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Anti-crisis methods in Logistics

Case company: SIA “CheckPoint Transports”

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ABSTRACT

The logistics sector is important for the economy of absolutely any country. The overall development progress of all other areas depends on this sector. However, logistics companies face a lot of risks, as they are dependent on other economic parts. This thesis studies an anti-crisis management methods of a company in a turbulent economic situation to stabilize financial performance, as well as drawing up a general method that will combine the most important advantages of each.

The main aim of the work is to analyze and gain an understanding of the anti-crisis methods used in logistics companies in order to create a new method that will combine all the advantages.

Commission company is CheckPoint Transports, a company that specializes in the transportation of oversized goods, therefore it is dependent on various economic changes.

During this work, the mixed methods approach was used, which contains quantitative and qualitative methods, which allows to gain an understanding of the topic from all sides, as well as increase reliability.

During the study, online interviews were conducted, mainly with logistics companies that had experienced several crises. Also, due to the author's experience, an observation was conducted within the target company, which also increased the general understanding and need for this study. The analysis of digital values was carried out using content analysis, which made it possible to identify common patterns and dependencies, and with the help of content analysis, the analysis of secondary sources of information, such as books, existing studies and articles, was carried out.

As a result, a method was created that combines all the advantages and a minimum of negative parts of existing methods, as well as a closed-loop scheme that will be relevant for any company. A managerial implication and two scenarios for implementation in the company were developed.

Keywords: Logistics, Anticrisis, Outsourcing in Logistics.

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1 BACKGROUND

Nowadays, the logistics sector is one of the important economic parts. Since absolutely all companies that work with physical materials are vitally important to ensure transportation on time and in full. Now, logistics occupies one of the lines in the top of the most important types of activity. Since there is a large-scale global trend towards globalization, it is transportation that is reaching a more and more significant level. (Sezer & Abasiz 2017.)

Logistics companies are very dependent on external factors such as human resources, purchasing power, the general state of the economy of the country in which the company operates, as well as energy prices, since most of the company's expenses are fuel costs. The company cannot resist these fluctuations in any way but can try to implement something to reduce the impact of external factors on the company's performance. (Nascimento-e-Silva et al. 2019.)

During a turbulent economic situation, logistics companies experience difficulties in their work as traditional and efficient supply chains are disrupted, the transportation market is squeezed, as well as the overall purchasing power of both companies and individuals. It is anti-crisis management that allows companies to remain in operation, through the implementation of various methods and strategies for optimizing the work process. (Folinas & Aidonis 2012.)

This topic is relevant due to the cyclical nature of various crises, as well as general problems that a logistics company may experience due to incompetent management. Therefore, the methods considered can be used both in periods of economic turbulence and in calm times to increase the company's profitability. The author expects that in the course of the work and in the final chapter, relevant methods and ways to improve the internal state of the company will be presented.

1.1 Commissioner

The commissioner of this research is a logistics company from Latvia. This company is engaged in a narrow range of services and specializes in the transportation of oversized goods. The company is not large and does not occupy a large percentage of the freight market, but due to the duration of work for almost 30 years, it is widely known among companies that are engaged in the production and sale of any oversized goods. The author worked in this company during an internship, which allowed him to gain some knowledge and understanding of the work processes, as well as conduct various observations. Due to the narrow scope of activity, it is vital for the company to adapt to various crises, as well as apply and implement stabilization and anti-crisis methods. At the moment, due to the turbulent economic situation, the company's condition is not the best, and it is necessary to optimize all business processes as much as possible in order to remain on the market and not go bankrupt. Due to general crises and unstable economic conditions, turnover and scale have significantly fallen over the past 15 years. Now, the company has its own Facebook group, where all transportation cases are published, and there was also a website, with the provider of which there are problems. However, due to the large number of years on the market, the website or social networks are not the number 1 source of clients, since the work is mainly with regular customers.

The economic situation in Latvia over the past few years can be called stagnant because there have been significant geopolitical changes that have affected the economy. Since Latvia was previously a transshipment point between the East and the West, since 2022, the general state of logistics in this country has been deteriorating. (RTUcargo 2024.)

Due to the global disease covid, Latvia, as a country that was previously a point between Western and Eastern Europe, felt declining economic indicators, since the freight market fell, since then it has not been able to recover and therefore the overall dynamics from 2019 to 2024 in the freight market is negative. (Ibisworld 2024.) Also, due to the rise in energy prices in the period from 2019 to 2024, the total cost of transportation remains significantly higher than the pre-crisis state,

and according to experts, there are no prerequisites for a decrease in this indicator within 5 years. (Statista 2024.)

1.2 Aim and research questions

This work is an analysis of existing methods, as well as improvement within the framework of the topic of organizational stabilization impact on the enterprise in a turbulent economic situation. The study is aimed at studying current methods and how much they can improve the economic condition of the company during turbulence. From this, the research question is formed - "How can the effectiveness of organizational and stabilization impact on enterprises be increased in conditions of economic instability by optimizing existing methods and developing new ones?".

The aim of the study is to study and improve current methods of organizational and stabilization impact within the company. To fully achieve this goal, several research objectives will be used.

The very first of them is to analyze the theoretical foundations of organizational sustainability and crisis management.

The second is to systematize and classify existing methods of organizational stabilization influence, to get a visual understanding and idea of the principles and possible places where improvements can be made.

The third is to assess the applicability of different methods depending on the type of crisis, the size of the enterprise, and its location.

Fourth to analyze of the effectiveness of the factors influencing the method on the company.

The fifth and final research objective is the development of a model for combining various methods for the best efficiency, as well as adaptability to various types of crises.

The study is aimed at studying and analyzing the effectiveness of existing methods of organizational and stabilization impact on enterprises in the logistics sector in the context of a turbulent economic situation on the EU, USA and

Eastern European markets.

1.3 Conceptual framework

In this thesis, two directions will be considered and studied, logistics and anti-crisis. The logistics direction means general concepts, developments that exist now. The anti-crisis direction can be described as a synonym for anti-crisis management. It is combination that will allow to fully achieve research topic. The focus in searching for literature is primarily on fresh literature, except for cases of general concepts that have already been fully described by someone and could not change over time.

According to the search map keywords will be used to search for literature.

