

HOW WE PLAN TO MAKE CARS MORE AFFORDABLE IN PORTUGAL - FUNDING  
AND FINANCIAL PROJECTIONS

Romeo Daniel Simonca Farkas 51177

Work project carried out under the supervision of:

Euclides Major

Sérgio Guerreiro

Rui Silva

16/12/2022

## **Abstract**

This business plan for an online vehicle marketplace with twist was carried out within the scope of our master thesis project, for the final master's degree in Management, with the guidance of Professor Euclides Major. The development of this business plan aimed to transmit all our study towards the plan to build a successful company and use our learnings to continue scaling it after submission. I had the opportunity to explore all areas within a business as a team and gained valuable insights into the Portuguese car market and how it works.

## **Keywords**

Customer journey, CLV (Customer Lifetime Value), CAC (Customer Acquisition Cost), Net burn, Profit, Revenue, Costs, Cashflow, Customers, Funding, Market segmentation, TAM (Total Addressable Market), SAM (Serviceable Addressable Market), SOM (Serviceable Obtainable market).

## **Mandatory statement regarding funding**

To be able to lift the company and survive at least the first year until we become profitable, I'm currently seeking 100.000,00 € in exchange for 15% of our company.

## **Acknowledgments**

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

Contents

- 1. The Opportunity ..... 5**
  - 1.1 The Pain .....5**
  - 1.2 The Solution .....7**
  - 1.3 The Reasoning .....8**
    - 1.3.1. Solution Validation.....8**
    - 1.3.2 Private customer survey results .....9**
    - 1.3.3 Demand for online car-dealerships in general .....9**
    - 1.3.4 Demand for our solution.....10**
  - 1.4 Car dealership survey results .....11**
    - 1.4.1 Search Volume of Related Terms .....12**
  - 1.5 Mission, Vision, Goals & Values .....14**
    - 1.5.1 Mission .....14**
    - 1.5.2 Vision.....14**
    - 1.5.3 Values .....14**
    - 1.5.4 Goals and Objectives.....14**
    - 1.5.5 Sustainable Development Goals (SDGs).....15**
  - 1.6 The Potential of the Opportunity .....17**
    - 1.6.1 Factors impacting the automobile industry .....17**
    - 1.6.2 Used cars market overview.....17**
    - 1.6.3 How the war in Ukraine is affecting the market.....19**
    - 1.6.4 Most wanted by fuel type.....20**
    - 1.6.5 Demand by car segment.....22**
    - 1.6.6 Most profitable cars – focused product offering.....27**
  - 1.7 Competitor Analysis.....30**
    - 1.7.1 Direct Competitors.....32**
    - 1.7.2 Indirect Competitors.....33**
  - 1.8 Competition based on key-word search .....34**
  - 1.9 Evaluation .....35**
  - 1.10 SWOT Analysis .....36**

1.11	Key Factors for Success .....	41
<b>2.</b>	<b><i>Rollout</i></b> .....	<b>45</b>
2.1	Validation and Starting Venture.....	45
2.2	Pre-seed funding and registration.....	45
2.3	Development of MVBP and proof of concept .....	46
2.4	Marketing and future scaling .....	46
2.5	Seed funding and mid-term outlook .....	46
2.6	Long-term outlook and exit strategy .....	47
<b>3.</b>	<b><i>Financial Plan</i></b> .....	<b>48</b>
3.1	Main Assumptions & Core Costs.....	48
3.2	Revenue Streams and Pricing .....	51
3.3	Revenue Development.....	52
3.4	Profitability Development.....	53
3.5	Cashflows & Funding.....	54
3.6	Unit Metrics .....	56
<b>4.</b>	<b><i>The Team</i></b> .....	<b>59</b>
4.1	Management and Ownership .....	59
4.2	HR Structure .....	60
<b>5.</b>	<b><i>Conclusion</i></b> .....	<b>62</b>
<b>6.</b>	<b><i>References</i></b> .....	<b>63</b>
<b>7.</b>	<b><i>Appendix</i></b> .....	<b>65</b>
	Graphic 1. Survey: Age of Respondents .....	9
	Graphic 2. Survey: Where they planning on buying their next car .....	10
	Graphic 3. Market Share by Segment .....	22
	Graphic 4. Top car for each segment in volume .....	27

Graphic 5. Market Value by Segment.....	27
Graphic 6. Five Porter's Forces .....	30
Graphic 7. Positioning Map .....	36
Graphic 8. Key Factors for Success .....	41
Graphic 9. Profitability Evolution 2023-2027.....	54
Graphic 10. Cash Flow Evolution 2023-2027.....	55
<b>Table 1. Used Cars Market Overview .....</b>	<b>17</b>
<b>Table 2. Cost for 100kms by combustible type.....</b>	<b>20</b>
<b>Table 3. Most wanted car by fuel type .....</b>	<b>20</b>
<b>Table 4. Top cars for each segment in volume and market share .....</b>	<b>24</b>
<b>Table 5. SWOT Analysis.....</b>	<b>37</b>
<b>Table 6. Number of Customers Evolution 2023-2027 .....</b>	<b>56</b>
<b>Image 1. Website Home Page Draft.....</b>	<b>7</b>

# 1. The Opportunity

## 1.1 The Pain

Buying a car in Portugal can be more expensive than expected. Having the third most expensive cars in Europe due to high taxation, buyers have to spend generous amounts. On the other hand, arises the difficulty of finding the desired brand and model in the Portuguese market, as it is scarcer than other European players.

Therefore, when they do not find the ideal car, some individuals choose to look for a car abroad, more specifically in Europe due to the proximity to Portugal and the free movement of goods. It should be noted that there are European countries such as Germany, France, Belgium, Italy, and Spain that have a wide variety of car brands and models, whether gasoline, diesel, hybrid or electric, as well as offering lower prices, which attracts Portuguese consumers to other markets across borders. However, the importation of a car from abroad, despite having more advantageous aspects, as mentioned above, implies some constraints. In this way, the problems related to the transport of the car to Portugal stand out, which adds additional costs. On the other hand, many are unwilling to go through the tedious, time-consuming, and complex bureaucratic process required when buying a car outside Portugal. Finally, some individuals are uncomfortable with the instability of not having a car warranty. Although the car seems to work perfectly at the time of purchase, problems are often only discovered later with the use of the car.

The Covid-19 pandemic and the war in Russia also stand out. The car market was already in decline at the beginning of 2019, with Covid-19 not being at its origin, it just came to accentuate, particularly at an economic level, in terms of the supply chain, production, and sales. As the contagion spread, due to the lockdown measures imposed in several European

countries to contain the virus, there were delays in production leading to the provisional closure of several car plants, contributing to disruptions in the supply chain.

Regarding the war between Russia and Ukraine, the automotive industry will also suffer consequences due to such instability. Particularly due to the rise in the price of raw materials exported from Russia, such as steel, aluminum, and magnesium. But also, considering globalization, the growing presence of various car groups in Russian territory, exposes them more directly to this crisis. Therefore, production stoppages, problems in supply chains, and lower profit rates are some of the problems that the automotive industry is going through.

To better analyze and study the problem, several individuals answered a survey (the results will be presented later) and the 4Us Framework was used to validate the problem.

**1. Unworkable (how painful):** Through the purchase of a car abroad made by a private individual (even having third-party assistance in some parts of the process), there are several negative consequences that are necessary to face. Namely, expenses with transport from and to Portugal, loss of time and money due to the bureaucratic process that involves legalization and, potentially, problems with the poor condition of the car that is not covered by the warranty.

**2. Unavoidable (how necessary):** Whenever a car is purchased abroad, there are mandatory legal requirements, namely the registration application, car insurance, vehicle registration, and payment of the "Imposto Único de Circulação", among others.

**3. Urgent (how time-sensitive):** Many Portuguese suffer from the limitations of the Portuguese car market, either due to inflated prices, a wide variety of makes and models, or shortages related to the type of fuel in the car, as has been seen with gasoline. Thus, there is an urgency to access a market that is more abundant as is the example of the German, French, Italian, Belgian, and Spanish car markets.

4. Underserved (how many alternatives): Many Portuguese suffered in the process of buying a car because the Portuguese market has no excellent conditions, however, the whole process of getting a car abroad was even more complicated to execute despite its abundant characteristics and low prices. In this way, it is possible to verify that there is still no optimal service that helps the consumer with the entire car import process.

In conclusion, as can be seen above, the process of buying a car is not perfect or easy for anyone, especially now that the car market is quite unstable. Buying a car abroad, despite having a lot of potential due to the high variety and low prices, also associates several insecurities and constraints.

### 1.2 The Solution

We propose the marketplace platform “Dealster”, where customers can find automobiles from all around Europe. A potential Portuguese customer could access more than 2 million cars from other countries, compare prices, and make a direct purchase through the website.

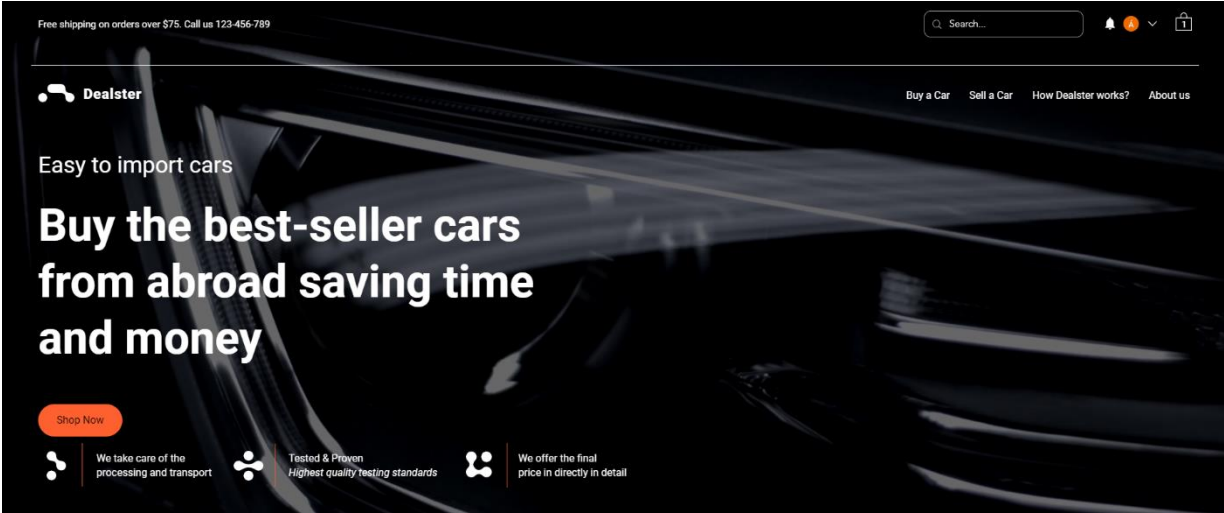


Image 1. Website Home Page Draft

Using a Portuguese customer as an example, they could visit our website, search for a particular brand or model, and gain access to all cars that are for sale from all European countries, with a

distinct and crucial step that is the final price of the vehicle after all potential expenses, like the cost of the car in the original country, shipping to the country of purchase, legal costs like license plates, car registration, and insurance costs, give the customer a genuine idea of the cost differences between buying a car locally and having it shipped from abroad. Therefore, the solution is providing customers with a wider array of offers, as well as lower pricing, as the dealership's profit margins are eliminated by our website/platform. To be even more explicit, here is an illustration of a real-world car and how the expenditures would be divided on our platform:

For an Audi A5 with first registration year 2017 / Diesel

- Car price 25.000€
- License and registration: 4.000€ (Simulador ISV 2022, n.d.)
- Shipping: 800€
- **Final price: 29.800€**

The user would see this on the platform, with the cost of the car listed as 29.800€, which he could then contrast with the costs for the same car in his home nation. Our main objective with this solution is to make car purchases slightly more affordable for everyone while maintaining the same level of trust and confidence as a traditional dealership. However, we also have a more ambitious goal in mind: since we are transparent and don't take as much profit as the dealerships, this will force them to lower their prices as well.

### **1.3 The Reasoning**

#### **1.3.1. Solution Validation**

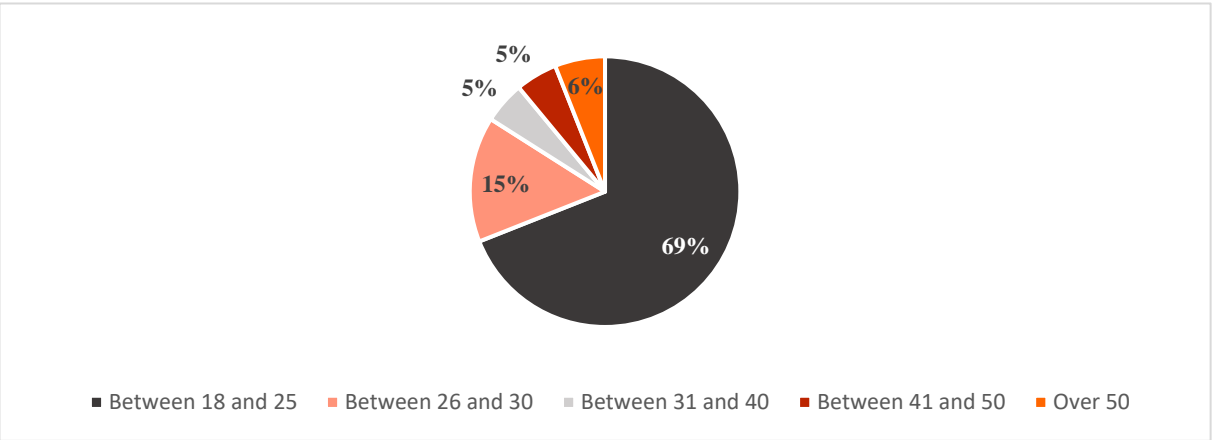
Given the business idea being very specific, we were not able to retrieve relevant information from internet research for validation. To validate our solution and the pain we identified, we

conducted two separate online surveys with our two target customer groups in Portugal: regular customers, as in private customers, and car dealerships. We received answers from 97 individuals and 4 Portuguese dealerships.

### 1.3.2 Private customer survey results

Before analyzing the results, it should be noted that a vast majority – 68% of the participants – were between 18 and 25 years old. In addition, 59 answers were from students and 69% have never bought a car before (Appendix 1 and 2). Even though most participants do not fit our target demographic, their answers still mostly align with our internet research results.

The survey’s purpose was manifold as previously explained. For the purpose of identifying the demand, its purpose was twofold: first, we wanted to understand the extend of the demand for online car-dealerships in general, after which we asked questions about our service in specific.

