



White paper

November, 2017

carVertical White paper is a living document.

We are constantly upgrading our white paper to answer all your questions and provide all information you could possibly need before participating in our ICO and understanding carVertical solution, products, and token.

If you miss any kind of information, please reach out to us at:
<https://t.me/carVerticalio>

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1. Overview [TL;DR]

- Automotive market is growing. Aftermarket is growing to an even larger extent.
- Used vehicles change multiple owners and multiple countries. Real vehicle history does not exist, because car data does not travel as fast as cars do.
- The lack of trusted vehicle history generates perfect ecosystem for unfair practices, which in turn generates false vehicle value.
- Because of false value and unreliable vehicle history data, insurance companies overcharge for taking risks, therefore consumers overpay for it.
- Vehicles generate a large amount of data which is monetized by third parties.
- Data is owned by its creator, hence vehicle owner is the owner of data generated by their vehicle. However, today vehicle owner has no real control over data the vehicle generates.
- We collect vehicle history, store it in blockchain and give back the control to the owner of the vehicle.
- We are building tools and products for vehicles to generate more trusted data which is then added to blockchain.
- We are creating incentive mechanisms for owners, so that they could get value for data their vehicles generate.
- All data goes into creating a trusted, tamper-proof, and decentralized vehicle history registry.
- By using vehicle history we are building a decentralized mechanism for transparently calculating vehicle value.

- History, reports, and value calculations will be sold to parties in need and vehicle owners, as content creators, will be rewarded.
- This will bring transparency and trust to the used car market.

2. Which Specific Problems Are We Addressing?

2.1 Scattered Data

Vehicle data is scattered across multiple sources and the only way to get a whole picture about a true state of the vehicle is by gathering it piece by piece. There are at least 7 primary car history parts:

- The accuracy of odometer readings
- Information about prior damage (as a result of various accidents)
- Maintenance records
- The number of previous owners
- The legal status of a vehicle (e.g. stolen)
- Possible ownership restrictions (e.g. liens)
- Archive photos

Each of these parts is scattered across a number of sources which, on top of that, differ depending on country or region.

2.2 Unwillingness to Disclose Data or Limited Availability of Information

None of the parties holding data about vehicles are willing to disclose it. Some data is closely linked to personal data, even though all of it can be depersonalized. Only a vehicle owner has rights to their data.

Unfortunately, in this area, content creators have no incentives to get their data, as they have no use for it. This is closely linked to the fact that organizations holding automotive data do not provide tools for data owners to collect it.

This is yet another reason for today's multi-billion car fraud business.

2.3 Inter-country Data Loss or Absence of Synced Regulations between Countries

Organizations within a country do not have infrastructure to share information in real time. The situation is even worse on the inter-country scale. Today's problems, economy, and used vehicle market are rapidly becoming more global. Centralized organizations which hold important data cannot catchup with the fast progress of globalization trends. As a result, every country (and every entity within the country) has its own rules for gathering and managing the data, and usually those rules are not aligned among different states.

The time gap between deregistering a vehicle in one country and registering it in another usually marks a grey area where previous accidents are hidden and mileages are clocked.

2.4 Various Nature of Data Makes It Difficult to Draw Conclusions or Get Market-specific Insights

Every organization, entity, and country has different data formats. Even basic units of length have not been unified yet (Germany has kilometers, the UK - miles, Sweden - Swedish miles). This creates even more difficulties in unifying vehicle history in today's global market. Getting complete conclusions and insights is practically impossible.

2.5 Unfair Trade Practices Defined by Law, but Hardly Traceable in Terms of Timing

There are laws protecting against these fraudulent and unfair practices. At the same time these law enforcement agencies are being blocked by simple lack of trusted information. Falsifying documents or tampering the odometer can be done much more quickly than it can be detected by law enforcement. After these falsifications, a vehicle is sold and link between the fraud and the person who commits it is lost.

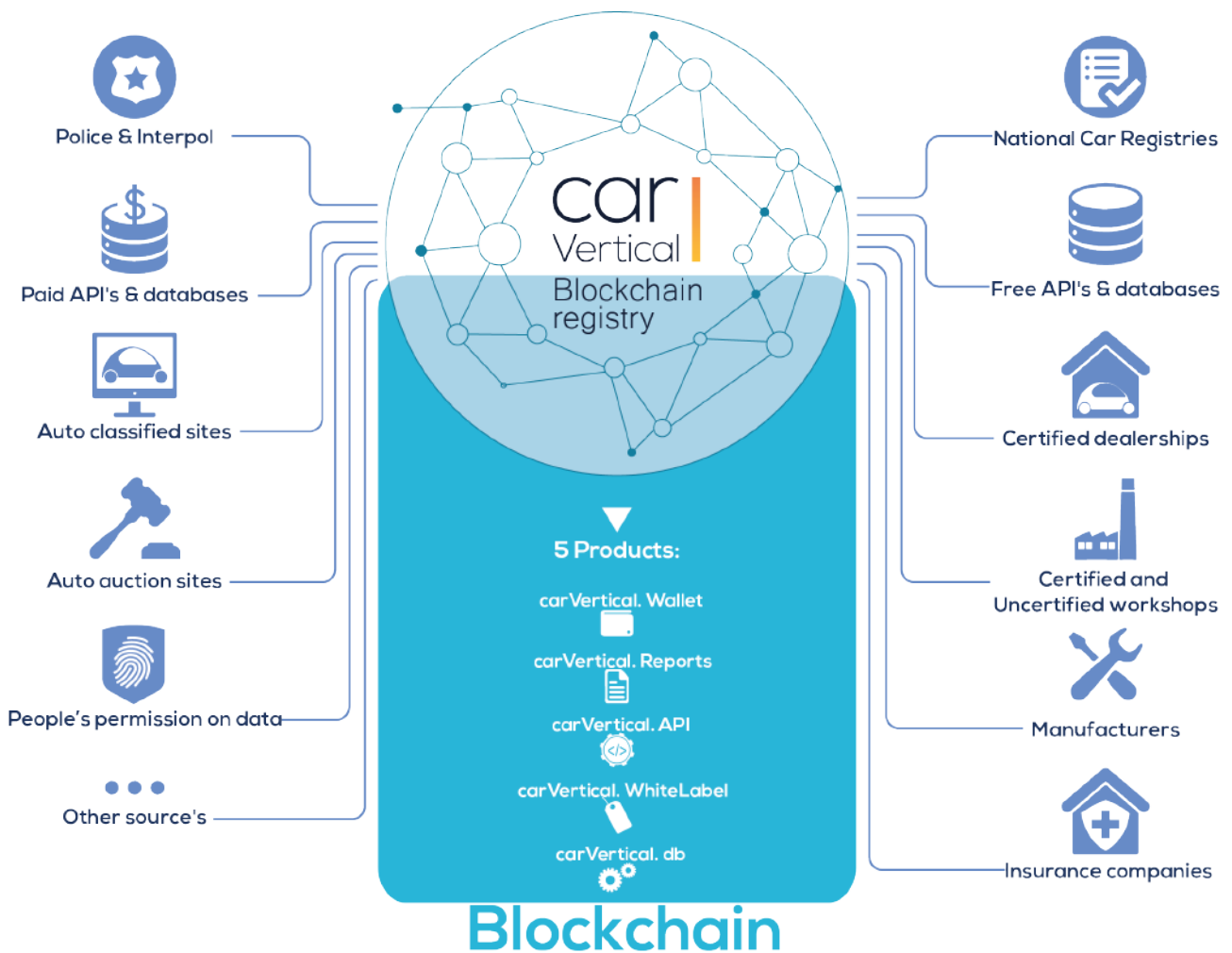
2.6 Lack of Trusted Source for Vehicle Value

Today, there is no trusted way to calculate vehicle value. Vehicles are evaluated privately, with questionable data, and low accuracy by people who mainly base their decisions on personal experience.

Accuracy, transparency, and trust are vitally important in this area as a lot of expensive decisions are made according to this number.

3. Deep Dive into solution

carVertical is blockchain-based vehicle history registry. We collect large quantity of information from a lot of different trusted sources, organize it in the form of records and store it in blockchain. We then feed this information into our data analysis stack, which, by using machine learning and advanced mathematical models, calculates the real value. Most of our elements will be open sourced and our system will be moving to full decentralization to preserve transparency. We will incentivize and empower users to easily collect and get rewarded for the data they own. They are content creators.