- 1) Logistics, ways to optimize a logistics company.
- 2) Anti-crisis management
- 3) Logistics chains
- 4) Financial stability of the company
- 5) Sustainable logistics

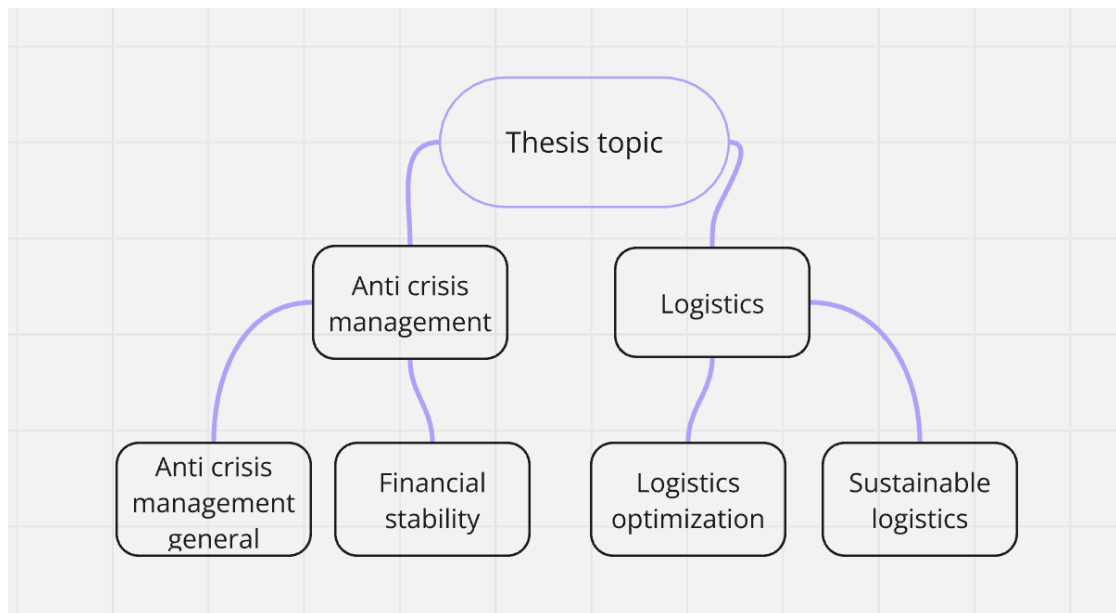


Figure 1. Thesis conceptual framework.

1.4 Methods

In this research, mixed method was used to obtaining information, it includes quantitative and qualitative method.

Qualitative methods are information obtained during interviews, surveys and observations, as well as literature. Quantitative is the process of analyzing existing digital values.

Also, during the work, primary and secondary data will be used.

This approach will allow to fully cover the topic and reveal all the issues without missing a single important detail. (Kabir 2016, 204-274.)

The methods that will be used during this work are conducting interviews, since the author has contact information for people who have been working in logistics for a long time and will help explain the processes and understand the issues. Due to work experience, observations were made, which allows to consider this method of obtaining information in demand. Observation is one of the simplest forms of obtaining information. The author conducted observation during his work in a logistics company, a mix of formal and informative observation was used. (Intrac 2017.)

However, to obtain any basic information or which cannot become outdated, literature will be used, which has its own value. Drawing up graphs and tables, as well as creating and finding any trends is important in this topic so that there are no uncovered subtopics. The content analysis method will also be used in this work. This method allows to measure how often and how much has been written about a particular topic (Columbia Mailman School of Public Health n.d.). This will help to understand which topics are the most relevant and require additional consideration, and which are not of primary importance.

1.5 Scope and limitations

This work focuses on the study of stabilization anti-crisis methods for logistics companies. The main emphasis is on the collaboration of all methods used today, and the creation of a method that will combine all the pros and have a minimum

of cons. Also, during this work, only the increase in the volume of transportation due to the increase in the number of categories transported will be considered.

During this work, the processes of reverse logistics, green logistics, as well as the implementation of various innovations, such as blockchain data on transportation, will not be considered. In addition, issues of complex personnel search, marketing strategies to increase the number of orders and optimize company expenses will not be considered.

2 OUTSOURCING AND ANTICRISIS MANAGEMENT IN LOGISTICS

2.1 Logistics and Outsourcing

Transportation is something that no economy in the world can do without. It is logistics companies that connect the buyer and the supplier, export and import goods. Thus, they support the performance of all participants in the country's business activity. According to Prieto, the definition of logistics activity can be called as follows - This is the movement of various physical products from the source of supply to the recipient. All stages of this movement are closely interconnected with each other and require managers to understand each stage of the chain. (Prieto 2021.)

Logistics is one of the most vulnerable parts of the economy. It is this business niche that is particularly dependent on the state of the country's economy. According to Meyer- Rühle et al. 2008, the growth of logistics companies' income for the period 2000-2006 is about 6 percent in the Baltics. When analyzing the state of GDP growth in countries over the same period, a similar trend is revealed that companies were able to grow by a similar number of percents as the country's GDP.

Logistics directly affect the macroeconomic and microeconomic indicators of the economy. Logistics companies can provide many jobs, and with a properly built supply chain, the efficiency indicators of all stages are improved, from production to the receipt of goods by customers. Therefore, it can be said that it is vital for

logistics companies to have tools to counter the turbulence of the economic situation. (Sezer & Abazis 2017.)

The strategies that are already being applied by companies not only in a turbulent economic situation, but also to permanent ones, include reducing costs by reducing the company's staff, reducing the services offered by types of transportation, however, this directly negatively affects the situation with current and potential customers, since if the company wants to expand, then entering new markets will no longer be easy, since the company will be known due to some direction. (Nascimento-e-Silva et al. 2019.)

Outsourcing in logistics is a powerful tool that allows companies to develop faster by allocating non-targeted tasks that will be handled by a third-party company, but this method will be relevant if the company is not large and there are no people on staff who are engaged in different areas. This will allow the company to save a significant portion of funds that can be directed to more important and primary tasks. (Luke 2024., Tagliapietra et al. 1999.)

An important factor is that a company that applies outsourcing in its system will be able to focus only on its focus, namely, cargo transportation, which will allow managers not to waste time analyzing secondary information, but only to obtain the basic information necessary for correct work. (DHL Freight Connection 2024.) As a result, this will lead to improved interaction with the client, the turnover of transportation over a period of time will increase and, accordingly, the financial indicators of the company (Somjai 2017).

However, this is not a solution to all problems, and in outsourcing, as in any partnership, there may be problems, namely, the outsourcing company may not have the skills necessary to solve the tasks set by the customer or perform them poorly, which will ultimately result in the need to correct and change everything, which is unacceptable for a logistics company. (Fadile et al. 2018.)

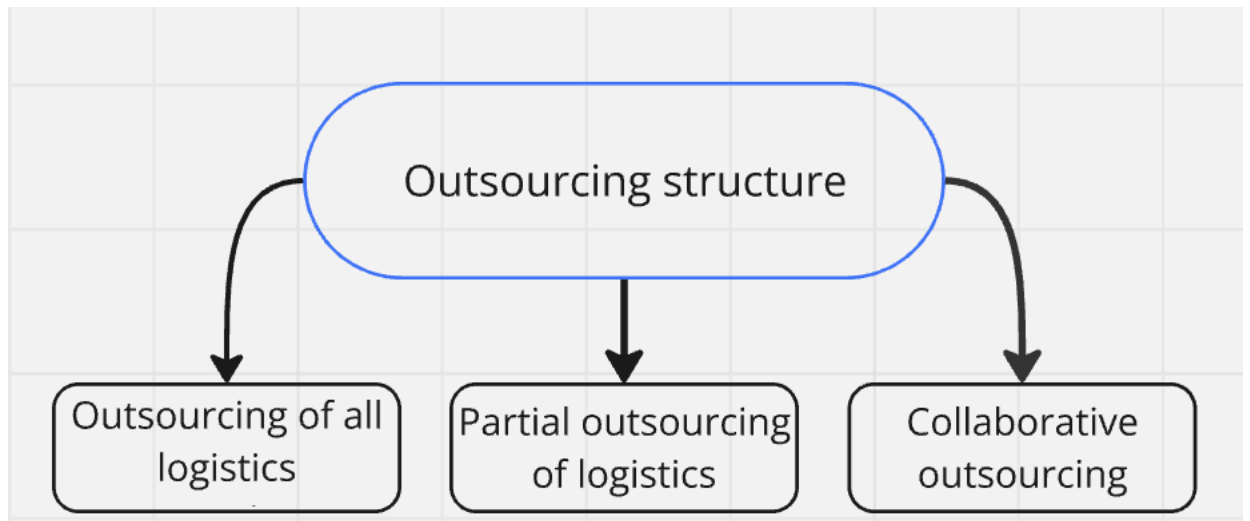


Figure 2. Types of outsourcing

This figure shows three types of outsourcing currently in use, which are effective, but the need for using one type or another differs significantly.