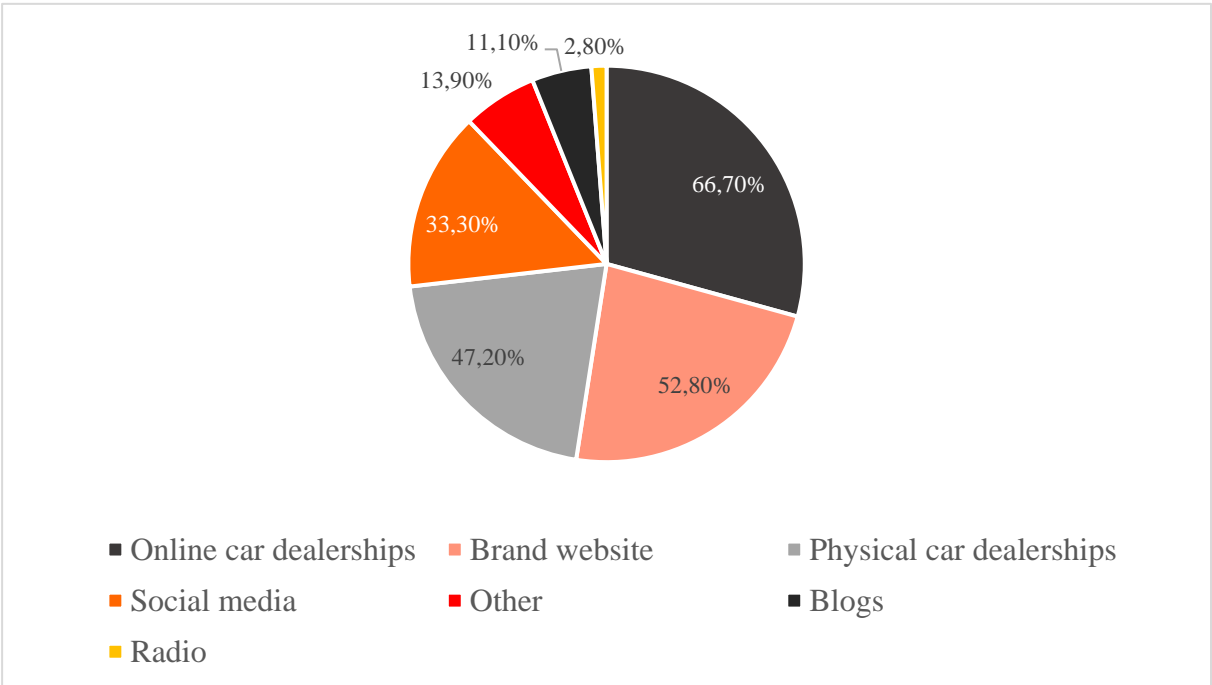


Graphic 1. Survey: Age of Respondents

### 1.3.3 Demand for online car-dealerships in general

When asked about where they were planning on buying their next car, out of 35 answers, 11 people considered dealerships as an option, whereas 18 considered brick and mortar dealerships only. This could be the cause of lacking trust in a secure deal with an individual online. However, that trust might not be an issue in the case of cars being offered online by car

dealerships. This poses an interesting topic to further research in the future. Moreover, when asked about the channels (multiple choice) used when searching for a new car, 68,6% stated that they use online car dealerships, compared to 54,3% using brand websites, 48,6% visiting physical car dealerships and 34,3% using social media. Radio only accounted for 2,9%, which could also be due to the special attribute of radio of being the only source (which we focused on in this survey), that customers usually don't actively seek to get information, but rather hear the information automatically alongside driven their car (in most cases). The cheap nature and wide reach of AM/FM radio for marketing, especially for car sale is worth examining in further



research in the future, potentially done by ourselves, as current research about this is scarce.

**1.3.4 Demand for our solution**

To get an idea about the demand of our service, we first asked if the participant ever bought a car abroad. Only 14,7% (5 individuals) of the people who bought a car before answered this question with “yes”. 3 of them actually imported the car from another country, of which one person did it through a dealership, one person did it through a firm, and the other person did it

themselves. All 3 all stated that the import process was difficult. The person who imported through a firm stated the legal process as specifically difficult, while the person who imported themselves mentioned the lack of contacts abroad as a difficulty.

To those who have never bought a car abroad before, we asked if they have ever considered it. 40,4% (19 out of 47 individuals) of those asked considered this before. Those who didn't were asked to explain why, and if this was an option for them in the future. The answers were concerns about a lengthy process, trust and quality, difficult legal process, transportation, customs and warranty, concerns about a lack of information on the car's history, concern about having to leave the country, higher prices and taxes, paperwork, as well as lack of information. Four people did not think about this as an opportunity before. While these answers give an idea on what to address to gain sceptic people as customers, it is clearly visible that a vast majority of the participants did either not think about this as an opportunity, or are concerned about things that are solved as unique selling propositions of our proposed service. Consequently, most of the concerned participants stated, they would consider buying a car abroad, should these concerns not be given.

Finally, we asked for an intent to use our service, specifically if they would consider using a service, where they could choose a car at a lower price that came from abroad. 85,5% (53 out of 62 individuals) said they would. Remaining concerns include sustainability of the transport, quality of the car, local mechanics and availability of car parts, leasing opportunities, and public transport opportunities.

#### **1.4 Car dealership survey results**

All 4 brick and mortar dealerships that answered our survey are located in Lisbon and offer used cars. It is worth mentioning that one of these focuses on high-end and luxury cars. 3 of them stated that they buy their cars from private sellers and 2 dealerships buy their cars from

other dealers. Interestingly, 2 dealerships also buy their cars abroad. However, when asked if they ever bought a car abroad, they all answered “yes”. These insights show that dealerships source their cars from a variety of options and are not appalled from buying from other dealers and private sellers, as well as looking abroad to find the right cars for their customers. Nevertheless, only one dealership said they also use online marketplaces to buy cars. The cause for this can be further questioned in future surveys and when approaching dealerships and potential customers.

As for the transportation of the purchased cars to their shops, either from abroad or not, only one stated that they do not have a transportation service. As all dealerships bought a car abroad before, we also asked if they found the process difficult. One stated that it was difficult due to a lot of bureaucracy, even though they received support from “Autodoc”, an online marketplace for car parts, and thus it just concerned car parts, rather than a car.

All 4 dealerships would use a service where they could buy cars at a lower price from abroad, making them perfect candidates to approach as potential customers in the future. This shows that indeed, car dealerships would use our service.

So far, all questions addressed the car dealerships as customers using the platform to import cars from abroad to Portugal. However, according to the survey, 2 of them also sell cars outside of Portugal, which suggests a new opportunity for Dealster, being that of car exports – an additional service that is worth exploring in the future, especially from a profitability perspective. This is not the focus of our business and will not be further addressed in this business plan.

#### **1.4.1 Search Volume of Related Terms**

We conducted a keyword analysis for several reasons – to get first insights on keywords to use for Search Engine Optimization (SEO) purposes, confirm main competitors and get additional

insight for the competitor analysis, and get an overview on which brands and models' potential customers are looking for online. For the search engine of choice – Google in our case – the tool searches the web for similar keywords and ranks them according to the search volume, while also showing how competitive a keyword is, meaning how often it is used by other websites. For the purpose of this analysis, we included the 5 most searched keyword for each term.

We used two terms: “standvirtual” and “carros usados”. Since we are focusing on the Portuguese market, we used our biggest competitor as the first term (Standvirtual), and “used cars” – our product offering (in Portuguese) – as the second (Appendix 4 and 5).

In short, the first term “standvirtual” mainly showed two things. Next to Standvirtual itself, people also searched for competitors such as Byrd, Drive Point and Hjr Car. Moreover, most of the searched keywords include brands or specific car models. These insights are included in the decision of the brands and models that we will target in the beginning to ensure we cover the most wanted cars in our portfolio.

The second term “carros usados” however, additionally presented other keyword examples to consider for future SEO and included fuel type differentiations as well. Some of these suggested keywords are: "carros usados baratos", "custo justo carros usados", and "carros eletricos usados". However, we were able to identify two more potential competitors that customers that looked up used cars in Portugal searched for: Lebocoin and OLX. The potential competitors and their posed threat on our business identified through related search terms, both for “standvirtual” and “carros usados”, will be further evaluated in the competitor analysis below.

## **1.5 Mission, Vision, Goals & Values**

### **1.5.1 Mission**

Our mission at Dealster is clear. We want to make cars more accessible in our customers' home countries, in a cheap, fast, and secure way.

### **1.5.2 Vision**

By executing our venture's disruptive business model, we plan to bring a lasting change to overly expensive car markets, by changing the way people buy cars and ultimately how cars are taxed.

By building our partnership network and growing our importation process expertise, we aim to create a global trusted service that enables people to own their dream car.

### **1.5.3 Values**

As mentioned above, we are aware of carbon emissions caused by the international transport of cars. We value carbon neutral transportation processes, which eventually will become carbon negative. We value our ventures sustainability and contribution to the UN's contribution to sustainable development, which will be further explained below.

Additionally, we highly value the quality and trustworthiness of our service. These are important criteria our customers demand from us. Keeping our customer promise and maximizing customer satisfaction will define Dealster's success.

### **1.5.4 Goals and Objectives**

In the foreseeable future, we want to carry out our mission internationally – across all of Europe. After having successfully expanded in Europe, we want to offer the same service on more continents, including the Americas and Asia.

Throughout the course of this process, we want to join the top 5 online car-dealerships in Portugal until Q3 of 2025, Standvirtual, Custo Justo, Facebook Marketplace, OLX, and Car

Spot. Moreover, after expanding do more countries in Europe, approximately in Q3 of 2025, we would like to be among the top 5 in those respective countries as well. These countries are Germany, the UK, France, the Netherlands, and Switzerland. Of course, these countries will be subject of further evaluation, as before expanding to new countries, we need to analyze the market and competitor infrastructure more thoroughly. Similarly, the timings and order of expansions needs to be defined beforehand.

Additionally, with electric cars being produced more and more, as well as infrastructures being adapted more to host electric cars, we want to be a major player in supporting the accessibility of electric cars in the markets that we are present in and thereby make a positive impact on the environment. In regard to this, we are also committed to offer carbon emission compensations related to possible emissions during the transportation of cars. This will be done by offering our customers to donate to trusted organizations who battling climate change. With reaching a more mature financial position, we will cover these costs ourselves while still giving customers the opportunity to donate as well, aiming to making the delivery process carbon negative.

#### **1.5.5 Sustainable Development Goals (SDGs)**

Transparency and honesty are basic principles for Dealster and as such, it is not intended to make an empty defense of sustainability that leads to an obvious greenwashing. Even so, although the company's raison d'être is not directed to the care and improvement of the environment, there are actions that can contribute to it and that each company should be morally obliged to implement.

Sustainable Development Goals are a very useful tool for small businesses to measure and organize their actions' social and environmental impact. These objectives are summarized in 17 and each one attacks a particular problem. This way, the company can focus its impact on a series of objectives and measure compliance.

Based on these premises, there are several initiatives with which Dealster wants to humbly contribute to this global goal. The objectives that Dealster has tried to achieve are the following:

- **12 Production and Responsible Consumption:** the basis of Dealster's business model is the purchase and sale of second-hand vehicles. This is intended to reduce car manufacturing and give a second life to vehicles that are still able to continue on the road. This reduces the number of cars in circulation while reducing production and therefore the associated gas emissions. Reuse is a key to winning the battle against environmental degradation and Dealster wants to contribute to this from the core of its business model.
- **13 Climate Action:** closely related to the previous objective, the choice of transport service provider has not been trivial. In Europe, they return empty shipments of their shipments. Through Clicktrans carriers that currently cover that route connect with people or companies that need to make a shipment. This reduces the number of vehicles in circulation and thus CO2 emissions to the atmosphere.
- **5 Gender Equality:** the commitment to gender equality is fundamental for Dealster, which is why the board wants to implement a culture of equality and transparency as previously discussed. For this, we want the CMO of the company Joana, to be an example to achieve this end.
- **8 Decent Work and Economic Growth:** finally, Portugal is one of the most promising emerging economies in the European Union and as a capital-born company, Dealster wants to contribute to the future of the national economy and to the most beautiful end goal of any company, to give work to families and contribute to social development and observe the impact that the company is having where it operates.

## 1.6 The Potential of the Opportunity

In the first half of 2022, 48.863 used vehicles were registered in Portugal, and 75.449 new ones, meaning the used cars market represent 39,31% of the total car market in Portugal. In terms of how big the market is, the total value generated by the total cars sold is expected to be around 4,34 billion €, and the value generated by the used cars purchases is set to reach 1,71 billion € by the end of this year, if things go according to the calculated projections, something that so far seems to be going in that direction. The following analysis is going to cover the market share of cars by fuel and segment, within the used cars market, meaning the 39,31%. This number has been increasing since 2019 mainly due to the fact that Covid affected a lot of manufacturers, so it was harder for people to buy new cars, opting for used ones and being satisfied by them.

### 1.6.1 Factors impacting the automobile industry

A few things affected the automotive sector in 2021, including a scarcity of aluminum because China, the top manufacturer of magnesium, decided to cut back on output. A disturbance that occurred when it came to the regular operation of shipping containers, which made transit more difficult, was another element brought on by confinement. Since the new rules sought to replace conventional power sources with more environmentally friendly ones, some nuclear and coal facilities closed, which had an impact on the industry.

### 1.6.2 Used cars market overview

	Demand	Dynamics	Offer
Vs 2021 H1	-15%	11%	-26%
Vs 2020 H1	-18%	-5%	-13%
Vs 2019 H1	-24%	-14%	-10%

Table 1. Used Cars Market Overview

Even if everything appears to be in a bad place, the market dynamic in the first half of 2022 compared to the first half of 2021 is positive by 11%, which means that buyers' calls and messages to sellers have been growing and are now outnumbering the deals that are being offered. Even while it could appear that the demand declined by 15% from 2021 to the present, if we look at earlier years, we can observe that the decline was actually less than in 2020 (-18%) and 2019 (-24%). This is also a strong indicator when compared to the offer, which experienced the largest decline (-26%) when compared to 2021.

The real sales of used automobiles have increased by 5,5% between 2022 and the same period in 2021, which is a positive development. However, when compared to the year 2019, the sales have decreased by -11,8%. These are reliable signs because they demonstrate that, despite the market's lack of growth, it is gradually returning to pre-covid values.

The new automobiles, which have been suffering the most after the rise in used car sales, are also important to notice. When comparing 2022 to 2021, they still show negative values of -7,4%, and if we look even further back to pre-covid values, the difference between 2022 and 2019 is a loss of -41,3%, which is a good indicator for us, but at the same time not the best situation in economic terms, since new cars are essential for the economy.

Therefore, when it comes to used cars, overall conditions are improving. More vehicles are being sold when compared to the same time last year, and perhaps they will eventually approach pre-covid values. The same cannot be said, however, for new cars, which are being sold at a lower rate than in the previous year and are being valued at a far lower level than before the recession.

The massive increase in imported cars, which are seen as a perfect substitute for new cars and have already increased in sales compared to 2021 by 57.4% and compared to 2019, pre-covid values, by 28.2%, is another significant factor that is currently occurring after seeing the sales

on new cars are decreasing significantly compared to previous years. Because our company strategy and concept are dependent on imported cars and because that market is expanding, this is one of the best signs we have so far.

In conclusion, we observed a rise in the purchase of used cars and a decline in the purchase of new cars, indicating that used cars have been gaining market share. To support this conclusion even further, the sale of imported cars increased by nearly half over the previous year and has been rising over time.

**1.6.3 How the war in Ukraine is affecting the market**

Since the Russian invasion on Ukraine started, the automotive sector had huge impacts with the increase in fuel prices to levels never seen before. After weeks with the price just getting higher and higher, people started quickly to search for better alternatives to fuel based cars, which lead to an increase on demand for electric vehicles by 250% in February and March, and then another spike also in June in alliance with the EDP 2ª Electric Week. In economic terms this makes perfect sense since for example for 100kms, an electric vehicle can be up to almost 5 times cheaper than a gas-powered car.

A study was made by (UVE, 2022), in this case in Portugal, and the cost for 100kms was the following:

<b>For internal combustion engine cars</b>	<b>Price</b>
Gas, with an average consumption of 5,6lt/100km with 1,77€/lt	<b>9,90€</b>
Diesel, with an average consumption of 4,6lt/100km with 1,87€/lt	<b>8,60€</b>
<b>For electric vehicles with an average consumption of 16,9kWh/100km</b>	<b>Price</b>

Charged on public with 0,38€/kWh	<b>6,37€</b>
Charged at home at normal rate with 0,19€/kWh	<b>3,21€</b>
Charged at home at special rate with 0,13€/kWh	<b>2,21€</b>

Table 2. Cost for 100kms by combustible type

Based on the fact that people are more and more interested and curious about the economic and environmental advantages, the demand on electric vehicles increased from 5% to 10%, at the same time as Diesel-powered cars demand dropped from 71% to 63%

#### 1.6.4 Most wanted by fuel type

<u>Electric</u>	2022	2021	Variation ↑/↓
1. Renault Zoe	16,40%	23,51%	↓
<u>Diesel</u>			
1. BMW 3 Series	4,42%	4,91%	↓
<u>Gas</u>			
1. VW Golf	3,75%	3,25%	↑
<u>Hybrid-Gas</u>			
1. BMW i	10,36%	4,91%	↑
<u>Hybrid-Diesel</u>			
1. Mercedes E Class	24,32%	17,85%	↑

Table 3. Most wanted car by fuel type

When it comes to electric vehicles, and after analyzing the report (Standvirtual, 2022), we can say that the price also seems to have an impact on the models that are in high demand. For example, the Renault Zoe appears to be the most popular model, despite a -7,11% decline in demand, and the Nissan Leaf appears to be catching up with it, with a slight increase in demand over the previous year. The Tesla Model 3 is another vehicle that appears to be selling more and more as a result of being both an affordable and high-quality model. One of Tesla's models is getting pretty close to catching up to the complete BMW electric model lineup, which is a

favorable indicator for the company since it has contributed to its sales surge. The Tesla model S, which is the costliest electric vehicle among the top 5, also appeared to witness a decline in demand as consumers seemed to be shopping for less expensive alternatives.