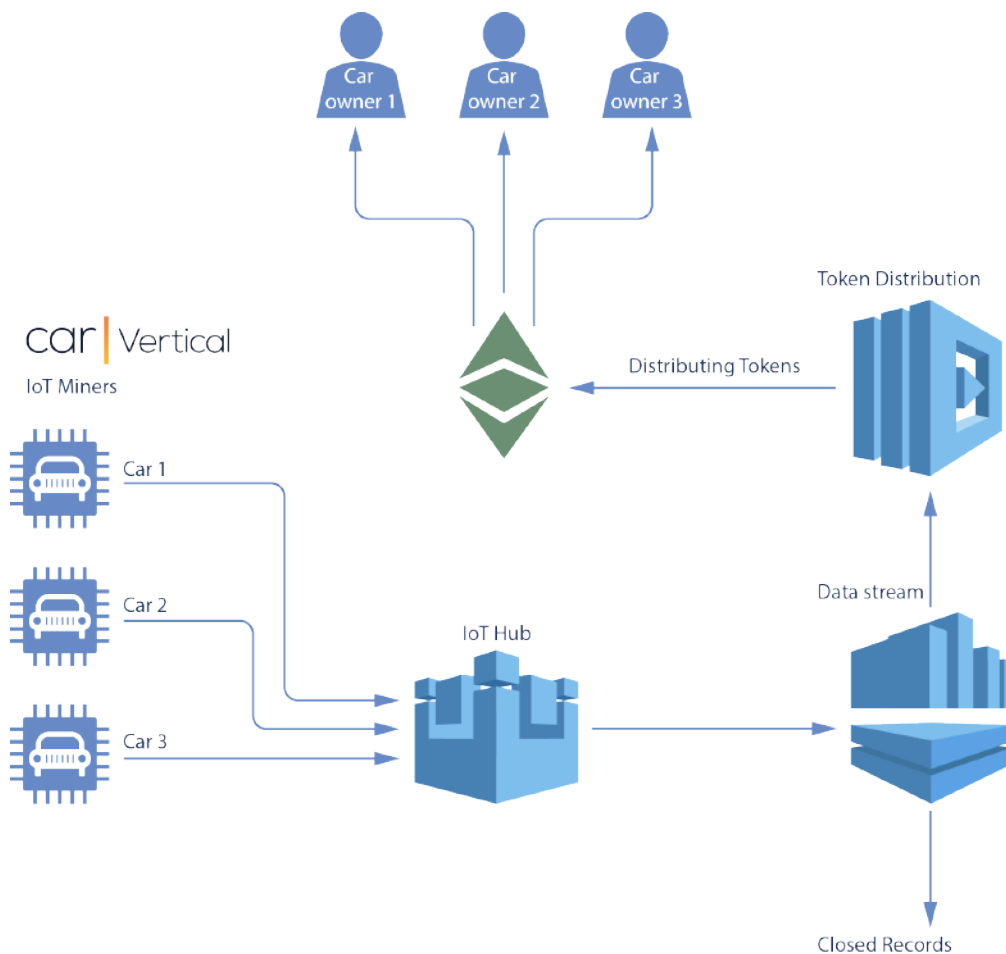
3.1 Data first

There are three main data source categories:

- IoT miners;
- Data accessible to only a vehicle owner;
- Trusted sources;

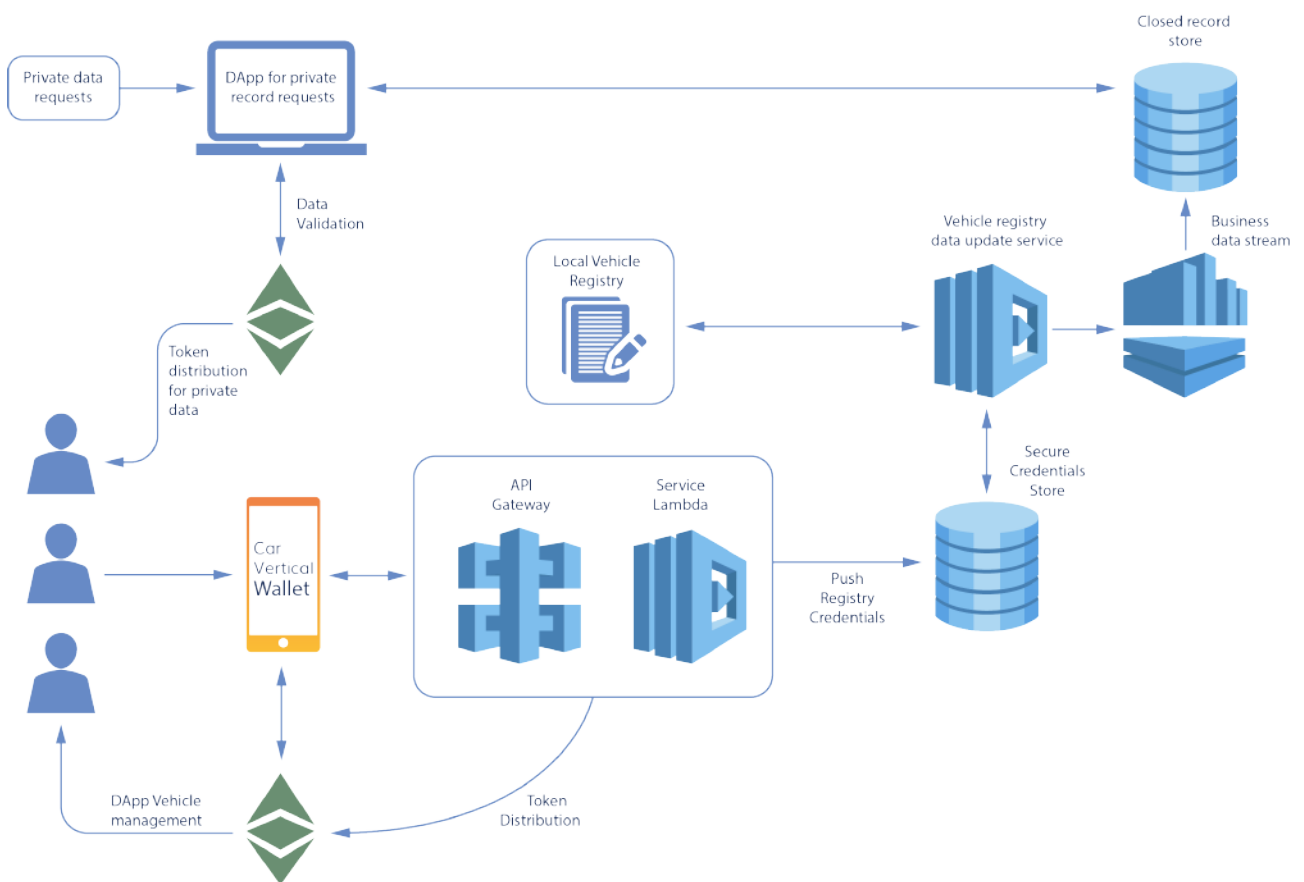
3.1.1 IoT miners

We are working with an industry-leading IoT device manufacturer to create the 1st version of carVertical miner. Installing these miners into your vehicle OBD slot will generate a stream of real time information which will be sent to our data farm for processing. In exchange, the owner of a miner will receive tokens as a reward.



3.1.2 Data Accessible to Only Vehicle Owner

There is a number of data sources which can only be reached by a vehicle owner. We are working with advisors and partners to create ways for users to grant us access to such data in exchange for tokens. Primary sources of such information are local registries. Data will be depersonalized, securely stored, and encrypted. We do not need personal data. Only the data owner will be able to unlock and grant access to such information in exchange for tokens. This will allow user to control and receive value for their information.



Every vehicle data exchange will have to pass Ethereum smart contract to be validated and unlocked. We are using Merkle tree with Merkle reduce list to store final state of vehicle data in Ethereum.

3.1.3 Trusted Sources

Most of the vehicle history records are stored in closed and private databases. We are onboarding insurance, business fleets, state registries, classifieds, auctions, law enforcement agencies, and workshops to open vehicle data for vehicle owners. Such data exchange is in the best of interest to all parties: the owners who officially hold data and businesses that need this data to benefit. All exchanges will be done with carVertical token.

3.2 Vehicle Value

We are building a decentralized and open-sourced vehicle value calculation service. It will use information owned by users and will provide trusted, open, and collaborative source of true vehicle value. This is in high demand by a lot of service providers, such as insurance companies, car mortgage providers, leasing services, and many more. Frauds and inaccuracy are usually very expensive for such companies, while additional price is usually overpaid by customers.

3.3 History Reports and Insights

Our system will examine a vehicle's data, technical specifications, and other records, and provide the history of details, insights, as well as future predictions for the vehicle. Using these reports we are bringing trust and transparency into today's chaotic, unfair and, very often, fraudulent second-hand vehicle market.

4. Business Model

One world - one decentralized registry for all vehicles. This is an unprecedented case. We are building a company which will allow users to truly own, control, and benefit from the data their vehicles generate.

Our company's healthy life cycle is calculated on the soft cap of the ICO 3050 Ethereum. This amount of money could help us safely build a company and run it for 5 years only developing products. We aim to start a revenue flow in a few months after we close the ICO with carVertical.reports (section 4.2). Another product carVertical.WhiteLabel (section 4.3) will add income to cash flow in 13 months after completing the ICO and carVertical.API (section 4.4) in 15 months. For detailed cash flow execution please check cash flow analysis (5.2).

The main goal of the ICO: the hard cap of 15050 Ethereum is the most rational budget for our company's 5 years runway with maximized marketing expenses. Additional budget gives us leverage to onboard databases of more different countries earlier and start selling our products in these countries.

