Car-sharing Start-Up in Ukraine

Capstone project

Rostyslav Shipka | Vasyl Lukyanenko

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CHAPTER 1. BUSINESS CONTEXT

1.1 Problem statement

The car-sharing industry is a rapidly growing market with a relatively low level of competition. In Europe, the number of car-sharing users has grown from 1 million in 2010 to 5 million in 2016, and the number of vehicles available for sharing has increased from 18,000 to 100,000 during the same period (Navigant Research, 2017). In North America, the car-sharing market is expected to grow from 2.3 million users in 2015 to 9.4 million in 2025 (Bureau of Transportation Statistics, 2021). Despite this rapid growth, the car-sharing market is still underdeveloped in many countries, including Ukraine.

In Ukraine, the car-sharing market is currently at a nascent stage with only a few players. The first car-sharing service was launched in Kyiv in 2015 by a local start-up, Zipcar Ukraine. However, the car-sharing market is still very underdeveloped in Ukraine, with less than 0.1% of the population using car-sharing services. The biggest company in this market is GetmanCar from Dnipro and it has a fleet of 220 vehicles.

There are several causes for the lack of growth in car-sharing in Ukraine. First and foremost, current ride-sharing services have limited coverage and availability throughout Kyiv. Second, the full-scale war in Ukrainian has resulted in residents of Kyiv Oblast and Kharkiv losing their cars. Finally, the economic crisis has caused Ukrainians' household earnings to drop, making it difficult for people to afford their own cars.

In order to address these challenges, we have developed a platform that will allow users to share cars inside and between urban areas of large cities. This will enable Ukrainians to use cars for long-distance travel without the need to own a car. The platform will also be available for use by businesses, such as car rental companies, who can use it to offer on-demand access to their fleets.

1.2 Idea description

The idea is to develop a car-sharing platform that will allow users to share cars between cities in Ukraine. The platform will be available for use by private individuals and businesses, which can substitute their own fleet with shared cars on-demand. Station-based model car-sharing can be applied to business customers.

1.3 Vision and mission

Car-sharing is a fast-growing industry with a lot of potential in Ukraine. The company's vision is to become the leading player in the Ukrainian car-sharing market and to contribute to the development of this new and innovative transportation option in the country.

The company's mission is to provide an affordable, convenient and sustainable Car-as-a-Service solution for Ukrainians. Car sharing allows people to have access to a car without having to own one, which saves money and reduces congestion and pollution in cities. The company strives to provide the best possible service to its customers and to make car-sharing a success in Ukraine.

1.4 Goals and objectives

The goal of the company is to become the leading car-sharing provider in Ukraine. In order to achieve this, the company has set the following objectives:

- To grow the customer base by 100% every year for the next three years.
- To increase awareness of car-sharing and its benefits among Ukrainians through marketing campaigns.
- To expand the car-sharing network to cover all major cities in Ukraine.

CHAPTER 2. MARKET ANALYSIS

2.1 Macro analysis

In 2022, the Ukrainian economy is expected to decline due to the full-scale war started by Russia. According to the World Bank, Ukraine's economy will shrink by 45% in 2022. The Russian military campaign has caused a significant economic and humanitarian crisis, evidenced by fiscal financing strains, trade disruptions, the displacement of millions, and extensive infrastructure damage that may have far-reaching macroeconomic and social ramifications.

Ukraine faces significant challenges. The economy is still largely reliant on energy imports, and economic growth has been constrained by weak rule of law, pervasive corruption, and low levels of domestic and foreign investment. The war will likely exacerbate these problems and set back efforts to achieve sustainable and inclusive growth. Progress on structural reforms has stalled in recent years, and further reform is needed to create jobs and reduce poverty. The country also faces the ongoing challenge of repairing its infrastructure after months of the war.

The war has had a devastating impact on Ukraine's economy. However, the country is working to overcome the challenges it faces and rebuild its economy. With international support, Ukraine can succeed in this endeavor.

Table 1 Ukraine / Macro outlook indicators

(annual percent change)

	2019	2020	2021e	2022f	2023f	2024f
Real GDP growth, at constant market prices	3.2	-3.8	3.4	-45.1	2.1	5.8
Private Consumption	10.9	1.7	7.7	-50.0	2.5	2.9
Government Consumption	-13.6	-0.7	1.8	-10.0	3.0	2.0
Gross Fixed Capital Investment	11.7	-21.3	7.6	-57.5	68.5	34.3
Exports, Goods and Services	7.3	-5.8	-10.4	-80.0	30.0	35.0
Imports, Goods and Services	5.7	-6.4	12.7	-70.0	42.0	24.0
Inflation (Consumer Price Index)	4.1	5.0	10.0	15.0	19.0	8.4
Current Account Balance (% of GDP)	-2.7	3.4	-1.1	-6.8	-16.8	-15.3
Fiscal Balance (% of GDP)	-2.1	-5.6	-4.0	-17.5	-21.6	-14.6
Debt (% of GDP)	50.2	60.4	50.7	90.7	..	..
Primary Balance (% of GDP)a	1.0	-2.7	-0.5	-13.8	-16.6	-12.8
Upper middle-income poverty rate ($5.5 in 2011 PPP)	2.5	2.5	1.8	19.8	18.5	17.1

Source: World Bank, Poverty & Equity and Macroeconomics, Trade & Investment Global Practices. Emissions data sourced from CAIT and OECD.

Table 2. Economic indicators

	Last	Previous		
Currency	29.54	29.54		May/22
Stock Market	519	519	points	May/22
GDP Growth Rate	1.9	1.5	percent	Dec/21
GDP Annual Growth Rate	6.1	2.8	percent	Dec/21
Unemployment Rate	10.6	9.2	percent	Dec/21
Inflation Rate	16.4	13.7	percent	Apr/22
Interest Rate	10	10	percent	Apr/22
Balance of Trade	-166	-1108	USD Million	Jan/22
Current Account	1350	371	USD Million	Mar/22
Current Account to GDP	4.3	-2.7	percent of GDP	Dec/20
Government Debt to GDP	48.9	60.8	percent of GDP	Dec/21
Government Budget	-3.4	-5.3	percent of GDP	Dec/21
Consumer Confidence	85.6	92.4	points	Apr/22
Retail Sales Mom	-20.7	19.3	percent	Jan/22
Corporate Tax Rate	18	18	percent	Dec/21
Personal Income Tax Rate	18	18	percent	Dec/21

Source: World Bank

We would employ PESTEL analysis to examine the market from a variety of angles: political, economic, social, technological, environmental, and legal.

2.1.1 Political environment in Ukraine

Political environment has a significant impact on businesses in Ukraine. The country's relations with the West and Russia are important to consider when making business decisions. With continued euro integration and worldwide assistance, Ukraine's economy is likely to expand. There has been a decrease in the impact of corruption, though it remains an important issue. Digitalization of business and social services has been a priority for the Ukrainian government in recent years. The business registration process has also become simpler. Overall, the political environment has improved and is more stable now compared to a few years ago.

2.1.2 Economic Environment

Ukraine's economy grew to 3.4% in 2021 when COVID restrictions are reduced and domestic demand is boosted by the removal of caps on steel production, as a larger harvest compensates for higher global energy prices and a faster fiscal consolidation. The economy will shrink by up to 45% in 2022 owing to the Russian invasion, according to the World Bank. The inflation rate in Ukraine rose to 13.7 percent in March 2022, up from 10.7 percent in the previous month and well above the central bank's 5% medium-term objective. The cost of transport rose faster (16.4 percent from 13.7 percent); the cost of food & non-alcoholic beverages rose faster (18.9 percent from 14.3 percent); the cost of housing & utilities rose faster (6.9 percent from 6.4 percent); the cost of alcoholic beverages & tobacco rose faster; furniture and household equipment (6.6 percent from 4.1 percent); health (12.1 percent from 6.9 percent); communication (8.5 percent from 7.6 percent); recreation and culture (5.6 percent from 4.5 percent); restaurant & hotels (11.1 percent from 10.1 percent) and miscellaneous goods &

services (10.1 percent from 8.4 percent). Consumer prices increased 4.5 percent in April, the most since April 2015.

Car-sharing can lead to a significant reduction in the overall cost of car ownership and use. This is because car-sharing services allow users to pay only for the time that they actually use the car, rather than for the full cost of owning and maintaining a vehicle. In addition, car-sharing services often include fuel and parking costs in their rates, which further reduces the overall cost of using the service.

Table 3. The average yearly cost per driver-owned car and car sharing expenses (8,000 kilometers per year, 667 kilometers per month) in Euros. Fixed costs for car-sharing include the registration fee, security package, and the basic price of membership.

	Driver owned cars	Car sharing
Fixed costs	€960	€176
Costs for repair	€298	-
Operating costs/travel costs	€605	€2,780
Loss in value	€1.620	-
In total	€3,483	€2,956

Source: Adapted from BCS (2017a). The monthly costs were estimated using the ADAC car cost calculator, while the car-sharing rate is a standard charge from a station-based provider without any discount.

2.1.3 Social Environment. War in Ukraine

The war in Ukraine has resulted in vehicle losses among residents of the capital, Kyiv Oblast, and Kharkiv. The economic crisis has led to a decrease in household incomes, which has made it difficult for Ukrainians to afford car ownership. Households that have had their cars destroyed will require a means of transportation from Kyiv Oblast to Kyiv.

Globally changing mobility habits of (young) adults are propelling an industry in which on-demand service providers such as Uber, DriveNow, and car2go have experienced rapid expansion and are still experiencing it. Consumers are changing the way they move thanks to these providers, who are revolutionizing transportation by connecting drivers to passengers (taxi, carpooling) or passengers to cars (car sharing). Technology is allowing for this, and it caters to specific market segments by providing a variety of modes of transportation, from flexible one-way trips to the planned weekend. Many people in the new generation Z group prefer not to own things, but instead to use them. This is especially true for millennials, who are more likely to use collaborative consumption, where people share resources instead of owning them.

The study, conducted by the online car-buying platform CarGurus, found that 40% of respondents between the ages of 18 and 34 said they would rather use a car-sharing service than own a car outright. This preference for car-sharing is likely due to the increased cost of car ownership, as well as the millennial generation's preference for experiences over things.

The study also found that millennials are more open to using new technologies in their cars, such as ride-hailing apps and self-driving features.

2.1.4 Technological Environment.

The Ukrainian startup ecosystem has been growing rapidly in recent years, with more and more young entrepreneurs launching their own businesses. A large number of early adopters allows technology firms to enter the market quickly, as evidenced by their rapid growth. P2P car sharing is a new and upcoming technology that allows individuals to share their vehicles with others through an online platform. This type of car-sharing is different from the traditional model, in which a company owns and maintains a fleet of vehicles that are made available for members to use. In P2P car sharing, individuals list their own vehicles on the platform and set their own terms for use. This type of

car-sharing is often seen as more convenient and flexible than traditional car-sharing, as it does not require members to return the vehicle to a specific location. P2P car sharing is still in its early stages of development, but it has the potential to revolutionize the way people think about car ownership and transportation.

2.1.5 Environmental

Climate change is affecting all sectors and industries, including the automotive sector. The impact of climate change on the automotive sector includes changes in consumer demand, regulatory pressure, and technological developments. Car-sharing helps to cut down on personal automobile trips by up to 33%, resulting in lower carbon emissions. Gas costs have risen significantly, and as a result, the number of trips will decrease. As gas prices rise, people will turn to other means of transportation in order to avoid higher fares. Regulatory pressure is increasing as governments implement policies to reduce greenhouse gas emissions. Technological developments are making electric vehicles more viable as an alternative to traditional gasoline-powered vehicles.

2.1.6 Legal Environment

Aiming for EU membership during the last three decades Ukraine has been developing its legal system and adjusting it to European laws and regulations. Significant law enforcement initiatives have been deployed since the revolution of dignity in 2014. Government promotes fiscal relief for start-ups and SME’s in general.

Ukrainian law does not provide an opportunity to set any barriers or licensing, neither for users of the car-sharing nor for companies that operate in this business. In fact, if you have a driving license and comply with the company's public offer, you can use car sharing. However, insurance companies may introduce additional criteria that limit drivers by age and driving experience.

As for peer-to-peer car-sharing, certain taxation issues may appear in case of proceeds from sharing a car exceeding the certain amount set by the Ukrainian Tax Code or a person who shares its car is a PEP. In such cases, tax declaration should be submitted to tax authorities.

2.2 Microanalysis

The microanalysis of the car-sharing industry in Kyiv can be conducted using Porter's Five Forces framework. This framework takes into account the competitive rivalry, the bargaining power of buyers and suppliers, the threat of new entrants, and the threat of substitute products.

2.2.1 Car-sharing Market

2.2.2 Highlights

- Revenue in the Car-sharing segment is projected to reach US$12.95bn in 2022.
- Revenue is expected to show an annual growth rate (CAGR 2022-2026) of 6.28%, resulting in a projected market volume of US$16.52bn by 2026.
- In the Car-sharing segment, the number of users is expected to amount to 60.7m users by 2026.
- User penetration is 0.7% in 2022 and is expected to hit 0.8% by 2026.
- The average revenue per user (ARPU) is expected to amount to US$255.20.
- In the Car-sharing segment, 95% of total revenue will be generated through online sales by 2026.
- In global comparison, most revenue will be generated in the United States (US$2,629.00m in 2022).