When it comes to Diesel powered cars, we can immediately notice a domination in the Portuguese market by BMW and Mercedes-Benz, with small variation from the previous year to 2022, where the BMW 3 Series remains the top choice, and the Mercedes C Class with a little increase on its demand but still not enough to be more than the 2 best choice for consumers. Both BMW 5 and 1 Series are similar in terms of sales but with the 5 Series being slightly above its “little brother

On gas-powered cars, the dominant car here is the Volkswagen Golf, which besides being the most wanted car, was also the only one that had its demand increase, and in this case by 0,5%. For luxury sport cars, that are normally all powered by gas, we see the top choice being the Porsche 911, followed by a more affordable car, the Renault Clio, which despite having more sales than 2,71% as a car model, this number seems quite small mostly due to the fact that the Renault Clio is one of the best-selling cars, but not exactly in the gas-powered version.

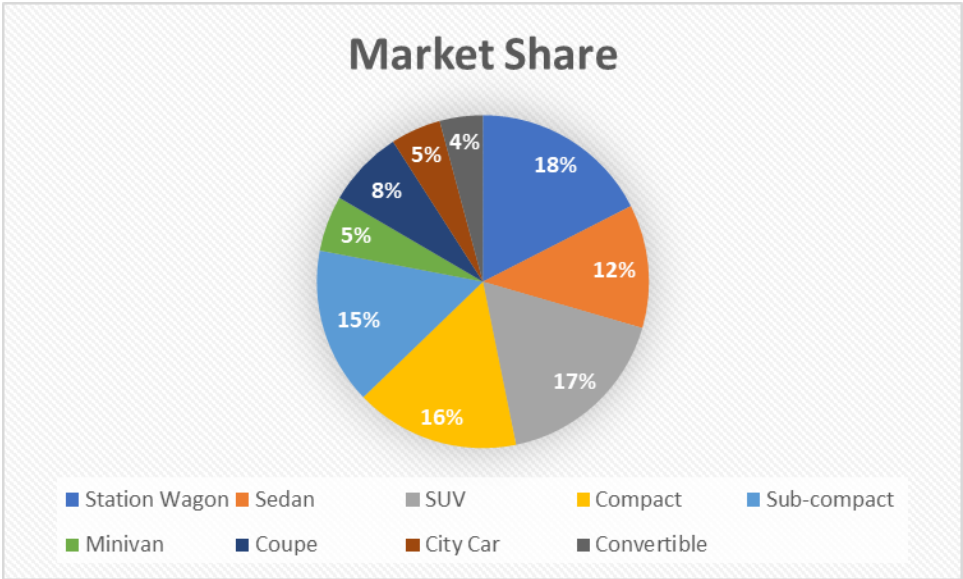
All the top 3 models from the hybrid-gas segment increased their demand from the previous year, and BMW i models registered the biggest increase with 5,45% from 2021 to 2022. Another important note is that the premium models are still the most searched for ones, with BMW and Porsche occupying the top 4, with the Porsche Panamera being the second most sold model from the Hybrid-gas models.

What is easily noticeable with the hybrid-diesel models is Mercedes' dominance in this sector, with 43,54% market share, and a grow from last year of 8,71%. The Mercedes class E still is the most dominant model representing 24,32%. All the other models in the top 5 except the first

2, showed a decrease in their demand, the Peugeot being the most affected one with a negative variation of -5,14% when compared to 2021.

**1.6.5 Demand by car segment**

When it comes to car segment, and according to the (Standvirtual, 2022) when comparing this year with the last 3 years, the Station Wagon along with the Sedans, were the 2 segments that suffered the most, and saw their demand decrease like it never did before, in the Station Wagon case, registering a drop in demand from approximately 22% in 2019, to close to 17,5% in 2022. With the Sedan even though it was not that big of a difference, it was still a considerable decrease in market share, from around 14% down to 12%. In terms of market share loss, there were no other segments registering the same phenomenon, even if some segments stayed pretty similar to how they were before, besides the convertible that had a minor decrease, the rest still didn't register any decrease during this 4-year period. The segment that seems to be catching to the previously dominant one, is the SUV, which increased from 14,5% in 2019, all the way up to 17% in 2022, being really closed to overcoming the Station Wagon.



Graphic 3. Market Share by Segment

The compact and sub-compact type of segment were the other 2 that registered a big increase in market share when compared to the rest, which leaves us with 3 segments that are currently increasing more and more, and they seem to be close to being the dominant segments in Portugal, with the fall of the Station Wagons. The compact segment registered an increase of around 1% when compared to 2019, which even though it seems small it is quite noticeable when compared to its competitors. There is also the sub-compact that sits in 4<sup>th</sup> place in terms of market demand, that also registered an increase of 1% when comparing the 4 years. These are the main segments and the top 5 represent a total of close to 78% of the total market share.

Last but not least, there is the Coupe segment that has been decreasing from 2019 to 2021, but when comparing this year to 2021, it registered a really small increase in demand, and even though it was a small increase, it's still a positive aspect to notice since this was not always a dominant segment.

The Minivan unlike the Coupe segment registered a decrease in demand from 2019 to 2020, but then from 2020 up until now it has been increasing by close to 1%, but still only representing around 5,5% of the total market demand.

The city car has also been increasing its popularity, but still not being a dominant segment, increasing its market demand by around 1% since 2019, but with the difference to the other 2, the Minivan and Coupe, that the city car has been increasing its market demand only, without decreasing it once in this 4-year period.

Finally, the Convertible, which has always been the least favorite one, registered a decrease in demand, by around 0,2%, which despite being the smallest decrease, it's still a negative variation, leaving the convertible segment in last place, something that has been occurring since 2019.

From this analysis, it can be said that the 3 “rising stars” are the SUV, the compact and the sub-compact segments, whereas the Station Wagon and the Sedans are the 2 segments with the biggest loss in terms of market share. The other 4 segments are stable and represent in total 22% of the total market demand, which if we compare to one of the top 5, let’s say for example the SUV’s, the difference between the SUV’s and the bottom 4 segments is of 5% only.

	Market Share 2022 within their segment	Volume in millions	Market Share 2021 within their segment
Peugeot 3008 (SUV)	5,83%	16.9 €	6,16%
Mercedes SLK (Convertible)	7,00%	5.1 €	7,33%
BMW 4 Series (Coupe)	7,22%	9.2 €	6,96%
Smart ForTwo (City car)	28,68%	23.9 €	28,91%
Renault Clio (Sub-Compact)	9,30%	24.2 €	9,78%
Mercedes C Class (Station Wagon)	9,64%	28.7 €	8,86%
Citroen C4 Grand Picasso (Minivan)	9,88%	9.2 €	8,62%
Mercedes A Class (Compact)	7,94%	21.6 €	10,22%
<b>BMW 5 Series (Sedan)</b>	<b>9,06%</b>	<b>18.5 €</b>	<b>8,53%</b>

Table 4. Top cars for each segment in volume and market share

Even though the top 5 SUVs suffered from a decrease in demand when compared to 2021, SUVs as a whole segment managed to increase the demand which means that more SUV models have been sold apart from these top 5. The Peugeot 3008 is now the most wanted one after passing its rival the Nissan Qashqai comparing to last year results.

The convertible segment is the one with the less market share and demand from all the available segments, but the one car that stands out from the rest, even do by a slight margin is the

Mercedes SLK with a decrease in the demand of -0.33% from 2021, but still having an overall market share of 7,00%.

The Mini is the only car registering an increase in demand when comparing to last year values, and in this case the increase was of 0,50%.

In the coupe versions, once again we see the dominance by BMW and Porsche, with BMW occupying the top 2 places, and 3 models in the top 5, having the 4 Series at the highest demand with 7,22%, and being this model the only one that registered an increase in demand comparing to 2021, increasing in 0,26%.

In City cars the scenario is completely different from the other segments, and we can notice a dominant car by far, the Smart ForTwo, representing 28,68% of the total demand in this segment, with a small decrease in the demand compared to last year, but with an enormous difference of 18,89% to the 2<sup>nd</sup> most wanted car, the Fiat 500. The Fiat 500 from this category is the car that had the biggest decrease in terms of market share compared to the previous year, losing -3,21%, but still managing to hold on to 2nd place in the best sold city car.

Sub-compact vehicles have been rising in terms of market demand in general when compared to other segments, even though the majority of them in the top 5 show negative variation.

The Renault Clio remains the strongest model in this category, representing 9,30%, 2,15% more than its competitor, the Mini Cooper, which surprisingly was the only one on this list that showed an increase in its demand, by 1,29% compared to 2021.

What these drops mean alongside an increase in the total market share for sub-compact vehicles is that even though these models have been losing market share, there are more models penetrating the market and helping this segment grow and make a difference in the general market overview.

The Mercedes C Class has always been one of the most dominant cars in the station wagon category, and this has been noticed with the increase in its market share, from 8,86% in 2021 to 9,64% in 2022, making its way to 1<sup>st</sup> place in terms of demand.

The same thing did not happen to the BMW 3 Series, which saw its demand drop by -0,25% compared to 2021, being so the 2<sup>nd</sup> most demanded car in 2022, right above its “big brother” the 5 Series, which similarly to the Mercedes C Class, had an increase in its demand, in this case by 0,31%.

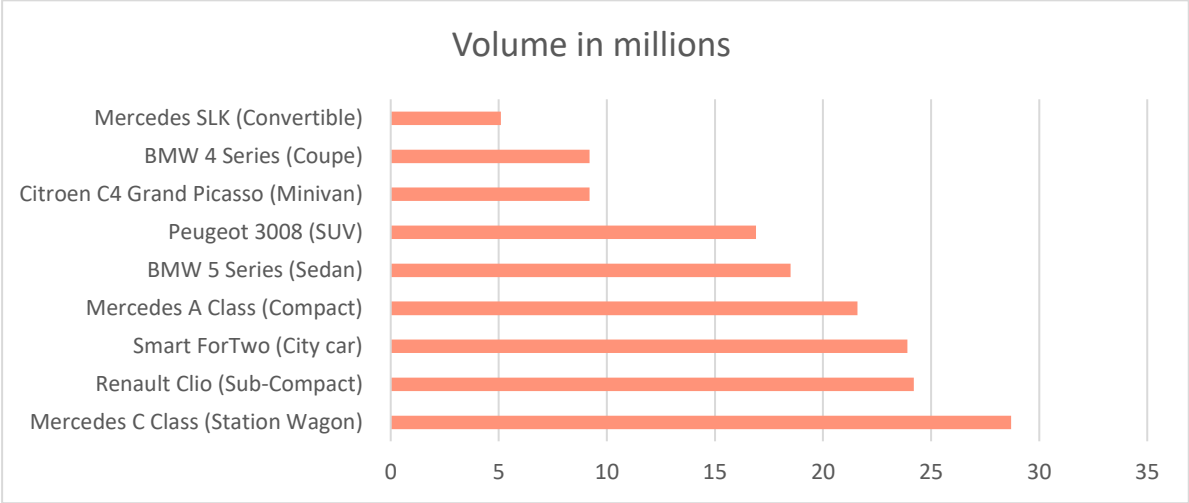
Minivans are one of the 3 segments with less demand from the car market, but the Citroen C4 Grand Picasso is the leader among the minivans with a market share of 9,88% in 2022, a higher value than in the previous year, by 1,26% more. The opposite happened to the Peugeot 5008, that registered a drop in demand by -1,04% in 2022 compared to 2021.

Once again, we have a Mercedes on the top of the table, and this time is when it comes to compact cars, with the A Class, which had already been the best-selling car in 2021, with 10,22% segment market share, and even though the demand for this model decreased quite a bit, by -2,28% to 2022, it remained the most demanded car model. In 2<sup>nd</sup> there is the Renault Megane, that similarly to the Mercedes, lost its market share, and in this case by -0,42%.

When it comes to Sedan models, the premium brands seem to be dominant here, with BMW and Mercedes occupying the top 5 spots, and where the BMW 5 Series was not only the most demanded car from the rest, with a 9,06% market share, but also was the only one who had a positive variation, gaining 0,53% compared to 2021.

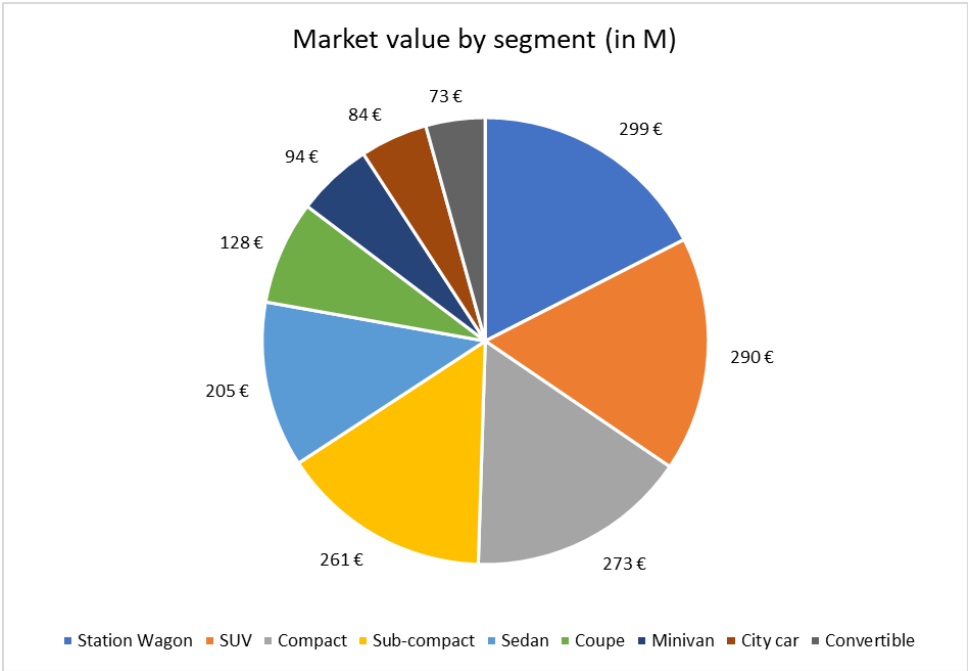
The 3 Series looks like a really wanted model under many different types of segments, and the sedan version is another example of that, where it represents 6,73% of the total segment market share, even though it lost 2,78% when compared to 2021, where it was the most demanded model, losing now its trophy to the upgrade model, the 5 Series.

The Mercedes C, E and S Class occupy the remaining 3 spots on this table, and curiously also by ascendent order, starting from the more affordable model to the more expensive and more luxurious one, the S Class.



Graphic 4. Top car for each segment in volume

1.6.6 Most profitable cars – focused product offering



Graphic 5. Market Value by Segment

In order to boost business in the beginning, it makes sense to actively approach brick and mortar dealerships to offer their cars on the platform. This requires a clear approach and distinct marketing strategy, as well as clear target car segments, brands and models with the highest customer demand. The previously done analysis provides an overview of the most profitable segments, cars within the individual segments and the development of the share of these cars within the segment. We chose the cars we will focus on based on their projected market value in 2022, the size of the segment the car is representing, and the development of the projected market share in 2022 of the cars – in decreasing order. Nevertheless, the purpose of approaching dealerships in the beginning of the business is to boost sales in the short term. Once these pick up, our only source of offers on the platforms will be individual and commercial sellers who offer the cars independently. Thus, mid- to long-term market share projections, especially minor changes in market shares do not affect the selection too much.

Starting with the biggest used car segment in Portugal with a value of around 299M EUR – the station wagon, we chose to focus on the top 5 cars in this segment, due to their high projected market value. However, all cars lost market share except the Mercedes C class and BMW 5 Series.

Continuing with the second biggest used car segment in Portugal with a value of around 290M EUR – the SUV, we will approach dealerships that offer the first two cars in the list, the Peugeot 3008 and Nissan Qashqai. These two cars have a high projected market value, while the other cars have a relatively low projected market value. It is worth mentioning that however, all cars in the top 5 of these segments are losing market shares, indicating that in the long term, other cars in this segment might gain in importance.

The 3rd biggest segment is compact cars, with a projected market value in 2022 of approximately 273M EUR. The Mercedes A class and the Renault Megane, the top sellers of

this segment are the only cars we will focus on, due to the A class's high projected market value, and the Megane's relatively high projected market value.