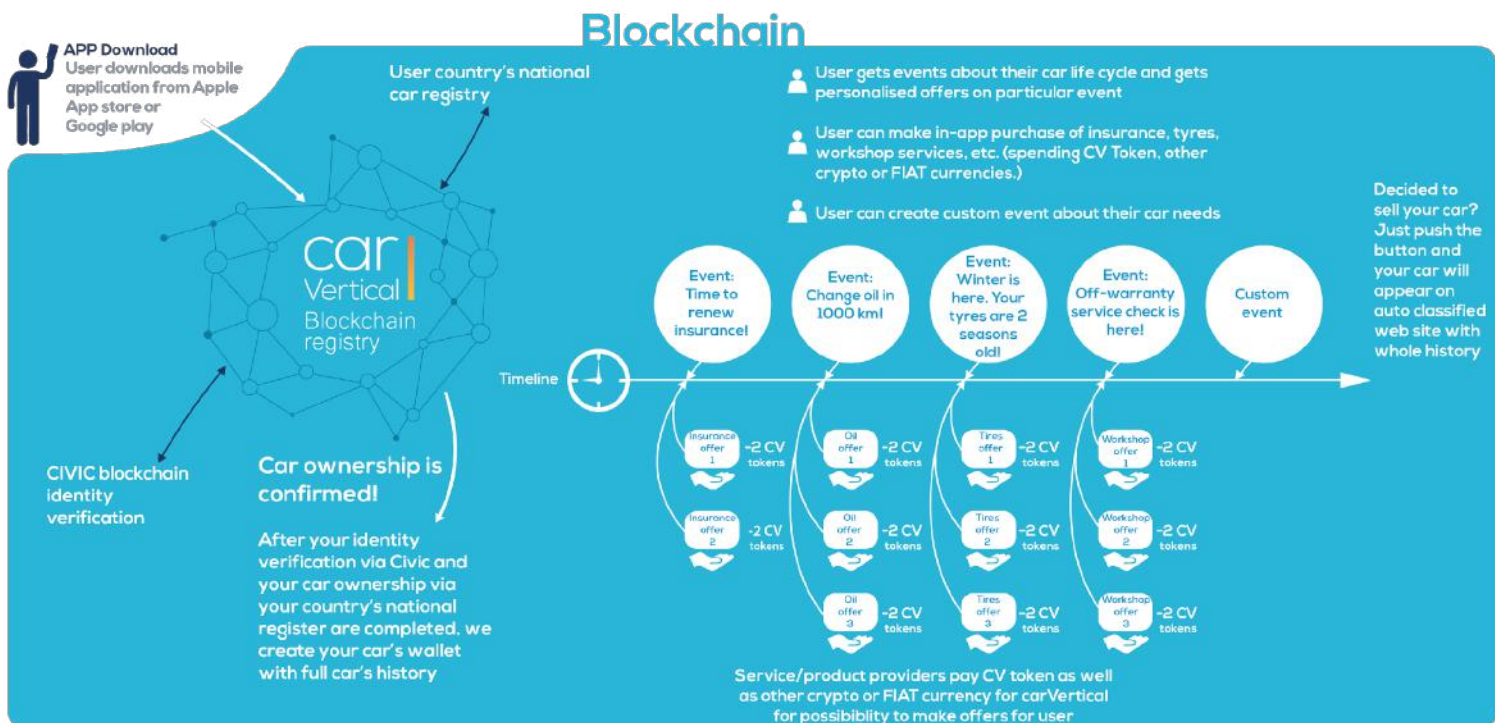
Producing car's history blockchain registry will enable our team to build four different products which will fully utilize blockchain technology, the token of our company, and will be the core elements of a stable cash flow.

4.1 carVertical.Wallet

Wallet is our front product. It will serve as a gateway to most of our services. It will directly communicate with Ethereum blockchain as well as other helper services. It is a mobile gateway to virtually manage your car's registration and maintenance records, perform insurance or technical inspection tasks, access marketplace, and manage access to your data Wallet functionality:

- Closed information access control
- Claiming vehicle
- Marketplace
- Notifications

Monetization: service providers will have to pay cV Tokens to offer their services to vehicle owners. cV Tokens will be bought with FIAT from the pool or in exchange from other token holders.

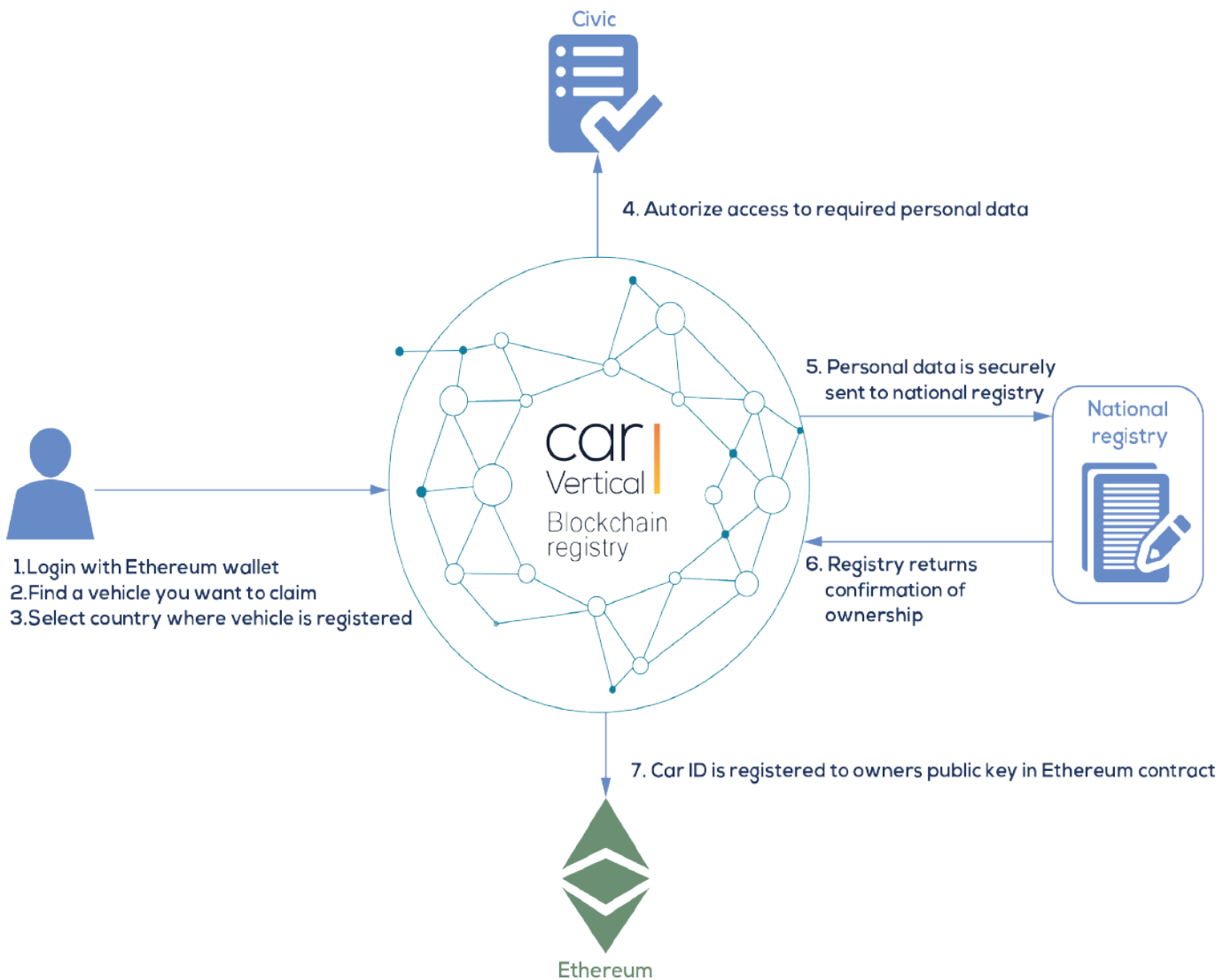


4.1.2 Closed Information Access Control

There is a number of record types in vehicle history. Users are able to control who can access which records, as well as enable public access to some of them.

4.1.3 Claiming vehicle

By claiming a vehicle, you will register it as your property. A record will be kept in Ethereum blockchain. This will make you the owner of any data related to that vehicle. You will receive tokens when this data will be used.



Registration process will include verifying your identity to the public key of your wallet. Users will have to use Civic (we will implement more identity services later) to verify their identity (we will not be handling any personal data). And, after that, you will have to confirm that the vehicle you are claiming is officially registered to your name. This is done via your local vehicle registry. We are working with advisors to create such possibility in countries where it does not exist.

4.1.4 Marketplace

This is going to be a new way to use and manage outside services needed to run your vehicle smoothly. Buying/renewing insurance, ordering service checks, maintenance, and much more. Since we are going to have detailed information about vehicle and its status, service providers will be able to accurately target vehicles which require certain services. Targeting will cost tokens. Vehicle owners will be able to pay using tokens they currently own and receive discounts according to the amount of tokens they hold. Marketplace will be built with Ardor (an evolved version of NXT) blockchain.