2.1.1 Outsourcing of all logistics processes

Outsourcing of all logistics allows the company to focus on the most important elements of doing business, even if we are talking about a company in the logistics segment. The correctness of this subsection is about additional areas of action, for example, when a company is engaged exclusively in the transportation of containers, but they receive a request for transportation by refrigerated truck, in order not to lose a client, they contact the company to which the transportation is outsourced.

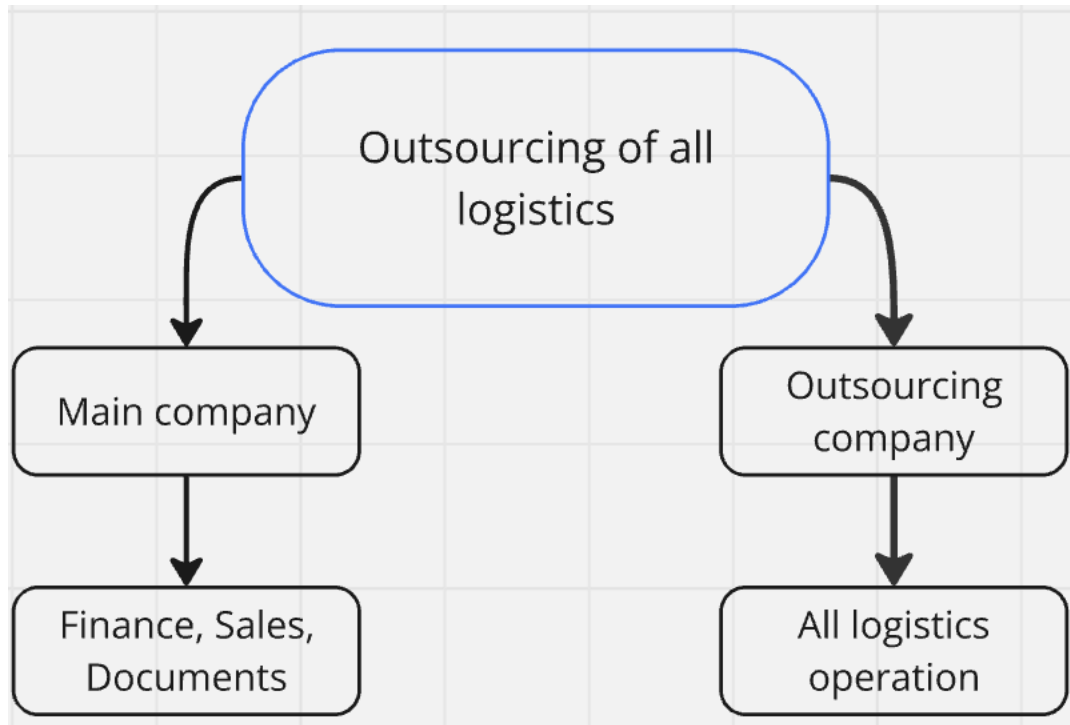


Figure 3. Outsourcing all logistics structure

Within the framework of this type of outsourcing, the most important points are to avoid risk when the company is a new player in the market of transportation of a different type, to which they have not previously had any relation.

In cases where there is a very large number of shipments, the company may not be able to cope with the flow and in order not to lose customers, they give requests for transportation to their outsourcers. (Tagliapietra et al. 1999 2-3.)

And the last point is the reduction of direct costs of the company, in cases of crises, it will be more profitable for the company to give certain orders to their outsourcers than to expand their capabilities, which can be a risky investment. (CWI Logistics 2024.); (Infosys BPM n.d.); (Lynch 2023.)

2.1.2 Partial outsourcing of logistics

This approach is one of the most widely used, as it allows outsourcing one of the parts of the logistics process to save money and opportunities. Companies

usually choose non-targeted areas, elements of which are outsourced.

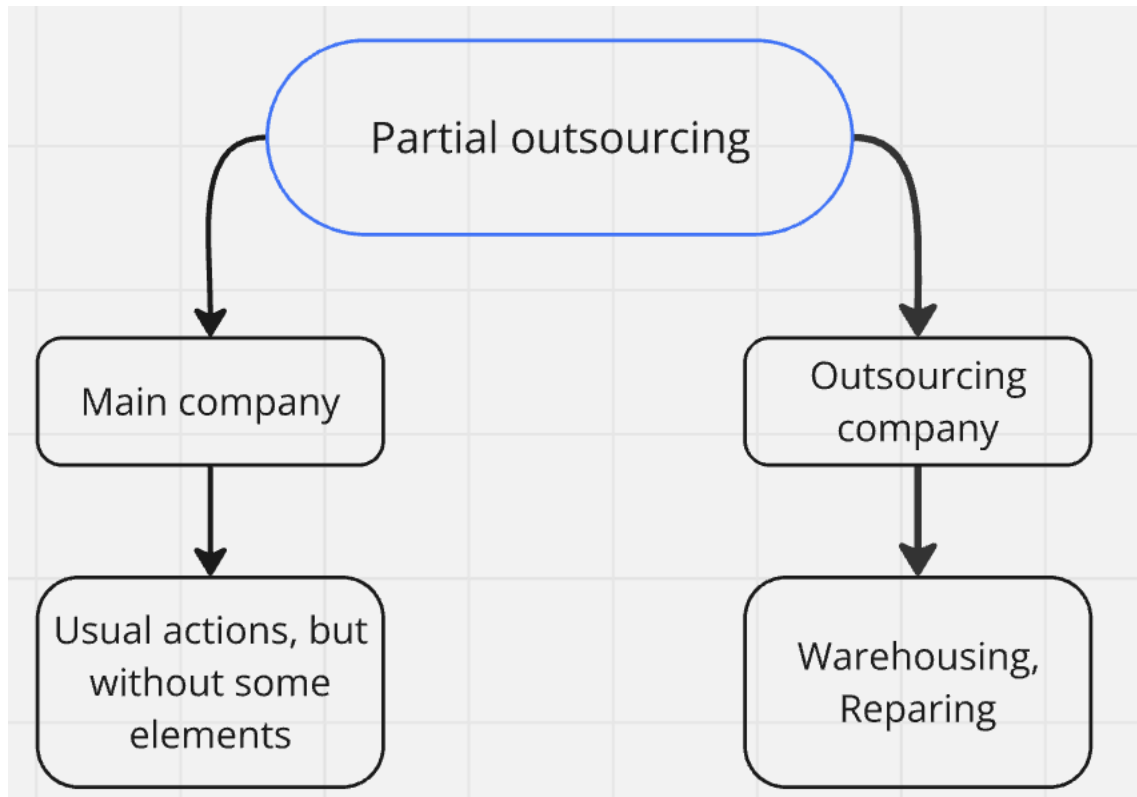


Figure 4. Partial outsourcing structure

This is done to achieve several points at once. The first of them is saving money, this is achieved by reducing the burden on companies, this can be either repair work, in the case of their own equipment, or storing goods in warehouses if it is necessary to assemble a full car, so as not to take up space in their warehouses. (Smart4W 2024.)