Even though only the Mini Cooper is projected to gain market shares in 2022 in the 4<sup>th</sup> biggest used car segment in Portugal – the sub-compact cars (Market value of 261M EUR), we will focus on all cars in this segment, as all top 5 cars have high projected market values.

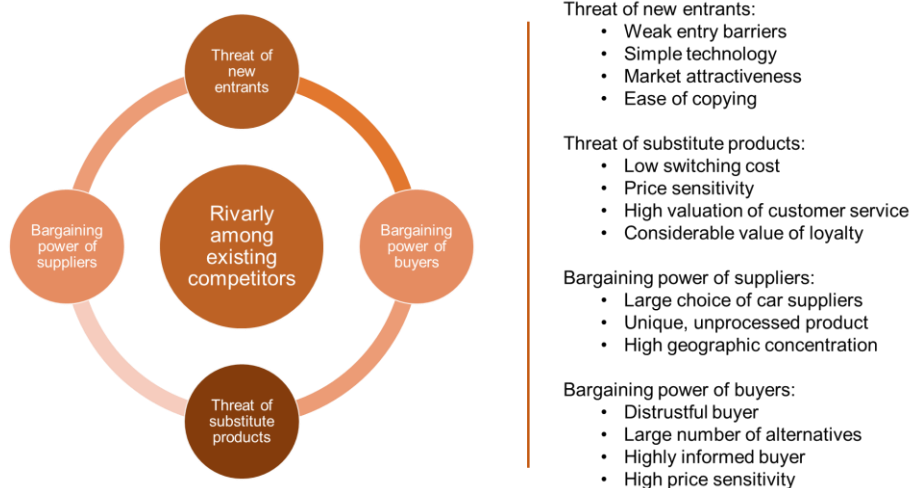
The 5th biggest segment is sedans, with a projected market value in 2022 of about 205M EUR. Mercedes and BMW are highly represented in the top 5. However, the BMW 5 Series and 3 Series, the top sellers of this segment are the cars we will focus on, due to their high and relatively high projected market value. Additionally, the BMW 5 series is projected to gain market share from 8,53% to 9,06%.

None of the 4 weakest used car segments in Portugal offer cars with a higher projected market value than about 10M EUR, with a notable exception in the city car segment. Given these comparably weak projections, we will only focus on the top seller of each segment, in order to have a product offering in these segments and cover at least some of the demand. The segments in decreasing value and the cars in question are the coupe segment and the BMW 4 Series, the Citroen C4 Grand Picasso in the Minivan segment, the Smart ForTwo in the city car segment, and finally, the Mercedes SLK in the Convertible segment.

Interestingly, the Smart ForTwo is projected to hold a whopping 28,68% of the market shares in the city car segment – reaching a projected market value of about 24M EUR. Hence, it will be especially important to include this car in our product offering, even though the used city car segment is the second smallest in Portugal. Additionally, it is worth mentioning that in our survey for car dealerships, the station wagon, SUV, and sedan, as well as Mercedes and Renault were mentioned as the car segments and brands that sell the most. This aligns with our previously used sources.

## 1.7 Competitor Analysis

As discussed earlier in the market analysis, the mature character of the market can be observed. The European market for online used car purchases is growing, however, the current competitive situation makes it difficult for new players to enter the market. Therefore, it is appropriate to comprehensively analyze the effect that competitiveness has on the entry of new competitors and therefore the intrinsic characteristics of the market in terms of different competitive parameters. For this purpose, an analysis of Porter's 5 forces has been carried out and is shown in the following graph:



Graphic 6. Five Porter's Forces

The competitiveness of the market, in terms of the current market players, dominates and conditions the other important players for our company. The market for online used car sales is mature, with numerous competitors from different European countries. This maturity is reflected in the quality of the technology used, the sales figures, the large number of cars offered

by each of the competitors and a large number of employees. However, in terms of the specific niche Dealster is targeting, i.e. car imports, the competition is not as significant. Many traditional competitors are starting to enter this business, but this is not a general trend, so early action could give Dealster a competitive advantage.

As for the threat of new entrants, this is relative. This is because despite the maturity of the market and the technology, it is not overly complex and barriers to entry are limited. These are online businesses, with less investment in infrastructure. They are business models where copying is quite common, but their strength lies in the trust and loyalty of both sides of the marketplace.

The threat of new substitutes is therefore considerable. The price sensitivity of the customer buying a second-hand car abroad is strong and exchange costs are low, so one must always keep an eye on new business alternatives.

Finally, while the strength of the customers is very high due to several factors already mentioned, such as the importance of service, the large offer available or the level of consumer information, the strength of the suppliers is limited. The large supply of used cars for sale coupled with the difficulty of processing these sales means that the bargaining strength of suppliers is low.

However, if we focus solely on our company's potential customers, we can distinguish two main groups: direct and indirect competitors. The fundamental aspect to making this distinction is that of importation, with direct competitors being those who present the importation of used cars as the essence of their business model or simply as an additional service in their catalogue. Indirect competitors, on the other hand, would be made up of companies which, despite not offering this import service, may represent an obstacle and an option for the purchase of second-hand cars, either due to geographical factors, the breadth of the offer, price, etc. In order to

better understand each competitor's characteristics and strengths, the following parameters are presented: Company Name, Origin Country, CEO, Core Business, Geographic Coverage, Offer Size, Revenue, and Number of Employees.

### **1.7.1 Direct Competitors**

#### **1.7.1.1 CARVAGO**

Carvago is a Czech company. They claim to be a European online car marketplace, offering cheap cars conveniently and safely. It is probably the company that is most similar to the product that Dealster offers and would therefore be Dealster's biggest competitor at the European level. It offers a very simple service consisting of a Marketplace that connects sellers and buyers of second-hand cars from all over Europe. It also offers several additional services such as a technical inspection that complements the purchase and is contractually binding (return for defects), and different financing and transport options. Its business model is based on the purchase of the car in question and its subsequent sale to the customer to offer greater security in the service provided.

#### **1.7.1.2 MOBILE.DE**

Germany's largest car marketplace Mobile.de, run by CEO Ajay Bhatia, offers about 1,5M cars, motorbikes, and commercial vehicles. Their website is visited by about 16,9M individual users monthly and covers every European country. They employ around 270 employees and a revenue of 3M in 2021. It is more like a traditional used-cars marketplace but Mobile.de also provides a complete importation service. It was bought by Adevinta in 2004.

#### **1.7.1.3 AUTOSCOUT24**

AutoScout24 is the largest marketplace for cars in Europe. Run by CEO Michael Rademacher and originates from Germany. They cover 8 European countries and offer workshop services, in addition to their car selling service, which includes about 40.000 dealers offering around 2M

cars. It has around 500 employees and a revenue of more than 140M EUR in 2021. It was acquired by Hellman & Friedman in 2019.

#### **1.7.1.4 AUTO1**

The German company Auto1 Group, run by CEO Christian Bertermann, covers 30 countries in Europe, has 6.000 employees, and has an offering north of 3M cars, generating the company 4,775M EUR in revenue in 2021. They claim to be the biggest wholesale platform for used cars in Europe, covering 60.000 dealers. Their main brands are “wirkaufendeinauto.de” (meaning we buy your car in Germany), “Autohero” and “AUTO1.com”.

#### **1.7.1.5 IMPORTRUST**

Importrust positions itself as an “automotive consulting company”. They offer a service similar to Dealster, supporting the customer from choosing to delivering the car. The company around CEO António Eca was founded in Portugal and covers 8 European countries and offers around 2M cars. The main difference between Importrust’s offer and Dealster’s offer is, that Importrust lets customers choose a car, which they will look upon other platforms for them, and then make them an offer. We are a platform for individual and commercial sellers to directly offer their cars through the platform, create a listing, and sell to a customer directly, with us covering the process between purchase and delivery. While arguably, Importrust simplifies the customer’s buying experience, we reduce waste through inefficient operations, by avoiding looking up cars for the customer on other websites, consequently removing the middleman. This makes scaling significantly easier. It is an early-stage startup with less than 10 employees.

### **1.7.2 Indirect Competitors**

#### **1.7.2.1 STANDVIRTUAL**

Standvirtual originated in Portugal. Here, they are the biggest online dealership for both new and used cars. Customers can purchase and sell cars. According to Standvirtual, people selling cars are offered special plans. They are only present in Portugal, have an offering of around 40.000 cars, 100 employees and a revenue of about M EUR.

### **1.7.2.2 CAZOO**

Cazoo is a company from the UK run by CEO Edward Chesterman. They claim to cover the main European countries. The company presents a revenue of £668 M in 2021 with almost 50,000 vehicles sold in the last year in the biggest European countries, UK, Germany and France with 3.500 employees. The main differentiation from their competitors is that they want to make purchasing or financing used cars online as easy as the purchase of any other product – reducing the time for collection or delivery to 72 hours.

## **1.8 Competition based on key-word search**

The keyword analysis has also shown us several companies that although they cannot be classified as direct or indirect competitors of Dealster, do deserve individualised comments. This special mention is due to the coexistence that Dealster would have with these firms in search engines since when users enter the terms used cars or standvirtual, they end up visiting web pages such as the ones presented below:

### **1.8.1.1 OLX**

One of the world's fastest-growing networks of trading platforms, operating in 30+ countries around the world. help people buy and sell cars, find housing, get jobs, buy and sell household goods, and much more. With more than 20 well-loved local brands including OLX, OLX Autos, Otomoto, and Property24, our solutions are built to be safe, smart, and convenient for our customers. We are powered by a team of 10,000+ people, working across 5 continents in offices all around the world.

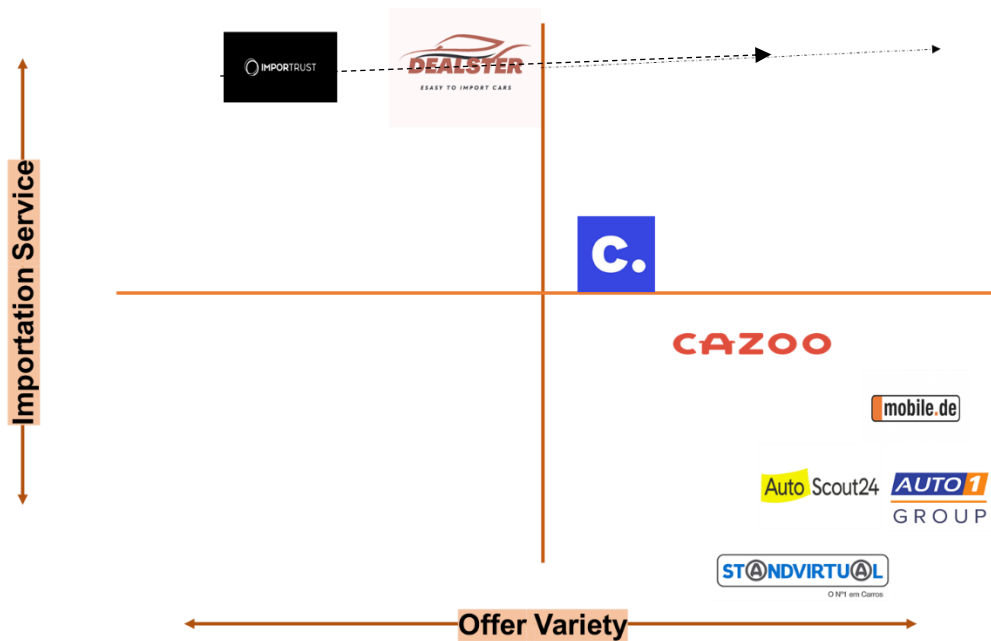
### **1.8.1.2 LEBONCOIN**

Leboncoin.fr is a classifieds site that starts with a simple idea: the bargain is around the corner. So similar to OLX but operates mainly in the France market. As Mobile.de is part of the group Adevinta. It counts with more than 500 employees and offers a wide range of products like vehicles, clothes, jobs...

## 1.9 Evaluation

As can be seen in the fact sheet of the main competitors, there are common features in all of them, such as the online presence or the Marketplace model (with the exception of the Importtrust model). The German presence in the industry is very strong, leading the market with numerous companies that have a long history in the industry and advanced and consolidated technologies. Therefore, once all the competitive information on the industry and its agents has been collected, it is important to organise the data and extract the attributes or characteristics that define the market. All of this is to know our brand's positioning and how it manages to differentiate itself from the competition and adopt a competitively advantageous position.

For this purpose, the following positioning map has been drawn up, alluding to the two main attributes or values that define Dealster's competitors, namely the importation service and the offer variety. The import parameter will define the competitors that offer Dealster's main service so that this value will be more marked among those that offer to import as the main service, while there will be less presence of this attribute in companies that offer it as a secondary service or not at all. For its part, the variety of offer parameters measures the number of models offered by each company and the variety of brands offered. For example, if the company focuses on a mass market, it will have a greater presence of this attribute, while if it focuses on a niche market, its value will be reduced in terms of this attribute.



Graphic 7. Positioning Map

As can be seen in the positioning map, there is a clear homogeneity among the existing competitors. The offer aimed at the mass public dominates the market. There is little differentiation between the competitors' offers, which makes price comparison and service the differentiating factors when buying imported cars, as seen in our validation surveys' results. This is why our business model manages to differentiate itself from the current offer by providing a specialised import product, focusing on the products most demanded by Portuguese consumers. In the following, therefore, the key factors of Dealster's business model will be highlighted based on the conclusions drawn from the validation of the idea, the solution and the study of the market and the competition.

### 1.10 SWOT Analysis

It is necessary to understand that, as it is a startup that does not yet exist in the real market, the analysis carried out below does not incorporate all aspects of a real business. However, through market research and surveys, it was possible to elaborate a more concise and reliable analysis.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>- Business model innovation.</li> <li>- Overcomes the scarcity of the Portuguese market.</li> <li>- Overcomes the pain points of importing a car.</li> <li>- Warranty offer.</li> <li>- Watching the process in real-time.</li> <li>- The car report as an extra.</li> <li>- International network of buyers and sellers.</li> </ul>	<ul style="list-style-type: none"> <li>- Initial lack of capital.</li> <li>- Reduced budget in the beginning.</li> <li>- No fit between investors, business, and founders.</li> <li>- Lack of brand awareness.</li> <li>- Not coming up in the search results.</li> <li>- Low brand exposure.</li> <li>- Lack of alignment between brand exposure and message.</li> <li>- Founders contribution no longer enough to satisfy demand.</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>- Technological innovation.</li> <li>- Portuguese car demand outside Portugal.</li> <li>- Consumers' needs not satisfied in Portugal.</li> <li>- Difficult import process for individuals.</li> <li>- No solution like Dealster's offer (no direct competition).</li> <li>- No strong direct competitors.</li> <li>- Geographic expansion opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>- Transportation legal changes.</li> <li>- Import process requirements changes.</li> <li>- Covid-19 pandemic in the automotive sector.</li> <li>- The war between Russia and Ukraine.</li> <li>- Business model imitation.</li> <li>- Customer lack of trust.</li> </ul>

*Table 5. SWOT Analysis*

To better explain the table above, you can find the different topics described more precisely.

Strengths: Starting with innovation in terms of the business model in the Portuguese automotive sector, there is currently no company that offers such a complete service that manages to overcome all the limitations of the Portuguese market (such as the scarcity of brands and models, type of fuel desired, and inflated prices) but also able to overcome the existing adversities when buying a car in the foreign market, despite being quite diverse and with low prices (difficulties and costs associated with transporting the car, time-consuming and complex bureaucratic process, and possible problems with the warranty); Another advantage of the company is the possibility of watching the process in real-time through the application. Thus, from the transport of the car to Portugal until the conclusion of the legal process, the customer

will know in what stage the order will be. All this without leaving home and without having to carry out each step of the import process; Also, through the survey, it was possible to perceive that when buying a car abroad one relevant concern is the condition of the car and its warranty. In this way, the possibility of creating a guarantee will be offered as an extra, which allows the user to enjoy a set of pre-defined partner auto repair shops. On the other hand, it will also be possible to buy the car report as an extra, exposing its old accidents and other anomalies, increasing the transparency and reliability of the service; Another important strength of Dealster is its contact with an international network of used car dealers. Therefore, it is possible to practice much lower prices as well as offer a service that includes the choice between a wide variety of brands and models, even if they do not exist in Portugal.

