# **Czech University of Life Sciences Prague**

# **Faculty of Economics and Management**

# **Department of Economics**



## **Bachelor Thesis**

**Business Plan for a Chosen Business** 

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## CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

# **BACHELOR THESIS ASSIGNMENT**

Nataliia Habrik

Economics Policy and Administration
Business Administration

Thesis title

**Business Plan for a Chosen Business** 

#### **Objectives of thesis**

The aim of this bachelor thesis is to create real business plan for openning a car service station in the city Kiev, Ukraine and its critically evaluation. It will be also evaluated the feasibility of the chosen business idea.

#### Methodology

- Financial analysis
- PEST analysis
- SWOT analysis
- Competitor analysis

#### The proposed extent of the thesis

40 - 60 pages

#### **Keywords**

Business plan, car service, financial statements, entrepreneurship, analysis.

#### **Recommended information sources**

BLACKWELL, E. (2011). How to Prepare a Business Plan. London: Kogan Page, 2011, ISBN: 978-074946253 FINCH, B. (2013). How to write a business plan. London: Kogan Page, 2013, ISBN: 978-0749467104 KIRILOV, A. (2019). «Автосервис как бизнес». Retrieved from https://newbusiness.su/avtoservis-biznes-plan.html

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SHELTON, H. (2014). The Secrets to Writing a Successful Business Plan: a pro Shares a step-by-step guide to creating a plan that gets results. Rockville, Maryland: Summit Valley Pres, 2014, ISBN: 0989946002

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Prague on 04. 03. 2021

Declaration	
I declare that I have worked on my bachelor thesis titled "Business J	plan for a chosen
business (opening a car service station in Kiev)" by myself and I ha	
sources mentioned at the end of the thesis. As the author of the bedeclare that the thesis does not break copyrights of any their person	
In Prague, on the 4 <sup>th</sup> of March	
Nataliia Habrik	

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# **Business Plan for a Chosen Business** (opening a car service station in Kiev)

#### Abstract

Bachelor thesis focuses on the issue of opening a car service station in the city Kiev, Ukraine. The aim of this bachelor thesis is the creation of real business plan on opening a car service station in the city Kiev, Ukraine and its critically evaluation.

Bachelor thesis compiles different methods. The first part is the result of literary research. A car service business in Ukraine is presented in this part, and also necessary criteria for creating a business plan. The application part of the thesis contains market analysis, production plan, organizational plan, financial part, and risk assessment. The study includes a series of analyses and calculations to adequately assess the future of the business, the purpose of which is to understand whether the car service station will be successful. The thesis also includes a conclusion, which summarizes the main findings from the study, references and appendix that will help in the course of the research.

**Key words:** Analysis, business plan, car service, entrepreneurship, financial statements.

# Podnikatelský plán pro vybranou oblast podnikání (založení autoservisu v Kyjevě)

#### **Abstrakt**

Bakalářská práce se zaměřuje na problematiku otevření autoservisu ve městě Kyjev na Ukrajině. Cílem této bakalářské práce je vytvoření reálného obchodního plánu otevření autoservisu ve městě Kyjev na Ukrajině a jeho kritické zhodnocení.

Bakalářská práce sestavuje různé metody. První část je výsledkem literárního výzkumu. V této části je představen obchod s autoservisy na Ukrajině a také nezbytná kritéria pro vytvoření obchodního plánu. Aplikační část práce obsahuje analýzu trhu, výrobní plán, organizační plán, finanční část a posouzení rizik. Studie zahrnuje řadu analýz a výpočtů pro adekvátní posouzení budoucnosti podnikání, jejichž účelem je pochopit, zda bude autoservis úspěšný. Součástí práce je také závěr, který shrnuje hlavní poznatky ze studie, reference a dodatky, které pomohou v průběhu výzkumu.

Klíčová slova: Analýza, podnikatelský plán, autoservis, podnikání, finanční výkazy.

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## 1 Introduction

Bachelor thesis focuses on the issue of opening a new car service station in Kiev. This sphere of business is dynamic and full of numerous innovations, so the topic is of great interest among young entrepreneurs-beginners.

Nowadays car is perhaps one of the most significant things in modern life. The economic efficiency of road transport is that it saves time and contributes to the acceleration of economic processes. Moreover, the car provides comfort, brings pleasure. In turn, the "quality of life" of a car is determined by the quality of the road transport infrastructure: roads, garages, parking lots, gas stations, service stations, spare parts, maintenance materials, traffic safety, environmental safety, recycling. The car market is growing every year. Since the end of the 19th century, automobile transport not only largely determines the development of the economy of developed countries, but also influences the transformation of social processes in society. It changed the human environment (building roads, bridges, and tunnels, creating megacities), the very way of life of people. Influencing all aspects of society, the car led to the creation of a whole infrastructure, without which it simply cannot be used. The car spawned new industries, new activities. Over time, the car increasingly captured the minds and hearts of people and became more and more real human need. At the same time, it became more and more clear that without a system for maintenance and repair, a car cannot be useful. In Ukraine auto market there are all the tendencies that in the coming years the "service revolution" will explode in our country. Therefore, it is relevant to study the peculiarities of the development of car service market, the formation of principles and tasks for regulating the process of small business development in car service.

However, a good idea is never sufficient for successful performance. The strong will, good knowledge and proper practical skills be also required to run your own business. This is not just the matter of financial knowledge, but necessity to understand the complicity of the business and its key factors: financial, marketing, administrative and legal aspects. That is why thesis contains theoretical and analytical part with description of processes.

## 2 Objectives and Methodology

#### 2.1 Objectives

The main objective of this bachelor thesis is to create and critically evaluate real business plan on opening a car service station in Kiev, Ukraine with regards to legal, administrative and business requirements. We will also evaluate the feasibility of the chosen business idea. One of the points is research on the success of such business development based on a financial analysis for the first three years of business operation. It is planned to carry out an analysis of the car market, to study the theoretical information necessary to open your own business. The consultation with my father will be held, as he is a really good specialist in this field, who is a supplier of auto parts for cars, is associated with car repairs and understands the principle of operation of such enterprises.

To achieve diploma goals, the following tasks were solved:

- 1. Determination of the specifics of doing business in small car service enterprises.
- 2. Development of strategy for the operation of car service in Ukraine.
- 3. Evaluate the position of the investigated small car service enterprise in the car service market.
- 4. Evaluate the external and internal environment of the enterprise.

### 2.2 Methodology

Bachelor thesis compiles several research methods. The first part is the result of literary research. The main literature sources are up-to-date and covering all aspects of doing business. Analytical part of the thesis contains of quantitative and qualitative research.

As a methodology for the thesis, it will be used financial analysis, SWOT and PEST analysis and competitor analysis. There also will be marketing, production, and organizational plans. We will also make such calculations as net present value (NPV), payback period (PB), break-even point (BEP), and profitability.

#### 1. NPV

In the financial plan of a business plan, it is necessary to calculate net present value. Net present value (NPV) is a method used to determine the current value of all future cash flows generated by a project, including the initial capital investment. It is widely used in capital budgeting to establish which projects are likely to turn the greatest profit (Jagerson 2021).

Net present value is calculated using the following formula.

$$NPV = -Co + \frac{CF1}{1+r} + \frac{CF2}{(1+r)^2} + \dots + \frac{CFt}{(1+r)^t}$$
 (1)

Where

Co - Initial Investment

CF - Cash Flow

r - Discount Rate

t - Time

If the NPV is greater than zero, the project is profitable. If the NPV is less than zero, you should not invest in the project.

#### 2. Payback period

The payback period is the time the company needs to recover its initial investment. The payback period is calculated by dividing the amount of the investment by the annual cash flow. It refers to the amount of time it takes to recover the cost of an investment. Simply put, the PB is the length of time an investment reaches a break-even point (Kagan 2020).

There are formulas for calculating the payback period.

$$Payback\ Period = \frac{Initial\ Investment}{Yearly\ Cash\ Flow}$$
 (2)

#### 3. Break-even point

The break-even point can be defined as a point where total costs (expenses) and total sales (revenue) are equal. Break-even point can be described as a point where there is no net profit or loss. The BEP represents the level of sales where net income is zero, the point where Sales equal the sum of Total Variable Costs and Total Fixed Costs, and Contribution Margin is equal to Total Fixed Costs (Dikov 2019).