4.1.5 Notifications

We will be able to notify users about the number of events which our Machine Learning will derive from the data:

- Insurance renewal
- Tech inspection
- Vehicle issue (IoT)
- Maintenance checkup
- Recommended oil change

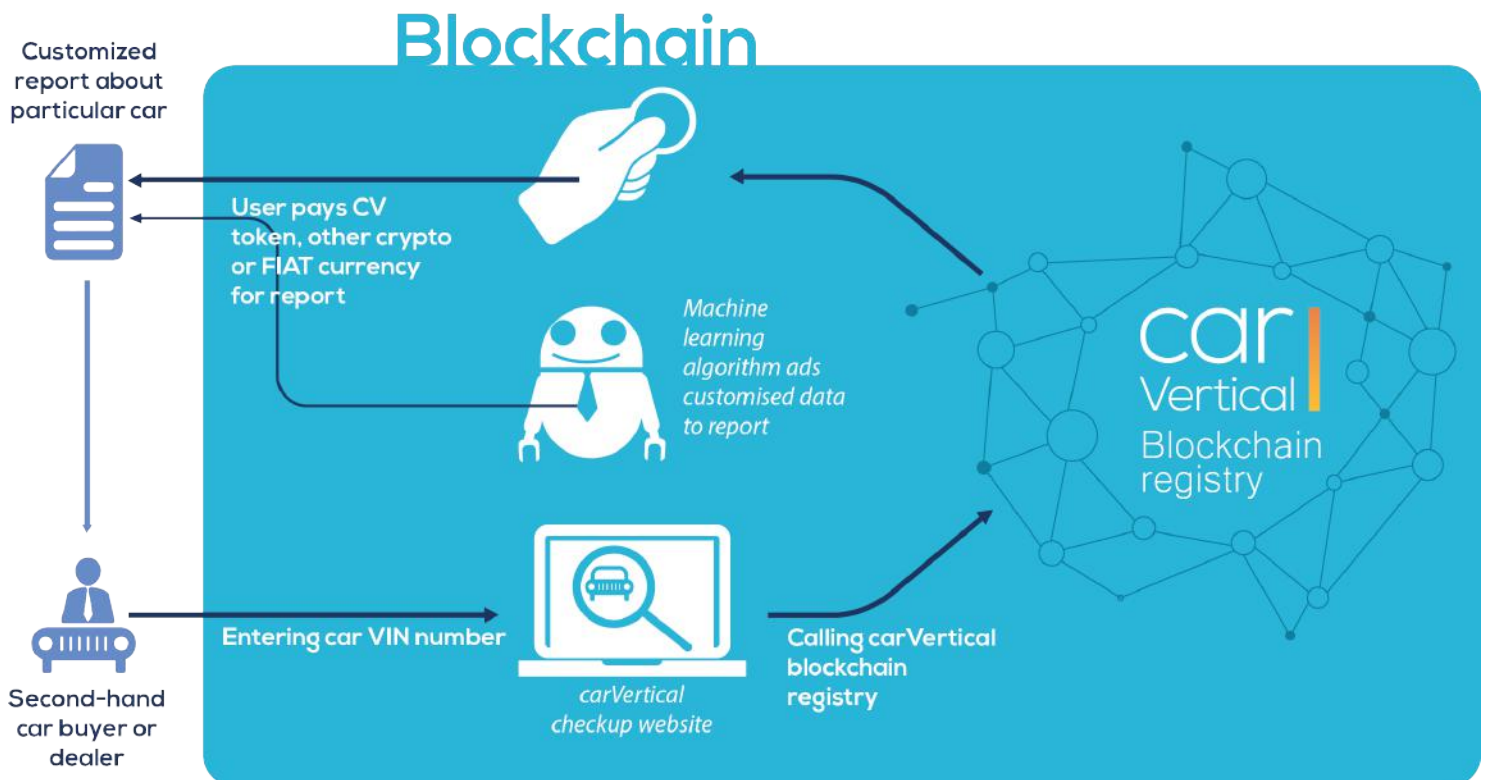
- Seasonal tire change
- ... and more, according to other parameters

4.1.6 Public data and data exchange

We would like to participate in such initiatives as IPDB [ipdb.io]. Users will be able to mark some records as viable for public use, such as odometer readings or minified versions of other records, as well as add integration via Ocean protocol [oceanprotocol.com]. This would provide users with more ways of benefiting from their data.

4.2 carVertical.reports

By utilizing this product we want to satisfy supply/demand for people who want to buy a second-hand car and car dealers. We will provide a unified and easy-to-read report which includes full car history and specific information about that particular vehicle.



More than 1.900.000 search queries about car VIN number check-up are estimated every month. And people get access to only low quality databases with dodgy and unreliable results, we are changing that.

Monetization: fixed price per report & bulk report offers

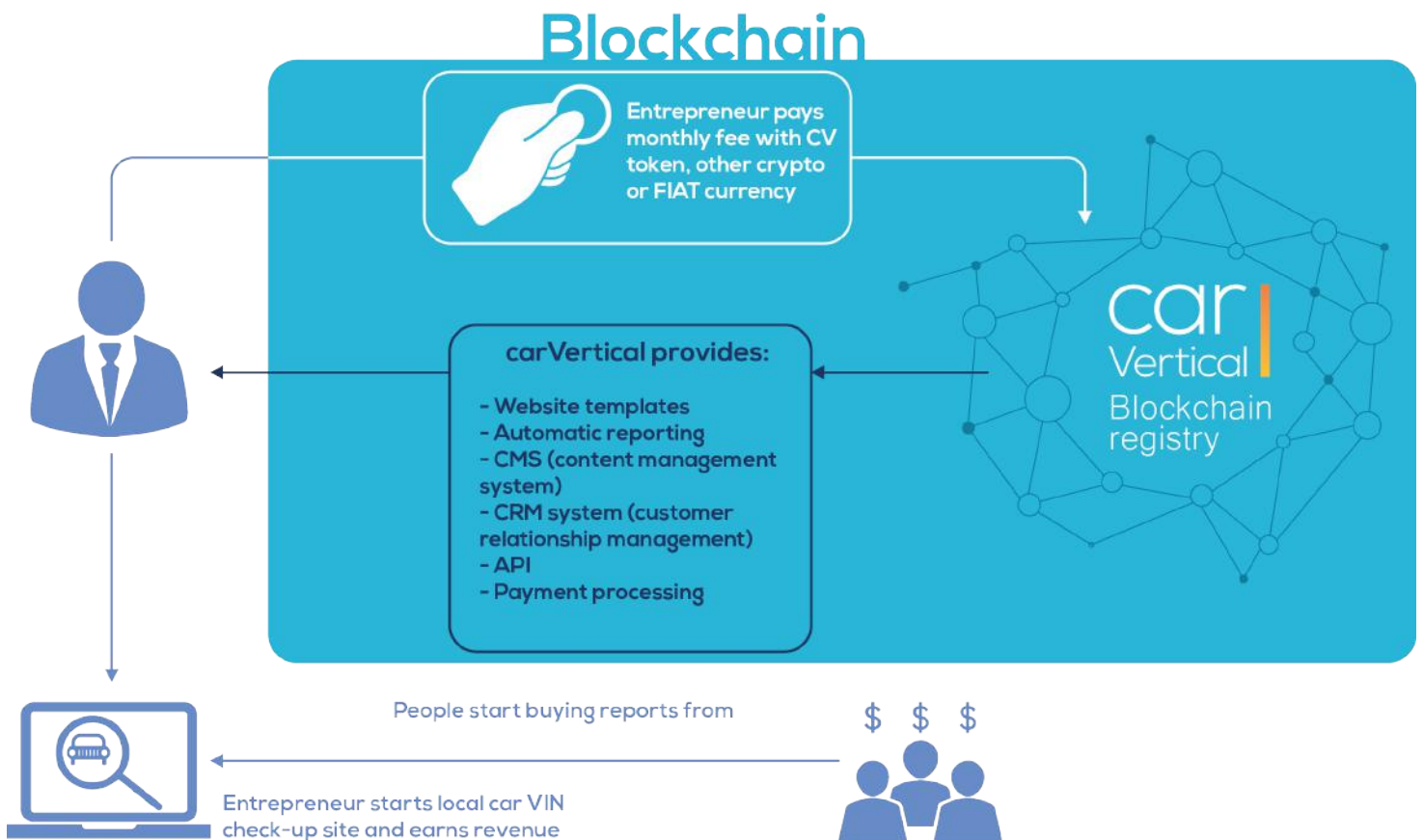
4.3 carVertical.WhiteLabel

We feel the need to spread and ensure easy access to this registry for as many people as possible. Our belief is that the fastest way to do so is giving correct tools, which will help to localize and spread access, to others. Even if you have a good team, car history register database is quite difficult to establish as a B2C business model and it also is time-consuming. We will provide white label (franchise model) solution to everyone who wants to run such business on their own.