The car-sharing market is growing rapidly in Europe. The number of cars in operation has increased tenfold from 2010 to 2020, reaching 175 thousand units in 2020. The vast majority of car-sharing services operate in urban areas, with Paris, Berlin, and Rome being the largest markets.

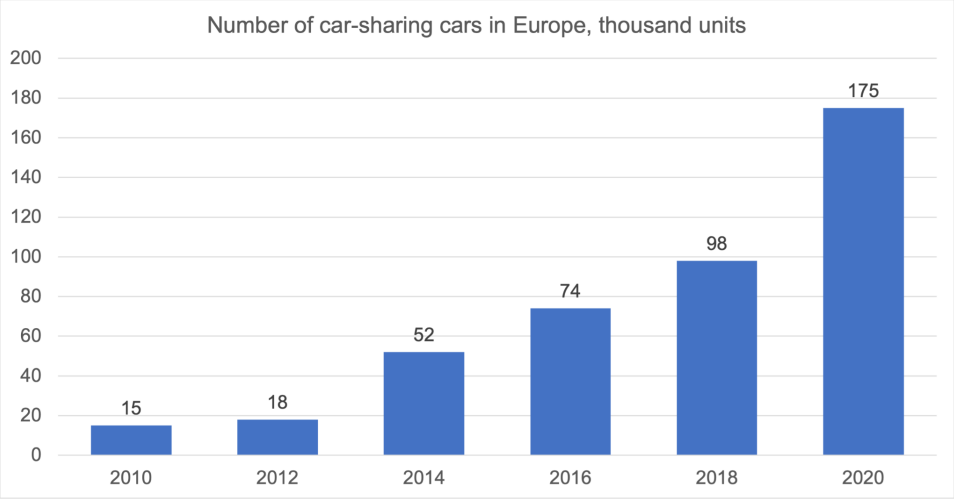


Figure 1 Number of car-sharing cars in Europe

The average number of car-sharing vehicles is 1400 cars per 1 million people population.

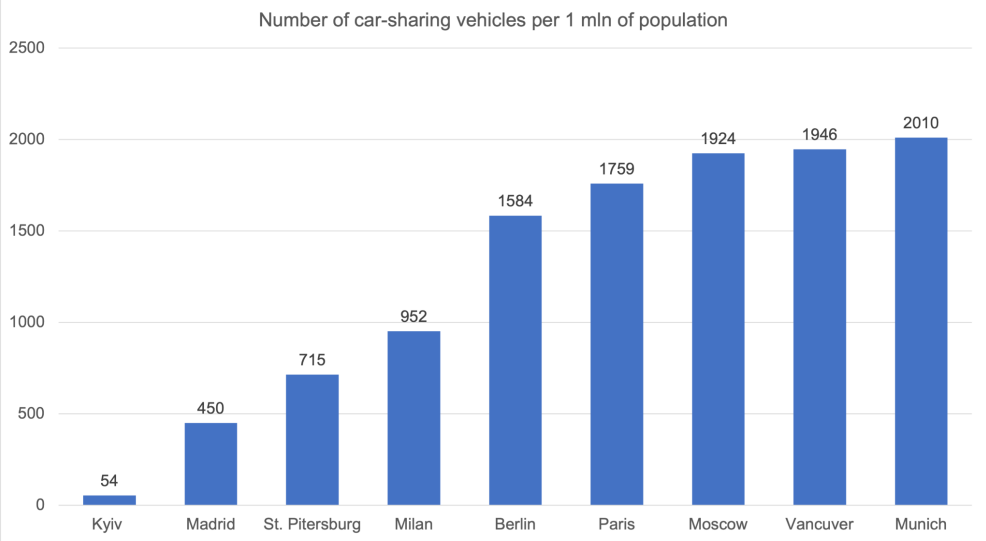


Figure 2 Number of car-sharing vehicles per 1 million people population

The market size of car-sharing in Europe grew from 1.9 million in 2010 to 3.9 million in 2014, and is expected to reach 21 billion by 2027.

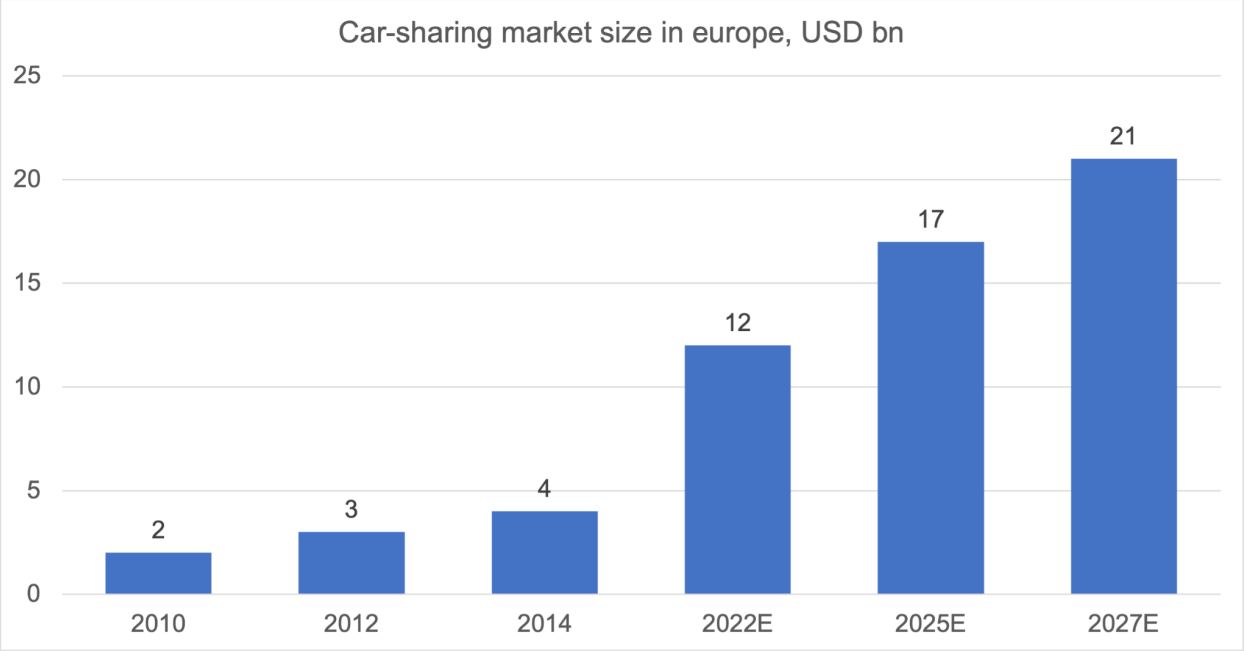


Figure 3 car-sharing market size in Europe

Car-sharing is a growing transportation alternative that allows people to share vehicles for transportation in an effort to minimize the number of cars on the road. Car sharing services are gaining popularity among individuals who no longer want or need their own vehicles.

The car-sharing services market is growing due to the rising cost of ownership and maintenance of vehicles, traffic congestion, and environmental concerns.

Growth Drivers:

- In Europe and North America, emission restrictions are more stringent.
- In the United States, there are numerous government incentives for car sharing.
- Car sharing's technological advances.
- Vehicle ownership and travel expenses will go down.

The industry's global competitive environment, as well as the key players' profiles, were also explored.

- Autolib (Bollore)
- Cambio Mobilitatsservice GmbH & Co. KG
- Car2Go Ltd.
- Modo Co-operative
- Turo Inc. (ICA)
- Zipcar Inc. (Avis Budget Group)
- CarShare Australia Pty. Ltd.
- Cityhop Ltd.
- HOURCAR
- Locomute (Pty.) Ltd.
- Lyft Inc.
- Mobility Cooperative
- Communauto Inc.
- DriveNow GmbH & Co. KG (BMW AG)
- Ekar FZ LLC
- Getaround Inc.

2.3 Competitive landscape analysis

We'll use Porter's Five Forces analysis framework to assess the level of competition. The threat of substitute goods or services, new entrants, supplier bargaining power, buyer bargaining power, and existing industry rivalry are all considered elements that influence competition.

2.3.1 Bargaining power of suppliers

In Ukraine, the vehicle-sharing sector is relatively non-competitive. “GetmanCar” is the main adversary, with a large market share. Because there are numerous alternative suppliers available, suppliers' bargaining power is quite low. Only in Kyiv, there are a lot of taxi businesses that struggle to find drivers and operate fleets with more than 150 vehicles. Furthermore, because car-sharing firms may obtain cars from a variety of manufacturers, they have little use for specialized providers. Gas prices and the gas shortage could be considered with a negative effect but in short term.

2.3.2 Threat of new entrants

There is a moderate threat of new entrants into the car-sharing industry as it requires significant capital investment and operational expertise. Investments in own fleet could cost a fortune. The app will require development and maintenance funds. The remaining portion of expenditures will include operations with the company's maintenance and service vehicles fleet. It might be assigned to a third party.

2.3.3 Bargaining power of buyers

The bargaining power of buyers is high in the car-sharing industry. This is because there are many substitute products available and buyers are not very brand loyal. In addition, car-sharing companies usually have low switching costs, so it is easy for buyers to switch providers if they are not satisfied with the service.

2.3.4 Threat of substitute products

The main substitutes for car-sharing services are traditional taxis, public transportation, and private cars. In Ukraine, the car-sharing industry is still in its early stages of development, so there are not many substitute products available. However, as the industry matures, we expect the number of substitutes to increase.

2.3.5 Rivalry among existing competitors

In Ukraine, the car-sharing market is quite concentrated, with “GetmanCar” having a large market share. There are only a few other players in the market, so the level of rivalry is low. We expect this to change as the industry matures and more companies enter the market.

CHAPTER 3. PRODUCT AND SOLUTION

3.1 Value proposition canvas

The value proposition canvas is a tool that can be used to develop and assess a company's value proposition. It is based on the following four key elements: Customer jobs, Pains, Gains, and Customer Segments.

Customer profile:

3.1.1 Customer jobs

The customer job is the task that the customer is trying to accomplish. In the case of the car-sharing industry, the customer job is to get from point A to point B in a convenient and affordable way. It also includes:

- Trips from point A to B
- Be in trend in community
- Control cost for a ride
- Avoid hassle and expense of owning a car
- Desire to drive an “own car”

3.1.2 Pains

Pains are the problems that the customer experiences while trying to accomplish the customer job. In the case of the car-sharing industry, some pains experienced by customers include:

- Need to pay for car gas
- Need to pay for car service
- Need to pay for car parking
- High cost for taxi trips from Kyiv Oblast

- Low car availability

3.1.3 Gains

Gains are the benefits that the customer experiences while using the product or service. In the case of the car-sharing industry, some of the gains experienced by customers include

- Environmental friendliness
- One-click booking/cancellation
- Trusted car condition
- Good coverage of available cars
- Zero time on Payment

3.1.4 Customer segments

Customer segments are the groups of people who share similar needs and characteristics. In the case of the car-sharing industry, some customer segments include business travelers, families, and IT professionals.

- Business users
- Commuters
- Occasional users

Value proposition

Pain relievers – how the product or service alleviates customer pains and how it offers a better solution to the customer.

- The ability to drop cars almost everywhere in Kyiv.
- The ability to manage all trip details on a single platform.
- Flexibility.
- Automatic credit card payment.

Pain relievers – a description of exactly how the product or service alleviates customer pains.

- Trip cost prediction.
- Flawless automatic payment.
- Trips are cheaper than taxis.
- 24/7/365 availability of the car.
- Increased utilization of the own car fleet.

Products and services – the products and services which create gain and relieve pain, and underpin the creation of value for the customer.

- Convenient Mobile App.
- Share your own car - gain additional income.
- Get your fleet of vehicles working on you.
- Customer Support 24/7

Value proposition canvas

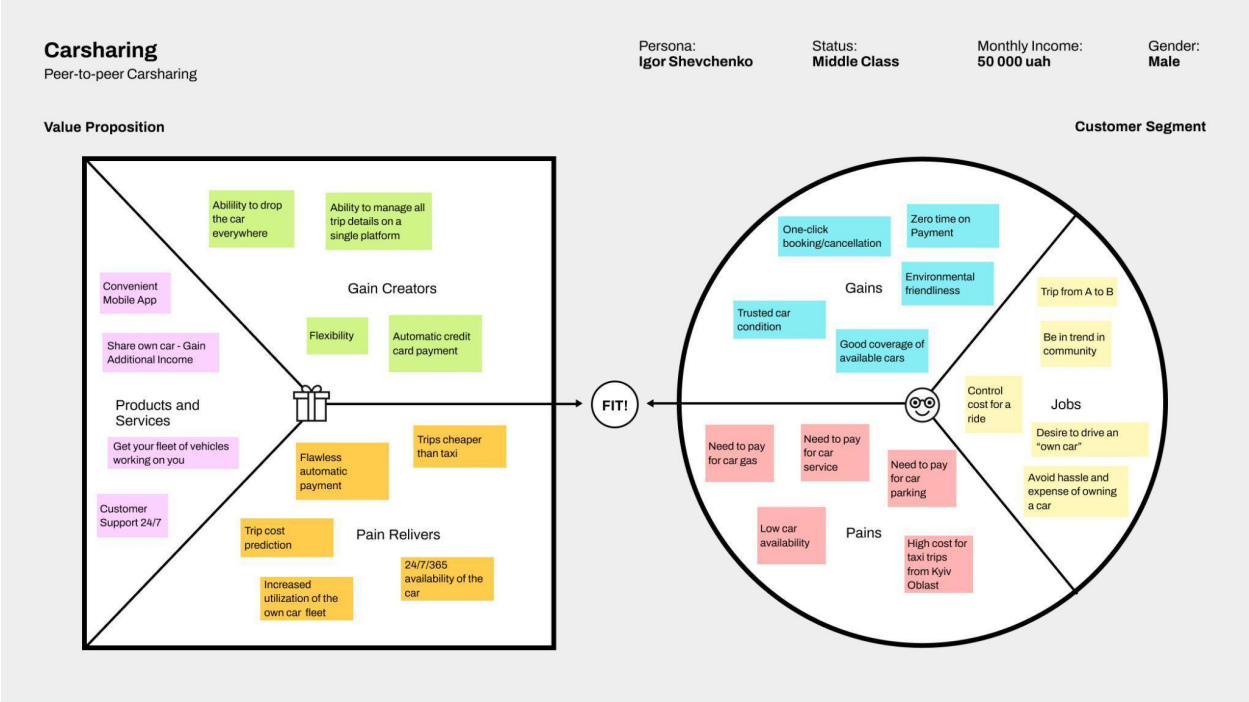


Figure 4 Value Proposition Canvas

3.2 Business model Lean Canvas

The business model canvas is a tool that can be used to develop and assess a company's business model. It is based on the following nine key elements: Problem, Customer segments, Value propositions, Channels, Customer relationships, Revenue streams, Key resources, Alternatives, Key partnerships, and Cost structure.