Break-even point in terms of money is calculated by the formula:

$$BEP = \frac{FC}{Gross\ margin\ ratio} \tag{3}$$

Where

FC - Fixed Costs

$$Gross\ margin\ ratio = \frac{Margin\ income}{Total\ Revenue} \tag{4}$$

$$Margin\ income = Total\ Revenue - Variable\ Costs$$
 (5)

#### 4. Profitability

Profitability is a number showing how much profit is received from each currency unit invested in business development. That is, how efficiently the enterprise works.

For a correct assessment of the company's profitability, it is necessary to analyse its indicators for different periods of time, in dynamics, and then compare them with each other. (Horton 2019).

Profitability is calculated using the following formula.

$$Total \ Profitability = \frac{Net \ profit}{Costs} \times 100\%$$
 (6)

#### 5. SWOT-analysis

A SWOT analysis is a compilation of your company's strengths, weaknesses, opportunities, and threats. The primary objective of a SWOT analysis is to help organizations develop a full awareness of all the factors involved in making a business decision. A SWOT (strengths, weaknesses, opportunities, and threats) analysis is a planning process that helps your company overcome challenges and determine what new leads to pursue. Strengths (S) and weaknesses (W) refer to internal factors, which are the resources and experience readily available to you.

These are some commonly considered internal factors:

- Financial resources (funding, sources of income and investment opportunities)
- Physical resources (location, facilities, and equipment)
- Human resources (employees, volunteers, and target audiences)
- Access to natural resources, trademarks, patents, and copyrights
- Current processes (employee programs, department hierarchies and software systems)

External forces influence and affect every company, organization and individual. Whether these factors are connected directly or indirectly to an opportunity (O) or threat (T), it is important to note and document each one.

External factors are typically things you or your company do not control, such as the following:

- Market trends (new products, technology advancements and shifts in audience needs)
- Economic trends (local, national, and international financial trends)

- Funding (donations, legislature, and other sources)
- Demographics
- Relationships with suppliers and partners
- Political, environmental, and economic regulations

After creating SWOT framework and filling out SWOT analysis, it is necessary to come up with some recommendations and strategies based on the results (Schooley 2019).

#### 6. PEST-analysis

PEST is an acronym for political, economic, social, and technological. It is a way of understanding how external forces impact your business. It should be included in every business plan, in addition to a SWOT analysis, as it is part of risk management and strategy design.

#### P – Political

Political environment is an analysis of what politics is doing to the business world. These factors determine the extent to which a government may influence the economy or a certain industry. For example, a government may impose a new tax or duty due to which entire revenue generating structures of organizations might change.

#### E – Economic

The economic factor examines outside economic issues that can play a role in a company's success. These factors are determinants of an economy's performance that directly impacts a company and have resonating long term effects. For example, a rise in the inflation rate of any economy would affect the way companies price their products and services. Adding to that, it would affect the purchasing power of a consumer and change demand/supply models for that economy.

#### S – Social

With the social factor, a business can analyse the socioeconomic environment of the given industry's market to understand how consumer needs are shaped and what brings them to the market for a purchase. These factors gauge determinants like cultural trends, demographics, population analytics, etc.

#### T-Technology

Technology plays a huge part in business, and it can impact it either negatively or positively. With the introduction of new products, new technologies and services, a certain marketplace can have a tough time adjusting so it is important to assess the technology from all angles. These factors pertain to innovations in technology that may affect the operations of the industry and the market favourably or unfavourably. This refers to automation, research and development, and the amount of technological awareness that a market possesses (Post 2018).

### 3 Literature Review

#### 3.1 Description of the car market

The number of cars in the 20th century grew up rapidly. For example, the changes in number of vehicles in Germany from 1907 to 2018 years are shown in Figure 1 below. For example, in 1907 there were 10,115 vehicles. In 1926 there were 100 thousand of them, in 1937 their number reached 1 million, in 1967 - 10 million, in 1977 - 15 million, in 1990 - 24 million. Currently in Germany there are more than 46 million vehicles (Markov 2018).

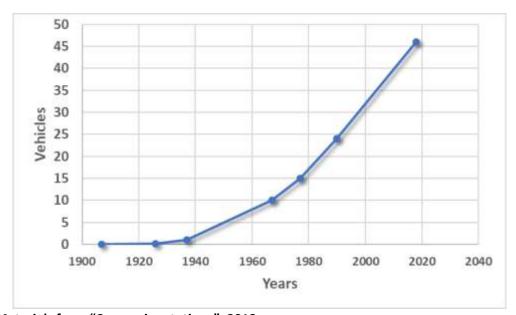


Figure 1 Number of vehicles in Germany from 1907 to 2018 years, millions of pieces

Source: Materials from "Car service stations", 2018

The first car on the territory of present-day Ukraine appeared in Odessa even before the XX century, more precisely in 1891. That is, the automobile market of Ukraine will celebrate its 129th anniversary this year! But AUTO-Consulting managed to start the Ukrainian accounting of cars only since 1933.

As we can see from Figure 2 in Ukraine in 1933 there were approximately 5 thousand, in  $1975 - 464\ 900\ cars$ , in  $1991 - 2\ 380\ 370$ , in  $2000 - 2\ 745\ 830$ , in  $2010 - 4\ 872\ 920$ , in  $2015 - 5\ 573\ 925$ . Nowadays there are more than 6 566 000 cars in Ukraine (AUTO-Consulting 2020).

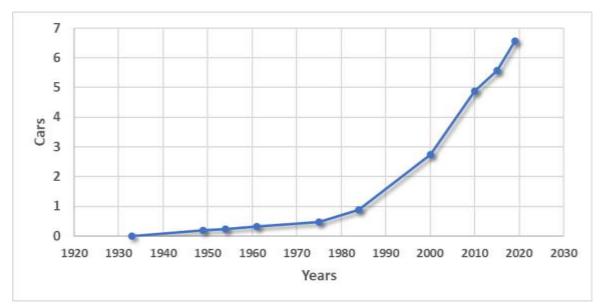


Figure 2 Number of cars in Ukraine from 1933 to 2019 years, millions of pieces

Source: Materials from AUTO-Consulting, 2020

All these cars require not only urgent repairs, but also diagnostics, planned interventions, etc. Accordingly, the need for servicing these cars grows. The car service market today is far from saturation and the shortage of offers continues to grow. This means that the opening of a car service station will always be in demand.

#### 3.2 Car service in Ukraine

In Ukraine car service in the broad sense is the infrastructure of road transport. This is all that ensures the use, operation, maintenance, and restoration of the car during the entire "life cycle". Car service includes several systems, as shown in Figure 3, that together provide the social and economic efficiency of road transport.

Car service in the narrow sense of the word is a system for maintaining and restoring the car's performance over the entire life cycle. Its components are an information system about the clientele and for the clientele; inventory management subsystem; customer service subsystem; a subsystem of car sales, spare parts, materials, equipment; subsystem diagnostics, maintenance, and repair of cars.

Figure 3 Car service as a road transport infrastructure



Source: Materials from "Car service stations", 2018

The efficiency of a car service, both in a broad and narrow sense, is determined by how well it ensures the use of the possibilities inherent in a car - speed, comfort, carrying capacity, reliability and durability.

Car service has arisen from the need for car repairs: they were structurally imperfect, often broke, required large amounts of maintenance and repair. It grew and developed as the number of cars increased and transformed with a change in socio-economic conditions. Its development was determined by the fact that it was claimed. The development process of car service can be described as a conversion from car repair to maintaining its working capacity. Today car service in Ukraine is a prestigious and rapidly developing business. This is due to a significant annual increase in the fleet of cars, relatively small investments, quick return on capital, and significant, besides constantly growing demand.

The development of auto service lags the market needs because the pace of development of auto service enterprises objectively cannot match the growth rate of the car park. Mainly dominated by small private companies that are not tied to global brands. Therefore, there is no reason to talk about any structure among car service stations. All of them can be engaged both in foreign cars, and domestic cars. Increasing competition will require a significant improvement in the quality of car service and customer satisfaction. It is obvious that many modern auto service enterprises, accustomed to working in conditions of poor-quality service, will not be able to withstand the competition and will be forced to leave the market. To prevent this from happening, you need to ensure the quality of car service now (Markov 2018).

#### 3.2.1 Types of car services

Let's look at the types of car service stations. The classification of car service enterprises is based on their purpose, types of work performed, production capacity, and specialization. There are four main types of service stations. Not all of them are represented in our market, but knowledge of this structure gives an insight into which niche is better to open your project. And, also, in what direction it is possible to develop a business if it is successfully launched.