This approach allows a company that operates in one segment, in the event of a situation that has not been encountered before, to resolve with minimal losses, which also has a positive effect on the financial and stability of the company's situation (Pransanjit & Tarun 2021).

2.1.3 Collaborative outsourcing

Collaborative outsourcing is a process in which both companies closely cooperate in all key aspects, in other words, they are close partners who are open to each other (3PLlinks n.d.).

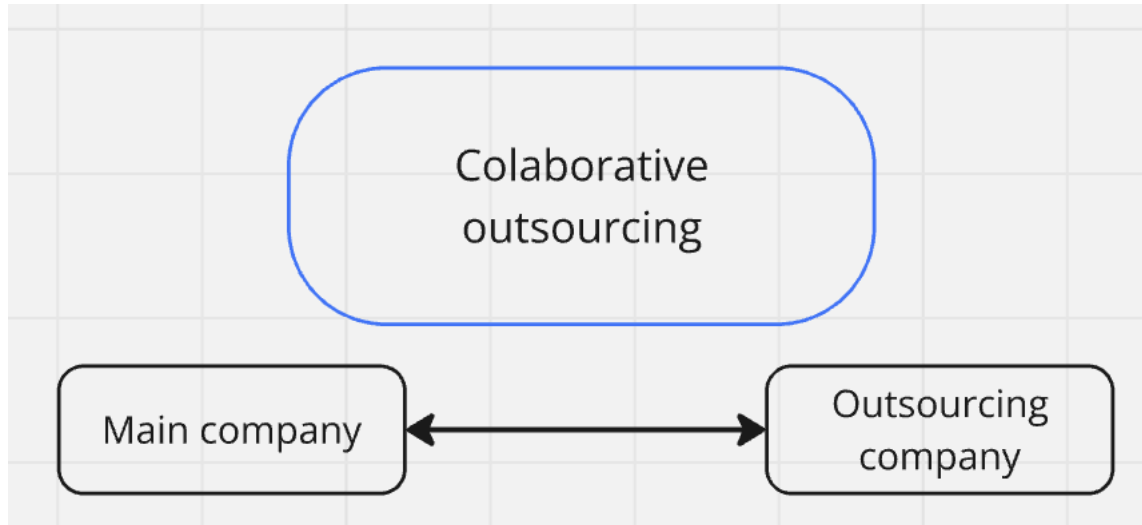


Figure 5. Collaborative outsourcing structure

In the logistics environment, this approach allows them to cover each other's needs, especially during peak periods when the workload is high or in the event of an emergency. In such a case, one company can turn to the other for help. Any number of outsourcers can be used in this type of outsourcing, since this approach assumes that the companies contribute their maximum expertise to a common goal. (Stefansson 2006.)

2.2 Anti-crisis management and outsourcing

Outsourcing is an important part of the financial component of the company, since sometimes it is better for the company to pay for the work done by an employee who belongs to another company. This will be an advantage for the company, since there will be no large operating costs for the employee. However, this only takes place if the tasks are not constant and are not very important for

the company, and outsourcing becomes more profitable than an in-house employee. (Rieg et al. 2022.) There is no such approach to anti-crisis actions that will be universal for every company and every situation. It is necessary to select its own actions and develop an anti-crisis plan for absolutely every case.

However, outsourcing as a concept in the anti-crisis system is very popular and relevant, as it allows companies to save a significant amount of money during crises.

Anti-crisis management is a process of restructuring within a company to counteract crises and various economic shocks. It is used for several stages of counteraction - analysis of external factors indicating the imminent onset of a recession and crisis, for immediate implementation of changes in work processes, mitigation of the consequences of the crises that have occurred so that the company can more easily survive the recessions, as well as the development and implementation of new, previously unused methods that will help the company quickly emerge from the crisis and reach a new level of development. The company needs to understand that there will be a crisis, some time before it affects it.

All anti-crisis management can be divided into four stages so that all actions occur sequentially.

The very first of them is the recognition and diagnosis of the crisis, which allows to get information about in the imminent onset of the crisis and begin preparation (Meiste & Jakstiene 2015, 3).

The next is the development of an anti-crisis plan in the company, which will allow to feel the effects of the crisis already prepared. This significantly increases the company's chances of survival. (Meiste & Jakstiene 2015, 2-3.)

The next stage is the application of the developed plan, namely the ability to quickly respond to the current situation so that the company enters the crisis and feels it as easily as possible. Also, this stage includes the coordination of all participants in the process in an accelerated manner so that everything is applied on time. (NSF 2020.)

The final stage and one of the most important is the recovery of the company after the crisis and training based on the past crisis since the crisis is a cyclical process. To further correct all the mistakes and problems made as a result of the past crisis. (Linkedin PR n.d.)