For a monthly fee we will provide a white label buyer with:

- Website templates
- - Automatic report development system
- - CMS (content management system)
- - CRM system (customer relationship management)
- - API;
- - Payment processing

The buyer will only need to figure out how to create marketing for their product and selected country or region, and start earning revenue.

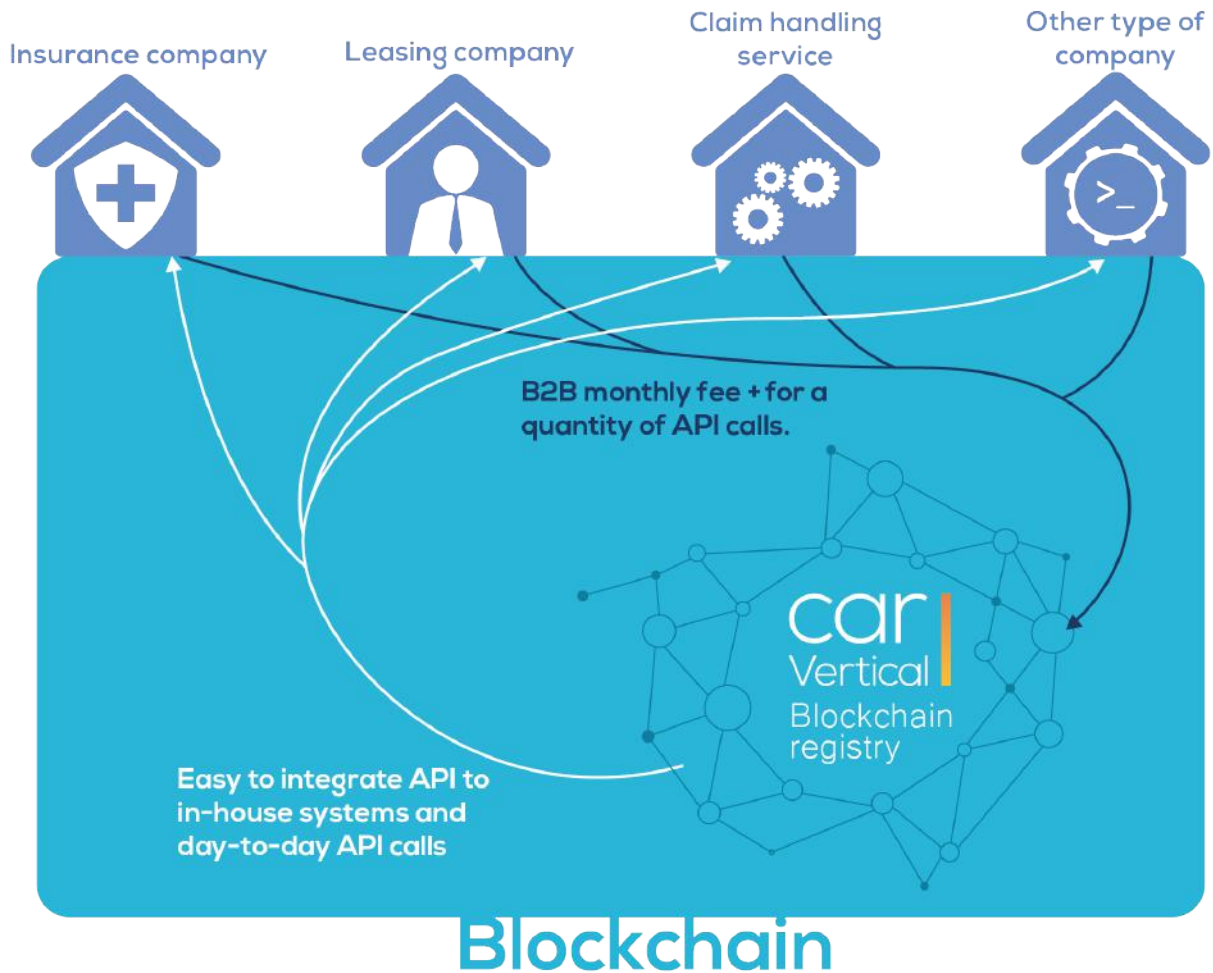


More than 1.300.000 people worldwide look for white label (franchise) business opportunities every month. Creating such product as carVertical.WhiteLabel is a great solution to satisfy this demand and give online entrepreneurs an opportunity to start their local car VIN number check-up business.

Monetization: fixed monthly subscription depending on quantity of reports generated.

4.4 carVertical.API

Big and medium size companies are always in a great need to expand their data sources.



Such companies as insurance, leasing or claim handling services buy plenty of database services every day to make their job easier. For big companies more data sources in their everyday job mean lower financing loss at the end of the year.

carVertical.API is a product for big fish. We will provide them with an API (application programming interface) to get a really easy access to history,

report and value calculation services. An API can be easily integrated into their in-house systems and supported all the time from our side.

Monetization: b2b monthly fee + for a quantity of API calls.

5. Business Analysis

5.1 Milestones & Highlights

Five year milestones:

1. 3rd year **cash flow positive**
2. presence of carVertical.Reports business in the EU, Asia, and the USA;
3. carVertical.Wallet launched and **scaling**.

2018 highlights: building a database and launching carVertical.Reports in 4 European countries, 40.000 reports sold

2019 highlights: launching in 9 more European countries, introducing API and "white label", preparing for a carVertical.Wallet, 290.000 reports sold

2020 highlights: launching carVertical.Wallet beta version, entering 10 more markets with reports, 850,000 reports sold

2021 highlights: entering Asia, Middle East and South Africa Republic with reports, launch of wallet in selected European markets, 1.500.000 reports sold

2022 highlights: wallet scaling entering the USA, Canada, and completing onboard of Europe with reports, 2.200.000 reports sold

5.2 Cashflow Analysis

	2018	2019	2020	2021	2022
Funds needed EUR	786.000	3.360.000	4.161.000	2.306.000	2.106.000
Remaining end of the year EUR	400.000	2.064.000	7.104.000	11.324.000	12.630.000
Marketing & Sales EUR	230.000	1.590.000	2.280.000	3.335.000	4.150.000
Operational Expenses EUR	556.000	2.170.000	3.945.000	6.075.000	9.280.000
Sales, total EUR	400.000	2.944.000	9.168.000	18.428.000	27.204.000
carVertical.Reports EUR	400.000	2.610.000	8.500.000	16.500.000	24.200.000
carVertical.API EUR		250.000	500.000	1.300.000	2.000.000
carVertical.WhiteLabel EUR		84.000	168.000	378.000	504.000
carVertical.Wallet EUR				250.000	500.000
Operating profit EUR:	-386000	-1296000	2943000	9 018000	10 524000

5.3 Notes on Product Pricing

carVertical.report pricing the net price of carVertical.Reports growing from 8 to 12 EUR avg. daily sales growing up to 200.

carVertical.API pricing the average net price of carVertical.API - 10.000 eur/year per client.

carVertical.WhiteLabel pricing the average net price of carVertical.API - 350 eur/month per client.

5.4 SWOT Analysis

Strengths

1. carVertical is a blockchain registry. This means that data cannot be changed, faked, rewritten or manipulated.
2. carVertical is the first solution in the world which took blockchain-based approach to the car history sector.
3. Our team has a team member who has worked in car history database market for years.
4. Blockchain for our products automatically guarantees trust and transparency as a unique selling proposition.
5. Three products (.reports, .WhiteLabel & .API) will guarantee a stable cashflow for our company in a very short time after ICO.
6. Our carVertical.Wallet product will feature an integration with Civic Identity Verification process. It is becoming an industry standard.
7. carVertical.WhiteLabel product will guarantee a faster spread of our blockchain registry all over the world.
8. Performance team! Faster than autoDNA and more technologically advanced than CARFAX.

Weaknesses

1. Data gathering starts from scratch. In the case of scraped information, it will take about 2 years for it to become valuable.
2. It will also take some time to overcome some VIN-checking services which are well-known on the regional level.

Opportunities

1. carVertical.API product will not only guarantee possibility to approach and sell blockchain registry to big companies, but also turn them into our data sources.
2. From marketing perspective, it is always easier to penetrate such market which does not want to change and innovate itself.
3. carVertical is the first blockchain-based car history solution. It means a great potential to become an industry standard.
4. carVertical also has an opportunity to become the first global vehicle registry.

Threats

1. carVertical most heavily relies on Ethereum, as that is where the registry will be stored. Any threat to Ethereum is a threat to carVertical.
2. As trust in ICOs is in fast decline, we might raise money slower, which will slow down the product development.

3. Legislation. Some countries treat VIN as personal information. Not clear, but EU might enforce directive that states VIN as personal information. This might make getting and storing information more difficult as we will need to conform to more standards.

6. Token Sale & Token Model

In this section, we are going to summarize the process of carVertical token model, distribution & utilization. More detailed terms and conditions will be set out in the terms and conditions of the carVertical token sale which will be made available on our website www.carvertical.io.