Figure 4 Types of car service business



Source: Materials from "Car service as a business"

As shown in Figure 4 above, there are such types of car service business (Kirillov 2015):

- 1. <u>Authorized.</u> The station is completely subordinated to official dealers or foreign manufacturers of cars. Therefore, the station has a specialization in a particular car brand. To open such a service, you need a special license. But to get it is not easy vendors are very selective in the definition of contractors. At the same time, the maximum profit from such a station can be obtained in the amount of \$10 thousand per month. And then only in large cities, where there are many residents who use foreign cars.
- 2. <u>Network.</u> Absolutely empty niche in the domestic market. On a national scale, no station of this type has yet covered the whole country. Maximum coverage five regions of the country. The most common today is the "Bosch" car service station. Such car service station can bring up to \$7 thousand per month.
- 3. <u>Single.</u> They have no accreditation. At the same time, they offer a high level of services that helps them to make a serious competition to the stations described above. They provide a similar set of services, but with interest paid by 30% less than at authorized points. Such station each month will bring at least \$2 thousand, but usually the income does not grow above \$12 thousand.

4. <u>Customized services.</u> Many do not attribute it to car service business itself, calling such activity self-employment. Services are provided in owners` garages. But this type of vehicle maintenance is most in demand. For an entrepreneur, such project can bring \$800-1200 per month.

#### 3.2.2 Provided services

Today, it is not so easy to find a suitable place for car service. The place can be rented. The main range of services should consist of engine and suspension repair, oil change, washing and cleaning of the interior. The most profitable car maintenance services are engine repair, gearbox repair, steering gear replacement, clutch and other parts replacement, installation of air conditioners and acoustic systems. From an economic point of view, the braking system is the most unprofitable in terms of money, but without this the list of services provided will be incomplete. Tuning should also be included in the list of car maintenance, as well as glass tinting, xenon installation, etc. (Volgin 2013).

#### 3.3 Modern criteria for successfully starting new business

Starting a new business is always associated with some problems. They are relevant all time, because creating your own business always has a high degree of risk, which means the likelihood of bankruptcy is also high. However, there are many successfully implemented ideas, that prove that it is possible to create a business avoiding fatal mistakes. It is only necessary to accurately plan and prepare the process of making various management decisions. A high degree of market dynamism is one of the main conditions for starting a business, which increases the appearance of economic niches. The process of starting a new business is listed below (Kamara 2007).

#### Determining the structure of business goals

When forming goals, an objective assessment of your positive and negative qualities is extremely necessary. If there is a need to draw up business goals, then a person should ask himself, and very honestly answer some questions for himself. Are you the initiator of this case? How will you build relationships with employees and partners? Do you have enough determination to make decisions? Are you psycho-resistant enough to run your business successfully and overcome all emergencies? Do you know how to properly plan and organize your business? Is your desire to stick to your goal strong enough? Which business should you choose? It is usually better to choose a business from that area or field of knowledge, in which there is a sufficient amount of necessary knowledge, skills

and interest, perhaps you already have an experience. The chances of running a successful business will greatly increase if the skills are matched to the local market.

#### • Forming a business plan

When you want to start your own business, it is necessary to draw up a business plan, as you need to clearly plan the first stages of business development. From the economic point of view, this document will accurately reflect your activities and define your ideas. He will help you distribute money correctly and most profitably, make the right decisions and cope with unexpected difficulties.

• Analysis of the necessary conditions of effective business

There are four requirements for small business success:

- 1. Good management practice
- 2. Experience in industrial production
- 3. Technical support
- 4. Capacity planning.

To analyse the conditions for effective business conduct, it is advisable to honestly assess your experience and skills, and to compensate the lack of experience and knowledge, you need to find partners or hire core staff.

#### 3.4 Business plan

#### 3.4.1 Business plan concept and objectives

A business plan is a plan for the implementation of a business operation, a firm's actions, containing information about a firm, a product, its production, sales markets, marketing, organization of operations and their effectiveness.

The purpose of developing a business plan is to plan the company's economic activities for the near and long term in accordance with the needs of the market and the possibilities of obtaining the necessary resources.

The objectives of the business plan are:

- formulate long-term and short-term goals of the company, strategy, and tactics for their achievement
- determine the specific directions of the firm's activities, target markets and the place of the firm in these markets
- select an assortment and determine the indicators of goods and services that will be offered by the firm to consumers
- estimate fixed and variable costs
- determine the composition of marketing activities for market research, sales promotion, pricing, etc.
- assess the financial position of the company and the correspondence of the available financial and material resources to the possibilities of achieving the set goals, etc.

The business plan performs the following main functions, namely (Blackwell 2008):

- is a tool with which an entrepreneur can assess the actual results of activities for a certain period
- can be used to develop a business concept in the future
- is a tool for obtaining financial resources
- is a tool for implementing enterprise strategy

#### 3.4.2 Structure of business plan

In this chapter, the structure of a business plan will be described. It should be noted that a unique technique of preparing a business plan simply does not exist, however there is a list of mandatory items that a standard business plan must contain (Kamara 2007).

- 1. Panoramic section containing a short description of the project.
- 2. Company description description of future business as seen by the entrepreneur.
- 3. Product description characterization of the provided service or product.
- 4. Market analysis analysis of competitors and market segments in general.
- 5. Production plan Realization of a project step by step.

- 6. Marketing plan a description of marketing methods used and distribution channels of service or product.
- 7. Financial plan plan of financing a project.
- 8. Project analysis additional project evaluation, including advices from specialists.
- 9. Annexes tables, graphs, charts, etc.

Any suggested form of a business plan provides only a general idea. Every business has its own characteristics, so there can be no "standard" business plan that is acceptable for all cases. For example, my business plan will also consider an organizational plan.

## 4 Application Part

In this part of the thesis, the author will apply the theoretical knowledge gained and will develop a real business plan for opening a car service station in Kiev. The author will try to follow the correct sequence and advices gleaned from sources to show their application in practice. The main task is to present a business idea to readers.

#### 4.1 Executive summary

The business is a car service station in Kiev, Ukraine. Its name is "Mriya". The concept is "An ambulance for your vehicle".

A certain range of car maintenance and repair services will be offered to consumers. Conventionally, services that will be provided by the station, can be divided into 3 blocks:

- 1. Repair and maintenance of cars
- 2. Tuning of cars
- 3. Electrical engineering work

The target segment of automotive service includes individual and corporate customers using automotive technology. Consumers are the most sensitive to the quality of the provided services. In the car service market, the demand will increase every year. But high demand is not all that is needed, it is also necessary to take the competition into account, which will also grow in the area with growing demand. The automotive service marketing strategy is based on providing maximum benefits to consumers. Car service station plans to provide services on its own directly on the territory of the service (delivery by the client or by the service) and equipment maintenance directly at the place of its operation. For the development of the company and increase in sales of car service services, it is necessary to constantly inform customers about this. Based on the specifics of the services, the following advertising will be used: radio, advertising booklets, advertising via the Internet. Also, among the means of promoting goods, one can single out cooperation with stores of automotive equipment and components, which do not have equipment repair and maintenance centres.

It is planned to open a car service station at the address: Ukraine, Kiev, Bolshaya Okruzhnaya street, 1 b.

In general, personnel play a decisive role in the efficiency of the automotive service working, since only highly qualified employees can ensure the required level of quality in the provision of services. The selection of staff should be carried out on a competitive basis. Based on the average assortment that can be sold in a month, the following personnel are needed for the normal functioning of the enterprise: director (performs administrative functions, accepts cars, and distributes between employees, communicates with clients), accountant cashier, 2 vehicle service specialists, cleaner. The activity of the car service station will be organized in the form of an Individual Proprietor (IP). The initial amount of money for starting a business I will take from my father. It is 315 000 UAH.

In view of the specifics of the car service activities, the following main risks can be identified: growth in labour costs, higher rent, a decrease in the volume of services provided, an increase in prices for materials, a worsening economic situation, and a decrease in the quality of services.

#### 4.2 Representing the idea of a car service station

#### 4.2.1 General description and characteristics of the service

In the modern world without automotive technology, work productivity can decrease significantly. You can cover much shorter distance without a car than with it at the same time.

The purpose of a small business is to make a profit by its owners by satisfying the needs of customers, business entities and any other legal entity in goods, works and services offered to car owners. The main activities of the enterprise are:

- tuning, revision and additional equipment of cars
- electrical work
- glass tinting
- installation and adjustment of additional equipment for cars
- car repair and maintenance.