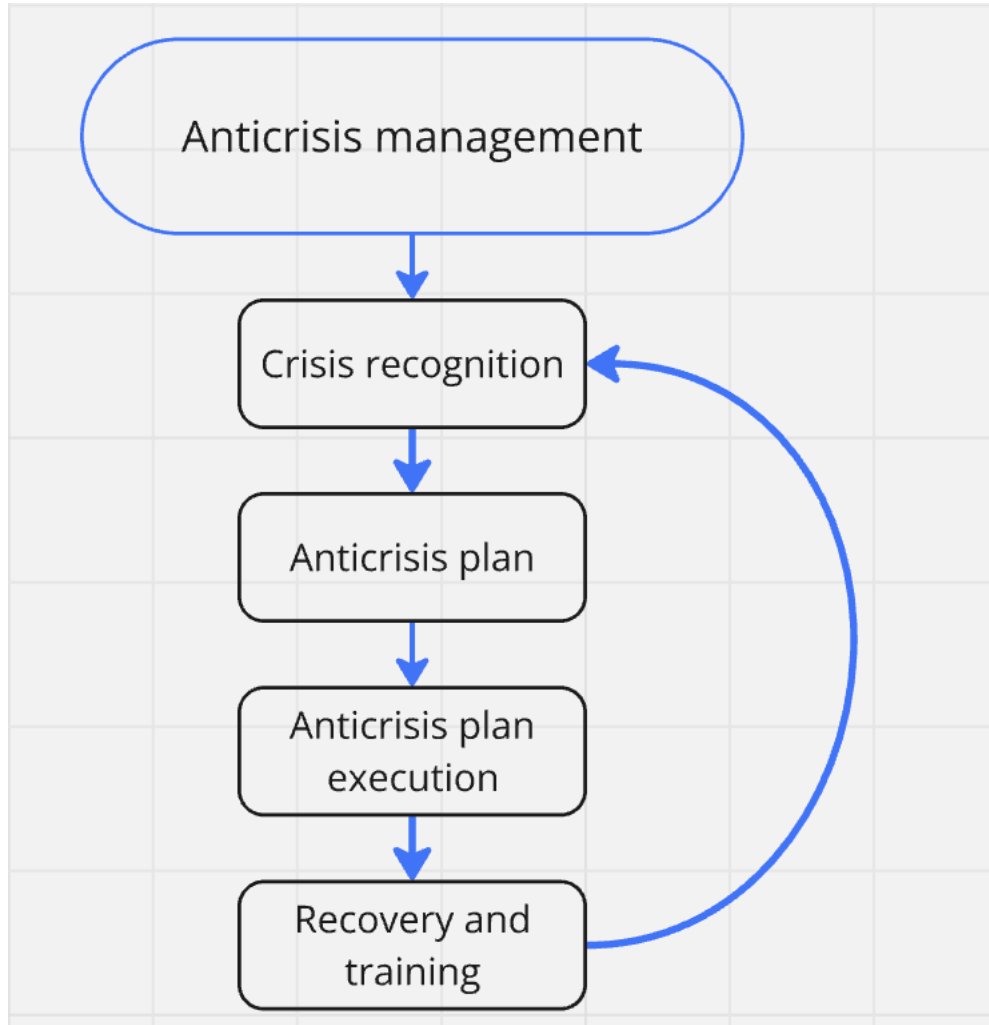


Figure 6. Anticrisis management structure

Crisis diagnostics is an important parameter for the completeness of the anti-crisis management system. This stage is the very first in anti-crisis management, and very important in the system. Since it is at this point that information appears around the type of crisis, whether it will be a financial downturn or problems from a technological point of view. There are also such types of crises when the company can do nothing, for example, an earthquake. (Nteka 2021.)

Crisis is a process in which the financial state declines, purchasing power decreases. A crisis cannot start with just a small problem, but if several problems appear that are correlated with each other, then the chance of occurrence increases sharply. (Nteka 2021, 65-68) At the moment, there are no studies that can specifically explain all the causes of crises, but there are basics that any instability appears as a result of two factors, macroeconomic imbalance and an external factor that appeared very suddenly. (Claessens & Kose 2013, 1-6.) (Zych et al. 2014.)

2.2.1 Anticrisis plan development

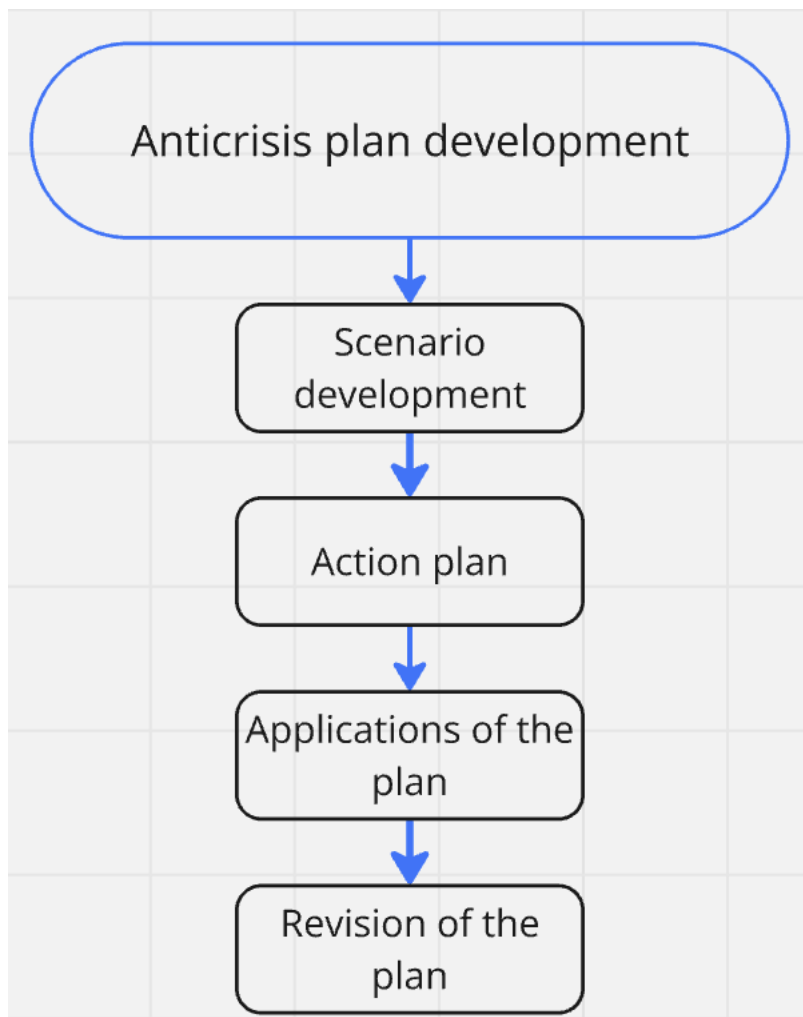


Figure 7. Anticrisis plan development structure

An anti-crisis plan is a list of specific actions that a company must take in the event of a crisis to stabilize operations. However, absolutely every plan is

developed for specific tasks and types of companies, but there are several general parameters that will be applicable to each organization.

An anti-crisis plan, from development to application, requires 4 steps.

The first of these is a risk analysis of how exactly a crisis can proceed and what is its beneficiary. Since the starting point of crises can vary, the company builds its actions from this. (Skomra 2017.)

The second step is to create scenarios for the company's work in a crisis situation. Managers need to calculate and understand what situations the company may have to get out of. These can be both positive scenarios, where the general "bottom" of the crisis will pass the company by and will not particularly affect it, and situations when the company finds itself in the most difficult crisis situation. (Königová 2010.)

This step is very important in the entire process of drawing up a plan, since the correctness of the drafting affects the correctness of the tasks and actions necessary to implement the plan. **The third step** of anti-crisis management is to develop a specific plan with an eye on the already created scenarios of crisis development and interaction within the company. During the development of the plan, the company needs to create and prepare an action procedure, namely, to create a responsibility matrix, that is, who will be responsible for what part of the application of the plan in practice, as well as what actions to take in the event of any emergency that may occur. Also, since a crisis is an ongoing phenomenon, it is necessary to think over the areas of responsibility, that is, what people will be responsible for what. And also to prepare probable replacements, in the event of someone being absent from the workplace. (Golikova n.d.) (Rittenberg & Watts 2024.)

Table 1. Responsible matrix example

Task	Responsible person	Lead time
Assessment of financial capabilities	Accountor	2 w.d
Increase in the rate per kilometer	Logistics manager	10w.d
Payment deferrals	Finance manager	5 w.d
Diversification of business focus	General manager	ASAP

Table 1 is an example of what a responsibility matrix looks like inside a small company. The first column indicates the necessary action, the second is the responsible person, that is, the one who will carry out the assignment, and the last one is the time allotted for the execution of a particular task in working days. The responsibility matrix is created by the organization's managers and is required for the correct allocation of a person and their task, as well as the allocated time for execution. In case of the need to apply an anti-crisis plan, it comes first in importance, since it specifies the necessary actions and the time frame in which any action must be done. This allows the plan to be applied exactly as it was intended. (Suhanda & Pratami 2021, 127-131.)