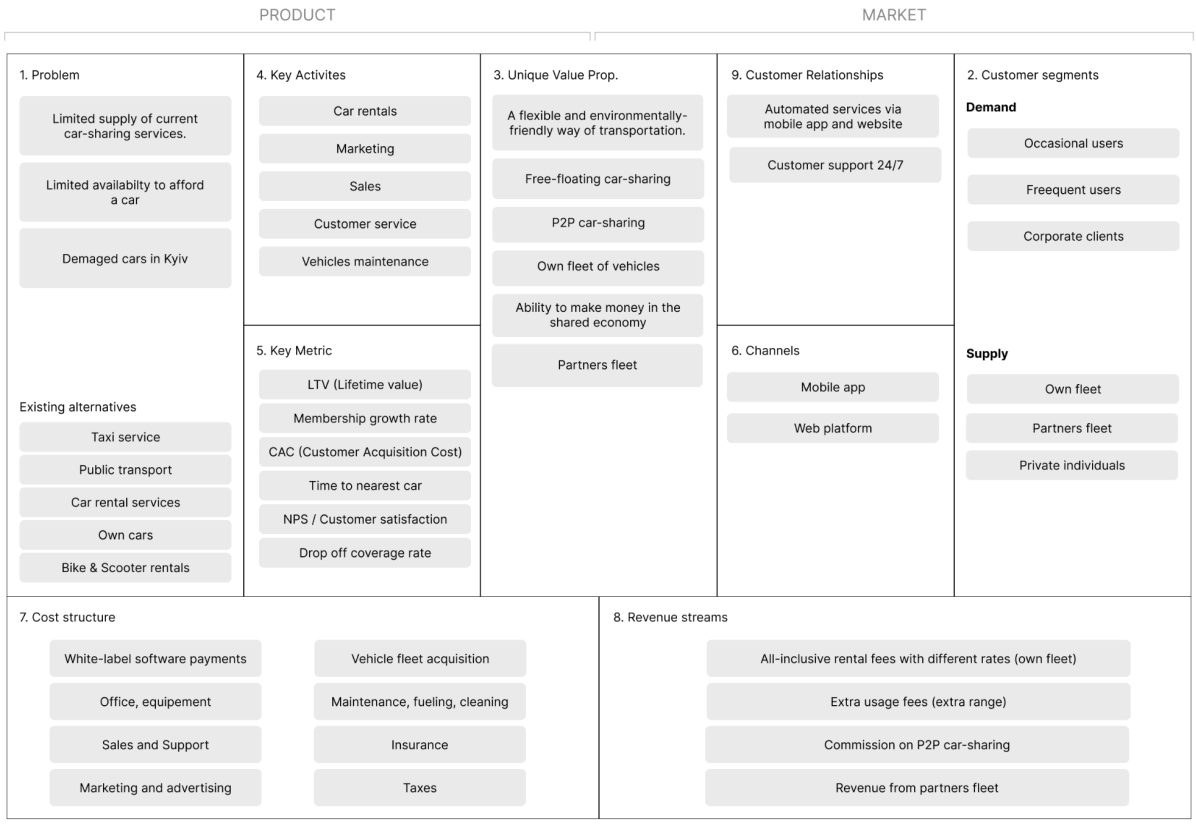


Figure 5 Business model Lean Canvas

Product – the product or service which creates value for the customer.

The car-sharing service in Kyiv offers a convenient, flexible, and environmentally-friendly way of transportation for customers with middle-range monthly incomes. The service is available 24/7/365 via a mobile app and website.

Market – the target market for the product or service.

The target market for the car-sharing service in Kyiv is customers with middle-range monthly incomes who occasionally or frequently use car-sharing services. The market is supplied by taxi services, public transport, and existing car-sharing services and for shorter distances, people can use bike and scooter rental services.

Unique Value proposition – how the product or service creates value for the customer.

The car-sharing service in Kyiv offers a convenient, flexible, and environmentally-friendly way of transportation. Free-floating car-sharing for convenience of customers. P2P car-sharing services for the ability to car-owners make money on their cars. Own fleet of vehicles. Ability to make money in the sharing economy.

Key activities – the activities which are necessary to create value for the customer.

The key activities of the car-sharing service in Kyiv include marketing, sales, customer support, and vehicle maintenance.

Key resources – the resources which are necessary to create value for the customer.

The key resources of the car-sharing service in Kyiv include a mobile app, website, customer support 24/7, and a fleet of vehicles.

Existing alternatives – alternatives that customers may use.

There are two existing alternatives for transportation: public transportation, taxis, car rental companies and own cars. For short-range rentals e-scooters and bikes could be considered as an alternative.

Cost structure – the costs associated with creating value for the customer.

The cost structure of the car-sharing service in Kyiv includes white-label software payments, vehicle fleet acquisition, office and equipment costs, maintenance, fueling,

cleaning, sales and support costs, insurance, marketing and advertising costs, and taxes.

Revenue streams – the revenue associated with creating value for the customer.

The revenue streams of the car-sharing service in Kyiv include all-inclusive rental fees with different rates (own fleet), extra usage fees (extra range), commission on P2P car-sharing, and revenue from partners' fleets.

3.3 Use Case Diagram

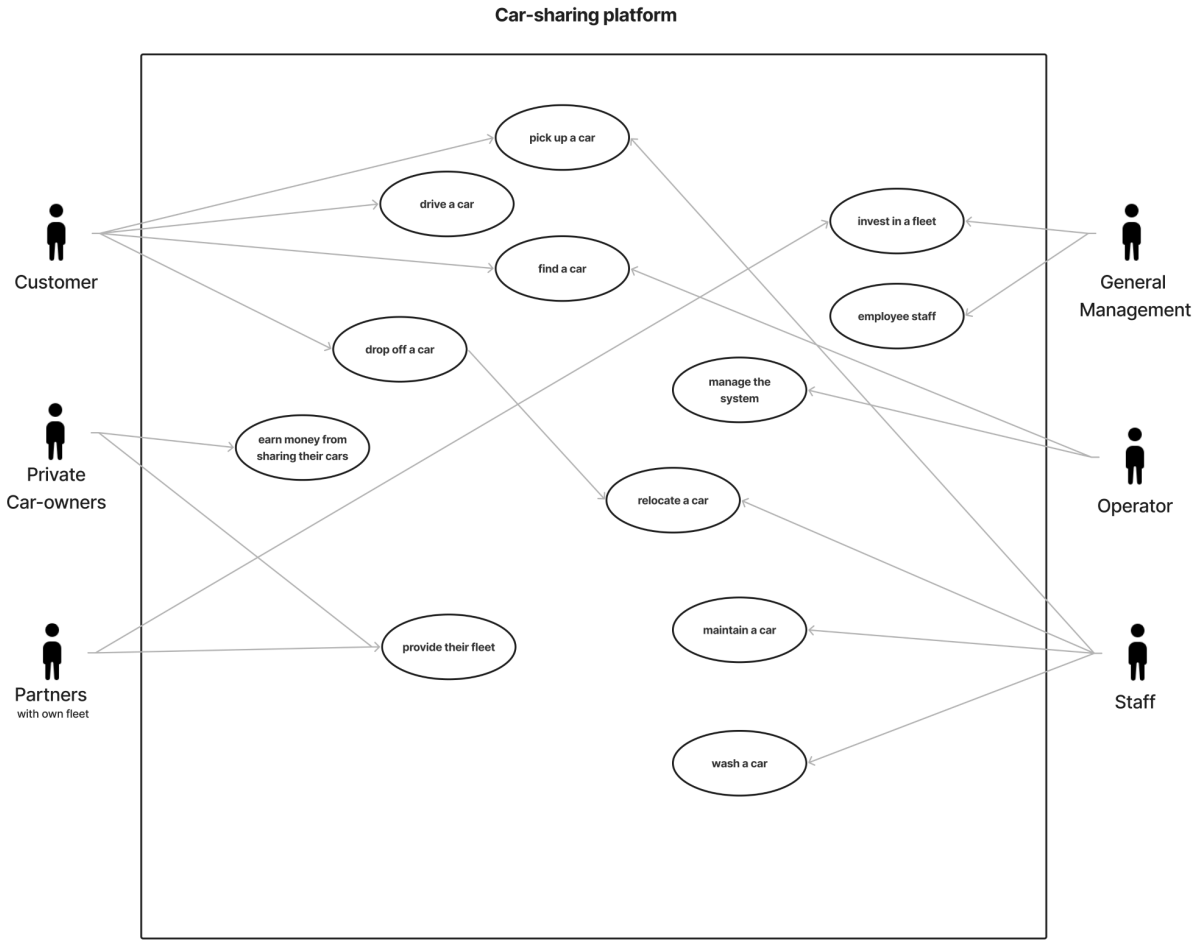


Figure 6 Use case diagram

3.4 Process diagram

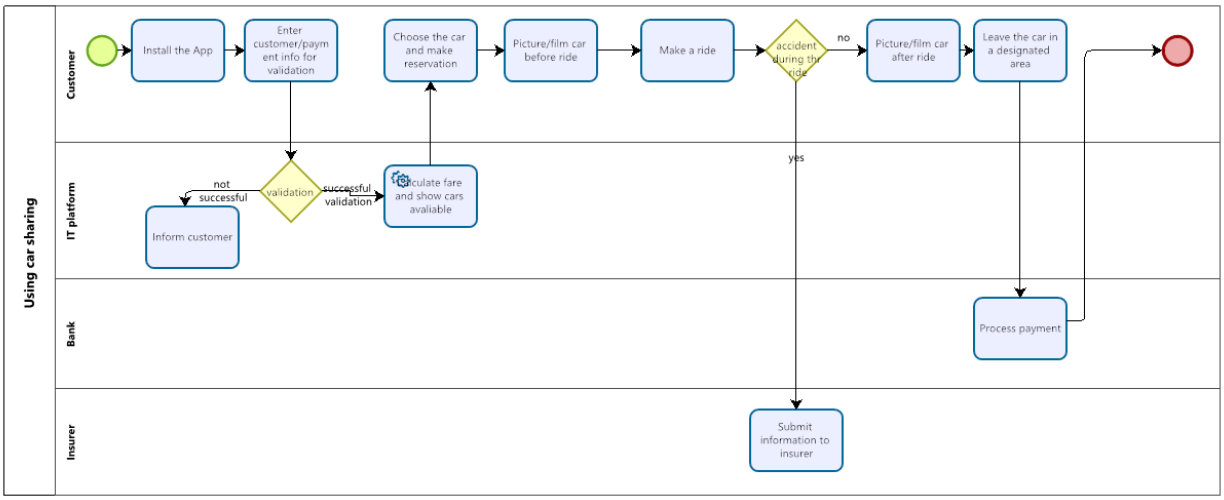
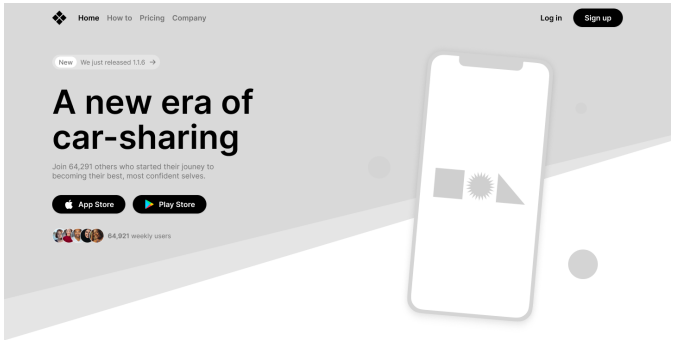