For now, a small enterprise operates in the market for retrofitting vehicles with safety and comfort systems and provides services for the maintenance and repair of various systems and components of vehicles. It carries out work on the installation of anti-theft systems and alarms, acoustic and video systems of varying degrees of complexity, interior noise insulation, auto glass tinting, installation of sunroofs, window lifters, air conditioners, heaters and interior heaters, installation

of special signals and sensors, and much more. Thus, the company's goods are services for customers for the retrofitting of his car.

When forming and implementing the technical policy of a small enterprise, the main emphasis is on high quality work performance and variety in the proposed additional equipment. The main thing in business is to create maximum comfort for the consumer. For this purpose, the best conditions will be created for the convenience of purchasing the service: inspection and diagnostics can be carried out both on the territory of the service, and by directly visiting the client by master. It will be possible to order the service by phone or via the Internet, it is also possible to conclude contracts for permanent service.

The target segment of automotive service includes individual and corporate customers using cars. The main characteristic of the sector of individual consumers is the age. It will be 18 years and older regardless of gender, that is, everyone who uses cars for work, entertainment, but does not have special skills to service such equipment. The sector of corporate clients also has sufficient capacity, because now almost all firms use automotive technology in their activities.

Our consumers are the most sensitive to the quality of the provided services. That is, in order to gain the trust of the target segment of consumers and a stable position in the market, it is necessary to take into account a number of factors in the work: the quality of customer service in general, the quality of work (that is, you can be polite and courteous with the client, but set up something wrong), timing (on average 2-4 hours for simple work), flexible pricing policy (low prices and a mandatory system of discounts), highly qualified specialists (no one will be satisfied with low-quality and long-term repair of their car), adequate and quick market responses on prices and new offers, building a balanced cost chain within the company, an established system for accepting applications and servicing, providing information about their services via the Internet and other media. So, the service really boils down to speed and assistance. They are two main "values" in car service station business.

Considering the aspects above and consumer sensitivity to quality, it can be concluded that the optimal strategy for entering the market will be the "strategy of a specialist". To get a closer look at the business environment and assess the competition, it is necessary to conduct market analysis and research.

#### 4.2.2 Assessment of the area of economic activity

Firstly, it is necessary to assess the size of the market and its development trends.

Many customers turn to a service station when purchasing a new car, so it is difficult to clearly separate requests depending on their welfare. It is possible to divide customers into owners of domestic and imported cars, however, given that the requests of both are identical, their distribution is hardly correct. Considering this, for the first criterion of segmentation, we will accept the type of service, for which a potential consumer applies. In our case, let's select the following segments:

- 1. Installation of cheap alarm systems.
- 2. Installation of anti-theft systems.
- 3. Auto glass tinting.
- 4. Installation of cheap speaker systems.
- 5. Installation of average cost and expensive acoustic systems, TV systems, interior sound insulation.
- 6. Installation of air conditioners, heaters, and hatches.
- 7. Repair work.

Let's briefly describe these segments:

- Installation of cheap alarm systems. This segment is characterized by the greatest competition, which is carried out due to price reductions. Such struggles are usually detrimental to quality. In this case, service stations use the cheapest components and simple technical solutions. The danger of this segment is that it grows, engulfing the second segment. Now this segment is quite numerous and tends to grow.
- Installation of anti-theft systems. The segment is characterized by moderate intensity competition. The main thing in this struggle is the use of more complex and expensive components and their high-quality and competent installation. The segment is small and tends to decrease as a potential customer moves to the first segment.
- Auto glass tinting. In this segment, there have been significant changes recently, which led to a significant increase in competition. The main weapon in this fight is price reduction. Its physical

size is stable, despite the ban on tinting, but due to the significant growth of service stations, these works offer, its real volume has decreased.

- Installation of cheap speaker systems. The segment is very voluminous in terms of quantity, but it is not financially attractive due to the size of the supply in it and its low cost. As a rule, the simplest technical solutions are used with a minimum amount of time.
- Installation of average cost and expensive acoustic systems, TV systems, interior sound insulation. The segment is characterized by competition between medium and low weight systems. Requires competent specialists and rather expensive techniques. The segment is currently small, but it has growth prospects and an attractive unit cost.
- Installation of air conditioners, heaters, and hatches. The segment is insignificant, the works are artificial. We need competent specialists with special knowledge and equipment. There is no competition now.
- Repair work. The repair work is being carried out in the lower and, at best, middle price range. There is a fairly strong competition in this market segment.

#### 4.2.2.1 Competitor analysis

At the service market, the demand on our products will increase every year. But high demand is not everything, it is also necessary to look at the competition, which will also grow in the area with growing demand.

In the selected district that is called Teremky, there are several stations. I analyze these stations to find out if they are competitors to me.

The first station, which is located at a distance of 1,5 km from my location, is also a private station of the same format as I am planning to open, but they are engaged in servicing only one BMW brand, so I do not consider them as my competitors, since I specialize on a wide range of services for all machines.

The second station is located in the immediate vicinity of me. It is the official station of JAGUAR LAND ROVER, there is a salon for sales of new cars, as well as a service for their maintenance. They also cannot be considered as direct competitors, since they have very high prices for spare parts, only original spare parts, the cost of work corresponds to the official station and only new

cars that are bought from their showroom and which are under warranty are going to them. Such cars will not go to me, and the cars that I am counting on will not go there.

The next possible competitor, which is located within a radius of 5 km, is small garages where 1 mechanic works, the quality of work is very low, spare parts are not certified, are often falsified, work without state registration, do not pay taxes, as a result, if they do the work poorly, then the owner will not be able to make any claims, because they do not issue any checks, and it is impossible to prove that the work was done in principle, so only very poor people who want to save money and that are ready to risk their vehicle will go to them. But I'm counting on wealthier people.

There is also another technical station in the area under consideration, but it specializes exclusively in the repair and sale of exhaust systems and repair of generators for all brands of cars. Therefore, I also do not consider it as a direct competitor.

The data obtained will help determine the types of services that our service station will provide.

As a result of the analysis of the competitive environment, it can be concluded that firms providing similar services have a stable position in the market. Their advantage is an already formed customer base and experience, and their weak side is their focus on one car brand. The weak side of competitors (small garages) in the market for this type of service, which will allow us to compete and increase market share in the future, is the low level of service quality and low speed of service provision. Also, due to the fact that competitors have been providing services for a long time, they work on outdated equipment that requires updating and does not allow receiving a full range of diagnostic services.

Having considered the market research data, it is necessary to pay attention to the formation of such competitive advantages: the speed of customer service, the quality-of-service provision, the formation of stable distribution channels, the introduction of an optimal pricing policy. The market entry process is gradual. In the first quarter, the company will provide 25% of services in connection with the development of the market. In the 2<sup>nd</sup> and 3<sup>rd</sup> quarters, the sales of services will grow due to the fact, that the company will have a good reputation in the market.

120% PD 100% 80% 80% 80% 40% 20% 80% 1 2 3 4 5 6 7 8 9

Figure 5 Rate of change in the volumes of expected sales services by quarters, % to capacity

#### Source: Author's creation

Starting from the 7<sup>th</sup> quarter, a slight decline in sales of services is possible due to the entry of new companies into the market and the measures of competitors aimed at improving competitive advantages.

Quarters

#### 4.3 Market analysis

#### 4.3.1 Marketing plan

Sales and Service Policy

The automotive service marketing strategy is based on providing maximum benefits to consumers. Among the main benefits to consumers are the following:

- high quality of the services provided thanks to qualified personnel
- speed of response and order fulfillment due to a well-established system of distribution of duties and services
- convenience for the client in purchasing the service is provided due to the developed distribution channels
- extending the service life of the equipment through regular maintenance
- prevention of downtime due to continuous monitoring, prevention, and prompt troubleshooting

- average prices on the market for similar services are combined with high quality of services provided.

To strengthen the company's position in the market and increase the competitiveness of services, it is planned to carry out activities in the following areas:

- quality control of the services provided by establishing feedback with clients (questionnaires, guarantees)
- expanding the range of its services, namely: implementation of the development of Websites and the provision of consulting and intermediary assistance in the acquisition of components and their provision
- formation of a base of regular customers due to the conclusion of contracts for regular maintenance of automotive equipment and technical support.

Firstly, car service should focus efforts on providing services to corporate clients, and secondly to individual consumers. This orientation is due to the possibility of regular cooperation with enterprises and organizations, which will ensure a constant demand for the service. In addition, it avoids seasonality and provides a wider range of services. Serving individual customers tends to seasonality, namely: a slight decrease in demand in the summer and an increase in the autumn (Volgin 2013). To compensate for peak voltages, it is planned to attract additional (non-staff) workers - senior students of automotive faculties.