6.1 The Purpose of carVertical Token

carVertical token is NOT AN ASSET, NOR A SECURITY. It is a utility token. carVertical tokens do not represent or confer any ownership right or stake, share, security, or equivalent rights, or any right to receive dividends, other payments, intellectual property rights, or any other form of participation in or relating to the project described in this white paper and/or in carVertical or any of its affiliates. The holders of carVertical token are only entitled to use carVertical products as described in this document if successfully developed, or to resell the tokens.

The cV token itself will be based on Ethereum, a blockchain-based computing platform. Ethereum allows smart contracts – distributed computer programs which can facilitate online contractual agreements in a cryptographically secure manner. Smart contracts are what enables the

existence of carVertical token as a truly transparent and decentralized service. This technology also ensures that carVertical removes the need for intermediaries and having a central authority you need to trust, through smart contracts, the complex process of choosing peers, tracking delivery and facilitating bidding/payment can be described in the contract itself, while still running on the distributed Ethereum network and taking advantage of the blockchain qualities.

cV are distributed and kept on the main Ethereum network. To optimize the transaction cost and performance, all micro transactions are processed off-chain and only the final stakes are returned to the Ethereum network. We believe in the idea of keeping tokens on Ethereum and see it as a bank platform, and an excellent platform to enter exchange markets.

6.2 How Is Token Going to be Used in carVertical?

The usage of a cV token described by product:

carVertical.Wallet:

A person can earn cV by using carVertical.Wallet product. The person will earn a small amount of cV by downloading the carVertical.Wallet mobile application, confirming their identity with Civic identity verification blockchain, and confirming their car's ownership with their country's national car registry. Using wallet user will be able to provide access to his/her data kept by third parties, which will earn additional tokens. Also, there will be

some referral programs for carVertical.Wallet with a small amount of cV tokens as a reward.

Service or product providers will need to pay cV tokens (or other crypto or FIAT currency) for a possibility provided by carVertical to make offers (e.g. insurance offer) to the carVertical.Wallet users.

A carVertical.Wallet user will be able to buy service or products from providers by paying a cV token (or other crypto or FIAT currency).

carVertical.Reports:

A person or a company will be able to purchase a report about a particular car by using a cV token (or other crypto or FIAT currency).

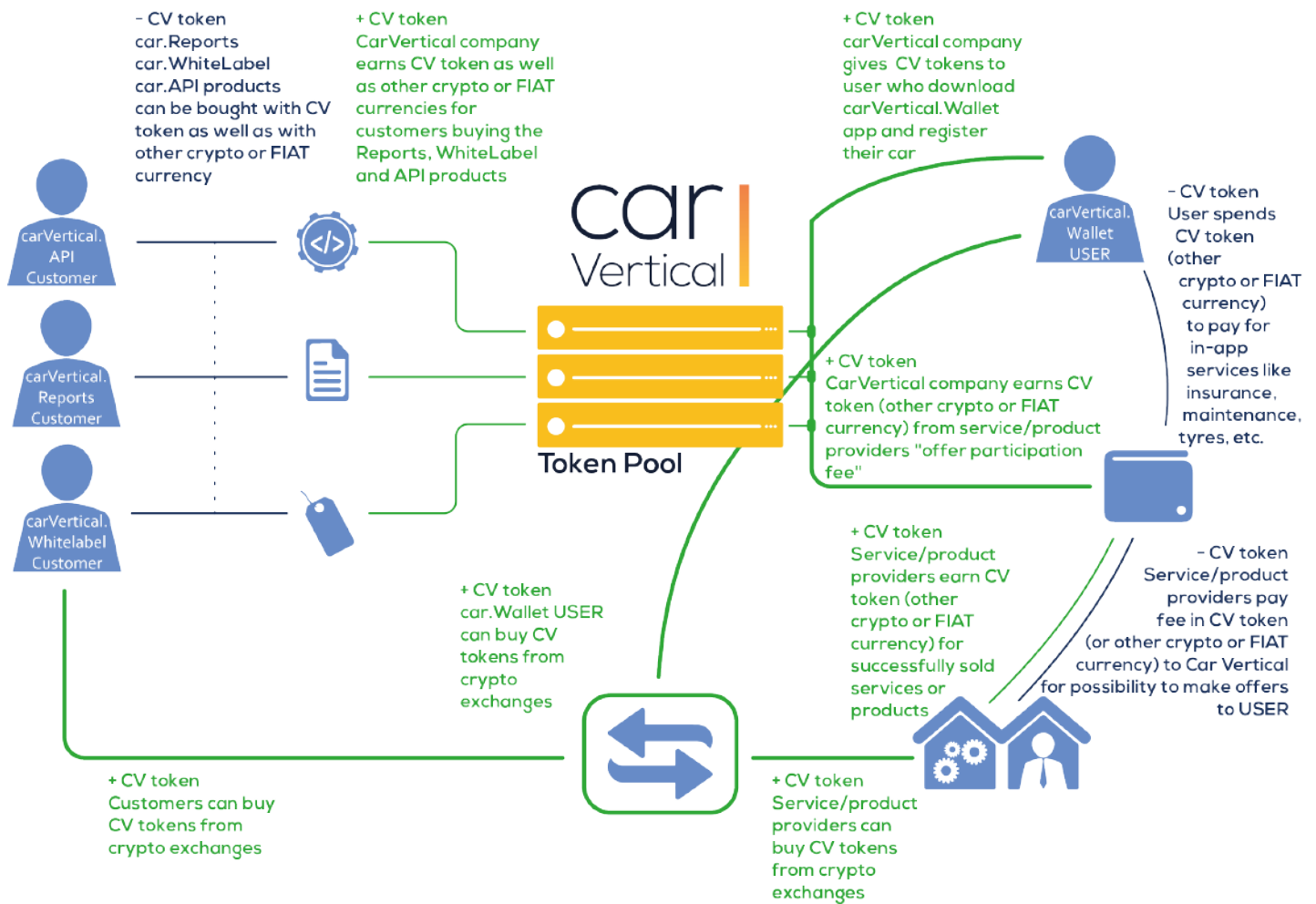
carVertical.WhiteLabel:

A person or a company will be able to buy a carVertical.WhiteLabel solution by using cV token (or other crypto or FIAT currency) and start their own car VIN checkup business in their country.

carVertical.API:

A person or a company will be able to buy a carVertical.API solution by using cV token (or other crypto or FIAT currency) access carVertical database by provided API solution and easily integrate our data to their systems.

cV Token graphic flow:



6.3 Rules of ICO

carVertical will launch only ONE public initial coin offering (ICO) during which a token sale will be held. It will take place on <https://www.carvertical.io>. The ICO will start on the date which will be determined soon. Contributors who plan to purchase up to 2,5 ETH worth of cV will not be required to get whitelisted. The hard cap of the carVertical ICO is 15050 ETH. The soft cap - 3050 ETH. The pre ICO stage is 1050 ETH.

carVertical public token sale will be executed in 6 waves. The first wave is considered a pre-ICO and is worth 1050 ETH. All funds contributed during the pre-ICO wave will be used for marketing & legal expenses of the carVertical ICO campaign.

Wave 2 (2000 ETH) is considered the soft cap (Total with Wave 1 - 3050 ETH). If the company does not reach soft cap (End of Wave 2), all contributions will be refunded. In such case only contributors that participated in wave 2 will get their contributions back. All pre-ICO (wave 1) contributors will not be able to refund their donations.

All waves will be executed by ERC-20 standard and the token sale will be distributed via smart contracts on the Ethereum Network. The smart contract will cover all six waves including pre-ICO stage (Wave 1). The smart contract will automatically close in 100 days after the start of first wave. carVertical Tokens will be distributed to all contributors only after the end date of the smart contract or if the token crowdsale reaches its hard cap (15050 ETH).



Individual maximum purchase cap - 2000 ETH, individual minimum purchase cap - 0,1 ETH.

Rules of ICO 30: Additionally, during the registration an intended to be used Ethereum wallet address should be provided. It will be used for transferring ether and receiving carVertical tokens. The address provided and beneficiary address must be the same. One contributor will be able to make only one transfer. The wallet must be ERC-20 approved. A list of recommended wallets is provided below.

DO NOT PARTICIPATE IN TOKEN SALES DIRECTLY FROM CRYPTOCURRENCY EXCHANGE ADDRESSES. YOU NEED A TOKEN COMPATIBLE ETHEREUM WALLET.

cV will be transferred after the reach of the soft cap. When the soft cap is reached, the cV will be transferred immediately after the transaction is made. During the ICO, carVertical tokens will be locked, until the end of the

ICO. cV will be listed in exchanges in 6-16 weeks after the ICO is finished. If not all the cV are sold during our token sale, the remaining tokens will be shared to all ICO (43%) contributors proportionally. These tokens will be transferred when a person makes a transaction using carVertical token. Any transaction will be applicable, even to the same wallet. In an unlikely event, if the soft cap is not reached, contributors will get refunded automatically (except wave 1 - soft cap).