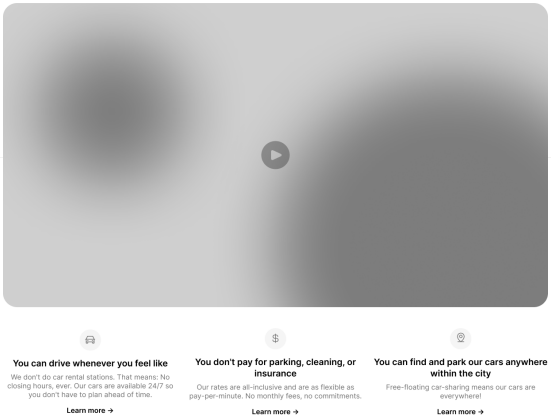
Figure 7 process diagram

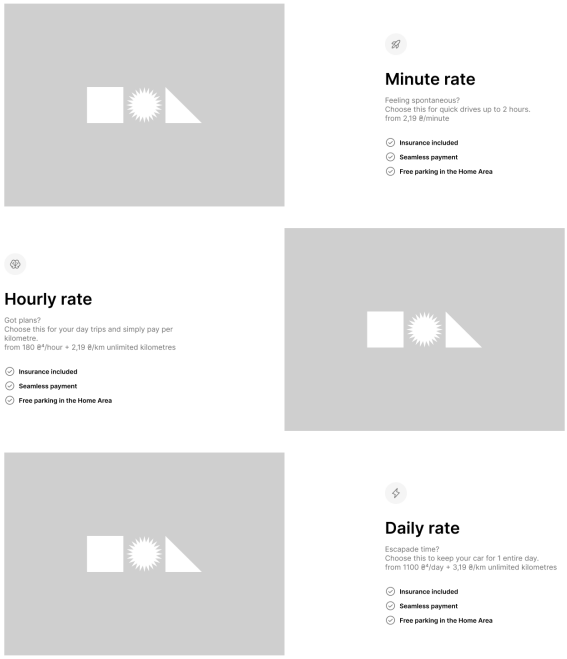
3.7 Prototyping

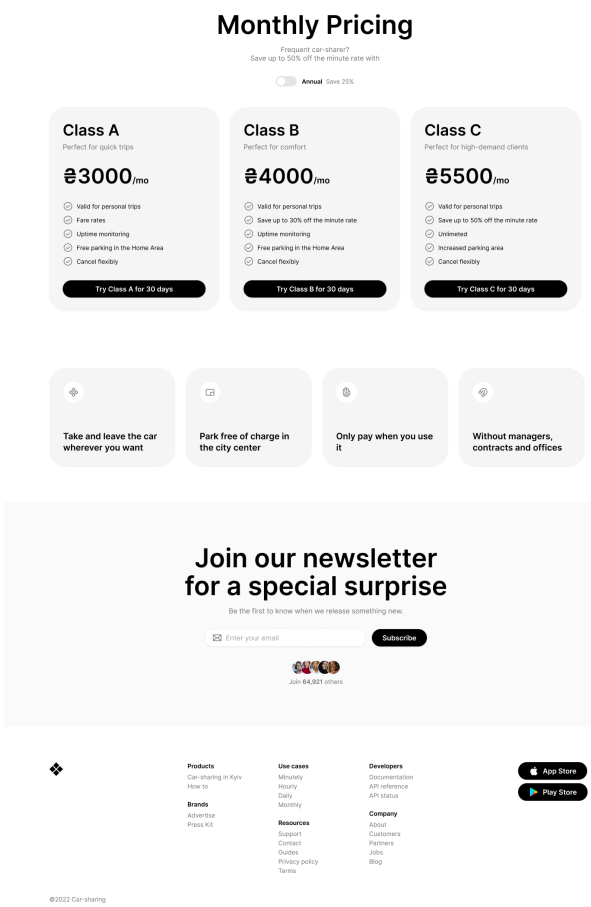
We'll utilize the Motion Tools white-label product for the MPV launch. It's a vehicle sharing software that you may customize to your own branding. We need to integrate it with our website and mobile app. It has a mobile app for customers with an integrated keyless access system and in-app payments. Managers will be able to access the Administration panel, which includes a fleet management dashboard. It lets you monitor the current status and charge level of each vehicle, keep track of active bookings and reservations and delve into product analytics with built-in BI tools.

Marketing website

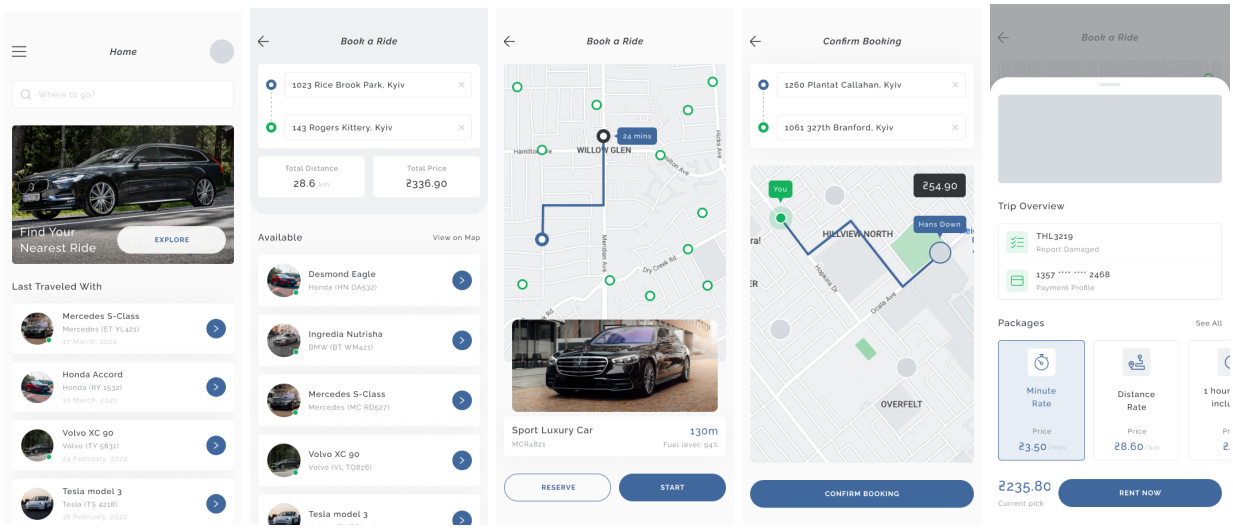








Mobile App prototypes



3.8 Customer Journey Map

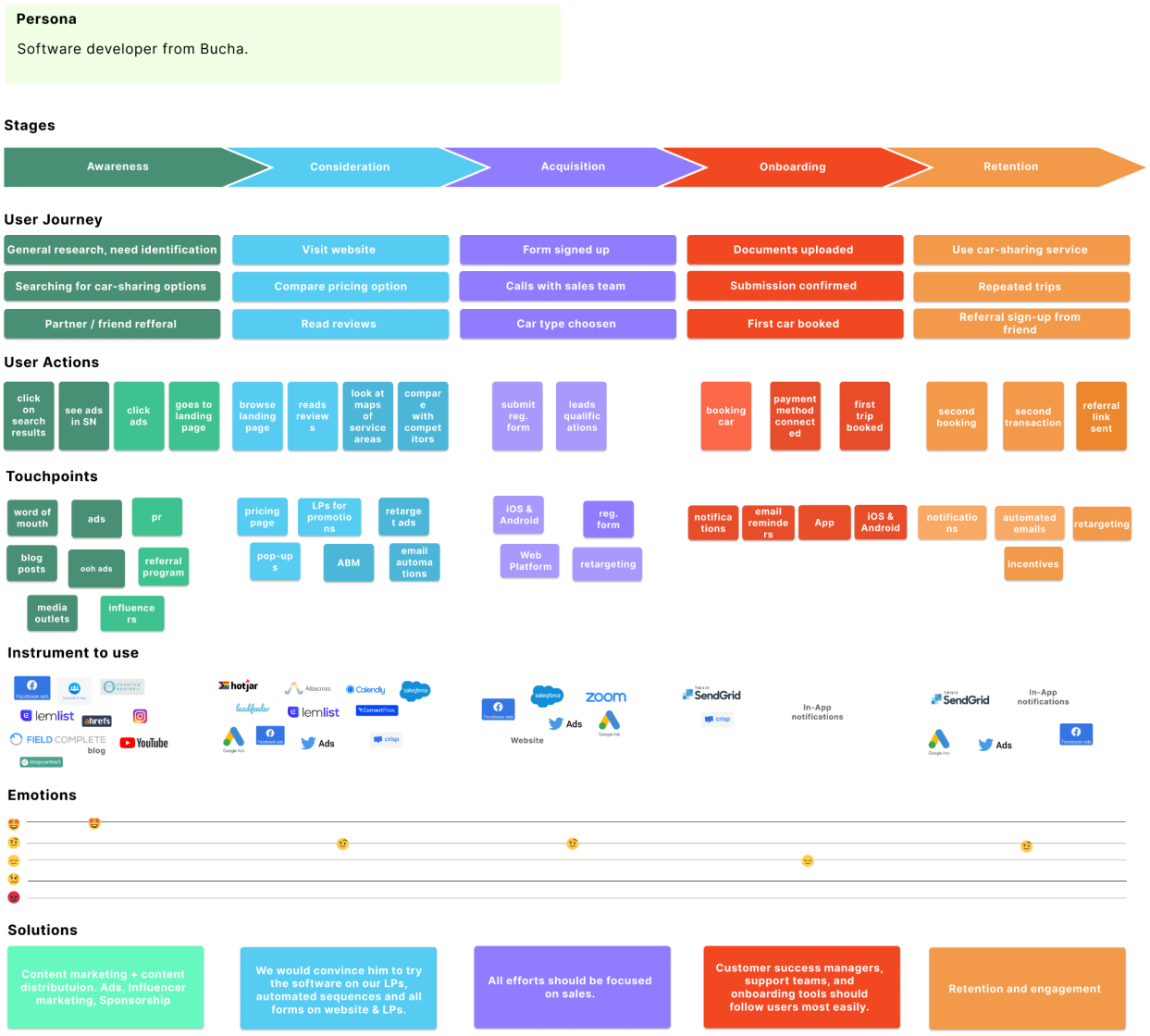


Figure 8 customer journey map

3.8.1 Awareness Stage

General research, need identification

At the awareness stage, customers are generally doing research and trying to identify their needs. They may not even be aware that car-sharing exists as a solution to their problem. In this stage, it's important to provide educational content that will help them understand their options and how car-sharing can meet their needs.

Searching for Car-Sharing Options

Once customers are aware of car-sharing, they will start searching for options. This is where our marketing efforts come into play. We should make sure you have a strong online presence so that potential customers can easily find you when they're searching for car-sharing options.

Partner / Friend Referral

One of the best ways to get new customers is through referrals from existing customers. We will encourage customers to spread the word about your car-sharing service to their friends and family.

User Actions

- Click on search results
- See ads on social networks
- Click ads on social networks
- Goes to a landing page

Touchpoints

- word of mouth
- ads
- pr
- blog posts
- referral program
- media outlets
- influencers

Solutions

Content marketing and distribution are two separate things. Advertising, influencer marketing, and sponsorship are all examples of sponsored content.

3.8.2 Consideration Stage

At this stage, customers are evaluating their options and trying to decide which car-sharing service is right for them. They're looking for more information about the different services, comparing prices, and reading reviews. It's important to provide potential customers with all the information they need to make a decision.

User Journey

Visit website

We will make our website user-friendly and informative. Include pricing information and a list of features. Blog posts that answer common questions from potential customers will be published. Monitored social media and address any negative reviews.

Compare pricing options

The pricing of the car-sharing services will be compared. A variety of factors such as price, distance, and time will be considered.

Read reviews

We will encourage customers to leave reviews on our website and social media pages. We will also actively monitor these channels and address any negative feedback.

User Actions

- browse landing page
- reads review
- look at maps of service areas
- compare with competitors

Touchpoints

- website
- landing page
- pricing page
- page with reviews
- customer support

Solutions

Customer support is critical at this stage. Make sure you have a live chat feature on your website so that potential customers can get their questions answered in real time. You should also have a FAQ section on your website that covers all the most common questions people have about car-sharing.

3.8.3 Acquisition Stage

At this stage, the customer has decided to use your car-sharing service and is ready to sign up. This is where we will need to collect their contact information and payment information.

User Journey

Sign up for an account

We will collect the customer's contact information and payment information. We will also need to set up their account and give them access to our car-sharing network.

Choose subscription plan

The customer will need to choose a subscription plan that meets their needs. We offer four different plans: minutely, hourly, daily, and monthly.

Add payment method

The customer will need to add a payment method so that they can be charged for the car-sharing service. We accept major credit cards and PayPal.

Touchpoints

- web platform
- iOS mobile app
- Android mobile app
- emails

Solutions

Make sure your sign-up process is simple and easy to understand. The fewer steps there are, the better. You should also offer a variety of subscription plans so that customers can choose the one that's right for them.

3.8.4 Onboarding Stage

The onboarding process is critical to the success of your car-sharing service. We will make sure you have a clear and concise onboarding flow that covers all of the important information. Also, we will offer customer support so that users can get help if they run into any problems.

User Journey

- Documents uploaded
- Submission confirmed
- First car booked

User Actions

- booking car
- payment method connected
- first trip booked

Touchpoints

- web platform
- iOS mobile app
- Android mobile app
- in-app notifications
- emails

Solutions

Users should be able to navigate themselves to the departments that generate the most revenue or business value and obtain a high-level overview of what they do. Managers, support teams, and onboarding tools should follow users where they are going.

3.8.5 Retention Stage

At this stage, the customer is using your car-sharing service on a regular basis. Our goal is to keep them happy and engaged so that they continue to use our service. We will do this by offering incentives, such as discounts and rewards, and by providing excellent customer service.