Weaknesses: There are some internal factors that need to be improved for the organization to perform at its optimal level and remain competitive. First, since Dealster is characterized as a startup, initially, there may be a lack of capital to carry out the business. On the other hand, in the beginning, with a tight budget, it is important that the startup has great financial control. Knowing how to prioritize investments, for example, is an essential action to avoid excessive debts that cannot be paid in the future. Finally, finding the right investors to help can be also highlighted as a weakness since, in addition to the capital offered, a perfect match between the founders, the business itself, and the investors are also necessary; Another problem that can arise at the beginning is the lack of brand awareness. For example, if the company is not coming up in the search results there is a brand awareness problem, where the SEO and digital marketing efforts are not working or not enough for the website to rank higher. Also, when a brand is not recognized by industry experts as worthy of mention in their assessments, therefore the brand doesn't have enough exposure or isn't positioned correctly. Finally, when trying to gain brand exposure it is necessary to pay attention to place the brand where it makes sense, otherwise, it can cause a loss of the attention of the target. In this way, it is important to

guarantee that exposure aligns with the brand's message, staying true to the company's values; To conclude, the final weakness that may arise in the company's path is the difficulty to find workers with the desired qualifications, because, as the company grows, the input from the founders will not be enough to meet the high demand. Thus, a set of experienced professionals with the necessary knowledge will have to be hired to take the company further, although such a workforce is difficult to find at a cheap price that the company is willing to pay at an early stage in the company's growth process.

Opportunities: Through the study carried out by IBG in 2019 "The Automotive Industry 2020 to 2030" it is possible to highlight some opportunities for Dealster in the automotive sector, namely in terms of technological innovation such as car digitalization, autonomous driving, and electric cars. In this way, as the Portuguese car market is quite scarce and incomplete, not having the most recent models, it is likely that more users will look for a car outside their country, namely in countries where the car market is more developed; On the other hand, in recent times there has been an increase in car prices due, for example, to the shortage of chips and semiconductors, which eventually led to a rapid increase in the prices of used vehicles as well. Also, used cars were particularly impacted by the shortage of vehicle supply on the market. Therefore, an opportunity can be found in the Portuguese car market for Dealster, as the needs and pain points of consumers are not being exceeded. In addition, not even in the foreign market, they find a satisfactory solution since the whole process, which requires a car import, is quite complex and time-consuming; Regarding the competition currently existing none of them offer a solution like Dealster, so it is possible to enter the market without strong direct competitors since the offer is different. In conclusion, the reduced existence of direct competitors and the high need of customers to buy a car at cheaper prices, and access to more diversity is an opportunity for the company; Finally, the last opportunity that can be highlighted is the geographic expansion of the company. Although the company initially focused only on a

foreign country, there are several countries whose potential for their automotive market is quite appealing, namely Spain, Italy, Belgium, and France. Thus, with the evolution of the startup and its operations, it will be possible to bring to Portuguese consumers cars from more than one foreign car market.

Threats: In terms of threats, any change that is made to the legal part of the process can have negative consequences for the company, for example, by lowering the revenue per imported car and increasing costs. Namely, the IUC "*Imposto Único de Circulação*", the registration of the vehicle in the "*Conservatória do Registo Automóvel*", and the ISV "*Imposto Sobre Veículos*". On the other hand, if the requirements demanded when carrying out the import process increase, it can also negatively affect the startup; As it has been possible to watch in recent years, the Covid-19 pandemic has severely affected the automotive industry and, although the pandemic is more controlled now, it does not mean that it will not get worse again and that the implications in the market will spread for several years. In this way, the effects of the pandemic hit the car market twice.

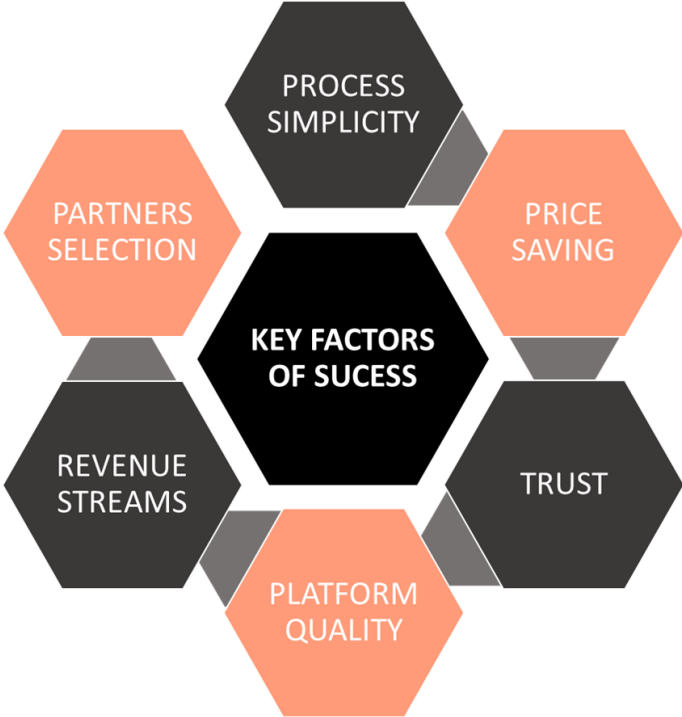
On the one hand, the sector came to a halt with the closure of factories and stood for more than a month and, on the other hand, the imposed restrictions and economic consequences discouraged the purchase of new cars. Also, there is the semiconductor crisis, in which, now, demand exceeds supply, as factories, many in Asia, have also suffered the effects of covid-19. In addition to the pandemic, the war between Russia and Ukraine can now be a very worrying threat to the car market and, consequently, to Dealster.

Finally, if the remaining competitors decide to imitate Dealster business model and have professionals with the right know-how and skills, knowledge of other countries with an expanding automotive market, or if they create strategic partnerships with different important

players in the market, then they will also prove to be threats to the startup's survival and profitability.

### 1.11 Key Factors for Success

The key success factors of a company are nothing more than the competitive situation that it adopts in a given market and which gives it a competitive advantage that allows it to be sustainable and profitable over time. Therefore, the identification of these factors is a key step in the development of the adventure of any start-up and therefore also for Dealster.



Graphic 8. Key Factors for Success

Through the validation surveys, it is possible to observe what can be called external success factors or those that have to do with the relationship between consumers and the environment. In a way, certain values make Dealster's business successful, either because of the importance they have for the consumer or because of the intrinsic characteristics of these attributes that lead them to become a competitive advantage. Within these key external factors, there are, as

observed in the validation surveys, three key aspects that will condition the success of the company: trust, price and simplicity.

These notions are no more than the factors that the average person takes into account when considering buying a second-hand car abroad (our core business). The first thing to consider is the price. The prices offered by our platform will always have to be lower than the different national alternatives that the consumer can find since at the same price they will always prefer the closest and simplest option. Therefore, a key factor will be the identification of offers and a comparison service with national offers, so that the customer can see clearly and transparently what he is saving with our option.

This transparency explains the second factor that conditions Dealster's success: trust. The second-hand car purchase market is characterized by uncertainty and mistrust, as you do not know how the car has been used by the previous owner and, therefore, you do not know the possible inconveniences that may arise once the payment has been made. For this reason, in a business like Dealster where the cars come from abroad and therefore where mistrust increases in terms of cultural issues, and inconveniences in processing and transport, it is key to delve into this key aspect.

To overcome this barrier, detailed information about the vehicle as well as its owner, whether an individual seller or a dealer, will be provided through previous reviews and their corresponding user rating. In addition, there will be an obligation to provide a minimum of 12 photos, 6 interiors and 6 exteriors, and 2 videos, 1 interior and 1 exterior. On the other hand, extra service will be offered to the purchase, consisting of a complete technical inspection by a Dealster trusted partner, to provide greater security to the purchase.

Finally, the purchasing process must be simple. Bureaucracy, or the simple belief that buying a car abroad is a long and tedious process, is one of the main reasons why consumers opt for other

options. Dealster must therefore overcome this barrier by making its platform a simple and user-friendly solution.

The purchase process times must be quick and concise in a series of clearly laid out steps on the platform. In addition to the previous factor of security and transparency, the shipping time from the country of origin Germany to the country of destination Portugal and the clear and itemised costs associated with the processing and this journey must also be clearly stated.

Here of course, another decisive factor for Dealster's rapid growth and success will be the relationships that the company is able to generate with industry and experts. The automotive market, is a mature and technical market so create strong relationships with experts who can advise us on this path, will be key at the beginning of the adventure.

Previously, two types of factors were announced, the "external" ones, related to the consumer and the values or attributes that condition their purchase decision and that have just been exposed, but there are also some "internal" determinants of Dealster's success. The structure or business model also has a decisive impact on the success or failure of a company, which is why there are internal success factors for our company.

The choice of second-hand car suppliers is a key aspect of the success of our business venture. Our platform is set up as a Marketplace, i.e. as an intermediation and processing service for the purchase of vehicles abroad. Therefore, as in any Marketplace, there are two legs of the stool, one is the clients or buyers of vehicles and the other are the suppliers or sellers of used vehicles, and these can be private individuals or professionals. The choice of sellers is key for the company because, although private sellers can offer better prices and more flexible conditions, dealers offer greater security and guarantees both in the process and in the product of the purchase. In terms of this, sellers will be mainly individuals so it will be necessary to exercise a proper marketing campaign to attract these users of the platform. That is to say to encourage

their participation in this, through reasonable commissions or ease in the sales process (something that will be explained later by the operations department).

Another key success factor will be the choice of the transport company. Transport is a fundamental part of Dealster, as our solution is based on simplicity and speed. It is therefore important to bear in mind that we are dealing with international transport and that there may be inconveniences that can delay delivery and increase costs. This is the main reason why we have chosen Clicktrans as a partner to carry out this work, which will be explained in more depth by the company's COO, Álvaro Cintas.

Finally, the last key internal factor will be the monetization model of the solution. Care must be taken when choosing the company's revenue channels. The commission system is effective but needs to be done delicately and carefully as margins are limited and relationships with stakeholders can be damaged.

## **2. Rollout**

From the start of our venture until the targeted exit, there are six major steps we will be taking.

A Gantt Chart visualizing the timing of the different steps can be found in appendix 4.

### **2.1 Validation and Starting Venture**

Firstly, we conducted our own internet research to get initial validation on our business idea. Afterwards, we conducted surveys among private customers and dealerships – both on the buyer side, meaning in the Portuguese market. We participated in an event organized by our Nova SBE's Startup Club in cooperation with the Haddad Entrepreneurship Institute. Here, we talked to two different mentors to receive feedback on our business idea, model, and key assumptions.

Between end of November and beginning of December 2022, we will conduct four more surveys. The first two will mainly validate our solution among dealerships and private customers on the seller side, meaning in Germany. The latter two will be a survey, specifically focused on our business's perceived trust among all customer groups on each side of the business (buyer and seller), as well as another survey focused on willingness to change – again involving all customer groups. As a result of feedback from our mentors and our own research, we identified the latter two survey topics to be of eminent importance for our business's success.

### **2.2 Pre-seed funding and registration**

With the gained validation, we will be able to continue working on our business idea and choose the right sources for our pre-seed investment round. We are planning to receive investments mainly from angel investors. However, we will consider incubation and acceleration programs as well. We will then choose the right investors to partner with and negotiate our first contracts. Presumably with the help of our partners or newly gained mentors through an incubation or

acceleration program, we are planning to set the registration process of our business in Portugal in motion in March 2023.

### **2.3 Development of MVBP and proof of concept**

Starting December 2022, we will create a simple MVP for initial feedback on our solution. After which we will hire a developer, who will develop the MVBP – a platform that can attract first dealerships and is expected to generate first sales in March 2023. The new developer will then constantly improve the platform and gain proof of concept.

### **2.4 Marketing and future scaling**

In December 2022, our Marketing Strategy will be finalized, and our social media channels are going to be set up. We are planning to execute our Marketing strategy in the first week of 2023.

### **2.5 Seed funding and mid-term outlook**

Since we are planning to hire more employees at this point, especially more developers, we will prepare for a seed funding round – this time also potentially including VC offers. Similar to the pre-seed round, we will choose the right sources for investment and finally, the right investors among them and negotiate the contracts. As mentioned above, with the help of the new funds, we will hire more developers starting July 2023. After defining further positions needing to be filled, we will also hire more employees between August and September 2023. Moreover, we are planning to rent our first office in July 2023.

## **2.6 Long-term outlook and exit strategy**

Dealster will expand and carry its mission over to more countries in Europe, as well as extensively recruit and grow in 2024. Our target exit by acquisition is scheduled in 2025.

## 3. Financial Plan

### 3.1 Main Assumptions & Core Costs

To begin with, we need to create a website and an app, both for Android and IOS, and for that we will hire 2 software developers, costing in our first year 30.000,00 €. When it comes to the 4 founders, we won't be getting any salary during this first year, and instead that money will be redirected towards marketing expenses, summing up to a total of 70.000,00 €. Another 15.000,00 € will be allocated to the website and app maintenance and update. The office rent, based on how many square meters per person are normally required, and the price per square meters of 15,00 € in Lisbon, makes a total of 10.800,00 € per year in office rent. Some other costs are also important to add such as legal costs, of 5.000,00 €, Google and App Store, which have a 110,00 € annual fee, insurance of 1.000,00 € per year and finally the purchase of some office equipment such as furniture and laptops, adding up to 10.000,00 € in the first year. So, the total fixed costs per year all add up to 141.910,00 €. In the second year as revenue is expected to rise, so do the costs, where we would hire another Software Developer, so the salaries will increase to 50.000,00 € for the 3 engineers, as well as 50.000,00 € for the 4 founders, per year, summing the salaries total value to 100.000,00 €, at the same time as the marketing budget increases to 130.000,00 € for 2024. As expected, and since the app and website are set to increase its customers, so does the maintenance cost, to 20.000,00 € per year. The office rent, Google and App Store fee, office equipment and insurance all remain the same as last year, with a difference on the legal costs, as the company grows, growing their legal costs to 20.000,00 € in 2024. This means the total fixed costs for 2024 are 291.910,00 €.

In 2025 it's when we are already expected to make profit, and for that we need to make several improvements and updates, so for that we will hire 3 additional software developers, making their total salaries 120.000,00 € divided by the 6 current engineers. Founders will also be receiving a total of 100.000,00 €, which means 25.000,00 € per each annually. Since we will

have more workers, the office also needs to be upgraded, and based on the same criteria as before, the annual cost of the new office will be 25.000,00 € per year. Legal costs will also double, from 20.000,00 € in 2024 to 40.000,00 € in 2025. More equipment will be needed and for that the amount spent on new laptops and furniture will be 20.000,00 € in 2025. Insurance, Google and App store fees will remain the same as the previous year, in this case 1.000,00 € and 110,00 € respectively. After taking all these expenses in consideration, the total costs for 2025 are of 496.110,00 €

In 2026 almost all costs remain the same, except for the marketing budget, that instead of the 160.000,00 € from 2025, will be 200.000,00 € in 2026 and the maintenance costs, increasing 20.000,00 €, from 30.000,00 € to 50.000,00 € when comparing to the previous year. This gives a total of 556.110,00 € as total fixed costs for 2026.

Lastly, in 2027, with some traction happening, the wages will all increase, to 180.000,00 € for the 6 software developers, and to 220.000,00 € for the 4 founders. The maintenance costs will be the same from the previous year, and the same thing happens to the office, legal, Google and App store, equipment, and insurance, where none of them suffered any alteration making the total fixed costs for 2027 836.110,00 € (see appendix 7).

When it comes to wages, and the way they are split, as mentioned in 2023 none of the 4 founders will be receiving any salary, whereas the software developers will be paid a total of 30.000,00 € per year, meaning that they will receive a monthly payment of 1.071,43 € considering 14 months as it's mandatory in Portugal. The following year founders are already starting to receive some monetary compensation, of 892,86 € per month, making it a total of 50.000,00 € for all 4, and the software engineers will receive an increase in their salary to 1.190,48 € per month, and knowing we plan to hire another one for that year, that means that the total money spent with them would be of 50.000,00 €.