Recommended Wallets	Incompatible wallets Do not use the following wallets to participate any token sale. First move your ETH to a compatible wallet in the list to the left:
<ul style="list-style-type: none"> • MyEtherWallet (no download needed) • MetaMask (Firefox and Chrome browser addon) • Mist (Desktop) • Parity (Desktop) • imToken (iPhone) • imToken (Android) 	<ul style="list-style-type: none"> • Any Bitcoin exchange • Any Ethereum exchange • Jaxx • Exodus • Coinbase • Poloniex • Kraken • Bitstamp • Bitfinex • Bitrexx • Cex.io

6.4 What Is KYC and Why Is it Needed?

COMPANY WILL EXECUTE POST FACT KYC PROCESS. KYC PROCESS WILL BE EXECUTED ONLY FOR THAT PART OF CONTRIBUTIONS WHICH WILL BE CONVERTED TO FIAT AND TRANSFERRED TO BANK.

The primary objective of token sale registration is to enforce a mandatory Know-Your-Customer (KYC) check to prevent identity theft, terrorist

financing, money laundering, and financial fraud. It also allows our team to understand our token holders better and manage risks prudently.

At carVertical we take social responsibility very seriously, thus, we believe that it is important to play our part in combating money laundering and terrorism financing. That is why we have benchmarked ourselves to the same KYC standards typically adopted by banks and financial institutions globally. The due diligence process includes screening against international sanction/terrorist lists, politically exposed persons, and people with adverse reputation. Risk assessment and onboarding outcome will be performed and determined through the use of a proprietary software. The KYC process is comprised of two parts, in the following order:

1. Automated. Your details, as provided by you, will be checked against public sanctions and alert lists. This step will be performed by a KYC solution firm based in Singapore.
2. Manual. If the automated step is successful, we will manually verify that the information provided matches the identification document photos submitted by you.

6.5 Privacy and Security during KYC

Our members' privacy and security are of utmost importance to us. As such, please find below the measures which will be employed to ensure your privacy and security:

1. Only an encrypted version of your data is stored in our public servers. The decryption key is stored in a private server. The public servers cannot initiate

connections to this private server. All decryption happens in our private server which only the founding team has access to.

2. Email addresses will not be stored in our public servers, instead, only a hash of each email will be stored in those servers. All emails sent in regards to the registration processes will be sent from the private server.

3. Your data is not retrievable even if the password is compromised. Your password does not give you access to your data, but rather only enables you to re-submit your data if, and only if, requested by the carVertical team.

4. All data collected during the manual KYC will be only and exclusively stored on our company computers, as the entire process will be performed in our offices. For this purpose, new computers dedicated solely to this task will be acquired and all information will be wiped out from the memory drives of these machines after the checks are completed.

Once process is finished, data will be encrypted and stored privately for potential future audit requests from authorities.

Neither carVertical, nor Onfido will share members' personal data with 3rd parties without prior consent. You should take these precautions:

1. Never send Ethereum to any address during the registration process. There is only ONE public token sale date and it is specified on our website: www.carvertical.io.

2. Bookmark the registration, and never visit the registration site following any email links.

3. Never trust emails related to the particular sale details (such as the hard cap, Ethereum address to send to, etc.). Remember that sender's email address can be easily forged. 4. Never reply to our emails. Perform all your operations on our website only. You can check your registration status on our website using your account.

6.6 Registration for ICO

Registration for carVertical ICO and token sale will be held on our website <https://www.carvertical.io>. When the token sale is launched, please double-check the address in the browser, because scammers might create similar websites to trick you.

Some contributors who are planning to purchase up to 2,5 ether worth of cV will be asked to do post fact KYC process. KYC process will be made only for that part of contributions which will be fixated and converted to FIAT and send to Bank account

Registration to ICO and purchase:

1. Visit our website <https://www.carvertical.com>;
2. Choose "Contribute Now";
3. Enter your personal details and ERC20 standard wallet (recommended MyEtherWallet.com);
4. Select the type of currency you want to use for contribution;
5. Read and agree to Terms & Conditions;

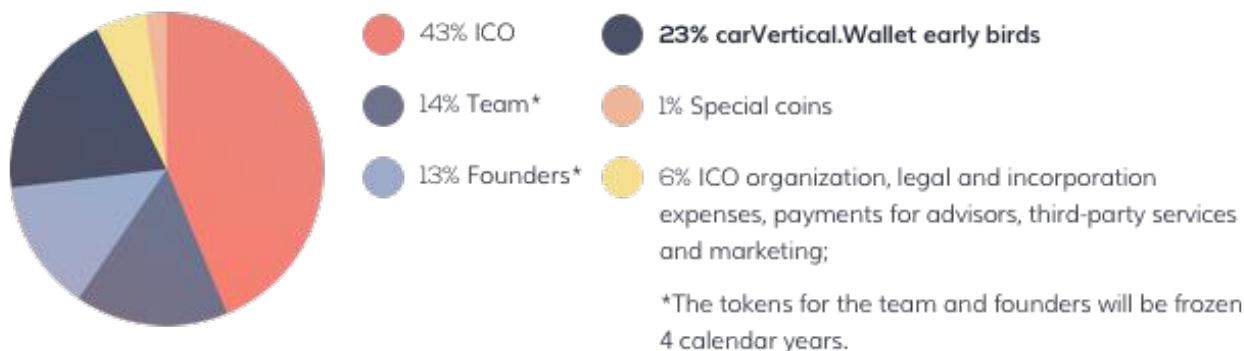
6. Contribute;

7. Make the transfer and you will receive cV after the soft cap is reached (if it is reached, you will receive them immediately). Warning: Only send ETH from ERC-20 compliant wallets which allow you to control your private key. Make sure to backup your private key. Do NOT send them from an exchange, because your ETH will be lost.

6.7 Token Sale

Our main goal is to establish a working company with cash positive revenue stream in the shortest period possible and achieve a stable growth of the company and community. That is why we are going to set an equal and individually assigned purchase cap for each contributor during the ICO.

Distribution of carVertical Tokens (ETH)



TOKEN PRICE: 1 ETHEREUM = 240 000 cV + Wave Bonus

	ETHEREUM	CAR VERTICAL TOKEN (cV)	BONUS %	CAR VERTICAL TOKEN (cV) with bonus
Wave 1	1050 ETH	252 000 000	45%	365 400 000
Wave 2	2000 ETH	480 000 000	35%	648 000 000
Wave 3	3000 ETH	720 000 000	25%	900 000 000
Wave 4	3000 ETH	720 000 000	15%	828 000 000
Wave 5	3000 ETH	720 000 000	10%	792 000 000
Wave 6	3000 ETH	720 000 000	5%	756 000 000
Total	15050 ETH	3 612 000 000		4 289 400 000

The carVertical ICO and token sale is expected to be organized in 6 waves. Such ICO model is introduced for the convenience of contributors: 1. they will receive BONUS tokens; 2. it is a more transparent way to present what carVertical features are proposed to be fulfilled.

	Percentage	Number of CAR VERTICAL TOKEN (cV)	Est. value in ETHEREUM
Total	100%	9 975 348 837	35 000
ICO	43%	4 289 400 000	15 050
Team	14%	1 396 548 837	4 900
Founders	13%	1 296 795 349	4 550
Early carVertical.Wallet users	23%	2 294 330 233	8 050
Special Coins	1%	99 753 488	350
Organizational expenses	6%	598 520 930	2 100

The team and founder tokens will be vested in 4-year period to show our commitment to the overall success of carVertical.

ICO - total pool of cV dedicated for token sale.

Team - bonuses for the team. Locked and vested in 4 years.

Founders - locked for 4 years.

Early birds - to accelerate a worldwide adoption of carVertical, these tokens will be given to major global companies free of charge in order to make them start using carVertical service. These tokens are not locked.

Special Coins - special coins which will be donated to victims of accidents which were caused by drivers who were driving a car sold by an unfair dealer.

Organizational expenses - expenses for the ICO organization, legal services, incorporation, advisors, third party services, and marketing.

6.8 Are carVertical Tokens Securities?

No, carVertical tokens are not and are not intended to be securities, financial instruments, or investment products of any kind.

For example, with purposes of financial regulation in the European Union a “security” is often defined with a reference to “transferable security” within the meaning of the EU Directive on markets in financial instruments (MiFID)[1]. According to MiFID, “transferable securities” means those classes of securities which are negotiable on the capital market, with an exception of instruments of payment, such as:

(a) shares in companies and other securities equivalent to shares in companies, partnerships or other entities, and depositary receipts in respect of shares;

(b) bonds or other forms of securitized debt, including depositary receipts in respect of such securities;

(c) any other securities giving the right to acquire or sell any such transferable securities or giving rise to a cash settlement determined by

reference to transferable securities, currencies, interest rates or yields, commodities or other indices or measures.

carVertical does not qualify as “transferable security” for the above purposes. carVertical as a utility token in the future will only provide opportunity to access carVertical services of. The aim of the carVertical token is to make it possible for people to buy carVertical products as well as with other crypto or FIAT currency.

If carVertical was not based on the blockchain technology, it would be similar to purchasing a ticket or other document which proves that the person has a right to use a particular service.