Consumers of car service are the most sensitive to the quality of services because the efficiency of the car equipment directly depends on it. At the initial stage, the service plans to provide services for the maintenance of automotive equipment in the local market of services of the city thanks to the established head office. Soon, after development, the enterprise seeks to expand its activities in the regional centers of the Kiev region, where the demand for these services is not fully satisfied.

#### *Price setting policy*

At the initial stage of market development, which will last about 3 months, the company plans to establish discounts to attract the attention of customers. The price will be lower for services by about 10% than that of the main competitors. It is impractical to establish large discounts, since prices should be average in the market, the quality of services is a competitive advantage. If the

initial discounts are large, then the future significant price increase to equalize it with major competitors could lead to a loss of customer confidence.

The price will ensure that the enterprise reaches the break-even point and receives the minimum profit for the return on investment. Thus, the car service seeks to attract and attract the attention of potential customers of competitors. By increasing the number of consumers, the company will increase income from the sale of the services provided and thereby increase the amount of profit, than using a high price for services. In the next quarters of activity, the company will gradually increase the price of services, compare it with competitors, while the risk of losing customers will be minimal, since consumers are the most sensitive to quality.

#### Distribution methods and channels

The distribution channel is the path along which services and work performed move from producers to consumers.

Automotive service plans to provide services on its own directly on the territory of the service (delivery by the client or by the service) and equipment maintenance directly at the place of its operation. Such channels for promoting the service to the consumer will provide maximum convenience for the client and thereby increase the volume of services.

#### Advertising and promotion policy of services

For the development of the company and increase in sales of car service services, it is necessary to constantly inform customers about this. An enterprise entering the market must make itself known to consumers.

Taking the specifics of the services into account the following advertising means will be used:

- **radio** provides a high result at an average cost. The advantage is the mass character and average cost, the disadvantage is the perception only by ear and the short duration of the action
- **advertising leaflets** low cost with an average effect. Advantages flexibility and timeliness, low cost, focus on the target audience; disadvantages creative limitations, short life span
- **Internet advertising** insignificant expenses, but high result. Advantage focus on the target audience; disadvantage negative attitude towards Internet advertising among users due to a large amount of "spam".

The budget for the advertising campaign during the period of development in the service market is 1 000 UAH per month.

Also, among the means of promoting services, we can single out cooperation with stores of auto parts and components that do not have centers for repair and maintenance of equipment. Such cooperation will be mutually beneficial since it will attract customers both to the service and to the store. The increase in sales volumes will ensure the provision of services by the complexity and simple opportunity of purchase.

#### After-sales service and guarantees

Using the services of a car service, each client is provided with a warranty card, which indicates the main details: the date of work, the name of the services, spare parts that have been replaced and the warranty period provided for each type of service. In the event of a breakdown or poor-quality work within 30 days, the service will repair the subject or replace it with new parts.

#### 4.3.2 SWOT-analysis

During the SWOT analysis, all factors that affect production are divided into four groups (Kozlova 2013).

According to the SWOT analysis, the owner of the planned service station "Mriya" work a closer look at how the business will work before opening it. The owner's task is to focus on the strengths, expand the capabilities of the car station, thereby suppress weaknesses and avoid threats.

Collecting all the data together will make possibility to understand how to minimize damage from negative aspects, assess opportunities for growth.

Table 1 SWOT-analysis of car service "Mriya"

Strengths	Weaknesses
High quality of services	Poor organization of production and
2. Skilled workers	management
3. Warm atmosphere in the team	2. Limited space
4. Territorial location	3. Not attractive external and internal
5. Range of services provided	appearance of the room
6. Warranty obligations to the client	4. Deficit of working capital
7. Age of workers	5. Non-interchangeability of workers
8. The level of technology	6. High cost of services
9. Presentation of the work performed	7. Specific type of activity
Opportunities	Threats
1. Low inflation, stable and high	1. Growth in the number of
exchange rate of the hryvnia against	undergrounds, unregistered
the US dollar, and, as a result, the	competitors
creation of a relatively favourable	2. Lack of qualified personnel
situation for the development of	3. High taxes
production	4. Clients get used to the low prices
2. Settlements with consumers are	offered in garages
carried out in cash	5. The danger of powerful financial
3. Possibility of changing the legal status	groups entering the regional markets
of a small business	
4. Availability of services that are not	
performed by competitors	
5. The ability to diversify the activities	
of the service station	

Source: Author's creation

So, the analysis of the internal environment has shown that the organization has more advantages than the negative factors. After identifying the strengths and weaknesses of the service station, as well as threats and opportunities, we establish links between them. Now we can identify the main strategic directions for improving the company's position in the near future:

- 1) Improving reputation.
- 2) Make high quality work.
- 3) Collect own customer base.
- 4) Professional development of employees.

#### 4.3.3 PEST-analysis

In the PEST-analysis table were included the main factors for each of the four groups: political, economic, social, and technological factors. The PEST-analysis shows which factors can influence on car service station attendance, the number of services provided, the sale of types of services and, accordingly, the profit of the car station "Mriya" in the long-term.

Let's consider a PEST analysis of our future company.

Table 2 PEST-analysis of car service "Mriya"

	Political		Economic
1.	Government stability	1.	The exchange rate of the national
2.	Absence of changes in legislation		currency is rather unstable
	concerning the activities of companies	2.	The inflation rate is regulated by the
	of this profile		state and is at an acceptable level
3.	Lack of tough government influence	3.	Unemployment is still high and
	on the activities of car service station		growing. In the second quarter of
4.	Lack of government regulation of		2020, the unemployment rate
	competition in the industry		increased by 1,3% and amounted to
5.	Adoption of laws to reduce customs		9,9%, which is 1.7 million people
	duties when importing cars, thereby	4.	Energy prices are stable and do not
	increasing the total vehicle fleet in the		change significantly
	country	5.	Quite a large average age of cars: over
			16 years
	Social		Technological
			reemiological
1.	Demographic changes	1.	The development of technology in the
1.	Demographic changes With the growth of the working age		<u> </u>
1.			The development of technology in the
1.	With the growth of the working age		The development of technology in the industry has greatly increased in
1.	With the growth of the working age population - have a positive effect on		The development of technology in the industry has greatly increased in recent years
1.	With the growth of the working age population - have a positive effect on the industry, since the demand for auto	2.	The development of technology in the industry has greatly increased in recent years In 2019, more than 45 new car models
1.	With the growth of the working age population - have a positive effect on the industry, since the demand for auto goods and services is increasing, and	2.	The development of technology in the industry has greatly increased in recent years In 2019, more than 45 new car models entered the market in Ukraine The emergence of new products. For example, a system called
	With the growth of the working age population - have a positive effect on the industry, since the demand for auto goods and services is increasing, and with a decrease, negatively  The population is quite active in purchasing cars. According to official	2.	The development of technology in the industry has greatly increased in recent years In 2019, more than 45 new car models entered the market in Ukraine The emergence of new products. For example, a system called "Autointelligence", which is a
	With the growth of the working age population - have a positive effect on the industry, since the demand for auto goods and services is increasing, and with a decrease, negatively  The population is quite active in purchasing cars. According to official data, the car fleet in Ukraine at the	2.	The development of technology in the industry has greatly increased in recent years In 2019, more than 45 new car models entered the market in Ukraine The emergence of new products. For example, a system called "Autointelligence", which is a specialized program for accounting
	With the growth of the working age population - have a positive effect on the industry, since the demand for auto goods and services is increasing, and with a decrease, negatively  The population is quite active in purchasing cars. According to official	2.	The development of technology in the industry has greatly increased in recent years In 2019, more than 45 new car models entered the market in Ukraine The emergence of new products. For example, a system called "Autointelligence", which is a
	With the growth of the working age population - have a positive effect on the industry, since the demand for auto goods and services is increasing, and with a decrease, negatively  The population is quite active in purchasing cars. According to official data, the car fleet in Ukraine at the	2.	The development of technology in the industry has greatly increased in recent years In 2019, more than 45 new car models entered the market in Ukraine The emergence of new products. For example, a system called "Autointelligence", which is a specialized program for accounting
	With the growth of the working age population - have a positive effect on the industry, since the demand for auto goods and services is increasing, and with a decrease, negatively  The population is quite active in purchasing cars. According to official data, the car fleet in Ukraine at the beginning of 2020 amounted to 6 566	2.	The development of technology in the industry has greatly increased in recent years In 2019, more than 45 new car models entered the market in Ukraine The emergence of new products. For example, a system called "Autointelligence", which is a specialized program for accounting and sales of auto parts for shops and

Source: Author's creation

Based on the conducted PEST analysis, we see what the main factors, in my opinion, can affect the operation of our enterprise in future periods (3-5 years).