User Journey

Use car-sharing service

We will provide an excellent car-sharing experience so that customers continue to use our service. This includes everything from the booking process to the actual experience of using the car.

Repeated trips

The customer will take repeated trips and become a loyal user of our service.

Incentives

We will offer incentives, such as discounts and rewards, to keep customers engaged.

Touchpoints

- web platform
- iOS mobile app
- Android mobile app
- in-app notifications
- emails

Solutions

In order to keep customers engaged, you should offer incentives and discounts. You should also provide excellent customer service so that users can get help if they run into any problems. Finally, you should actively monitor social media and address any negative feedback.

3.10 Marketing and sales strategy

The main marketing objectives of the company are to promote car-sharing in Kyiv, educate potential customers about the benefits of using such services, and increase brand awareness. The company also aims to increase its market share and expand its operations to other Ukrainian cities.

To achieve these objectives, the company plans to use a mix of online and offline marketing activities. These will include targeted online advertising, PR and social media campaigns, as well as traditional print and TV advertising. The company will also work with partner organizations to promote car-sharing in Kyiv.

The main sales objective of the company is to increase membership sign-ups and usage of the service. To achieve this, the company offers discount coupons and promotions, as well as a loyalty program for frequent users. The company also offers a flexible membership that allows users to sign up for short-term or long-term use, depending on their needs.

3.10.1 Competitive advantage analysis (VRIO)

The car-sharing service in Kyiv has a number of competitive advantages that allow it to be successful in the market. These advantages can be classified using the VRIO framework, which stands for Value, Rarity, Inimitability, and Organization.

Value: The car-sharing service provides value to customers by offering a convenient and affordable alternative to traditional methods of transportation.

Rarity: The car-sharing service is rare in Kyiv, as there are few other companies offering this type of service.

Inimitability: The car-sharing service is difficult to imitate, as it requires a significant investment in fleet and technology.

Organization: The car-sharing service is well-organized and has a team of experienced professionals who are able to provide a high-quality service.

The car-sharing service in Kyiv has a competitive advantage that stems from its value proposition. The service offers a convenient and affordable alternative to traditional methods of transportation, which makes it attractive to customers. In addition, the car-sharing service is rare in Kyiv, as there are few other companies offering this type of service. This rarity gives the company a competitive edge over its competitors. Finally, the car-sharing service is well-organized and has a team of experienced professionals who are able to provide a high-quality service. This allows the company to maintain a competitive advantage in the market.

Compared to competitors: 1 - Competitive disadvantage, 2 - Competitive parity, 3 - Temporary competitive advantage, 4 - Unexploited competitive advantage, 5- Sustained competitive advantage.

Internal Resource	**V**	**R**	**I**	**O**	**Compare to competitors**
Mobile App	+	-	-	-	1
Web App	+	+	-	-	2
P2P car-sharing	**+**	**+**	**+**	**+**	**5**
Own fleet of new cars	**+**	**+**	**+**	**+**	**5**
Customer support 24/7	+	+	-	-	2
Automatic credit card payment	+	-	-	-	1
Ability to manage all trip details on a single platform	+	-	-	-	1
Ability to drop the car everywhere	**+**	**+**	**+**	**+**	**5**
Location	+	+	-	+	3

Table 4 VRIO Matrix

The main competitive of the product may be derived from VRIO analysis:

- Mobile App - The company has a mobile application that makes it easy for users to find and reserve cars.
- Web App - The company has a web application that allows users to manage their accounts and reservations.
- Location - The company has locations throughout Kyiv, making it easy for users to find a car near them.
- P2P car-sharing - is a unique business model which has not yet been implemented by any other car-sharing company in Kyiv.
- Own fleet - The company owns its fleet of cars, which gives it more control over the quality and availability of vehicles.
- Customer support 24/7 - The company has a customer support team that is available 24/7 to assist users with any problems they may have.
- Ability to drop the car everywhere in Kyiv - The company has a network of locations where users can drop off the car, making it very convenient.

3.10.2 SWOT Analysis

To assess the internal and external factors that have a major influence on the Company's performance, we used SWOT analysis. In this analysis, we identified the main strengths, weaknesses, opportunities, and threats of the company.

Strengths	**Weaknesses**
● a new player in the market with a non-standard approach to business; ● a wide range of services for customers - short-term and long-term booking options; ● P2P car-sharing; ● an optimal price policy; ● a flexible system of discounts and promotions; ● own call center; ● own fleet of new vehicles; ● a developed system of online booking and payment; ● a convenient mobile application.	● the young age of the company; ● small market share; ● lack of own parking lots;
Opportunities	**Threats**
● growth of the car-sharing market in Ukraine; ● development of the infrastructure of Ukrainian cities; ● expansion of the fleet of vehicles; ● opening of new branches in other cities of Ukraine.	● the war effect on the economy; ● the emergence of new competitors; ● changes in government regulations.

Table 5 SWOT Analysis

Strengths:

- a new player in the market with a non-standard approach to business;
- a wide range of services for customers - short-term and long-term booking options;
- P2P car-sharing;
- an optimal price policy;

- a flexible system of discounts and promotions;
- own call center;
- own fleet of new vehicles;
- a developed system of online booking and payment;
- a convenient mobile application.

Weaknesses:

- the young age of the company;
- small market share;
- lack of own parking lots;

Opportunities:

- growth of the car-sharing market in Ukraine;
- development of the infrastructure of Ukrainian cities;
- expansion of the fleet of vehicles;
- opening of new branches in other cities of Ukraine.

Threats:

- the war effect on the economy;
- the emergence of new competitors;
- changes in government regulations.

3.10.3 Marketing and sales objectives

The main marketing objectives of the company are to promote car-sharing in Kyiv, educate potential customers about the benefits of using such services, and increase brand awareness. The company also aims to increase its market share and expand its operations to other Ukrainian cities.

To achieve these objectives, the company plans to use a mix of online and offline marketing activities. These will include targeted online advertising, PR and social media campaigns, as well as traditional print and TV advertising. The company will also work with partner organizations to promote car-sharing in Kyiv.

The main sales objective of the company is to increase membership sign-ups and usage of the service. To achieve this, the company offers discount coupons and promotions, as well as a loyalty program for frequent users. The company also offers a flexible membership that allows users to sign up for short-term or long-term use, depending on their needs.

3.10.4 Target audience and positioning

Car-sharing services are becoming increasingly popular in large cities around the world. In Kyiv, this market is still relatively young, but it is growing rapidly. The target audience for car-sharing services in Kyiv is mostly young people aged 20-35 who live in urban areas and do not own a car.

The main reasons why people use car-sharing services are convenience, affordability, and environmental friendliness.

Convenience - Car-sharing services allow users to have on-demand access to a vehicle without having to worry about parking, insurance, or maintenance.

Affordability - Car-sharing services are often cheaper than owning or renting a car, especially when taking into account the costs of fuel, insurance, and parking.

Environmental friendliness - Car-sharing services can help reduce traffic congestion and pollution in cities.

Vision

To become the leading car-sharing service in Kyiv, providing our customers with a convenient, affordable, and eco-friendly alternative to owning or renting a car.

Mission

To provide a convenient, affordable, and eco-friendly alternative to owning or renting a car in Kyiv.

Values

Convenience, affordability, environmental friendliness, customer service

3.10.5 Customer needs

The needs of car-sharing customers can be divided into three main categories: convenience, affordability, and sustainability.

Convenience: Car-sharing is designed to be a convenient alternative to owning a car. Customers can use the service on an as-needed basis, without having to worry about maintenance, parking, or other hassles associated with car ownership.

Affordability: Car-sharing can be more affordable than owning a car, especially in cities where parking and gas are expensive. customers can save money by using car-sharing for occasional trips instead of owning a car.

Sustainability: Car-sharing is often promoted as a sustainable transportation option. By reducing traffic and parking congestion, as well as pollution and carbon emissions, car-sharing can help make cities more livable.

3.10.6 Personas

Every character of these Personas wants to get from point A to point B, but there are some differences.

Igor Smelyavskiy is a college student who doesn't have any money for a vehicle and enjoys partying on weekends away from campus. For him, car sharing is synonymous with adventure.

Maria Doroshenko is a gallerist who has high ideals. She is concerned about the environment and only wants to purchase electric vehicles that are uncommon in her city.

Irina Dubovaya is a successful executive. She is used to taking care of everything on her own, so she prefers car sharing over a taxi even if she's visiting a new city.

Grigoriy Chernyavskiy lives in a suburban community and must commute by car with his spouse. As a result, he rents a vehicle every few days to get to work and return home.

3.10.6 Marketing mix

3.10.6.1 Marketing mix of 7P’s

The marketing mix is a set of 7 elements that help companies achieve their marketing objectives. The 7P’s are product, price, place, promotion, people, process, and physical environment.

3.10.6.2 Product

- Convenient mobile app for users with the ability to park anywhere in Kyiv and Kyiv agglomeration.
- Web platform for booking cars and managing the account.
- Own a fleet of cars that are new and well-maintained.
- P2P car-sharing - is a unique business model which is not yet been implemented by any other car-sharing company in Kyiv.

3.10.6.3 Price

- Pricing will be divided into 2 main categories - short-term trips and long-term.
- The price for the short-term trips will be billed by the minute, hour, and day.
- The price for the long-term trips will be billed monthly.
- Price will vary from ₴1.80 per minute up to ₴2,19 per minute.
- Monthly pricing will be ₴3000/mo for Class A, ₴4000/mo for Class B, and ₴5500/mo for Class C and will not include additional kilometers.

3.10.6.4 Placement

- Cars will be located on the streets of the city.
- The users will be able to find the car using the mobile app.
- The cars will be parked in designated parking spots that will be marked on the map in the app.

3.10.6.5 People

- The company has a customer support team that is available 24/7 to assist users with any problems they may have.

3.10.6.6 Process

- The process of signing up for the service is simple and easy. Users can sign up through the website or mobile app. Once signed up, they will be able to find and reserve cars.
- The car-sharing process is simple and convenient.
- Once they have found a car, they can unlock it with their phone and start using it.
- When they are finished, they can park the car in any designated parking spot and lock it with their phone.
- The billing will happen automatically, and they will be able to see their charges in the app.

3.10.6.7 Physical Evidence

- The cars are new and well-maintained.
- They are equipped with GPS, so users can easily find them.
- In some city areas, cars have a designated parking spot that is marked on the map in the app.

3.10.6.8 Promotion

The most crucial part of our marketing mix will be promotion. It includes all the marketing methods deployed to pique public interest in car-sharing and increase membership. To do so, we would break it down into five major sections.

3.10.6.9 Events

- Mass event sponsorship.
- Sporting events' sponsorship.
- Conferences with IT audience.

3.10.6.10 Digital marketing

- Programmatic media buying.
- Modern website marketing with proper UI/UI for sign-ups.
- Paid Social campaigns on social networks: Facebook/Instagram, TikTok, and LinkedIn with proper targeting.
- Social Media Influencer campaigns on Snapchat and YouTube.
- Email marketing to announce new cars, locations, deals, or prices.
- Referral system for users who bring in new customers.
- SEO-optimized pages.
- For promotional videos, we will use reach campaigns via YouTube 5-15s pre-rolls ads before business and tech video blogs such as Tochka.G, BigMoney, CEO club, Mykhailo Rogalskiy, and Begushiy Bankir.
- Native ads in video blogs: Tochka.G, BigMoney, CEO club, Mykhailo Rogalskiy, Begushiy Bankir.
- Search ads on Google and YouTube with direct queries and competitors' queries.
- Remarketing campaigns in Social Networks and Google Ads.
- Social Media campaigns in social networks: Facebook/Instagram, LinkedIn with proper targeting.

3.10.6.11 PR

- Promo campaigns at the lifestyle, business, and tech blogs: nv.ua, hmarochos, the-village.com.ua, pravda.com.ua, kyivpost, mind.ua, liga.net.
- Cooperate activity with third-party institutions for different media projects.

3.10.6.11 Outdoor & print

- 38 Billboards around the city close to public transport hubs.
- Outdoor advertising on public transport: trolleybuses, buses.
- Brochures & flyers.
- Own branded cars.

3.10.6.12 Sales promotion

- CRM scoring system with sales managers.
- Early bird discounts.
- Free rides promo.
- Promo for additional mileage.
- Free upgrades in class.