7. Industry Trends

So far, the automotive community seems to be excited about blockchain evolution. Some promising new cooperation possibilities and ventures have arisen, and they rush to provide various solutions to the market. It is not a product phase yet, but rather proofs of concept.

For example, Volkswagen Financial Services (VWFS), coupled with several partners, is developing CarPass in an effort to centralize all information about a car to a shared immutable and transparent database, immune to fraud or falsification. Telemetry and sensor data introduce all manner of possibility in what could be registered on such a ledger.

Toyota has also announced a plan to use blockchain to amass driving data which will help them to develop driverless cars. The Japanese manufacturer is working on developing applications and proofs of concept for three areas of the new mobility ecosystem: driving/testing data sharing, car/ride share transactions, and usage-based insurance.

Other major automakers, including Porsche, Daimler, and Renault, have also taken steps to investigate or integrate blockchain technology. For instance, in April 2017, Porsche launched a competition inviting blockchain start-ups to suggest how blockchain technology could be applied to its business.

According to Frost & Sullivan, participants in the automotive sector are expected to spend approximately 0.6% of their total IT spend on blockchain technology by 2025. Ranging from supply chain management to leasing, a variety of automotive industry verticals have been identified, where blockchain has the potential to be a disruptor. The industry is, therefore, beginning to build momentum to experience blockchain penetration outside of an R&D or a lab setting.

8. The Team

[Audrius Kucinskas](#)

Audrius is the leader of the project and blockchain guru. He has been developing web and software products since 2007, mainly specializing in DevOps engineering and iOS development. If Audrius was not a programmer, he would definitely be a scuba diver.

[Robertas Boravskis](#) is a graduate of University of Greenwich with a background in marketing and business development. He is a co-owner of gpswox.com, #1 global GPS tracking service provider. Since the beginning of 2017, Rob is also an active crypto investor.

[Rokas Medonis](#)

Rokas is a business development superstar, currently acting as a board member in StartupHighway, private venture capital fund. He is responsible for various online and offline products in the Baltics. Rokas is also the man behind “Keule Ruke” fast food chain brand, known for bold guerilla marketing solutions, such as “Putin kissing Trump” and others.

[Šarunas Legeckas](#)

An experienced Chief Executive Officer with a demonstrated history of working in the internet industry. Skilled in management, start-ups, leadership, business development, and business strategy. A strong entrepreneurship professional with a master’s degree in Msc Innovation, Creativity and Enterprise Management from Newcastle University.

[Aleksandras Nelkinas](#)

Alex is an experienced software engineer, focusing on frontend development since 2009. During his career, Alex has held senior developer positions in Hostmaker (#11 among the top 100 UK startups), Wrap Media LLC, Soundest, and others.

Adomas Baltagalvis is a amazing ROI channels performance marketer. He is famous for such amazing marketing campaigns as Filippo Loreti watch kickstarter campaigns which has raised mor than 4 million EUR.

Gediminas Cibulskis

Storyteller at work and in real life, Gediminas is a creative copywriter in VRS WPI Vilnius agency. With master's degree in philology, he is a tough one to beat when it comes to communication. Gediminas has an abundant collection of trophies, including Cannes Young Lions award.

Nerius Rutkauskas

Senior data analyst who is used to working with large quantities of data. Nerius has more than 7 years of working as a data analyst in Mark Monitor, a company whose clients are almost half of Fortune 500 companies.

Justinas Gulbinas

Backend software engineer with experience in working with various technological stacks and large profile of international products.

Martynas Kavaliauskas

When it comes to connected cars, Martynas has some experience to share. Since 2014, he is the co-founder & CEO of GPSWOX, global GPS tracking service provider. Before that, Martynas was an IT director at German's Otto GmbH.

[Aleksandras Gaška](#)

With 3 years of experience focused towards customer satisfaction, a little while back served as a community relations manager and jack-of-all-trades at Monetha (raised \$37 million in 18 minutes) and community relations / blog writer at Mysterium Network (raised \$14 million in 45 minutes).

Helps carVertical with the long-term growth and partnerships, as well as the Blockchain side of the project, including the economical token model.

[Nicolas Klaus](#)

Nicolas is a Berlin-based business development manager, excited about the changes that blockchain brings. With the Master's degree from University of Amsterdam, Nicolas is helping carVertical with communication and partnerships.

[Arūnas Vaitkus](#)

Arunas started his professional career 7 years ago in an international Law Publishing company in London starting as a developer, quickly following to Data Architect Lead role and leading a multi-continental team responsible for delivering part of global publishing platform. As part of technology stack and shift towards Big Data, Arunas had a chance to work on NoSQL database that in the end lead to opening of a consultancy company. Further down in his career, Arunas took an opportunity in consulting a leading Swiss investment bank over the implementation and delivery of NoSQL Data Warehouse. Also, whilst consulting, Arunas and his team had a chance to work on Oracle, data visualisation and BI tools. After that Arunas worked on blockchain document storage and retrieval projects. Lately, his focus is in an international company

building agricultural data analytics platform for big farmers globally along with food processors and investors. Current technology includes NoSQL databases, semantics & ontologies powered by a blockchain technology.

Advisors:

John Mack

President & CEO CIE Automotive China

Mr. Mack is a top automotive executive, previously employed by BMW, General Motors and FIAT Group. He lived in countries such as Australia, Germany, Italy, France, Poland, USA, Thailand, Singapore, China and others.

Mr. Mack's areas of Expertise include Automotive Business strategy, Operations strategy, Design and Development of cars. He studied Mechanical Engineering in Swinburne Australia and received MBA from European University in Germany.

Brian Dublin

CFO Sterling Eastern (Zug, Switzerland)

Mr. Dublin is Zug (Switzerland) based CFO who has led business transformation & delivered growth in \$multi-billion companies. His corporate experience include Zymtech AG, Virgin Media Internet, SPI Group, TMP Worldwide. Mr. Dublin is the graduate of Columbia University.

Tadas Volbikas

CEO & Board Member Legator

Corporate experience: 10 years of active leadership, structuring and executing operations of insurance brokerage. Areas of expertise: automotive insurance, finance, banking.

Steve Chernysh

Vice President, Russian Association of Automotive Dealers

Mr. Chernysh is an experienced automotive executive. He has been working with top automotive brands, including Volvo, Mazda, Kia and Toyota. Mr. Chernysh's areas of expertise cover automotive sales management, business development and investments.

Anatoly Ressin

CEO BlockVis

Blockchain, cryptography expert and a current contractor of famous Civic.

Mr. Ressin believes that blockchain will prevail and ultimately change our way of thinking about the entirety of the ever-changing Digital World.

Amongst numerous initiatives, Mr. Ressin has also contributed to those changes by participating in the development of Civic and by organising blockchain competence and education activities.

[Jonas Udris](#)

Deputy Director Lithuanian Center of Registers

Corporate experience: 10 years of active leadership, structuring and executing operations of insurance brokerage. Areas of expertise: automotive insurance, finance, banking.

[Mindaugas Valančius](#)

Ex-Data Protection Lawyer COBALT Legal

Corporate experience: Valiunas Ellex, Mykolas Romeris University, Legal Services Group Ltd. Areas of expertise: data protection, IT and IP.

[Peter Kuepper](#)

Head of Transmissions' Program Management BMW Group

Project experience: BMW i3 powertrain, Rolls-Royce powertrain. Areas of expertise: electric vehicles, electronic control units, vehicle diagnostics.

[Raid Naim](#)

Ex-IT Chief Architect BMW Group

Corporate experience: mobile.international GmbH (eBay Inc.), BMW of North America, Futurice (Germany). Areas of expertise: digital transformation, lean management, agile software development.

9. Product development timeline

The carVertical ICO will start on 26th of December 2017 and end on 4th of April 2018 or when it hit hard cap. During the 2018, we will develop a working carVertical product (web product and apps), which can cover B2C, B2B & Public access parts of the business model. From January 2018, we will start on-boarding different local and global databases and registers which belong to countries or private owners and start getting revenue on June 2018.



10. For Contributors

6 subjective arguments proving why carVertical Token value is going to grow in the future

1. carVertical is projected to start generating revenue from its products in July 2018. Our cash flow analysis states that in five years we will hit a revenue of 27,204,000 EUR with EBITDA of 10,524,000 EUR.
2. Token will be the only way to buy carVertical services. Stacking comes in place: person who owns more carVertical tokens gets significant discounts when buying our products. That means cheaper API calls, reports, whitelabel, car insurance and other services.
3. carVertical Token value will directly correlate with effectiveness of our service. Effectiveness of the service will be determined by efficiency of our machine learning and mathematical models. Machine learning and mathematical models will get better over time with more data.
4. The users carVertical onboards generate more and more data over time. So the value of the token will grow exponentially with the number of users we will onboard.
5. The team is already building this product. ICO came as an opportunity, not as a goal. This proves that carVertical is not just another ICO. We have signed agreement with Diginet, biggest classifieds website group in Baltic states, to deliver white label solution for their auto classified sites.

6. All national and privately held registries will move to blockchain in a few years. We're going to be the first "sitting at the table" when governments and big companies come searching for the solutions to their needs.