Usually, this approach uses 4 actors, but since the company is small, and the person supervising all departments will mainly be the director, it can also be considered correct (Baker 2023). As a result, when implementing this matrix into the plan, the efficiency and speed of implementation of various changes will increase, which will have a positive aspect in the stability of the company (Zagreb Global Group 2023).

The fourth step is to apply and test the plan in practice.

During this step, the company needs to implement the entire system that was developed during the first steps of the anti-crisis plan. From the correctness of the implementation of this step, namely, whether the predictions were formed correctly, whether the responsibility matrix was made correctly. With a correct implementation of the plan, if everything is done on time, then the probability of success is high. During the testing process, the company will begin to understand which moments were done correctly, and in which mistakes were made. Usually, at this point, the company will begin to understand which moments should be improved, which were correctly or incorrectly worked out. (Elst n.d.)

The last step of creating an anti-crisis plan is its analysis and revision. Usually, it is carried out either during the anti-crisis plan, if it does not give any significant results. This is required to analyze your mistakes and avoid mistakes and problems in the future.

The steps of creating scenarios and drawing up a specific plan are among the most important in the entire chain of anti-crisis management, it is on them that it will depend on how hard it will be for the company during the crisis or, on the contrary, how well they will guess the course of the crisis and will be able to take absolutely all the necessary methods in time to minimize losses (Tarasova et al. 2019).

What to learn after crisis

When analyzing situations that occurred during a crisis, it is worth relying only on actual events, that is, those that occurred. In a post-crisis state, any company should conduct a full analysis and find the weakest steps that were violated or required urgent intervention in them due to the crisis. Also, it is necessary to study the decisions made by the government of the country in which the company operates, since the impact of decisions directly depends on business activity at the time of the crisis, as well as on the ability to develop after it. (Stroiko & Kharus 2022.)

In the case when it is possible, it is necessary to learn from competitors on their mistakes and do something to avoid getting into the same situation, which can lead to big problems. Companies that actively study the actions of their competitors always remain in action and can quickly do something or change in their work.

It is also necessary to understand whether the partner companies are really such, namely, to analyze past requests within the companies and how one or another party responded to them (Olinda 2021). And of course, how correctly the anti-crisis strategy was drawn up, how much more difficult it became for the company to function during the crisis, and how much the anti-crisis plan was able to improve or stabilize the company (Kursun 2020).

3 DATA COLLECTION AND ANALYSIS

3.1 Data Collection process

The main objective of this work is to study and analyze existing methods of anti-crisis impact on logistics companies, with the aim of improvement. For a complete and detailed study and analysis, mixed methods were initially taken. Mixed method is the process of obtaining information from multiple sources using both quantitative and qualitative methods in a single study. (Doyle et. al. 2009.) Since this method allow to cover various aspects of the topic by combining qualitative and quantitative methods. Because of the mixed method, it becomes possible to understand the topic more deeply using different sources. (Dawadi et al. 2021.) Since the work used mixed methods, then as a division of the qualitative method, observation and interviews were used, and quantitative information - data obtained from the target company.

As a qualitative method for obtaining information, interviews were conducted with companies that have been working in the field of logistics for a long time. And an observation that was conducted by the author during the period of practice. The most significant part of qualitative methods is an interview, since it is information obtained directly from specialists working in this field.

Observation is a process of obtaining information through observation, which is carried out without intervention from the person who conducts it, that is, when things flow naturally. A mix of formal and informal observation was used in the process. The observation process is divided into two types, formal and informal. Formal implies an observation process that has an initial goal or question that needs to be revealed. Informal is an observation that was obtained by chance, without documentation. (Intrac 2017, 1-4.) At the beginning of the observation there were no precise questions that needed to be revealed, and they arose only in the process of work. Observation, began in 2023 and lasted 3 months and in 2024, when it lasted about 2 months, when the author did an internship in a logistics company. During this time, the author noticed some details, which later,

after consultation with company representatives, were more strongly disclosed, which made it possible to use this type of data collection in the research process. For the process of obtaining information through observation to be correct, it is necessary to consider three observation processes. The first of them is noticing something that attracts attention, then a deeper study to exclude subjectivity, and then a full understanding of the process and recording it. (Kumar 2023.)

The interview was conducted during October, the interviewer had the opportunity to choose the best option for communication. As a result, one direct call was made and 2 using online communication programs. Part of the interview was conducted in Russian, the results of which the author ultimately translated into English, and the interview with the target company was conducted in English. Each company with which the interview was conducted had a choice of which language was preferable.

To offer an interview, message was composed and sent to 5 logistics companies that met the criteria. However, only 3 responded, and each of them operates in different categories, which made the study more diverse. In the interview with the target company, as well as company number 3, the respondent was the company director, and in interview number 2, the respondent was the chief logistics manager.

The interview questions were as follows:

- 1 Can you tell me more about your company's activities? How many years have you been working in the logistics services market and what market segments are you focused on (B2B, B2C, etc.)?
- 2 Can you tell me about how your company has dealt with previous economic crises? What strategies and measures have you used to maintain business stability, and what do you think has been the most effective?
- 3 What are the main challenges you see for the logistics business in the current economic conditions? What risks arise in supply chains and how does your company minimize their impact?
- 4 What strategy has your company chosen to adapt to current economic conditions and long-term changes in the market? What key areas do you

consider to be the most important to ensure sustainable business development in the future? What role does innovation play in this strategy, and what new products or services do you plan to introduce?

5 What strategies are you using to maintain and strengthen customer relationships in the current economic environment?

6 What role does government support play in your company's operations, especially in the current economic crisis? How do government programs and incentives affect your business?

The questions used in the interview were open, which, coupled with experience in this sector, allowed to obtain the maximum amount of useful information that would be used in the research process. The first question would be necessary to understand the specifics of the company, how long it has been operating in the freight market and in what sector, to understand possible variations. The second question was compiled in order to obtain any working strategies, based on previous experience of going through crises, which the company could share. The third and fourth questions are related, since for the completeness of the results, it was necessary to understand the general trends of the company and what approaches could be used. The fifth and sixth questions were necessary to understand how the company could simplify its work in a turbulent economic situation. These questions relate to the topic, since the main goal of the work is to analyze and compile a stabilization method for a logistics company, and this method could be compiled with a full-fledged comprehensive understanding. In addition, it can be said that thanks to these questions, even more problems were revealed in the current days in the logistics business, which also influenced the conduct of this study.

Each interview lasted 15-25 minutes, and the questions concerned only the logistics part and anti-crisis management that the company had ever applied during its work. To receive complete answers from the respondents, only open-ended questions were composed, since the interlocutor does not have the opportunity to answer yes or no to them.

Since the target company provided data for analysis that was relevant to my research, the analysis was also conducted. To obtain the data, the author made a request to the company on the most significant topics for the study. The company provided a set of tables, some of which are maintained annually, and some quarterly. By identifying the necessary data even before the request, it was possible to ask for exactly what was needed, so as not to receive a negative response.

3.2 Data Analysis process

The process of analyzing the obtained information consisted of the step-by-step principle.