In 2025 and since things are expected to improve a lot, so will the salaries, and knowing we plan to hire 3 more software engineers, the total spent on their salaries will be of 120.000,00 €, which means they will receive 1.428,57 € each per month. When it comes to the founders, there will also be an increase in salaries there, to 1.785,71 € for each per month, giving a total of 100.000,00 € per year. In 2026 the situation will be the same, without any increase or new hire and in 2027 is when the next increase is set to happen, with 180.000,00 € to be allocated across the 6 engineers, meaning each one of them will earn per month 2.142,86 €, whereas the founders will also have an increase in their salary, earning 3.928,57 € per month, which means 220.000,00 € per year for the founders salaries and a total of 400.000,00 € in salaries in total (see appendix 8).

In the first year we expect a total of 67 customers, of which 57 are regular customers, the ones that will buy a car every 6 years, and 10 of them will be dealerships that buy on average 8 cars per month. What this amount of customer represents is a total expected sale of 99.240,00 € in 2023. In the following year this number is expected to grow because by then we will have a bigger offer on our platforms and plan to spend more money on marketing to attract customers, enabling us to reach 327 new customers, with 311 regular clients, and 16 new dealerships, totaling up to 327.720,00 €, which is more than the double of last year's value.

Moving to 2025, once again we expect our clients to keep growing, reaching out a total of 1097 new customers, from which 1054 are regular customers, and 43 are new dealerships, something that will bring to our company 878.880,00 € in expected sales.

In 2026 the situation is expected to follow the same growth path, with 3087 new regular customer and 68 new dealerships as clients, summing up to 3155 new clients in that year and a total expected revenue of 1.94 million €

Finally, in 2027 and the last year of our projections, we expect to have 5077 new regular clients and 93 new dealerships working with us. So far only new customers were mentioned but by the end of 2027 we expect a total of 5307 clients, which means 3.30 million €. By 2027, knowing that the regular customers only buy a car every 6 years, we expect to work with more than 9816 clients, and in this period earn a total of 6.54 million (see appendix 10).

### **3.2 Revenue Streams and Pricing**

When it comes to the way we plan to make money at Dealster, we have a few different aspects where we can make profit, but at the same time and due to our transparency and trust with the customer goal, we plan to have little margins on our services to make them more attractive than the competitors offer. Having that said and starting with the car price we don't plan to make any profit on that, so if the car costs 25.000,00 € that's also the price the customer is paying, something that aligns with our trust and transparency values. Then the legal costs come into action, and once again that's a number we are not planning on adding any profit to, so using the same example, if the car costs 25.000,00 € and the legal costs of the registration cost for example 4.000,00 €, the cost for the customer will be 29.000,00 € and we will make sure they know that's the real cost of the car, and not us trying to increase that.

The way we will be adding our margins are to the following services:

- Legal process solicitation at IMT, where we plan to outsource the service charging us around 160,00 €, according to (LegalizaOnline,2022) and we will add our own margin of 12,5% to that, totaling a cost of 180,00 € for the customer.
- Transportation cost, and here we will follow the same logic as before, where we plan to outsource this service, and the cost for that can vary with the amount of cars we plan to transport, but the range is normally from 600,00 € to 800,00 € (Home, 2022), and then

we plan to add our margin as well, elevating this cost from 800,00 € to 1.000,00 € for the customer.

- Optional features such as car historic report, where we plan to partner up with a company named „Car Vertical “and provide our customers that service for 30,00 € per report, having a cost of 10,00 € for us (Madi, n.d.).
- Another optional feature where we are also expecting to make revenue from is the car warranty we can offer, at a cost of 10% of the car price, and using the same example as above, if the car is currently being sold by the seller for 25.000,00 €, then the warranty cost for the customer would be of 2.500,00 €.

### **3.3 Revenue Development**

During the first year we will be mainly focusing on improving the website and the app, as well as reaching out to more and more dealerships from abroad to increase the offer available to our customers within our app. Because of that focus on the outreach, we expect to have a total of 57 regular customers and 10 dealerships, which represent 99.240,00 € in the first year. In the following year the number of customers is expected to grow, having in consideration that regular customers will only buy a car every 6 years, meaning the CLV calculated for them is based only on the first year, with a churn rate of 3%, while they represent 75% of our total clients. The dealerships on the other hand buy around 8 cars per month, with a churn rate of 10% per year. Based on these predictions, we expect our sales to go from 99.240,00 € in 2023 to 3.302.040,00 € in 2027 (see appendix 10)

### **3.4 Profitability Development**

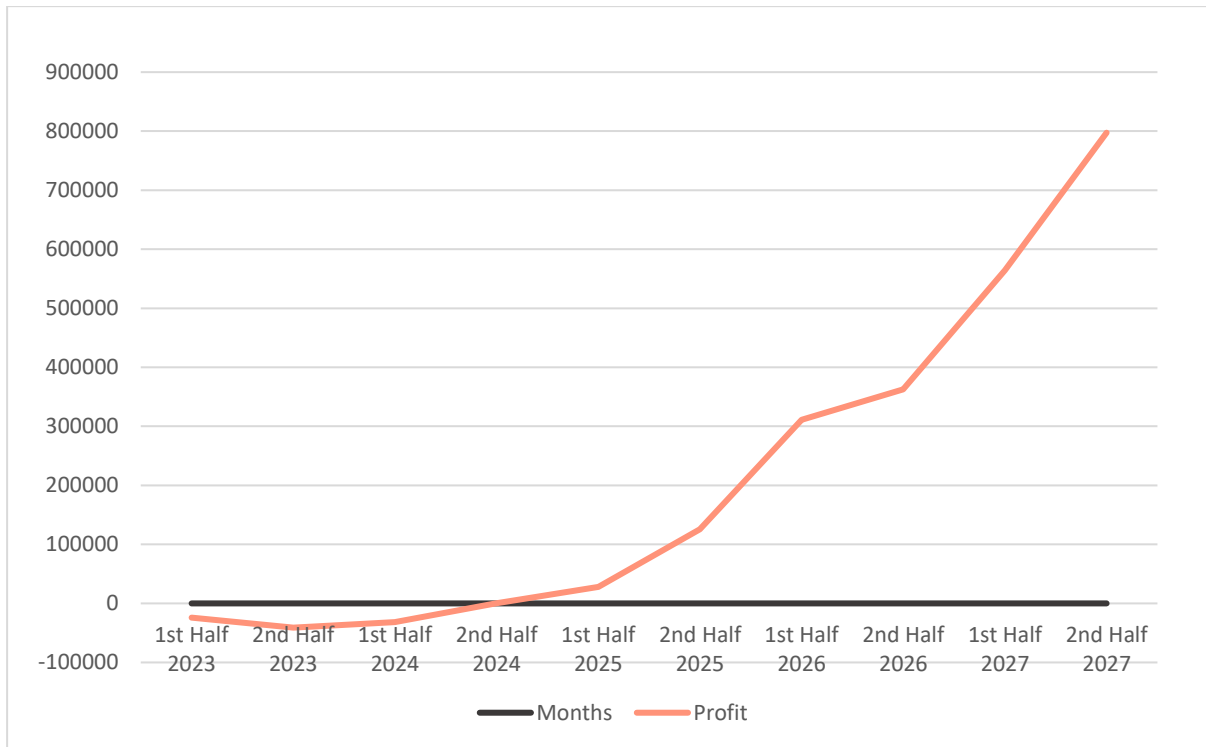
Because we have considerably high costs, a big initial investment and also the fact that we don't expect to have as many customers in the first 6 months as we do in the following ones, these first 6 months will represent a loss of (24.047,50 €) followed by another loss in the following 6 months of (41.047,00€) adding up to a total loss of (65.067,50 €) in the first year after launching.

The first half of 2024 the balance is still negative but slightly less, and in this case the losses are of (31.947,50 €) with better news for the second half of the year, where despite being a really small profit, it's the first time we expect to finish a half year on green, with 115,00 €.

The following years are where we start generating more revenue and more profit, being able to finish 2025 with a total profit of 153.525,00 €.

In 2026 we expect to be able to generate 4 times more profit than in the previous year, in this case of around 673.707,50 €.

Our best year is expected to be 2027, where we predict that we will be able to pass the 1 million € profit mark, with an estimated value of 1.36 million € which means we will be able to distance ourselves from our competitors and start gaining more and more trust from our customers (see appendix 12).



Graphic 9. Profitability Evolution 2023-2027

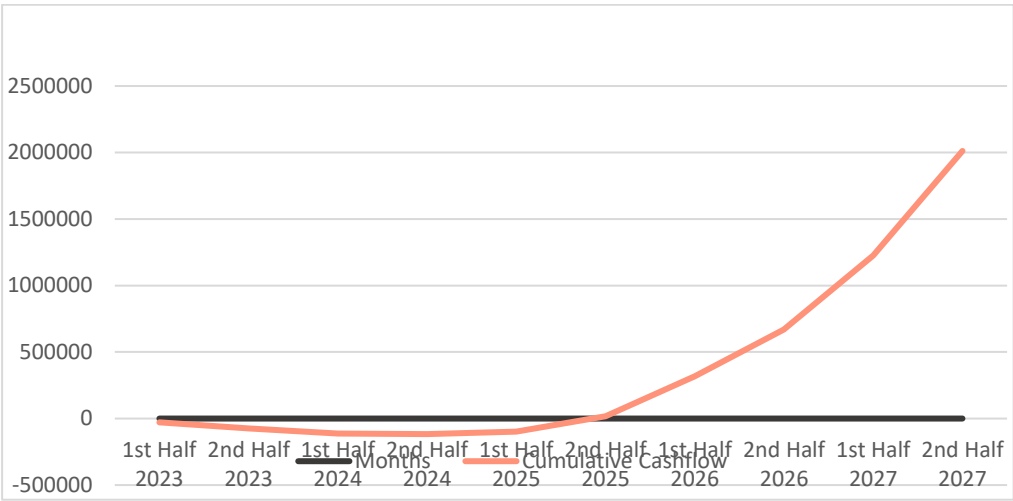
### 3.5 Cashflows & Funding

Our cumulative cashflow for the first year will be negative and of (74.067,50 €) which is mainly due to a big investment in the first 24 months, something that is clearly noticeable when we see the cumulative cashflow from year 2024, which is at that point of (116.900,00 €), and eventually starting to improve from then on.

In 2025, and even though it still is negative in the first half, it keeps getting better and turns green before the end of the year, with a total value of 16.625,00 €. From then on it just keep improving and the graph shows just that, whereby the end of 2026 we expect to have a positive cumulative cash flow of 670.332,50 €.

In 2027 it's when we have our biggest expectations, and as was previously mentioned above, as we expect the sales to grow substantially, so will the cumulative cash flow. The amount we

assumed to have by the end of 2027 is above the million euros mark, 2 million € to be more exact.



Graphic 10. Cash Flow Evolution 2023-2027

In order to survive the first 18 months, and having all aspects in consideration, starting with wages, marketing, maintenance costs and all out costs and plans, we need a total of 97.015,00 €, that we plan to acquire from business angels given the fact that we are still in an early-stage/idea stage, and business angels are more likely to invest in us knowing where we are at the moment, whereas a venture capital firm normally invests in startups or companies that have some traction already, which is clearly not the case. Also, the majority of business angels prefer to invest in the form of convertible notes, which is a form of short-term debt that converts into equity, typically in conjunction with a future financing round. What that means is the investor would be loaning us money and instead of a return in the form of principal plus interest, the investor would receive equity in the company, something we are ok with and willing to give. So, to sum up we are seeking for 100.000,00 € in exchange for 15% of our company (see appendix 13).

### 3.6 Unit Metrics

Notes: To measure Dealerster's performance over the years, several Key Performance Indicators will be monitored according to our estimations and will be considered, such as:

- Number of customers

Our expected number of customers, and for all the predictions and assumptions above to be as close as possible to the real achieved objectives, must be:

Year	Regular customers	Dealerships
2023	57	10
2024	311	26
2025	1054	69
2026	3087	137
2027	5077	230

Table 6. Number of Customers Evolution 2023-2027

- Customer lifetime value (CLV)

The customer's lifetime value was in this case different for each type of customer. For the regular customers, and since we calculated a customer lifetime value for 5 years and knowing that they only buy a new car every 6 years, this means that during those 5 years they wouldn't buy another car, and since their average spending with us would be of 240,00 €, that's also the customer lifetime value for the regular clients.

When it comes to dealerships the situation is different, as they buy on average 8 cars per month, their average spending per year would be of 13.200,00 € in 2023. Since the churn rate for dealerships is approximately 10% per year, this means that in the following year their average spending would be of 11.880,00 €, in 2025 10.692,00 €, followed by 9.622,80 € and finally in the last year of our estimations his spending would be of 8.660,52 €. What this adds up to is to a 5-year customer lifetime value of 54.055,32 € in the dealership's case, and 240,00 € when it comes to the regular customers.

In terms of the average CLV in the first year and since in that year we can count both types of customers, the average customer lifetime value is 6.720,00 €. In the following years since regular customers are not considered anymore to spend more money, this means that the average CLV is the same CLV as the one for dealerships, for 2024, 2025, 2026 and 2027 (see appendix 9).

- Customer acquisition costs (CAC)

Our customer acquisition cost is estimated to be in the dealership's case 1.500,00 €, which is the result of our heavy marketing campaigns and spendings.

For our regular customers, and knowing their CLV is 240,00 €, our customer acquisition cost for them is 80,00 €. We also calculated a blended CAC, where since our regular clients represent 75% of our total clients, and the dealerships represent 5%, multiplying those percentages by the respective CAC's, gives us a blended CAC of 435,00 €.

The CLV to CAC, which is the customer lifetime value divided by the customer acquisition cost, is 27,83 in the case of the dealership, meaning that the 5 years CLV is 27,83 times bigger than the amount we invested to have that customer (CAC).

For the regular customer, this value is way lower, 1,40, meaning once again, the 5-year customer lifetime value is 1,40 times bigger than the CAC (see appendix 9).

- Profit margin

The profit margin in the first year is negative in every half of 2023, in the first half with the worst margin, of negative (81,79%), being able to recover a bit but still not enough until the end of 2023, meaning it was still negative by (58,73%).

In 2024 things are slightly different, and even though the first half still didn't reach the green, it showed signs of improvement, with an expected negative margin of (24,31%), but most

importantly, at the end of the 2<sup>nd</sup> year, we expect to finish 2024 it with despite low, a profit of 0,06% which in euros means 115,00 €.

From then on things are expected to keep improving and our profit to keep growing, with an estimation for the end of 2025 with 23,39% profit and 31,56% profit for the same period of the following year.

The end of 2027 is when we expect to register not only the most amount of revenue, but also the biggest profit percentage, of 42,89% meaning 797.405,00 € (see appendix 12).

- Free Cash Flow & Net burn

The free cash flow is the cash left after we pay our operating costs and current investments, and our goal is to have this value positive, so we know we are receiving more than what we are spending. Based on our estimations our free cash flow will be negative until the end of 2024, with ups and downs and reaching a maximum of (46.020,00 €) at the end of the second year. From the very first start of 2025 it's when we expect to start having a positive free cash flow, and the goal is to keep it that way, estimating a positive value of 787.405,00 € in free cash flow by the end of 2027.

The net burn is the difference between the cash in and cash out, and knowing profitable companies have negative net burn since they are bringing in more cash than what they are spending, that is also our goal, go have a negative net burn rate.

Our net burn is expected to be positive in the first 18 months, adding up to a total of 97.015,00 €, which again, is not a positive aspect, and that number as mentioned previously represents the exact amount of funding we need to survive those first 18 months. After that the net burn is expected to be negative from the second half of 2024 onwards with a small value for that same period of (115,00 €).

2025 is the first year where the whole year is good in terms of burn rate, since in 2024 only the second half was good but still not enough to compensate for the previous 6 months, so, in 2025 at the end of the year the total net burn is estimated to be (153.525,00 €)

In 2026 the value tends to be better once more, adding up to a total of (673.707,50 €) which is more than 4 times higher than the value from the previous year.

Lastly, in 2027, by the end of the year we expect a negative net burn of (1.36 million €), which means we expect to bring 1.36 million € more than our total spendings.

For us, these unit metrics must be closely monitored from the start of the business to make sure everything we are doing is aligned with what we stipulated (see appendix 13).

## **4. The Team**

### **4.1 Management and Ownership**

The ownership of the company will be equally divided among the 4 founders at first, meaning each of us will own 25% of Dealster once it's legally registered, but things will change once funding rounds start occurring the percentage given to investors will be also divided by the 4 of us. As it is expected for the first pre-seed funding to come from a business angel, we estimate a percentage of 20% to be given out in order to get the funding needed, that would mean each of the founders gives 5%, totaling up to the estimated 20% which would mean that everyone in the company is expected to own 20% after the first funding round. This is only for the first round, meaning that in the following ones more percentage will be given, but an important note is that neither of the founders or the investors will have a majority in our company, meaning all decision must go through every member representing the company and all decisions from all parts must come to terms.