# 4.4 Production plan

### 4.4.1 Range of services

First of all, in order to plan the organization of the work of our enterprise, it is necessary to determine the range of services that will be provided by the car service "Mriya". Having studied the proposals of competitors and the demand at the market, we have identified the types of work that we will be engaged in.

- repair work
- installation of a cheap alarm
- installation of anti-theft systems
- car glass tinting
- installation of cheap acoustic systems
- installation of air conditioners, heaters, and hatches

#### 4.4.2 Location

The enterprise will be at the address: Ukraine, Kiev, Bolshaya Okruzhnaya street, 1 b. The location was chosen at the junction of the two largest young districts of Kiev. The building is located in close proximity to the main highway - the Great Ring Road in Kiev.

#### 4.4.3 Premise

This building already has a car wash and tire fitting. The owner of the building rents out an area of 120 m<sup>2</sup>. It is the optimal area for placing a production area with the necessary equipment, the director's office, a small storage room and a bathroom.

The rental price will be 20 000 UAH. To avoid risks, it is necessary to conclude a long-term lease with a fixed price, without the right to change the price for 3 years.

The following Table 3 shows the dimensions of each zone in the car service "Mriya". The layout of the premises is represented in Appendix 3 of this bachelor work. Numbers in the table correspond to the numbers on the plan.

Table 3 Sizes of zones in car service "Mriya"

№	Name of zone	Occupied area, m <sup>2</sup>
1.	Production area	104
2.	Office of the director and accountant	10
3.	Consumables warehouse	4,5
4.	Bathroom	1,5
	Total area of car service	120

## 4.4.4 Equipment and depreciation

# Equipment

A small cosmetic repair will be made in the room, for which 23 900 UAH is provided. The room is equipped with all the necessary communications - electricity, water supply, sewerage, and ventilation. The list of required equipment is given in Table 4.

Table 4 Equipment for a car service

Name of equipment	Price,	Amount,	Cost,
	UAH	pcs.	UAH
Multibrand auto scanner for X-431 PRO	29 300	1	29 300
LAUNCH			
Fuel pressure measuring set Profline 31011	2 245	1	2 245
Stand for diagnostics and cleaning of Sprint6K	19 600	1	19 600
+ SNG injectors			
Lift two-post UNIT U-40CS	34 100	2	68 200
Hydraulic sliding jack 3 t fj05	2 687	1	2 687
Trolley on wheels Yato YT-55300 with 177	15 500	2	31 000
tools			
Holzmann WT06 workbench	3 760	2	7 520
Installation for vacuum oil change G.I.KRAFT.	5 054	1	5 054
Hydraulic sliding crane for engine	4 599	1	4 599
INTERTOOL GT0808			4 377
Industrial hair dryer DWT HLP16-500	590	1	590
In total			170 795

## Depreciation

According to the Tax Code of Ukraine (TCU), adopted by the Verkhovna Rada of Ukraine on December 10, 2010, property with a useful life of 2 to 20 years is depreciated.

In accordance with the Classifier of Fixed Assets (DK 013-97):

- automotive equipment belongs to depreciation group 4 "Machinery and equipment", according to Art. 145.1 of TCU, the minimum allowable amortization period for this group is 5 years.
- devices, inventory, and furniture belong to depreciation group 6 "Tools, devices, inventory (furniture)", according to Art. 145.1 TCU, the minimum allowable amortization period is 4 years.
  - Calculation of depreciation by the straight-line depreciation method:

$$Annual\ depreciation\ expense = \frac{\text{Cost of fixed asset} - \text{Residual value}}{\textit{Useful life of asset}} \tag{7}$$

Monthly depreciation expense = 
$$\frac{Annual\ depreciation\ amount}{12}$$
 (8)

*Residual value* is equal to zero when the management of the enterprise intends to use the asset before the end of its physical term.

## Equipment:

Annual depreciation expense = 
$$\frac{170795}{5}$$
 = 34 159 UAH

Monthly depreciation expense 
$$=$$
  $\frac{34159}{12} = 2847 \text{ UAH}$ 

#### Furniture:

Annual depreciation expense 
$$=\frac{26400}{45} = 6600 \text{ UAH}$$

Monthly depreciation expense = 
$$\frac{6600}{12}$$
 = 550 UAH

Table 5 Depreciation, straight-line method

The name of depreciable object	Total cost, UAH	Useful life, years	The annual amount of depreciation deductions, UAH	Amount of depreciation per month, UAH
Autotechnical equipment	170 795	5	34 159	2 847
Furniture	26 400	4	6 600	550
Total	197 195		40 759	3 397

#### 4.4.5 Starting set of consumables

Car service requires components and consumables for car repairs. Due to the fact that the cases of repair are different, as well as because of the different wishes of customers regarding the technical requirements for cars, we need our own original spare parts, and buying different types at once in a warehouse requires significant costs. Therefore, it is more profitable to conclude a contract for the supply of spare parts with the enterprises "ELIT-Ukraine" and "EXIST.UA", which are engaged in the wholesale and retail trade of auto parts for automotive equipment.

It is beneficial for a car service to cooperate with such suppliers, for the reason:

- working capital is used more rationally
- all necessary parts and components will be delivered as soon as possible
- car service saves on warehouse space
- suppliers can provide the necessary components by 90%

But for smooth operation and ensuring the speed of service provision, it is necessary to create a 10% supply of consumables, which must always be available.

It should be noted that the cost of the service does not include the cost of installed spare parts. Components are paid by the client additionally at the suppliers' prices.

Based on the range of services provided by the car service, we can calculate to determine the required supply of consumables.

Table 6 Required 1st quarterly supply of consumables

Name of materials	Units	Monthly	Stock for	-	Cost per 3 month,
1 (0.110 01 11.0001 1.001	Cinco	requirement	3 months	UAH	UAH
Lubricants (liquid)	1	4	12	312,5	3 750
Car cleaning products	kits	12	36	83,3	3 000
Soldering materials	g	120	360	7,0	2 500
Lubricants (solid)	kg	8	24	116,7	2 800
Cleaning products	1	7	21	140,48	2 950
Total					15 000

In the process of activity, the volumes of required stocks will be adjusted depending on changes in demand in the context of the range of services by car service.

# 4.5 Organizational plan

#### 4.5.1 Form of business organization

The activities of the car service will be organized in the form of an Individual Proprietor (IP) due to the possibility of choosing a simplified taxation system. The business owner will be registered with the tax office as a legal entity. No license is required for this type of activity.

The state registration cost of an enterprise is 2 500 UAH.

#### 4.5.2 Taxes

#### **❖** Single tax

The simplified taxation system was chosen as the form of taxation due to the lowest costs. Simplified taxation system is a special tax regime introduced to reduce the tax burden and stimulate small businesses in Ukraine. Provides for the payment of a single flat tax.

In accordance with article 291 of the TCU car service "Mriya" belongs to the 2nd group of taxpayers: individuals - entrepreneurs; income limit of 5 000 000 UAH per year; maximum 10 employees.

The rate of the Single Tax (ST) for group 2 is 20% of the minimum wage in Ukraine.

## Calculation of ST for car service station "Mriya"

$$ST = Minimum \ wage \times 20\%$$
 (9)

Minimum wage is 6 000 UAH.

So, the monthly payment is:

$$6000 \times 20\% = 1200 \text{ UAH}$$

## **❖** Insurance premium tax

According to the Law of Ukraine "On the collection and accounting of a single contribution for compulsory state social insurance", the Unified Social Contribution (ESC) is 22% of the gross salary of each employee. ESC - consolidated insurance premium. ESCs are paid by the employer for each employee.

## Military gathering

The military tax is a tax introduced in 2014 to finance the Armed Forces of Ukraine. The military duty rate is 1,5% of gross wages and is paid by the workers themselves.

#### Personal income tax

Individuals tax in Ukraine is paid by employees independently and in accordance with Article 167 of the Tax Code of Ukraine and it is 18% of gross wages.

#### 4.5.3 Staff

Automotive service personnel play a decisive role in the efficiency of the enterprise, since only highly qualified employees can ensure the required level of quality of service. The selection of personnel should be carried out on a competitive basis. The qualifications of employees must be confirmed by an appropriate educational diploma.