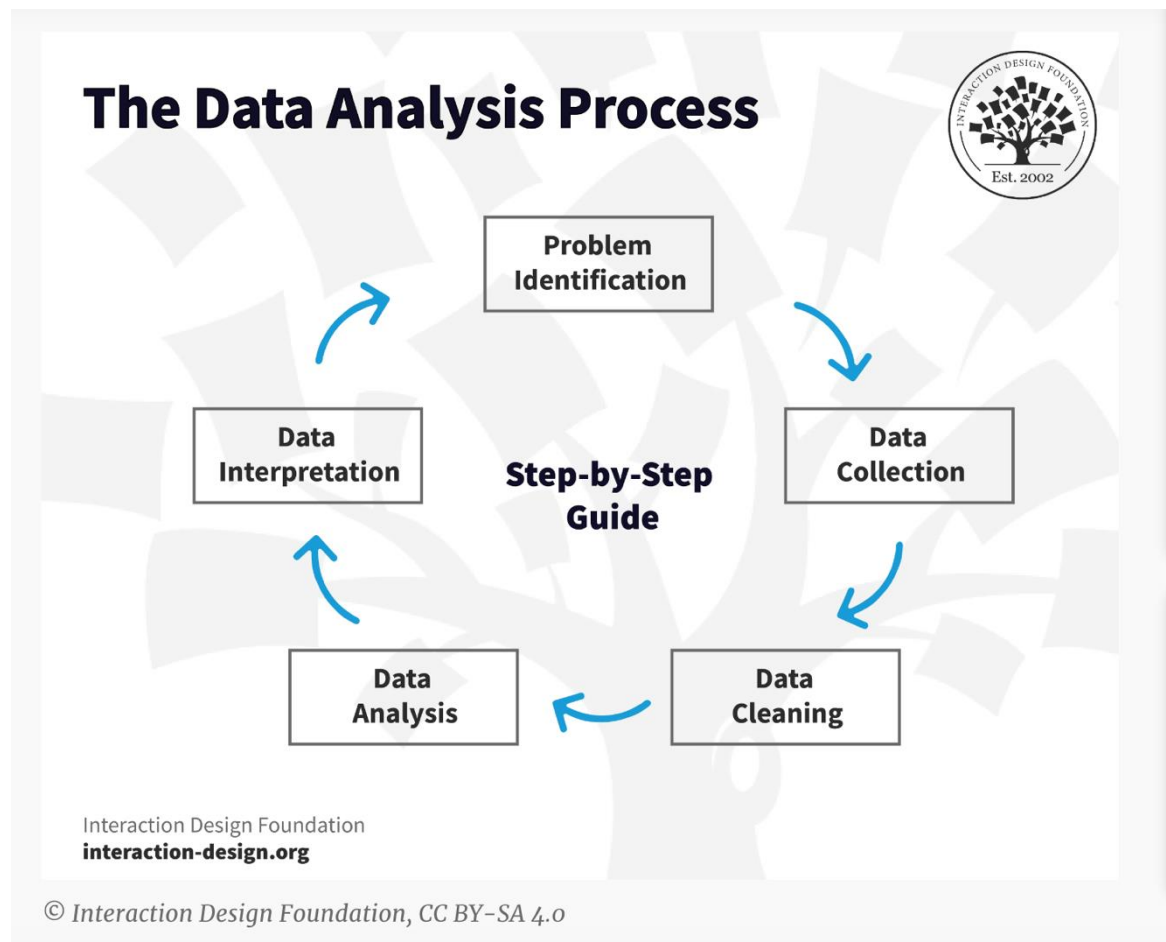


Figure 8. Data analysis process (Interaction Design Foundation, n.d.)

This approach allows to fully analyze each type of data that was collected, discard the unnecessary and get only what is important for the study (Soegaard 2023).

Before the stage of data analysis itself, there is a data cleaning stage. Data cleaning allows you to highlight the most important points in the study by selecting and combining key points. (Deshmukh & Wangikar 2011.)

The data obtained after data cleaning were processed using the following approaches.

For the process of analyzing the information received, static analysis was used, For data that was received from the company.

Static data analysis allows you to correctly process the data, and make graphs based on information from various tables, which were compiled earlier (Islam 2020).

As part of the information analysis, content analysis was used, thanks to which it is possible to make a certain coding, which will allow to understand the most common problems that the interviewer talks about, as well as other sources of information. It is the use of the content analysis approach that will help to fully satisfy all the needs in the study and not miss a single moment. (White & Marsh 2006.)

For the analysis of data that were obtained after the interview, content analysis was used, which allow to find and highlight the main and most important moments of the interview. This type of analysis was also used to observation. Since it allows to classify events by topic, which is useful during the analysis of information during the study. (Columbia Mailman School of Public Health, n.d.)

4 RESULTS AND ANALYSIS

4.1 Interview results

3 interviews were conducted, one with the company for which this work is being written, one with a company that is engaged in conventional transportation, that is, awnings and containers. And with a company that transports bulk goods, building materials and agricultural crops

The first interview was conducted with the target company, for which this work is written. The interview was conducted in English. The company has been specializing in the transportation of oversized goods for over 30 years. Due to the narrow specialization of work, any crisis had a negative impact on financial indicators, so for several years, the number of vehicles decreased. This served as a sign that it was necessary to begin implementing new strategies and measures to maintain the company's performance. As the main problems that have a negative impact on the company, 2 most important were identified. These are the rise in prices for consumables, as well as the need to look for new markets, since the turnover between Western and Eastern countries has fallen. However, due to the main customers with whom the company closely cooperates, it manages to stay in business. To adapt to current changes, the company decided to begin diversification, as far as possible, and some of the unused semi-trailers were sold in order to purchase trailers for goods of other categories. The company also began to use logistics outsourcing, namely, it acquired partners who provide transportation in other industries, mainly the transportation of food products and other goods that require strict temperature control. The quality of work, as well as the use of diversification and outsourcing, allow the company to strengthen relationships with customers, since they are of the opinion that when they receive an order for any transportation, they must implement it so that the company can survive.

The second interview was conducted with the company of the most popular focus at the moment. Since basically all companies are engaged in awning and container transportation due to their ease and market volume. But since it is quite easy to work in this category, the competition is very high. The company began its activities in 2009, after the large-scale crisis had passed. The interview was conducted with the manager of this organization, and one of the important points is that the company was born at a time when some logistics companies went bankrupt as a result of the crisis, and the market was quite free. And the company was initially created as an intermediary between transportation and customers. But over time, they acquired their own transport vehicles and

currently provide services in the b2b segment for the most popular transportation. In its history, the company faced a global crisis only once, during Covid-19. Due to the fact that they previously worked as intermediaries, their client list was very large, which was beneficial, since even taking into account the difficult economic situation and various restrictions, cargo continued to be transported. In the current market situation, the company continued to use the concept of working with its own equipment and with someone else's, thus ensuring maximum economic indicators. As for new services, the company plans to expand the list of transported categories, according to the same strategy as before. Relationships with clients are considered trustworthy and are maintained in good condition due to on-time delivery and high-level service.

During the third interview, questions were asked on the list, and there were also a couple of clarifying questions to completely cover the need for information from this company. The interview itself was quite short, but at the same time capacious, as answers were received to all questions. The main important points that the company uses in its work are the diversification of the work process. The company is focused on b2b, and is engaged in the transportation of agricultural products, as well as building materials. It is this approach to work that allows them to develop even in the event of crises. The company itself is not large, consists of 8 people and 6 trucks, and specializes in regional transportation. Since they have been working on the market for more than 25 years, they have a list of main partners who load all equipment with work in almost any season. Another point that distinguishes this company from the previous ones is the focus on using older equipment, since the work is mainly regional, and the issue of higher fuel consumption is not a key one.