## 4.2 HR Structure

**Emin Tufanoglu – CEO** - 24-year-old master's in management student at Nova SBE in Lisbon, Portugal. He had several previous work experiences when it comes to leadership and management, such as working as a business developer at many startups, consulting services and also spent some time working in sales and marketing while studying. Something notable about him is that he is currently the president at the Nova SBE Startup Club, combining all his leadership, analytical and communication skills in this great project.

**Alvaro Ruiz – COO** - 24-year-old master's in management student also at Nova SBE, with a background in Spain where he did a double degree in Business Administration and Law. He got a distinction in his final project in the role as COO in a business simulator. He also loves and is interested in entrepreneurial ecosystems, business strategy and operations. Alvaro was our first choice since he has all the required abilities to improve the company's productivity by analyzing all relevant data.

**Joana Machado – CMO** - 22-year-old master's in management student at Nova SBE, with a previous degree in management at ISEG. She was always passionate about marketing and opted to take additional courses in that area as well. In terms of previous work experience she had a lot we can say, from working on the management team at a medical clinic, to volunteer organizations experience, to also working in advertising and marketing promoting products and campaigns. That's what makes her perfect for this role.

**Romeo Farkas – CFO** - 24-year-old, and like the other members, also a master student in management at Nova SBE, with a bachelor's degree in management as well. Since a young age he showed interest in the entrepreneurial world, starting as a president of the students' association for more than 3 years, which was one of the experiences that enabled him to be a

strong leader when it comes to people, and the way they need to be handled. After that, he had several work experiences in some different domains such as sales, innovation manager, an accounting internship and now currently also as a financial manager at his current company. All these work experiences summed up made him the best choice for our financial role due to his ability to work with numbers and make accurate financial analysis.

We are a team that takes teamwork very seriously and having strong leadership skills makes all the team members work in synergy and towards the same goal efficiently.

Besides that, we will also hire 2 software developers in the first year to develop the app and website. We also have a vesting plan in place, and since we are all equal in terms of equity (25% each), the plan is to have all our members fully focused on this project, so those 25% will be fully available after completing 1 year within the project, meaning that in case one of us leaves before completing the first year, the established is to only remain with 7% of the company, while the other 18% are equally distributed among the other members that opted for giving the project continuity.

## 5. Conclusion

With this work project, I was able to identify a significant problem and figure out a great business model to tackle. In addition to our previous experience in importing cars, we gained valuable insights into the Portuguese car market and how it works. However, also due to the time constraints of the work project program, our team faced several limitations further elaborated below.

First and foremost, access to more information would have helped validate our business idea better. Our surveys did not generate as many answers as we were expecting them to. Especially car dealerships were not willing to respond. This may mainly be due to them not willing to share any business information to potential competitors. In addition, information online was scarce - not only due to our business concept being fairly new to the market.

Moreover, we expect the Portuguese market to be easier to reach than the German market, as the value proposition is stronger for Portuguese customers. At the end of the day, Portuguese customers get access to more affordable cars, while German customers get access to a larger network of buyers. This will change however, as we are planning to introduce a subscription model for commercial sellers. The resulting benefits will strengthen our value proposition significantly. Until then, heavy marketing in the seller market is of utmost importance to cover Portuguese demand.

Finally, even though we are close, our MVP is not finished yet. Hence, we could not gain proof of concept yet. In our tests with the finished MVP, we aim to compensate for the lack of information and validate our venture further and test our key assumptions.

## 6. References

*Understanding COVID-19's impact on the automotive sector.* (2020, May 22). Deloitte United States.

<https://www2.deloitte.com/us/en/pages/about-deloitte/articles/covid-19/covid-19-impact-on-automotive-sector.html>

Simulador ISV 2022. (n.d.). <https://impostosobreveiculos.info/isv/simulador-isv/>

*7 passos para legalizar carros importados.* (n.d.). Retrieved December 14, 2022, from <https://galp.com/pt/pt/particulares/estrada/para-descobrir/detalhe/legalizar-carros-importados>

Abreu, J. (2019, April 9). *Conheça os países mais caros para comprar carros.* Ekonomista. <https://www.e-konomista.pt/paises-caros-comprar-carros/>

AdeptPlus. (n.d.). *Radio Facts.* MediaTracks Communications. Retrieved December 14, 2022, from <https://mediatracks.com/resources/radio-facts/>

Anna. (2022, September 7). *Best Used Car Websites in Europe in 2022.* *Expatrist.Com.* <https://expatrist.com/best-used-car-websites-in-europe/>

Asana. (n.d.). *Customer Journey Map: How to Visualize the Buyer Experience* • Asana.

Asana. Retrieved December 14, 2022, from <https://asana.com/pt/resources/customer-journey-map>

*COVID-19: Impact on the automotive sector.* (2020).

ECO. (2022, August 10). *Por cada três carros novos há dois usados do estrangeiro.* ECO. <https://eco.sapo.pt/2022/08/10/por-cada-tres-carros-novos-ha-dois-usados-do-estrangeiro/>

Ferris, R. (n.d.). *How Russia's war is cutting global auto production*. CNBC. Retrieved December 14, 2022, from <https://www.cnn.com/2022/04/16/how-russias-war-is-cutting-global-auto-production.html>

Klein, C., Høj, J., & Machlica, G. (2021). *The impacts of the COVID-19 crisis on the automotive sector in Central and Eastern European Countries*. OECD.  
<https://doi.org/10.1787/a7d40030-en>

*Passenger Cars—Portugal | Statista Market Forecast*. (n.d.). Statista. Retrieved December 14, 2022, from <https://www.statista.com/outlook/mmo/passenger-cars/portugal>

*Quanto custa percorrer 100 km com um veículo 100% elétrico? – UVE*. (n.d.). Retrieved December 14, 2022, from <https://www.uve.pt/page/quanto-custa-100-km/>

*Search | Wordtracker*. (n.d.-a). Retrieved December 14, 2022, from <https://www.wordtracker.com/search?query=carros%20usados>

*Search | Wordtracker*. (n.d.-b). Retrieved December 14, 2022, from <https://www.wordtracker.com/search?query=standvirtual>

ויטל, ועומר. (2021, January 3). Where do you buy a good secondhand car in Portugal? *Live Abroad*. <https://vitalandomer.co.il/en/2-אוטו-יד-7/>

Buying a Car: How Long Can You Expect a Car to Last? (2019, June 30). *Autotrader*.  
<https://www.autotrader.com/car-shopping/buying-car-how-long-can-you-expect-car-last-240725>

*Convertible Note | Examples and How It Works*. (n.d.). Retrieved December 14, 2022, from <https://www.seedinvest.com/blog/angel-investing/how-convertible-notes-work>

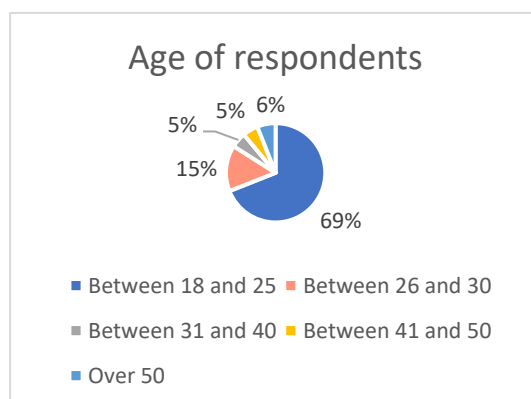
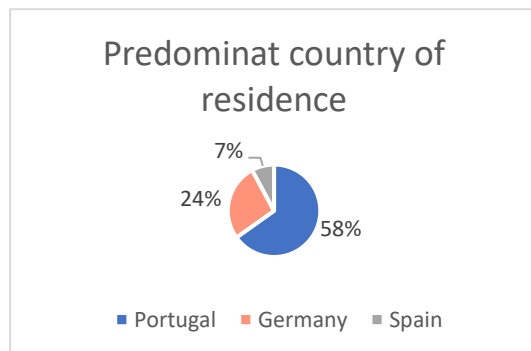
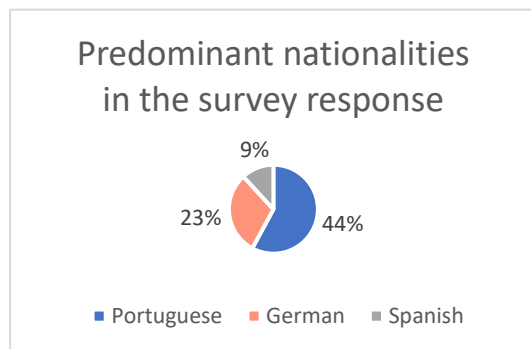
Johnson, J. (2019, May 17). How to Import A Car To Portugal. *BePortugal*.  
<https://beportugal.com/import-a-car-to-portugal/>

Planos E Preços: Legaliza online: Lisboa (n.d.) LegalizaOnline. Retrieved December 14, 2022, from <https://www.legalizaonline.pt/planosprecos>

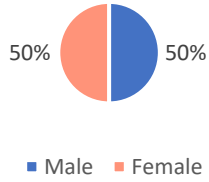
Home. (2022, December 14). <https://www.transporteveiculos.com/index.php>

Madi, E. (n.d.). carVertical – VIN Decoder & Car History Report. carVertical. <https://www.carvertical.com/en>

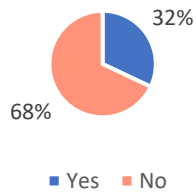
## 7. Appendix



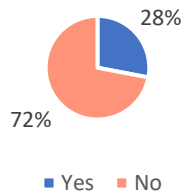
### Gender of respondents



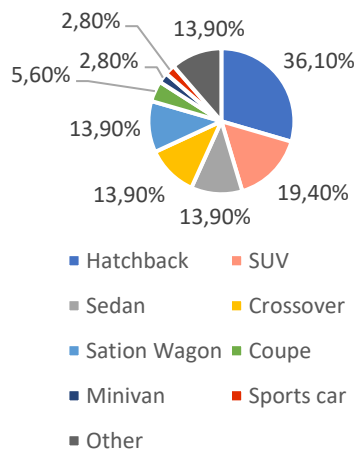
### Have you already bought a car before?

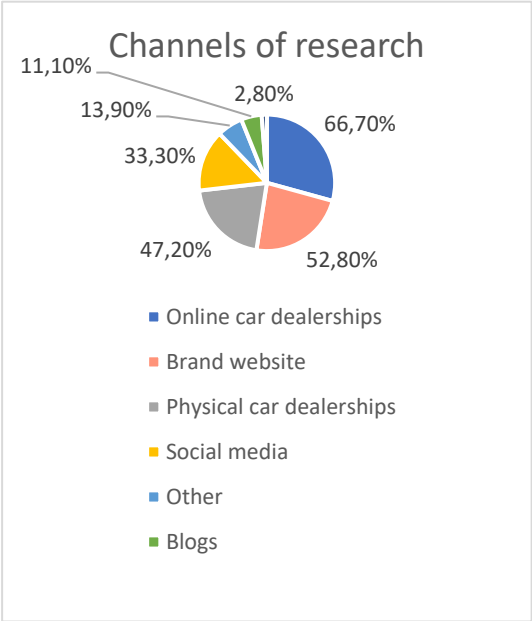
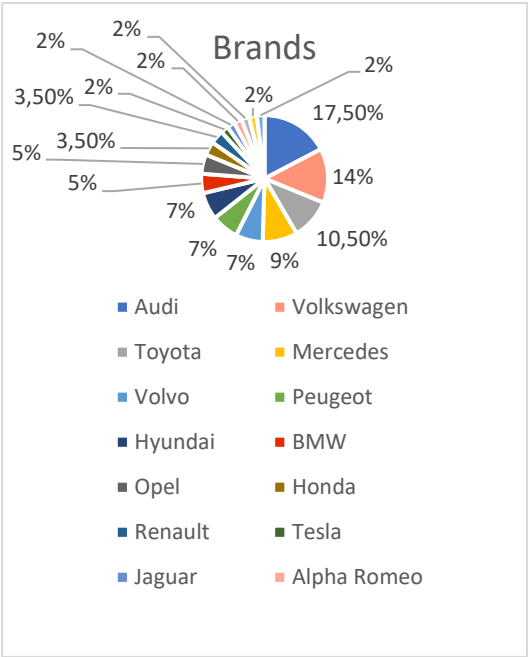


### Do you intend to buy a car in the near future?

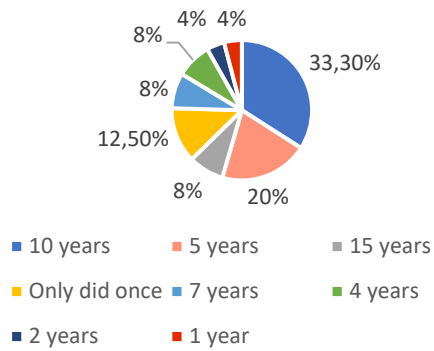


### Type of car

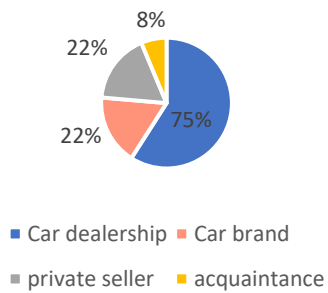




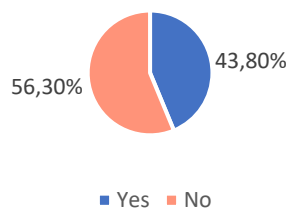
### With what frequency do you buy a new car?



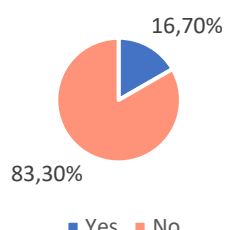
### Where did you bought your last car?



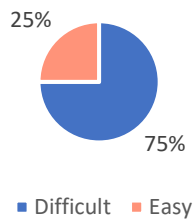
### Are you considering buying a car abroad?



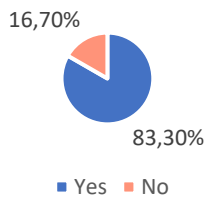
### Did you already buy a car abroad?



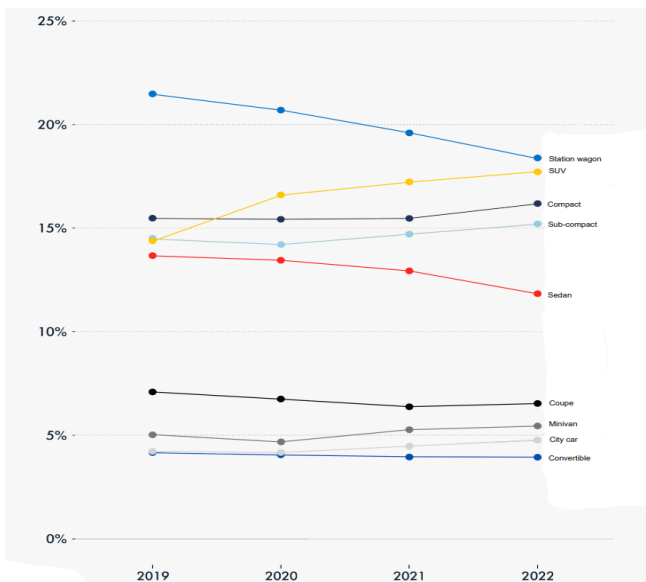
Do you think the process of buying a car abroad was easy?



If there was a platform like Dealster, would you use it?