**Table 7 List of enterprise personnel** 

Position	Number of people
Director	1
Accountant cashier	1
Vehicle service specialists	2
Cleaner	1

Based on the average assortment of services that can be sold in a month, for the normal functioning of the enterprise, a required composition of personnel is shown in Table 7 above. After determining the composition of the staff, we can calculate personnel costs. It is shown in Table 8.

**Table 8 Personnel costs** 

Position	Gross salary per one, UAH	The number of employees	Total Gross Salary, UAH	Personal income tax, %	Military tax, %	Total net salary, UAH	Unified social contribution (22%), UAH
Director	35 000	1	35 000	18%	1,5%	28 175	7 700
Accountant	12 000	1	12 000	18%	1,5%	9 660	2 640
cashier							
Vehicle service	15 000	2	30 000	18%	1,5%	24 150	6 600
specialists							
Cleaner	6 000	1	6 000	18%	1,5%	4 830	1 320
Total	68 000		83 000			66 815	18 260
Salary fund							101 260

Source: Author's creation

# 4.6 Financial part

The financial part is the most important part of a business plan. We will be able to find out if our business will be profitable and how much.

## Initial investment

Having calculated all the costs, we can determine the required amount of initial investment to open this enterprise. Table 9 shows the cost required to open the car service station "Mriya".

Table 9 The cost needed for opening a car service station "Mriya"

Name	Cost, UAH
Technical equipment cost	170 795
Premises rental cost (for 3 months)	60 000
The state registration	2 500
Furniture	26 400
Marketing (advertising, radio, internet, etc.) (for 3 months)	3 000
Equipment installation costs	13 405
Premises renovation costs	23 900
Consumables costs (for 3 months)	15 000
Total	315 000

The initial amount of money for starting a business I will take from my father. The investment is financed by our own family capital. Thus, I have to open an IP. The amount my dad gives me to open a business, considering the cost needed for opening a car service station is 315 000 UAH.

#### Fixed costs

Table 10 shows the calculation of the fixed costs of the car service "Mriya" per month.

Table 10 Calculation of fixed costs per month

№	Name of fixed costs	Costs per month,
		UAH
1.	Rent	20 000
2.	Salary fund:	101 260
2.1.	Gross salary	83 000
2.2.	Insurance premiums	18 260
4.	Single Tax	1 200
5.	The cost of bank services	450
6.	Depreciation	3 397
7.	Advertising	1 000
8.	Communication services and internet	550
9.	Other contingencies	3 045
	Total	130 902

Source: Author's creation

#### 4.6.1 Revenues

Let's determine the planned revenue.

Based on the market analysis, I plan that the cost of 1 labour-hour will be 500 UAH. The planned calculation of labour costs is given in Appendix 1 and Appendix 2. So, in the 1<sup>st</sup> quarter, the average number of labour-hours for two car service specialists will be approximately 4,3 labour-hours per day.

We can calculate the revenue for the quarter using the formula:

$$R = H \times D \times M \times C \tag{10}$$

Where

R - revenue during the period

H – average number of labour-hours per day

D - working days per month

M - number of months during the period

C - cost of one labour-hour

$$R(1st q) = 4.3 \times 24 \times 3 \times 500 = 154800$$

It turned out that in the 1<sup>st</sup> quarter the revenue will be approximately 155 000 UAH. Let's calculate the revenue for all periods the same way.

Table 11 Planned revenue for each period

	I q	II q	Шq	IV q	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year
Scope of work per day, LABOUR- HOUR	4,3	9,4	13,5	16,7	43,8	75	62,5
Revenue, UAH	155 000	337 500	487 500	600 000	1 575 000	2 700 000	2 250 000

Source: Author's creation

#### 4.6.2 NPV

Now it is necessary to calculate the net present value (NPV) of the project. This indicator will show the income that the project owner will receive during the planning period (3 years), having paid all operating costs, and settled with tax authorities and personnel (taking discounting into an account).

If NPV > 0, the project will bring a profit, and the higher level of it will be, the more profitable the initial investment in the business will be. Table 10 shows fixed costs, and Table 6 shows variable costs, which will grow with the growth of services provided, Table 11 shows the planned revenue. Based on these data, we can compile Table 12.

To calculate the data for Table 12 in addition to NPV formula (formula 1), we also use such formulas:

$$Gross Profit = Total Revenues - Costs$$
  $(11)$ 

$$Net Profit = Gross Profit - Taxes$$
 (12)

In our case, since the enterprise is on a simplified taxation system, the Single Tax is fixed and does not depend on revenues and is included in fixed costs. So, in Table 12 Gross Profit will equal to Net Profit.

$$CF = Total Receivables - Total Payables$$
 (13)

$$PVIF = \frac{1}{(1+r)^n} \tag{14}$$

Where

r - discount interest rate

n - number of the time period

$$DCF = CF \times PVIF \tag{15}$$

Table 12 Calculation of the NPV of the project, UAH

Indicators	0	I q	II q	III q	IV q	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year
Costs needed for opening	-315 000							
Total revenues		150 000	337 500	487 500	600 000	1 575 000	2 700 000	2 250 000
Fixed costs		392 706	392 706	392 706	392 706	1 570 824	1 570 824	1 570 824
Variable costs		15 000	27 500	34 700	42 300	119 500	139 200	123 700
Net profit (loss)		-257 706	-82 706	60 094	164 994	-115 324	989 976	555 476
Total Cash Flow (CF)	-315 000	-257 706	-82 706	60 094	164 994	-115 324	989 976	555 476
PVIF (r = 25%)	1	0,8	0,8	0,8	0,8	0,8	0,64	0,512
Discounted Cash Flow (DCF)	-315 000	-206 165	-66 165	48 078	131 995	-92 259	633 585	284 404
NPV								510 729

As a result of the calculation, it was determined that by the end of the 3<sup>rd</sup> year:

$$NPV = -92259,20 + 633584,64 + 284403,71 - 315000 = 510729 UAH$$

NPV > 0, that means the project is profitable.

## 4.6.3 Payback period

In accordance with the formula 2, we consider the following.

Payback Period = 
$$\frac{315000+92259,20}{633584.64}$$
 = 0,64 of the year

So, the Payback Period is 1 year and 7 months.

#### 4.6.4 BEP

Based on Table 12 and formulas 3,4,5 we can calculate the break-even point.

Total Revenue = 
$$1575000 + 2700000 + 2250000 = 6525000$$
 UAH

Variable Costs = 
$$119500 + 139200 + 123700 = 382400$$
 UAH

Margin income = 
$$6525000 - 382400 = 6142600$$
 UAH

Gross margin ratio = 
$$\frac{6142600}{6525000}$$
 = 0,94

Fixed costs (for 3 years) =  $1570824 \times 3 = 4712427$  UAH

BEP = 
$$\frac{4712427}{0.94}$$
 = 5 013 268 UAH

That is, upon reaching the proceeds in the amount of 5 013 268 UAH our business will pay off and cease to be unprofitable. The company will go to zero - still without profit, but already without loss.

#### 4.6.5 Profitability

#### ❖ Total profitability

For clarity, the total profitability of our company will be calculated using net profit and total costs (see formula 6).

Profitability is a number showing how much profit is received from each hryvnia (1 UAH) invested in business development. For a correct assessment of the company's profitability, it is necessary to analyse its indicators for different periods of time, in dynamics, and then compare them with each other.

Total profitability (1<sup>st</sup> year) = 
$$\frac{-115324}{1690324} \times 100\% = -7\%$$

Total profitability (2<sup>nd</sup> year) = 
$$\frac{989976}{1710024} \times 100\% = 58\%$$

Total profitability (3<sup>rd</sup> year) = 
$$\frac{555476}{1694524} \times 100\% = 33\%$$

As we can see from the calculations, in the first year our company we received a loss of UAH 0,07 for each 1 UAH invested.

In the second year, will make a profit of 0,58 UAH for each 1 UAH invested.

In the third year, will make a profit of 0,33 UAH for each 1 UAH invested.

## Personnel profitability

Every leader wants to know if their employees are performing well. We can find it out by calculating the profitability of the staff.

$$Personnel\ profitability = \frac{Net\ profit}{Number\ of\ personnel}$$
 (16)

Personnel profitability (1<sup>st</sup> year) = 
$$\frac{-115324}{5}$$
 = -23 065 UAH

Personnel profitability (2<sup>nd</sup> year) = 
$$\frac{989976}{5}$$
 = 197 995 UAH

Personnel profitability (3<sup>rd</sup> year) = 
$$\frac{555476}{5}$$
 = 111 095 UAH

After the calculations, we can see that in the first year, each employee led to a loss of 23 065 UAH.

