maintaining dominance in the CIS
- Platform support.
- Scaling the system.

2020

- Dominance in the CIS, USA, China.
- Massive promotion in connected markets.
- Platform support.
- Scaling the system.

2021-2022

- Maintaining global market growth
- Complementary scaling and system support
- Revenue target \$0.97 billion

USE OF PROCEEDS

<p>SEED-STAGE</p> <p>2016 - 2Q 2017</p>	<ul style="list-style-type: none"> · Selection of developers. · Development of prototype, alpha- and beta- versions. Tests in the market. · Development of basic advertising material for entering the market. · Recruitment of operational staff for the full launch in the Russian market and initial group of partners in US and Chinese markets 	<p>USD 0.8M</p>
<p>PRE-ICO</p> <p>3Q 2017</p>	<ul style="list-style-type: none"> · Advertising campaign: PR, SMM · Development of media content for the service promotion (English, Russian, Chinese) 	<p>USD 0.2M</p>
<p>ICO</p> <p>3Q2017</p>	<ul style="list-style-type: none"> · Advertising campaign: PR, SMM · Support of the service in the regions of presence 	<p>USD 0.9M</p>
<p>2018</p>	<ul style="list-style-type: none"> · Promotion in the CIS markets for explosive growth of market share · Start of promotion in the markets of China and the USA · Support of the service in the regions of presence · Preparation for entering new markets (India, Southeast Asia, South America, Eastern and Western Europe) · Scaling the system 	<p>USD 18.5M</p>

2019	<ul style="list-style-type: none"> · Market presence promotion · Connecting to new markets · Maintenance of the service in the regions of presence · scaling the system 	USD 20M
2020-2022	<ul style="list-style-type: none"> · Market presence promotion · Connecting to new markets · Maintenance of the service in the regions of presence · scaling the system 	Will be adjusted according to the results of the attracted investment.

TEAM

TARAS SEMENOV

CEO

With more than 15 years in business and strategic consulting, Taras has worked for such companies as the SOLEV International Consortium, one of the top consultancies in the CIS, as the leading advisor in projects to set up and develop large plants in the CIS, and AFK Sistema, the largest non-primary company in Russia. He was also involved in setting up a unique Binnopharm complex. He graduated from Saint Petersburg State Polytechnical University with an MSc in Physics and one in Economics. Taras was also the founder and co-founder of a series of companies in the real sector. He has been with the **CarTaxi** IT project since 2016.

GALA KOVALEVA

CFO

With an MBA in Finance from the CIFF Business School in Madrid, Gala has considerable experience in financial management in real estate development and construction. She specializes in financial services, transportation, IT and distribution companies. Gala was also the founder of a successful consultancy.

ALEXEY TAYANCHIN

CIO

A programming engineer, Alexey has enormous experienced in both back-end and front-end development. He has worked for companies such as MungunPro, a mobile app developer, and Alfatel Plus, a telecoms provider. Alexey has been with the **CarTaxi** project since 2016, at all stages of development: from the writing of a mobile app to the administration of the DBMS and the establishment of micro services.

KSENIA MOLLER

CMO

A graduate of Point Loma Nazarene University, Ksenia worked for a Virgin Group company.

RENATA ARIPOVA

Project Manager

A specialist in strategic branding and PR, Renata has mainly worked in the promotion of IT and science-intensive products, including DevPocket, Bercut, Git in Sky, and Startup Accelerator iDealMachine, and participated in the StartUp Cup international competition of business models. She has been with the **CarTaxi** project since 2016.

NICHOLAS AMOAKO

Front-end

With an MsC degree in Supercomputing and Interdisciplinary research from the ITMO or National Research University, Nicholas has four years of professional experience in software development and is qualified in Dot NET framework (2.0/3.5/4.0), ASP.NET, MCV, C#, Python, Java, Javascript, Visual Studio 2010/2013/2015, IIS, SQL Server, and more. He has worked with System Development Life Cycle (SDLC), Strong Object-Oriented concepts for software design and implementation. Nicholas also has industrial experience with Rhemasoft Corporation, VOA institute of Technology and Miller all.

VIVIEN ANDZUANA

QA – engineer

A Quality Assurance Engineer with experience in Test Automation, Vivien developed testing strategies for the Internet and mobile applications. Graduated Saint-Petersburg State Polytechnical University, she has been with the **CarTaxi** project since 2016.

PRINCE NTIM

International community coordinator

Prince graduated in supercomputer technologies and interdisciplinary research from ITMO or National Research University. He has worked with the R&D Team of Justmoh Mining services Ltd., a subsidiary of Endeavour Mining (Canada). Prince has extensive experience in international research on new projects, and in developing report and data for market analysis and product development.

JAPHETH ZOOGAH

International community coordinator

Japheth's focus is supercomputer technologies and interdisciplinary research. He's a graduate of ITMO University, the National Research University.

REFERENCES

1. Automobile Towing in the US: Market Research Report. IBISWorld (December 2016).
2. Global Car & Automobile Manufacturing: Market Research Report (April 2017)