CHAPTER 4. PLANNING AND IMPLEMENTATION

4.1 Team & organizational structure

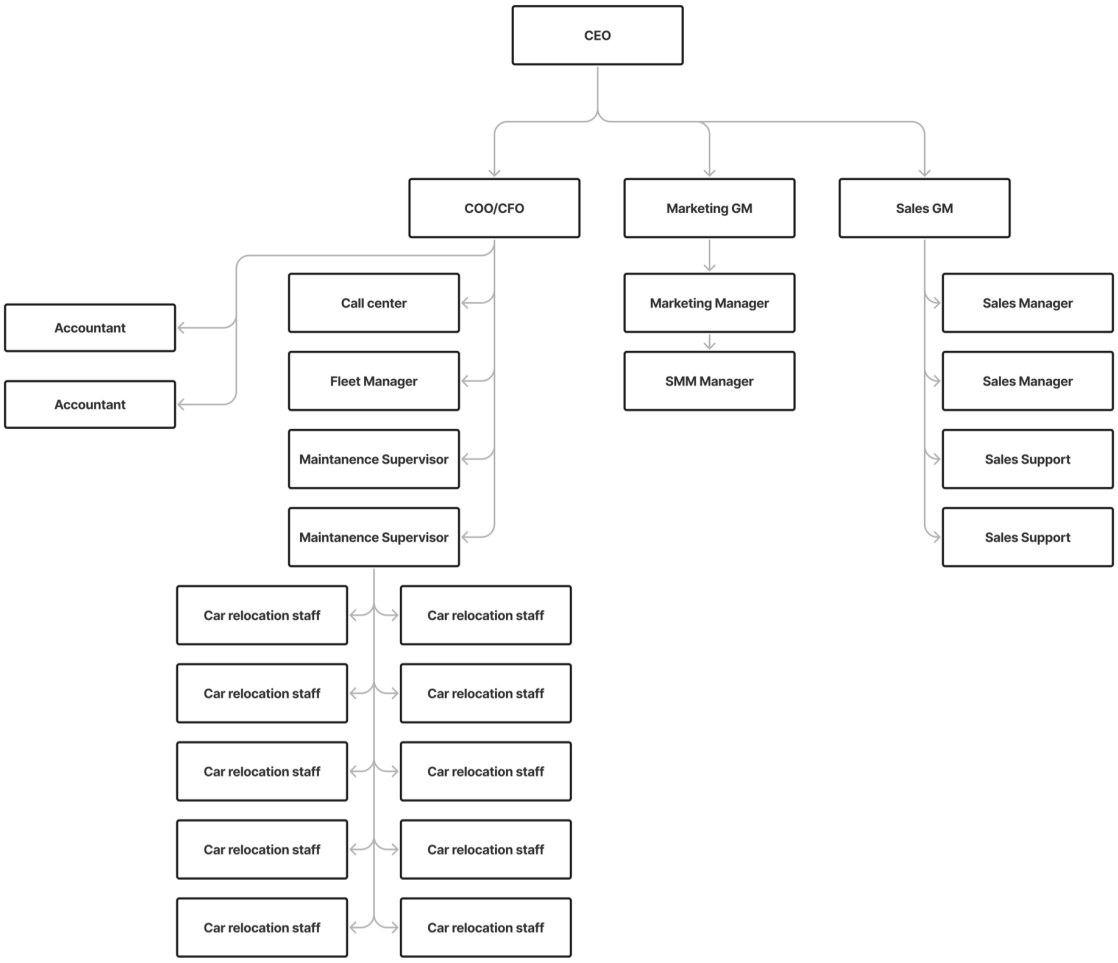


Figure 8 team and organization structure

4.2 Project Implementation Plan and KPI's

Preparation stage (2022)

- Company registration
- IT platform customization/testing
- Preliminary contracting

Start of operations (2023-2024)

- First round of financing amounting USD 3,5 million for purchase of 303 cars
- Increase of own car fleet by 100 cars under Leasing agreement
- Increase of total car fleet by managing 150 cars from Partners
- By the end of 2024 Company will operate the car fleet of 658 cars with average utilization rate of 27%

Expansion Stage to Lviv, Odessa, Dnipro and Kharkiv (2025-2027)

- Second round of financing amounting USD 3,5 million for purchase of 303 cars
- Increase of own car fleet by 450 cars under Leasing agreement
- Increase of total car fleet by managing additional 350 cars from Partners
- By the end of 2027 Company will operate the car fleet of 2371 cars with average utilization rate of 29%

4.2 Sales and revenue forecast

Company will provide three basic tariffs - minute based, hour based and 24 hours based with the annual growth rate of 6%.

Prices	Units	2022	2023	2024	2025	2026	2027
Price per minute							
minute based tariff	UAH		3,00	3,18	3,37	3,57	3,79
hourly based tariff	UAH		2,70	2,86	3,03	3,22	3,41
24hours based tariff	UAH		1,70	1,80	1,91	2,02	2,15

According to Company's projections most customers will choose hourly based tariff which corresponds to 45% of all bookings.

	Units	2022	2023	2024	2025	2026	2027
Structure of tariff							
minute based tariff	%		35%	35%	35%	35%	35%
hour based tariff	%		45%	45%	45%	45%	45%
24hours based tariff	%		20%	20%	20%	20%	20%

For the purpose of calculating the revenue stream the average price per minute is calculated as a product of price per minute in each tariff and frequency each tariff is used.

Prices	Units	2022	2023	2024	2025	2026	2027
Price per minute, average	UAH		**2,61**	**2,76**	**2,93**	**3,10**	**3,29**

Given the average price per minute Company assumes following operational indicators as trips per day and average travel time which allows to foresee the overall utilization ratio from 25% in 2023 to 29% in 2027.

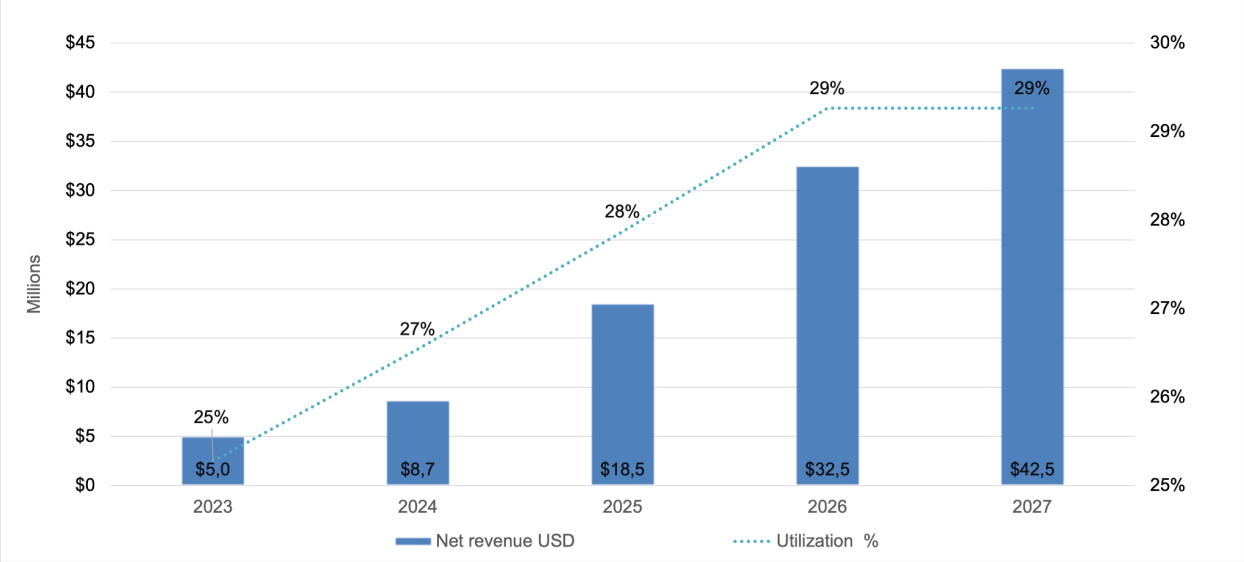


Figure 9 Net revenue and utilization

Operational indicators	Units	2022	2023	2024	2025	2026	2027
Trips per day	units		2,8	2,94	3,09	3,24	3,24
growth	%		0,0%	5,0%	5,0%	5,0%	0,0%
Average travel time	min		130	130	130	130	130
growth	%		0,0%	0,0%	0,0%	0,0%	0,0%
Total time of utilization	min		364	382	401	421	421
growth	%		0,0%	5,0%	5,0%	5,0%	0,0%
Utilization	**%**		**25%**	**27%**	**28%**	**29%**	**29%**

According to the model one car will generate annual revenue USD 9 614

Contributional margin of own fleet is USD 4 847 or 50%

Contributional margin of Partners' fleet is USD 1 947 or 20%

Own cars	Partners' cars

Trips per day/car		2,8
Average check, USD	$	9,41
Revenue per car/year, USD	$	9 614
Fuel		(2 307)
Insurance		(780)
Maintenance		(600)
FOH		(360)
Carwash		(120)
Other expenses		(600)
Contribution margin	$	4 847
Margin		50%

Trips per day/car		2,8
Average check, USD	$	9,41
Revenue per car/year, USD	$	9 614
Fuel		(2 307)
Insurance		(780)
Maintenance		(600)
FOH		(360)
Carwash		(120)
Other expenses		(600)
Payment to partners		(2 900)
Contribution margin	$	1 947
Margin		20%

According to Company's projections each car will generate revenue from USD 9614 in 2023 to USD 12897 in 2027.

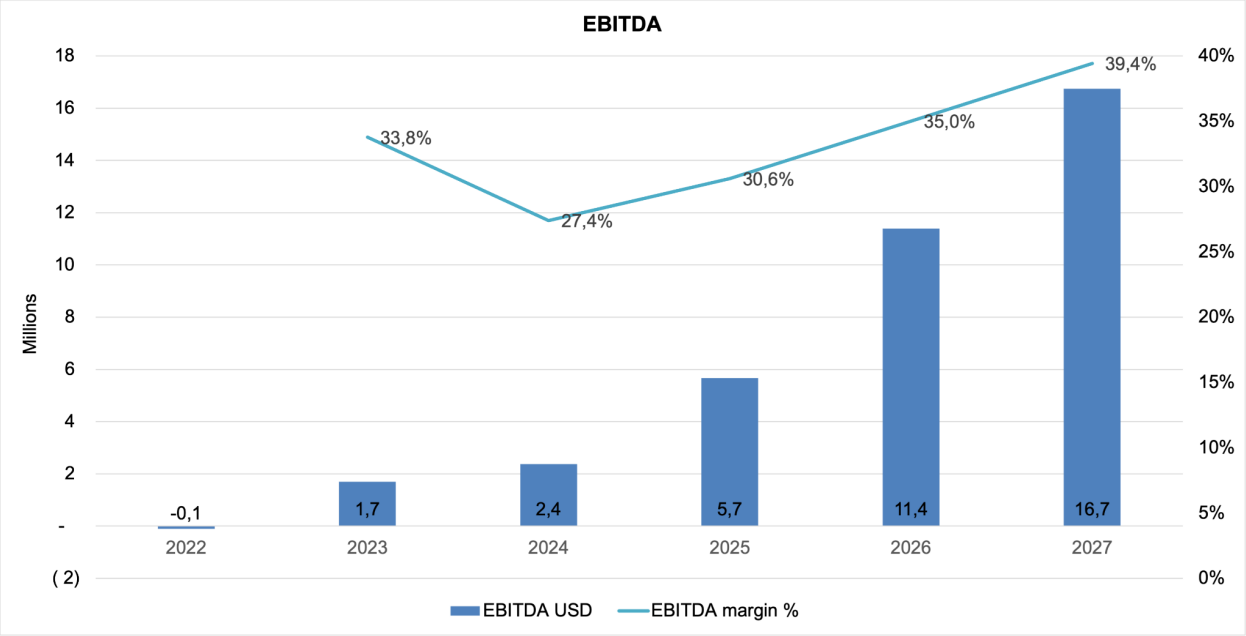


Figure 10 EBITDA

To reach the above mentioned KPI's it is vital to provide the needed number of cars available in 'five minutes walk' to target customers. For this reason the Company plans

two rounds of financing from external investors. In 2023 Company plans to sell up to 12% of its shares to private investors and purchase 303 cars. Additionally by the end of 2024 Company plans to manage at least 150 cars from Partners and purchase 100 cars under leasing agreement.

During the expansion stage to Lviv, Odessa, Dnipro and Kharkiv Company will hold the second round of financing amounting USD 3,5 million and purchase another 303 cars. The number of Partners' cars will increase by 350 and additional 450 cars under leasing agreement will be put into operations by the end of 2027.
However, car accidents will significantly affect the total number of cars under operation. The model assumes that 3% of the car fleet will drop out every year due to total damage accidents. Full coverage insurance will cover 90% of the damaged fleet and will enable partial substitution of the dropout fleet.

			2022	2023	2024	2025	2026	2027
Own car fleet								
New cars								
Existing car fleet	units	**2022**	-					
Purchase of new cars for investment	units	**2023**		303		303		
Income reinvestment	units	**2024**			126	146	344	668
Purchase of new cars for insurance reimbursement	units	**2025**		-	7	10	20	27
Sale of used cars	units	**2026**	-	-	-	-	-	166
Leasing cars	units	**2027**	-	-	100	150	300	-
Total new cars	**units**		**-**	**303**	**233**	**609**	**664**	**862**

Fleet damage			2022	2023	2024	2025	2026	2027
Car damage	units							
	units	**2022**		-	-	-	-	-
	units	**2023**		(9)	(9)	(9)	(9)	-

	units	**2024**			(4)	(4)	(4)	(4)
	units	**2025**				(14)	(14)	(14)
	units	**2026**					(11)	(11)
	units	**2027**						(26)
Total fleet damage	**units**		**-**	**(9)**	**(13)**	**(27)**	**(38)**	**(55)**

Insurance claims for damage			**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
	USD	**2022**		-	-	-	-	-
	USD	**2023**		90 900	79 992	69 084	58 176	-
	USD	**2024**			39 935	35 143	30 351	25 559
	USD	**2025**				137 806	121 269	104 732
	USD	**2026**					109 264	96 152
	USD	**2027**						258 496
Insurance reimbursement	**USD**		**-**	**90 900**	**119 927**	**242 033**	**319 060**	**484 939**

Used fleet sale			**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
	units	**2022**	-	-	-	-	-	-
	units	**2023**		-	-	-	(267)	-
	units	**2024**			-	-	-	(217)
	units	**2025**				-	-	-
	units	**2026**					-	-
	units	**2027**						-
	units		**-**	**-**	**-**	**-**	**(267)**	**(217)**

Used fleet sale

Fleet sale	**USD**		**$ -**	**$ -**	**$ -**	**$ -**	**$1 919 808**	**$1 563 434**

Own car fleet	**units**		**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
		2022	-	-	-	-	-	-

	2023		294	285	276	267	-
	2024			229	225	221	217
	2025				596	582	568
	2026					653	642
	2027						836
Total own cars	**units**	**-**	**294**	**514**	**1 096**	**1 723**	**2 263**

The projections of Partners' fleet are as follows.