In the second year, each employee will lead a profit of 197 995 UAH.

In the third year, each employee will lead a profit of 111 095 UAH.

Having calculated the profitability for these two indicators, we see that our business will be profitable.

## 4.7 Risk assessment

When creating a project for any business, it is necessary to pay considerable attention to the analysis of risks that may arise during activities and interfere with the achievement of the set goals. To avoid the unexpected onset of unfavorable situations, it is necessary to clearly understand all the possible risks of the car service activities. Given the specifics of the activities of the automotive service, it is possible to note the register of the main risks (Kozlova 2013).

Table 13 Register of potential activity risks

Risks	Type of risk	Causes of risks	Measures to minimize the risk
Growth in labour costs	Probable enough	Constant rise in minimum wages, trade union activity	Increasing labour productivity
Increase in rent	Probable enough	Inflation, property prices	Conclusion of long-term lease agreements
Reducing the amount of service	Probable	falling living standards	Increasing competitive advantages, maximum satisfaction of the target segment, diversification of services
Higher prices for materials	Probable	Inflation	Using cheaper materials
Deterioration of the economic situation	Probable a little	inconsistent reforms	Developing an action strategy in the face of a deteriorating economic situation
Decline in the quality of services	Probable a little	Supply of substandard materials, negligent attitude to the work of employees	employees, careful selection

Source: Author's creation

Now let's analyse the sensitivity of the response to changes in labour costs.

For example, we will take a change from baseline by 10%.

Table 14 Change in labour costs and fixed costs per year

Name	Basic level	+10% Salary fund	-10% Salary fund
Labour costs, UAH	1 215 120	1 336 632	1 093 608
Fixed costs, UAH	1 570 824	1 692 336	1 449 312

Now we calculate NPV with an increase (decrease) in labour costs by 10%. For the calculation, we use the data from Tables 6, 10, 14 and formulas 11-15, 1.

Table 15 Calculation of the NPV with an increase (decrease) in labour costs by 10%, UAH

	0	1 <sup>st</sup> year		2 <sup>nd</sup> year		3 <sup>rd</sup> year	
Indicators		+10% Salary fund	-10% Salary fund	+10% Salary fund	-10% Salary fund	+10% Salary fund	-10% Salary fund
Costs needed for opening	-315 000	Tunu	Tunu	Tunu	Tunu	Tunu	Tunu
Total revenues		1 575 000		2 700 000		2 250 000	
Fixed costs		1 692 336	1 449 312	1 692 336	1 449 312	1 692 336	1 449 312
Variable costs		119 500		139 200		123 700	
Net profit (loss)		-236 836	6 188	868 464	1 111 488	433 964	676 988
Total Cash Flow (CF)	-315 000	-236 836	6 188	868 464	1 111 488	433 964	676 988
PVIF (r = 25%)	1	0,8		0,64		0,512	
Discounted Cash Flow (DCF)	-315 000	-189 469	4 950	555 817	711 352	222 190	346 618
NPV						273 538	747 920

**Source: Author's creation** 

So, when labour costs are changing by 10%, we get 46% increase and decrease in NPV. At the same time, the project remains profitable.

# 5 Conclusion

The bachelor's work was written to develop a business plan for opening a car service with a threeyear planning, where the entire business concept described is based on the author's own ideas and research.

The purpose of the bachelor's work was to create a business plan for opening a new car service station "Mriya", in the city Kiev in Ukraine, with a certain range of services and affordable prices. For this, a study of the Ukrainian car market was conducted and also an analysis of internal and external factors that can affect the activities of the enterprise.

Despite the fact that the number of car services in Ukraine is increasing annually, this market has not yet reached its limit and remains quite attractive for novice businessmen.

To conquer the service station market, you need: high quality of work performed; high level of professionalism of employees; good condition of the place, equipment, and appearance of personnel. Analysis of the internal environment of a business revealed both its weaknesses and strengths. The strengths include high quality of services, qualified personnel, territorial location. The weaknesses are, for example, limited space.

Market analysis showed that the business has reserves of certain market measures that will increase the volume of services provided. Having considered the opportunities and threats, we can identify the main trends in business development to improve the company's position in the future by expanding the range of services (transportation of a broken car to a station; provision of a replacement car to the client during the repair; service of car air conditioners).

During the process of research, we obtained that we need 315 000 UAH for opening a car service station "Mriya". The calculations presented in the financial part show the expected financial results. The payback period of the project, considering the risks, is 1 year 7 months. As a result of the calculation, it was determined that by the end of the 3<sup>rd</sup> year NPV is equal to 510 729 UAH, that means the project is profitable. The break-even point will be reached when the revenue will be 5 013 268 UAH.

The total profitability of our project by the end of the third year will be 33%. As we can see from the calculations, in the first year our company we received a loss of UAH 0,07 for each 1 UAH invested. In the second year, will make a profit of 0,58 UAH for each 1 UAH invested. In the third

year, will make a profit of 0,33 UAH for each 1 UAH invested. We also got that in the first year, each employee led to a loss of 23 065 UAH. In the second year, each employee will lead a profit of 197 995 UAH. In the third year, each employee will lead a profit of 111 095 UAH.

In total, investing in the opening of the car service station "Mriya" in Kiev will be justified, the project will be profitable.

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**Appendix**Appendix 1 Price list by type of work in a car service

$N_{\underline{0}}$	TYPES OF WORK	UNITS;	LABOUR-HOUR	SERVICE COST;	
		LABOUR HOURS	COST; UAH	UAH	
1.	Replacing the brake pads (front)	1,4	500	700	
2.	Changing the engine oil	0,8	500	400	
3.	Replacing the ball joint	1,6	500	800	
4.	Replacing brake discs	2,6	500	1300	
5.	Replacing the air filter	0,4	500	200	
6.	Replacing steering tips	1,8	500	900	
7.	Replacing the silent blocks of the front arm	1,2-3,6	500	600-1800	
8.	Replacing the front crankshaft oil seal	2,4-3,9	500	1200-1950	
9.	Replacing the pump	3,2-5,8	500	1600-2900	
10.	Replacing the cooling pipes	1,1-4,8	500	450-2400	
11.	Replacing the cooling radiator	2,9-5,7	500	1450-2850	
12.	Replacing the front shock absorbers	3,5-6,3	500	1750-3150	
13.	Replacing the alternator belt with tension rollers	2,4-6,1	500	1200-3050	
14.	Replacing the valve cover gasket	1,8-3,2	500	900-1600	
15.	Replacing the clutch	6,8-11,4	500	3400-5700	
16.	Gearbox repair	7,9-17,5	500	3950-8750	
17.	Replacing the hub bearing (front)	2,4-5,7	500	1200-2850	
18.	Replacing rear suspension silent blocks	2,4-9,6	500	1200-4800	

19.	Replacing the low beam bulb	0,6-1,9	500	300-950
20.	Removal - installation of injectors (petrol engine)	2,0-5,9	500	1000-2950
21.	Cleaning nozzles at the stand	2,0-4,0	500	1000-2000
22.	Cleaning injectors (petrol, diesel) on the engine	4,2-10,5	500	2100-5250
23.	Removal - installation of the engine	11,5-27,8	500	5750-13900
24.	Engine repair	12,0-24,5	500	6000-12250
25.	Removal - installation of an automatic transmission	5,5-8,7	500	2750-4350
26.	Repair of an automatic transmission	10,5-30,0	500	5250-15000
27.	Replacing the fuel pump on a gasoline engine	5,5-12,5	500	2750-6250
28.	Replacing the high-pressure fuel pump on a diesel engine	10,5-25,0	500	5250-12500
29.	Replacing the fuel filter	1,3- 4,8	500	650-2400
30.	Alarm installation	6,0-15,5	500	3000-7750
31.	Installation of speaker systems	3,5-20,0	500	1750-10000
32.	Glass tinting	2,5-10,4	500	1250-5200
33.	Installation of air conditioner	12,0-35,0	500	6000-17500
34.	Installation of hatches	10,5-17,0	500	5250-8500
35	Installation of autonomous heaters	12,5-32,5	500	6250-16250

Appendix 2 Volume of services provided

Name	Units; Labour-hour								
	First year		Second year			Third year			
	day	month	year	day	month	year	day	month	year
First master (locksmith work)	5	120	1440	8	189	2268	7	158	1896
Second master (Locksmith and electrical work)	6	143	1710	11	261	3132	9	217	2604
Total:	11	263	3150	19	450	5400	16	375	4500

Appendix 3 The layout of the premises