*Appendix 1: Results of the survey*



Appendix 2: Used cars market share by segment

KeywordHistorical	Volume (average number of searches/ month, last year)	Comp .	IAAT	Comment	Type	Location Specific	Competitor	Brand	Potential Partner
standvirtual	698000	13,73	304	competitor			Standvirtual		
standvirtual carros	11225	3,97	1	competitor			Standvirtual		
standvirtual carros usados	8033	—	0	competitor			Standvirtual		
standvirtual motos	4883	—	0	competitor			Standvirtual		
standvirtual motas	2713	—	0	competitor			Standvirtual		
standvirtual porto	1742	—	0	competitor		Portugal	Standvirtual		
standvirtual comerciais	1675	—	0	competitor			Standvirtual		
standvirtual autocaravanas	1290	—	0	competitor			Standvirtual		
standvirtual mercedes	668	—	0	competitor			Standvirtual	Mercedes	
bmw standvirtual	592	—	0	competitor			Standvirtual	BMW	
mercedes standvirtual	459	—	0	competitor			Standvirtual	Mercedes	
standvirtual portugal	357	—	0	competitor		Portugal	Standvirtual		
benecar standvirtual	345	—	0	competitor			Standvirtual		
mcoutinho standvirtual	298	—	0	competitor			Standvirtual		
dacar standvirtual	244	—	0	competitor			Standvirtual		
standvirtual usados	239	—	0	competitor			Standvirtual		
volkswagen standvirtual	228	—	0	competitor			Standvirtual	Volkswagen	
dacia duster standvirtual	208	—	0	competitor			Standvirtual	Dacia Duster	
renault captur standvirtual	207	—	0	competitor			Standvirtual	Renault Captur	
nissan navara standvirtual	167	—	0	competitor			Standvirtual	Nissan Navara	
mercedes glc standvirtual	162	—	0	competitor			Standvirtual	Mercedes Glc	
peugeot standvirtual	155	—	0	competitor			Standvirtual	Peugeot	
hendo standvirtual	152	—	0	competitor			Standvirtual	Hendo	
hyundai kauai standvirtual	150	—	0	competitor			Standvirtual	Hyundai Kauai	
edaxgroup standvirtual	139	—	0	competitor			Standvirtual	Edaxgroup	
golf gie standvirtual	131	—	0	competitor			Standvirtual	Golf Gte	
standvirtual salvados	124	—	0	competitor			Standvirtual		
altamontra standvirtual	111	—	0	competitor			Standvirtual	Altamontra	
scirocco standvirtual	109	—	0	competitor			Standvirtual	Volkswagen Scirocco	
seat arona standvirtual	106	—	0	competitor			Standvirtual	Seat Arona	
edax group standvirtual	99	—	0	competitor			Standvirtual	Edax Group	
mercedes glc coupe standvirtual	98	—	0	competitor			Standvirtual	Mercedes Glc Coupe	
destaques standvirtual	95	—	0	competitor			Standvirtual		
expoeuropa standvirtual	88	—	0	competitor			Standvirtual		
byrd stand virtual	88	—	0	competitor	electric		Byrd		
volvo standvirtual	85	—	0	competitor			Standvirtual	Volvo	
drive point standvirtual	85	—	0	competitor			Drive Point		

standvirtual renault captur	75	—	0	competitor			Standvirtual	Renault Captur
autofix standvirtual	75	—	0	competitor			Standvirtual	Autofix
standvirtual dacia duster	68	—	0	competitor			Standvirtual	Dacia Duster
hjr car standvirtual	68	—	0	competitor			Hjr Car	
standvirtual mercedes glc	67	—	0	competitor			Standvirtual	Mercedes GLC
peugeot rcz standvirtual	67	—	0	competitor			Standvirtual	Peugeot Rcz
ford standvirtual	67	—	0	competitor			Standvirtual	Ford
ford focus st line standvirtual	67	—	0	competitor			Standvirtual	Ford Focus St Line
golf gti tcr standvirtual	66	—	0	competitor			Standvirtual	Golf Gti Tcr
mercedes eqe standvirtual	62	—	0	competitor			Standvirtual	Mercedes Eqe
campervan standvirtual	62	—	0	competitor			Standvirtual	
citroen standvirtual	59	—	0	competitor			Standvirtual	Citroen
mercedes glb standvirtual	58	—	0	competitor			Standvirtual	Mercedes Glb

<https://www.wordtracker.com/search?query=standvirtual>

KeywordHistorical	Volume (average number of searches/ month, last year)	Comp.	IAAT	Comment	Type	Location Specific	Competitor	Brand
carros usados	62750	15,91	599	potential keyword				
carros usados baratos	14725	6,34	17	potential keyword				
olx carros usados	9183	—	0	competitor			OLX	
standvirtual carros usados	8033	—	0	competitor			Standvirtual	
carros usados olx	6325	—	0	competitor			OLX	
custo justo carros usados	4942	—	0	potential keyword				
carros eletricos usados	4683	—	0	potential keyword	electric			
carros usados porto	3325	3,97	1	potential keyword		Portugal		
carros usados custojusto	3325	—	0	potential keyword				
comprar carros usados	3264	7,04	14	potential keyword	electric			
carros electricos usados	2342	—	0	potential keyword				
carros usados portugal	1842	3,97	1	potential keyword		Portugal		
carros usados braga	1675	—	0	potential keyword		Portugal		
carros usados algarve	1428	—	0	potential keyword		Portugal		
carros usados alemanha	1325	—	0	potential keyword		Germany		
carros usados em portugal	1296	—	0	potential keyword		Portugal		
carros usados coimbra	1221	—	0	potential keyword		Portugal		
olx carros usados baratos	1033	—	0	competitor			OLX	
hertz carros usados	947	3,97	1	competitor			Hertz?	
valor carros usados	873	—	0					
carros usados particulares	598	—	0	potential keyword				
carros hibridos usados	591	—	0	potential keyword	hybrid			
stand carros usados	517	—	0	potential keyword				
custojusto carros usados	488	—	0	potential keyword				
olx carros usados baratos diesel	465	—	0	competitor	Diesel		OLX	
carros usados lisboa	407	—	0	potential keyword		Portugal		
carros usados leiria	399	—	0	potential keyword		Portugal		

compro carros usados	376	—	0	potential keyword			
seminov	365	—	0				
carros baratos usados	361	4,61	2	potential keyword			
carros usados toyota	357	5,04	3	potential keyword			Toyota
carro usados toyota	357	—	0	potential keyword			Toyota
stand virtual carros usados	326	—	0	competitor		Standvirtual	
carros usados aveiro	312	—	0	potential keyword	Portugal		
valor carros usados tabela	291	—	0	potential keyword			
leasing carros usados	291	—	0				
carros usados viseu	289	—	0	potential keyword	Portugal		
carros usados baratos porto ate 500 euros	278	—	0	potential keyword	Portugal		
carros usados baratos a diesel particulares olx	251	—	0	competitor		OLX	
carros kia usados	245	4,61	2	potential keyword			Kia
carros usados baratos a diesel	228	—	0	potential keyword	Diesel		
preco justo carros usados	197	—	0	potential keyword			
leboncoin carros usados baratos	186	—	0	competitor		Leboncoin	
carros 7 lugares usados	177	—	0	potential keyword			
leboncoin carros usados	149	—	0	competitor		Leboncoin	
carros usados ate 2000 euros custojusto	119	—	0	potential keyword			
honda carros usados	88	—	0	potential keyword			Honda
carros usados hondas	81	—	0	potential keyword			Honda
carros usados hyundai	80	3,97	1	potential keyword			Hyundai
carros pequenos usados	73	—	0	potential keyword			

<https://www.wordtracker.com/search?query=carros%20usados>

*Appendix 3: Keyword search: “Carros usados” and related terms*

	2022									2023					2024	2025
	September	October	November	December	January	February	March	April	May	June	July	August	September	to be defined	to be defined	
<b>Validation and Starting Venture</b>																
Own internet research																
Survey among private customers (buyer side)																
Survey and contacting dealerships (buyer side)																
Feedback from mentors																
Survey among private customers (seller side)																
Survey and contacting dealerships (seller side)																
Focused survey on trust (all customer groups)																
Focused survey on willingness to change (all customer groups)																
<b>Pre-seed Funding and registration</b>																
Creating pitch deck																
Choosing right sources for investment																
Application for incubation programs																
Choosing investors and negotiating contracts																
Registration of startup (possibly with help of partners)																
<b>Development of MVP and proof of concept</b>																
Creating simple MVP for initial proof of concept																
Hiring developer and development of MVP																
Attracting first dealerships to platform																
First sales																
Constant proof of concept and improvements																
<b>Marketing and future scaling</b>																
Definition of Marketing strategy																
Design of social media channels																
Launch of Marketing strategy																
<b>Seed funding and Mit-term outlook</b>																
Choosing right sources for investment																
Choosing investors and negotiating contracts																
Hiring more developers																
Renting office in Lisbon																
Hiring more employees (to be defined)																
<b>Long-term outlook and exit strategy</b>																
Expansion in more markets and recruitment																
Acquirer attraction																
Target Exit: Acquisition																

Appendix 4: Rollout

<b>Fixed Costs</b>		<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Wages						
	Software Dev(2)	30 000,00 €	50 000,00 €	120 000,00 €	120 000,00 €	180 000,00 €
	Founders(4)	- €	50 000,00 €	100 000,00 €	100 000,00 €	220 000,00 €
	Marketing Budget	70 000,00 €	130 000,00 €	160 000,00 €	200 000,00 €	300 000,00 €
	<b>Total</b>	<b>100 000,00 €</b>	<b>230 000,00 €</b>	<b>380 000,00 €</b>	<b>420 000,00 €</b>	<b>700 000,00 €</b>
Maintainance Cost						
	Costs/year	15 000,00 €	20 000,00 €	30 000,00 €	50 000,00 €	50 000,00 €
Office rent						
	Square meters/person	10	10	10	10	10
	Price per square meters	15,00 €	15,00 €	15,00 €	15,00 €	15,00 €
	Costs/year	10 800,00 €	10 800,00 €	25 000,00 €	25 000,00 €	25 000,00 €
Legal Costs						
	Costs/year	5 000,00 €	20 000,00 €	40 000,00 €	40 000,00 €	40 000,00 €
Other	Google and Apple Store	110,00 €	110,00 €	110,00 €	110,00 €	110,00 €
Equipment						
	Laptops, furniture, etc./year	10 000,00 €	10 000,00 €	20 000,00 €	20 000,00 €	20 000,00 €
Insurance						
	Costs/year	1 000,00 €	1 000,00 €	1 000,00 €	1 000,00 €	1 000,00 €
<b>Total fixed costs</b>		<b>141 910,00 €</b>	<b>291 910,00 €</b>	<b>496 110,00 €</b>	<b>556 110,00 €</b>	<b>836 110,00 €</b>

#### Appendix 5: Core costs

<b>Wages per month/person</b>		<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Software Dev(2)		1 071,43 €	1 190,48 €	1 428,57 €	1 428,57 €	2 142,86 €
Founders(4)		- €	892,86 €	1 785,71 €	1 785,71 €	3 928,57 €

#### Appendix 6: Wages

	Dealerships	Regular Customer	Blended	
				CLV average
Year 1	13 200,00 €	240,00 €		6 720,00 €
Year 2	11 880,00 €	-		11 880,00 €
Year 3	10 692,00 €	-		10 692,00 €
Year 4	9 622,80 €	-		9 622,80 €
Year 5	8 660,52 €	-		8 660,52 €
5 YEAR CLV	54 055,32 €	240,00 €		
Margin	43 244,26 €	192,00 €		
CAC	1500	80	435,00	
5 Year Profit	41 744,26 €	112,00 €	10520,06	
CLV to CAC	27,83	1,40	8,01	

### Appendix 7: CLV and CAC

Profit and Loss Statement										
Revenue										
Year	2023		2024		2025		2026		2027	
Months	1st Half 2023	2nd Half 2023	1st Half 2024	2nd Half 2024	1st Half 2025	2nd Half 2025	1st Half 2026	2nd Half 2026	1st Half 2027	2nd Half 2027
#of remaining dealerships	0	4	10	18	26	45	69	101	137	178
#of remaining regulars	0	0	0	0	0	0	0	0	0	0
#of new dealerships	4	6	8	8	19	24	32	36	41	52
#of new regulars	25	32	105	206	374	680	1053	2034	2235	2842
Total #of dealerships	4	10	18	26	45	69	101	137	178	230
Total #of regulars	25	32	105	206	374	680	1053	2034	2235	2842
Avg spending per dealership	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600
Avg spending per regular	120	120	120	120	120	120	120	120	120	120
Sales	29 400,00 €	69 840,00 €	131 400,00 €	196 320,00 €	341 880,00 €	537 000,00 €	792 960,00 €	1 148 280,00 €	1 443 000,00 €	1 859 040,00 €

### Appendix 8: Profit and Loss Statement

Avg. CLV	4 757,53 €	4 757,53 €	4 757,53 €	4 757,53 €	4 757,53 €	4 757,53 €	4 757,53 €	4 757,53 €	4 757,53 €	4 757,53 €
Costs										
Variable costs										
CAC	217,50 €	217,50 €	217,50 €	217,50 €	217,50 €	217,50 €	217,50 €	217,50 €	217,50 €	217,50 €
Total variable costs	5 437,50 €	6 960,00 €	22 837,50 €	44 805,00 €	81 345,00 €	147 900,00 €	229 027,50 €	442 395,00 €	486 112,50 €	618 135,00 €
Fixed costs										
Wages	15 000,00 €	15 000,00 €	50 000,00 €	50 000,00 €	110 000,00 €	110 000,00 €	110 000,00 €	150 000,00 €	200 000,00 €	200 000,00 €
Marketing	20 000,00 €	60 000,00 €	70 000,00 €	60 000,00 €	80 000,00 €	80 000,00 €	100 000,00 €	100 000,00 €	150 000,00 €	150 000,00 €
Maintenance		15 000,00 €		20 000,00 €		30 000,00 €		50 000,00 €		50 000,00 €
Office rent	5 400,00 €	5 400,00 €	5 400,00 €	5 400,00 €	12 500,00 €	12 500,00 €	12 500,00 €	12 500,00 €	12 500,00 €	12 500,00 €
Legal	2 500,00 €	2 500,00 €	10 000,00 €	10 000,00 €	20 000,00 €	20 000,00 €	20 000,00 €	20 000,00 €	20 000,00 €	20 000,00 €
Utilities	5 000,00 €	5 000,00 €	5 000,00 €	5 000,00 €	10 000,00 €	10 000,00 €	10 000,00 €	10 000,00 €	10 000,00 €	10 000,00 €
Insurance		1 000,00 €		1 000,00 €		1 000,00 €		1 000,00 €		1 000,00 €
Other	110,00 €		110,00 €		110,00 €		110,00 €		110,00 €	
Total fixed	48 010,00 €	103 900,00 €	140 510,00 €	151 400,00 €	232 610,00 €	263 500,00 €	252 610,00 €	343 500,00 €	392 610,00 €	443 500,00 €
Total costs	53 447,50 €	110 860,00 €	163 347,50 €	196 205,00 €	313 955,00 €	411 400,00 €	481 637,50 €	785 895,00 €	878 722,50 €	1 061 635,00 €

### Appendix 9: Total costs

Profit	-24 047,50 €	-41 020,00 €	-31 947,50 €	115,00 €	27 925,00 €	125 600,00 €	311 322,50 €	362 385,00 €	564 277,50 €	797 405,00 €
Profit margin	-81,79%	-58,73%	-24,31%	0,06%	8,17%	23,39%	39,26%	31,56%	39,10%	42,89%

### Appendix 10: Profit and Profit Margin

Cashflow statement										
Cashflow										
Cashflow from operations	-24 047,50 €	-41 020,00 €	-31 947,50 €	115,00 €	27 925,00 €	125 600,00 €	311 322,50 €	362 385,00 €	564 277,50 €	797 405,00 €
Cashflow from investments	-5 000,00 €	-5 000,00 €	-5 000,00 €	-5 000,00 €	-10 000,00 €	-10 000,00 €	-10 000,00 €	-10 000,00 €	-10 000,00 €	-10 000,00 €
Free Cash Flow	-29 047,50 €	-46 020,00 €	-36 947,50 €	-4 885,00 €	17 925,00 €	115 600,00 €	301 322,50 €	352 385,00 €	554 277,50 €	787 405,00 €
Cumulative Cashflow	-29 047,50 €	-75 067,50 €	-112 015,00 €	-116 900,00 €	-98 975,00 €	16 625,00 €	317 947,50 €	670 332,50 €	1 224 610,00 €	2 012 015,00 €
Net burn(6 months)	24 047,50 €	41 020,00 €	31 947,50 €	-115,00 €	-27 925,00 €	-125 600,00 €	-311 322,50 €	-362 385,00 €	-564 277,50 €	-797 405,00 €
Funding needed(min)			97 015,00 €							

### Appendix 11: Cashflow Statement