Partners' fleet		**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Partners' fleet							
Existing car fleet	units	-					
New cars	units	-	50	100	150	200	0
Total new cars	**units**	**-**	**50**	**100**	**150**	**200**	**-**

Fleet damage		**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Car damage	units **2022**		-	-	-	-	-
	units **2023**		(2)	(2)	(2)	(2)	-
	units **2024**			(3)	(3)	(3)	(3)
	units **2025**				(5)	(5)	(5)
	units **2026**					(6)	(6)
	units **2027**						-
Total fleet damage	**units**	**-**	**(2)**	**(5)**	**(9)**	**(15)**	**(14)**

Dropout of fleet		2022	2023	2024	2025	2026	2027
	units **2022**	-	-	-	-	-	-
	units **2023**		-	-	-	(44)	-
	units **2024**			-	-	-	(88)
	units **2025**				-	-	-
	units **2026**						
	units **2027**						
Total dropout of fleet	**units**	**-**	**-**	**-**	**-**	**(44)**	**(88)**

Partners' fleet		2022	2023	2024	2025	2026	2027
	units **2022**	-	-	-	-	-	-
	units **2023**		49	47	46	44	-
	units **2024**			97	94	91	88
	units **2025**				146	141	137
	units **2026**					194	188
	units **2027**						-
Total partners' fleet	units	**-**	**49**	**144**	**285**	**470**	**413**

Company plans the lifespan for new cars of 4 years with 10% annual depreciation. After 4 years cars will be sold at 60% of purchase price. The proceeds from sale are directed for purchase of new cars.

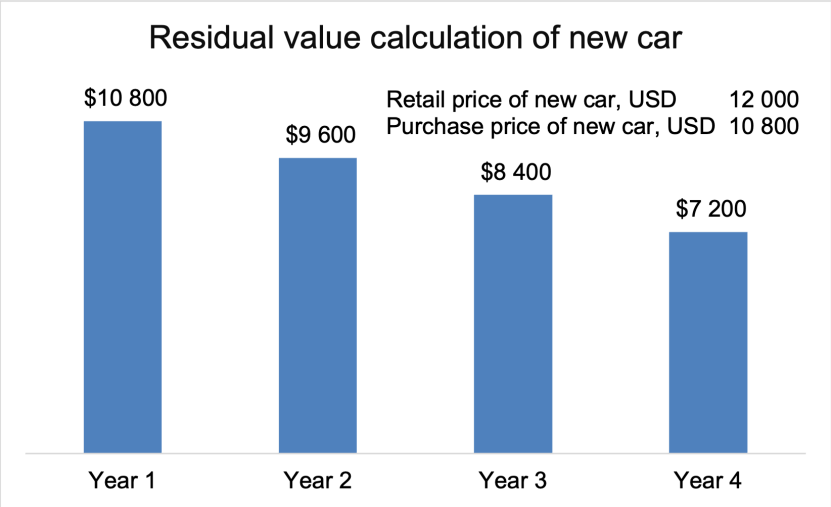


Figure 11 Residual value calculation of new car

Company also plans to increase the number of cars under operation by reinvesting net income. The overall car fleet projections by years are following.

	Units	2022	2023	2024	2025	2026	2027
Car fleet							
Own car fleet	units		294	514	1 096	1 456	2 046
Partner's car fleet	units		49	144	285	426	325
Structure of fleet							
Own car fleet	%		86%	78%	79%	77%	86%
Partner's car fleet	%		14%	22%	21%	23%	14%
New cars							
Own car fleet	units		303	233	609	664	862
Partner's car fleet	units		50	100	150	200	0
Total damage							
Own car fleet	units		9	13	27	38	55
Partner's car fleet	units		2	5	9	15	14

	Units	2022	2023	2024	2025	2026	2027
Dropout							
Own car fleet	units		0	0	0	267	217
Partner's car fleet	units		0	0	0	44	88
Total car fleet	units		**342**	**658**	**1 381**	**1 882**	**2 371**

By 2027 the company will operate 2 046 own cars and 325 partners' cars covering urban areas of Kyiv, Lviv, Odessa, Dnipro and Kharkiv.

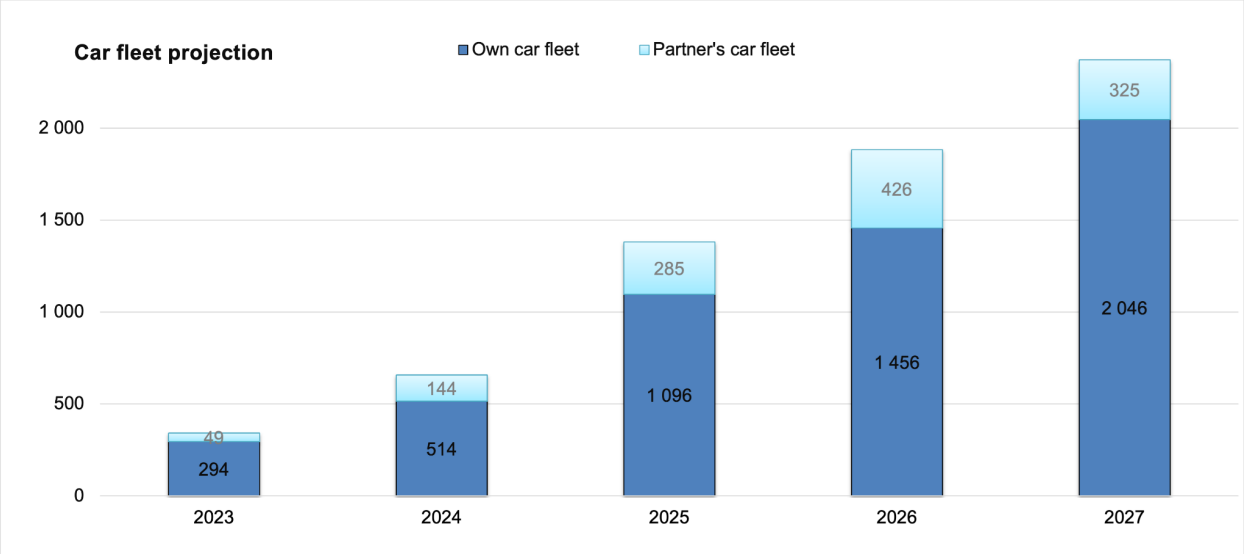


Figure 12 Car fleet projection

4.3 Risk assessment

The company's shareable cars are distributed around the city. The users can book a car from the app or from the company's website. The cars have a built-in GPS tracker and a lock that can be opened with the mobile app.

The service is presented in the city as a convenient alternative to public transport or personal cars. Let's assume that the service is new and not very popular yet.

The purpose of this assessment is to identify possible risks for the company and to develop recommendations for mitigating these risks.

Risks

1. The company may not have enough cars to meet the demand.
2. The cars may be damaged or stolen.
3. The company may not be able to find a parking spot for the cars.
4. The company may not be able to collect enough data to improve the service.
5. The company may not be able to generate enough revenue to sustain the business.

Recommendations

1. The company should have a plan for increasing the number of cars in the fleet in case of high demand.
2. The cars should be insured against damage and theft.
3. The company should have a plan for finding parking spots for cars.
4. The company should invest in data collection and analysis to improve the service.
5. The company should have a plan for generating revenue from other sources if the car-sharing service is not profitable.

4.3.1 Risk map prioritization

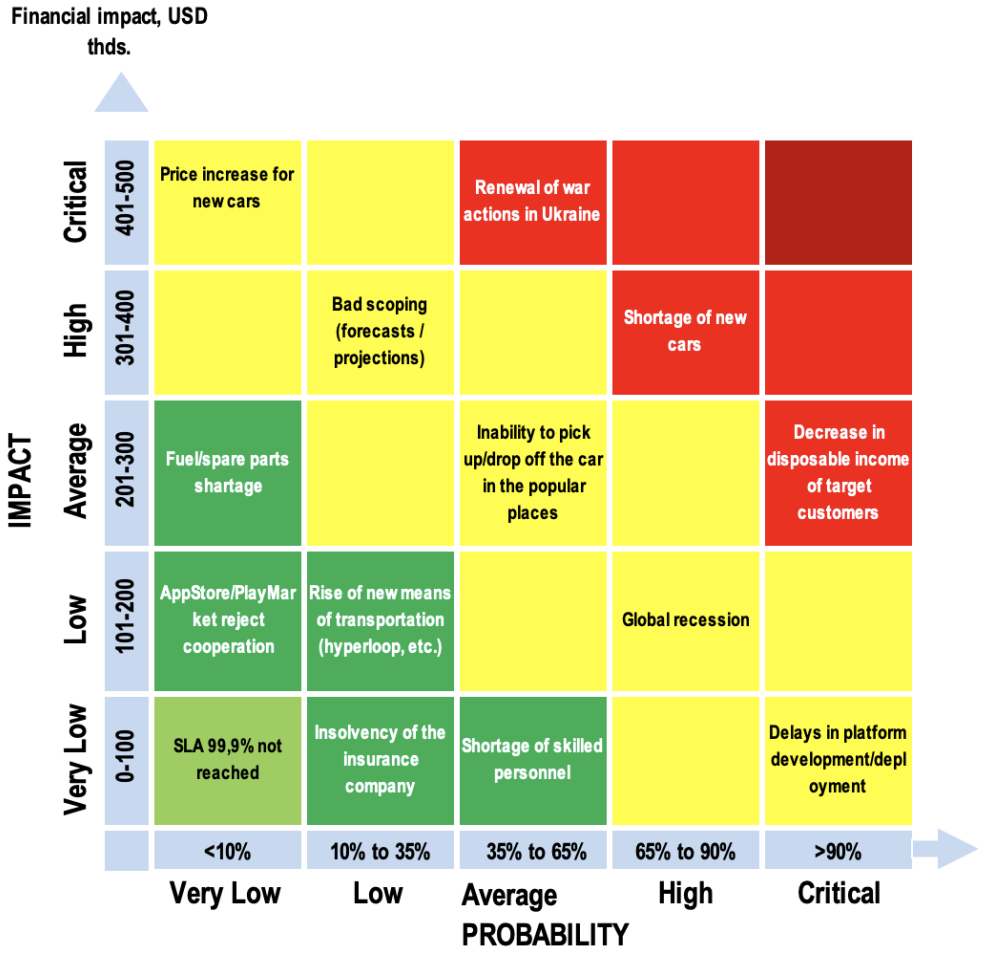


Figure 13 risk map

4.3.2 Risk register

Risk	Group of risk	Probabilty	Impact		Risk score	Risk materiality	Actions	Description
		%	USD thds.	Definition				
Shortage of new cars	operational	35%	400	High	140	High	mitigate	long-term planning, proper contracting
Price increase for new cars	financial	30%	150	Low	45	Average	mitigate	long-term planning, proper contracting
Fuel shortage	operational	15%	200	Low	30	Low	mitigate	long-term planning, proper contracting
Spare parts shortage	operational	15%	100	Very low	15	Low	mitigate	long-term planning, proper contracting
Shortage of skilled personnel	personnel	20%	100	Low	20	Low	mitigate	long-term planning, proper contracting
Insolvency of the insurance company	financial	5%	400	High	20	Low	mitigate	distribute insurance between few conpanies, obligatory reinsurance clauses
Bad scoping (forecasts / projections)	financial	25%	200	Low	50	Average	mitigate	external review
Decrease in disposable income of target customers	financial	40%	200	Low	80	High	accept	
Inability to pick up/drop off the car in the popular places	operational	15%	250	Average	38	Average	mitigate	PR, establish relations with city authorities
SLA 99,9% not reached	technical	5%	150	Low	8	Very Low	mitigate	constant platform development
AppStore/PlayMarket reject cooperation	technical	5%	500	Critical	25	Low	mitigate	constant monitoring of AppStore/PlayMarket regulations
Rise of new means of transportation (hyperloop, etc.)	strategic	10%	200	Low	20	Low	accept	
Global recession	strategic	15%	350	Average	53	Average	accept	
Delays in platform development/deployment	technical	20%	200	Average	40	Average	mitigate	constant control over development of IT-platform
Renewal of war actions in Ukraine	strategic	25%	500	Critical	125	High	mitigate	Business continuity plan

Figure 14 risk register

4.4 Financial model

The financial model covers a 6 years period. The model envisages no dividend payout. All earnings for the previous year are reinvested into the purchase of new cars.

4.4.1 Background Assumptions

Major assumption - Ukraine has won the war with Russia, sovereignty and territorial integrity have been restored. Coalition of Western countries help Ukraine in rebuilding destroyed facilities.

Purchase of cars		**Input cells**
Price of new car used in the financial model is set to USD 12 000. Taking into account the quantity of cars in a single order a 10% discount from list price is used in the model.	Price of new car, USD	12 000
	Discount, %	10%
Basic equipment (the IoT module which enables data transmission as well as locking/unlocking the car) and installation costs, branding.	Additional equipment installation, USD	750
The total cost per new car used in the model is USD 11550	Total cost, USD	11 550

Car fleet & depreciation		
It is assumed that cars will be shared for 4 years and the terminal value of the car will be 60% of the list price. The annual depreciation rate is 10%.	Lifespan of new cars, years	4
	Terminal value	60%
	Level of depreciation	10%

Terms of Leasing agreement		
Model envisages increasing the company's fleet through financial leasing of cars starting from 2023 and amounting to 550 cars in 2026. The effective interest rate is set to 9% with downpayment of 15% of total car cost. The cars will be sold after 4 years of operation.	Down payment	15%
	Period	4
	Interest rate, UAH	9%

Number of new cars in leasing by years

	2022	0
	2023	0
	2024	100
	2025	150
	2026	300

Partners' fleet

Financial model also envisages attracting/operating partners' fleet totaling 500 cars during 4 years of operation with 20% fixed commission paid to the company.	2022	0
	2023	50
	2024	100
	2025	150
	2026	200

Expenses

Fuel expense is expected to be 24% of revenue generated by car.	Fuel, % of revenue	24%
Marketing and sales expenses budgeted as 3% of revenue while Other expenses are up to 5% of revenue.	Other expenses, % of revenue	5%
	Sales&Marketing, % of revenue	3%
Insurance reimbursements expected in 90% of accidents. Full coverage car insurance package assumed as 12% of car price. It is assumed that 3% of the car fleet will be dropped due to total damage accidents which equals to 5% of revenue.	Insurance reimbursement, % of Accidents	90%
	Car insurance, % of car price	12%
	Total damage, % of revenue	5%
	Total damage, % of the fleet per year	3%
	Franchise, USD	800

Expenses, USD per car/year

Major per car expenses breakdown are following	Technical maintenance	-180
	Winter tyres	-120
	Car insurance	-720
	Car insurance obligatory	-60
	Car wash	-120
	Parking	-60

Sale of share in the Company

	First round of financing (2023)	
There is no benchmark for car sharing start-ups but the minimum of 5x multiplier can be applied as for all start-ups. https://eqvista.com/revenue-multiples-by-industry/ provides multiple for Rental/Leasing Companies 5.31x	Multiplier, EV/Rev	5,00x
	Enterprise value (pre-money), USD million	25,2
	Investor' share	12%
	Funds raised for initial purchase of cars, USD	3 500 000
	Second round of financing (2025)	
	Multiplier, EV/Rev	5,00x
	Enterprise value, USD million	92,6
	Investor' share	4%
	Funds raised for expansion purchase of cars, USD	3 500 000

4.4.2 Personnel Assumptions

Assumed that cars should have regular maintenance (technical maintenance, cleaning, refueling, returning to designated parking areas. For this purpose, the company will hire required personnel based on 20 cars per one employee.

Levels by function	**cost allocation P&L**	**units**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
The number of employees								
Cars per employee		units		20	20	20	20	20
Employees	direct labor COGS	employees		28	40	64	70	113
Salary, average per year		USD		7 200	7 200	7 200	7 200	7 200
Wage fund								
FOH		USD	-	(199 235)	(287 943)	(464 174)	(503 930)	(810 829)
Total FOH		**USD**	**-**	(199 235)	(287 943)	(464 174)	(503 930)	(810 829)
Total FOH per car/year		**USD/car**		(360)	(360)	(360)	(360)	(360)

4.4.3 Income Statement

P&L		2022	2023	2024	2025	2026	2027
Net revenue	**USD**	**-**	**5 039 653**	**8 675 491**	**18 521 715**	**32 522 428**	**42 472 657**
Cost of sale							
Maintenance of cars	*USD*	-	*(2 618 238)*	*(4 642 794)*	*(9 866 096)*	*(16 247 920)*	*(21 045 909)*
FOH	USD	-	(123 268)	(236 860)	(497 316)	(677 597)	(853 443)
Expense on Payments to Partners	USD	-	(295 060)	(768 139)	(1 544 620)	(2 843 480)	(2 160 592)
Total Cost of sale	**USD**		**(3 036 566)**	**(5 647 793)**	**(11 908 031)**	**(19 768 998)**	**(24 059 944)**
Gross profit	**USD**		**2 003 087**	**3 027 698**	**6 613 684**	**12 753 430**	**18 412 712**
Gross profit margin	%		*39,7%*	*34,9%*	*35,7%*	*39,2%*	*43,4%*
Administrative and other expenses	**USD**	**(100 000)**	**(150 000)**	**(390 000)**	**(390 000)**	**(390 000)**	**(390 000)**
% of revenue	%		*-3,0%*	*-4,5%*	*-2,1%*	*-1,2%*	*-0,9%*
Sales & Marketing	USD	-	(151 190)	(260 265)	(555 651)	(975 673)	(1 274 180)
% of revenue	%		*-3,0%*	*-3,0%*	*-3,0%*	*-3,0%*	*-3,0%*
EBITDA	**USD**	**(100 000)**	**1 701 897**	**2 377 434**	**5 668 032**	**11 387 757**	**16 748 532**
EBITDA margin	%		*33,8%*	*27,4%*	*30,6%*	*35,0%*	*39,4%*
Depreciation	USD	-	(339 466)	(593 606)	(1 266 379)	(1 989 897)	(2 614 133)
% of revenue	%		*-6,7%*	*-6,8%*	*-6,8%*	*-6,1%*	*-6,2%*
Interest payments	USD	-	-	(82 620,0)	(206 550,0)	(454 410,0)	(454 410,0)
% of revenue	%		*0,0%*	*-1,0%*	*-1,1%*	*-1,4%*	*-1,1%*
Income tax	USD	-	(245 238)	(321 089)	(777 426)	(1 654 436)	(2 462 398)

% of revenue	%		*-4,9%*	*-3,7%*	*-4,2%*	*-5,1%*	*-5,8%*
Net income	**USD**	**-$100 000**	**$1 117 193**	**$1 380 119**	**$3 417 677**	**$7 289 014**	**$11 217 591**
Net profit margin	%		*22,2%*	*15,9%*	*18,5%*	*22,4%*	*26,4%*

4.4.4 Cash Flow Statement

Cash Flow Statement		**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Net revenue	USD	-	5 039 653	8 675 491	18 521 715	32 522 428	42 472 657
COGS	USD	-	(3 036 566)	(5 647 793)	(11 908 031)	(19 768 998)	(24 059 944)
Administrative and marketing	USD	(100 000)	(301 190)	(650 265)	(945 651)	(1 365 673)	(1 664 180)
Leasing (interest)	USD	-	-	(82 620)	(206 550)	(454 410)	(454 410)
Leasing (annuity)		-	-	(283 358)	(708 395)	(1 558 468)	(1 558 468)
Taxes	USD	-	(245 238)	(321 089)	(777 426)	(1 654 436)	(2 462 398)
Cashflow from operating activity	**USD**	**(100 000)**	**1 456 660**	**1 690 367**	**3 975 662**	**7 720 443**	**12 273 256**
Insurance reimbursement	USD	-	90 900	119 927	242 033	319 060	484 939
Fleet sale	USD	-	-	-	-	1 919 808	1 563 434
Purchase of new cars	USD	-	(3 499 650)	(1 774 510)	(5 661 017)	(4 917 662)	(9 952 101)
Cashflow from investment activity	**USD**	**-**	**(3 408 750)**	**(1 654 582)**	**(5 418 984)**	**(2 678 794)**	**(7 903 728)**
Capital contribution	USD	500 000	3 500 000		3 500 000		
Dividends payout	USD	-	-	-	-	-	-
Cashflow from financial activity	**USD**	**500 000**	**3 500 000**	**-**	**3 500 000**	**-**	**-**
CASHFLOW	**USD**	**$400 000**	**$1 547 910**	**$35 785**	**$2 056 678**	**$5 041 650**	**$4 369 528**
Cash balance							
Cash at the beginning	**USD**	**-**	**400 000**	**1 947 910**	**1 700 336**	**3 048 619**	**6 531 801**
Insurance reimbursement, car fleet sale, capital contribution	USD	500 000	3 590 900	119 927	3 742 033	2 238 868	2 048 373

Purchase of new cars	USD	-	(3 499 650)	(1 774 510)	(5 661 017)	(4 917 662)	(9 952 101)
Leasing repayment	USD	-	-	(283 358)	(708 395)	(1 558 468)	(1 558 468)
Cashflow from operating activity	USD	(100 000)	1 456 660	1 690 367	3 975 662	7 720 443	12 273 256
Dividends payout	USD	-	-	-	-	-	-
Cash at the end	**USD**	**$400 000**	**$1 947 910**	**$1 700 336**	**$3 048 619**	**$6 531 801**	**$9 342 860**

4.4.5 Car fleet value calculation

Owned cars are the only tangible asset of the Company.

Car fleet value calculation		2022	2023	2024	2025	2026	2027
Car fleet	USD	-	-	3 065 693	5 039 093	10 557 089	14 168 424
(+) new cars	USD	-	3 499 650	2 692 510	7 038 017	7 671 662	9 952 101
(-) Dropout	USD	-	(94 491)	(125 504)	(253 642)	(2 070 429)	(1 643 896)
(-) Depreciation	USD	-	(339 466)	(593 606)	(1 266 379)	(1 989 897)	(2 614 133)
Car fleet value	**USD**	**-**	**3 065 693**	**5 039 093**	**10 557 089**	**14 168 424**	**19 862 497**

4.4.6 Debt

Model envisages increasing CaaS presence in the Kyiv urban area by 100 new cars purchased under financial leasing agreement in 2024. In 2025-2026 the Company plans expansion to Lviv, Odessa, Dnipro and Kharkiv which will enable inter city connection, will increase the load of existing car fleet as well as the penetration rate of CaaS. For that reason the Company will purchase another 450 cars under leasing agreement. We believe that Ukraine' post war restoration plan will include strong state support for new businesses. Thus we believe following basic term for leasing agreements can be applied in the model:

- effective interest rate - 9%
- down payment - 15% of total car cost which covers additional equipment installation and car branding.

- duration of the Leasing agreement - 4 years which corresponds to Company's approved 4 years lifespan for new cars.

			2022	2023	2024	2025	2026	2027
Leasing								
Purchase of cars	units		-	-	100	150	300	-
Leasing (annuity)	USD	**2022**	-	-	-	-	-	-
	USD	**2023**		-	-	-	-	-
	USD	**2024**			(283 358)	(283 358)	(283 358)	(283 358)
	USD	**2025**				(425 037)	(425 037)	(425 037)
	USD	**2026**					(850 073)	(850 073)
	USD	**2027**						-
Total annuity			**-**	**-**	**(283 358)**	**(708 395)**	**(1 558 468)**	**(1 558 468)**
Leasing (interest)	USD	**2022**	-	-	-	-	-	-
	USD	**2023**		-	-	-	-	-
	USD	**2024**			(82 620)	(82 620)	(82 620)	(82 620)
	USD	**2025**				(123 930)	(123 930)	(123 930)
	USD	**2026**					(247 860)	(247 860)
	USD	**2027**						-
Total interest			**-**	**-**	**(82 620)**	**(206 550)**	**(454 410)**	**(454 410)**
Down payment	USD		-	-	(237 000)	(355 500)	(711 000)	-
Leasing cars expenses	**USD**		**-**	**-**	**(602 978)**	**(1 270 445)**	**(2 723 878)**	**(2 012 878)**

4.4.7 Summary

Investment Summary	units	2022	2023	2024	2025	2026	2027
Revenue	USD	-	5 039 653	8 675 491	18 521 715	32 522 428	42 472 657
EBITDA	USD	(100 000)	1 701 897	2 377 434	5 668 032	11 387 757	16 748 532
Net income	USD	(100 000)	1 117 193	1 380 119	3 417 677	7 289 014	11 217 591
ASSETS	USD	-	3 065 693	5 039 093	10 557 089	14 168 424	19 862 497
CapEx	USD	-	(3 499 650)	(1 774 510)	(5 661 017)	(4 917 662)	(9 952 101)
Total Cash Flow	USD	400 000	1 547 910	35 785	2 056 678	5 041 650	4 369 528
Cash at the end of the period	USD	400 000	1 947 910	1 700 336	3 048 619	6 531 801	9 342 860
DEBT / EBITDA	times		0,00	0,48	0,45	0,46	0,22

Round 1 financing		2022	2023	2024	2025	2026	2027
Investor 1	USD	-	(3 500 000)	-	-	-	-
DIV	USD	-	-	-	-	-	
Sale of share	USD	-	-	-	-	-	25 899 527
Investor's net cash flow	USD	-	(3 500 000)	-	-	-	25 899 527
IRR	%	64,9%					
Cash-on-Cash	times	7,4x					

Round 2 financing		2022	2023	2024	2025	2026	2027
Investor 2	USD	-	-	-	(3 500 000)	-	-
DIV	USD	-	-	-	-	-	-
Sale of share	USD	-	-	-	-	-	7 733 665
Investor's net cash flow	USD	-	-	-	(3 500 000)	-	7 733 665

IRR	%	48,6%
Cash-on-Cash	times	2,2x