4.2 Observation results

The author completed an internship in a logistics company and was able to make observations that are useful for writing this work.

Observations have shown that in the context of a turbulent economic situation, companies that are always aware of various changes in legislation or have the opportunity to receive subsidies or various assistance from the government win. Since the company had a target audience in Eastern Europe before the 2022 crisis and mainly used trilateral transport documents, then until 2022, obtaining these documents was quite simple. But after that, their allocated number decreased very much, which entailed negative consequences for the company. While clarifying the details, I was given an example with Poland, where the government did not reduce the number of these documents. This, in turn, entailed an increase in cargo from Poland, and reduced the number of Baltic ones. However, because the author had been practicing for two years, it was clearly clear that the company was really adapting, and in 2024, the company had more people on outsourcing for non-key tasks. And due to this, it was possible to obtain a larger number of documents. The second most important observation, in order to diversify, the company began searching for partner companies in Europe, which they successfully did. To do this, they increased the range of transported categories. Since the company has its own repair zone, company rented a semi-trailer for containers, which was in poor condition, and brought it into working order on its own. It was very good decision from the top management.

4.3 Main problems in the logistics sector

Based on the interviews and other data collection, the main problems of logistics companies are as follows.

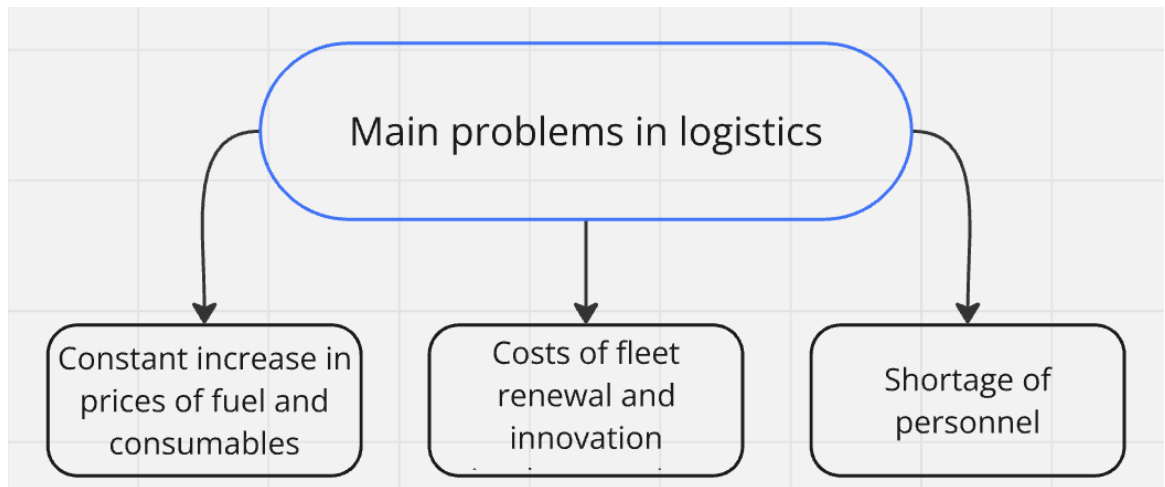


Figure 9. Main problems in logistics sector

1) The problem of constant rise in the cost of fuel and spare parts is the first priority for each company, since these two elements are key consumables that are necessary for the correct functioning of the organization. Due to the fact that logistics companies mainly perform long-distance transportation, the cost of fuel can be up to 40 percent of the total cost of freight. Also added to this is the moment of difference and price fluctuations in cases of flights. Since at the time of concluding the contract for transportation, the client must have the final price. Also, in most countries, trucks are required to pay for roads by mileage, which also adds various costs to logistics companies.

2) Expenses for updating the fleet of equipment and introducing innovations. Due to the current turbulent situation in the economy, companies are unable to update their fleet of equipment to a newer one, since it is the deterioration of the financial condition of the economy that means a deterioration in the stability of carrier companies. Companies usually buy equipment on lease, trailers (Tip-group 2019) and trucks, since it is more economically profitable for companies to buy several units of equipment at once. Due to the deterioration of the economy, companies have a lower percentage of net profit, which means they have to save on the implementation of innovations.

3) The third problem is the personnel shortage. Now there is a personnel shortage throughout Europe, since it is very difficult to find a good driver now, due to the fact that most people do not want to go into this industry. And the

current generation of employees is aging and they simply have no one to transfer their tasks to. However, it will not be possible to satisfy this need, even if you start actively attracting immigrants, since usually newcomers are absolutely not interested in this work.

4.4 Content analysis of quantitative data

Content analysis included an analysis of information received from the company, according to which, it turns out that due to the changes made and the implemented methods of improving the company's position,

Mileage coefficient

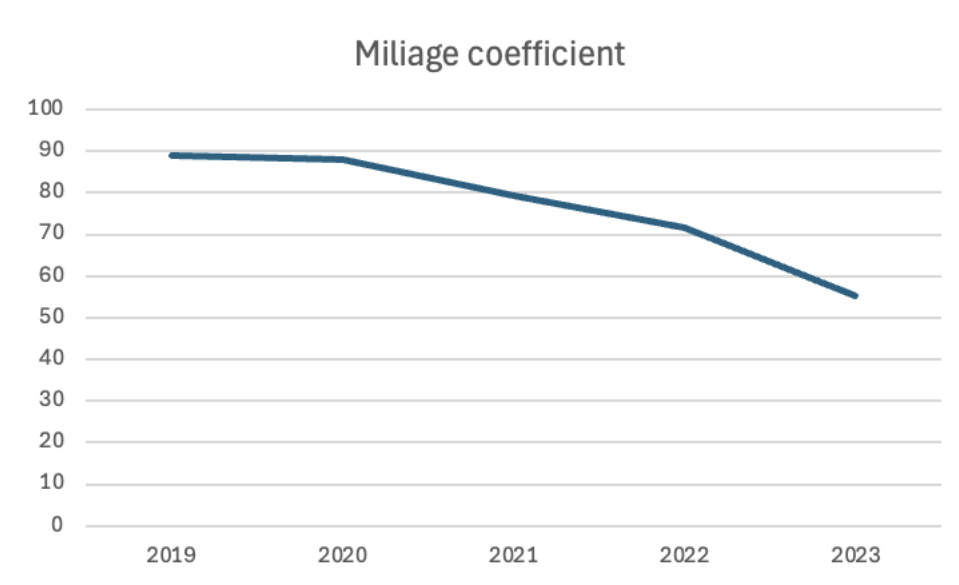


Figure 10. Mileage coefficient indicator

This KPI shows how optimally the route of using transport vehicles is developed. It also depends on the current economic situation, i.e. when the company has loads not only in the direction where the goods are transported, but also in the opposite direction. Over the past few years, this coefficient has been declining for the company, which means lower loads on flights than before. This is a negative indicator that the company can hardly influence when it operates in a narrow niche.

Idle time

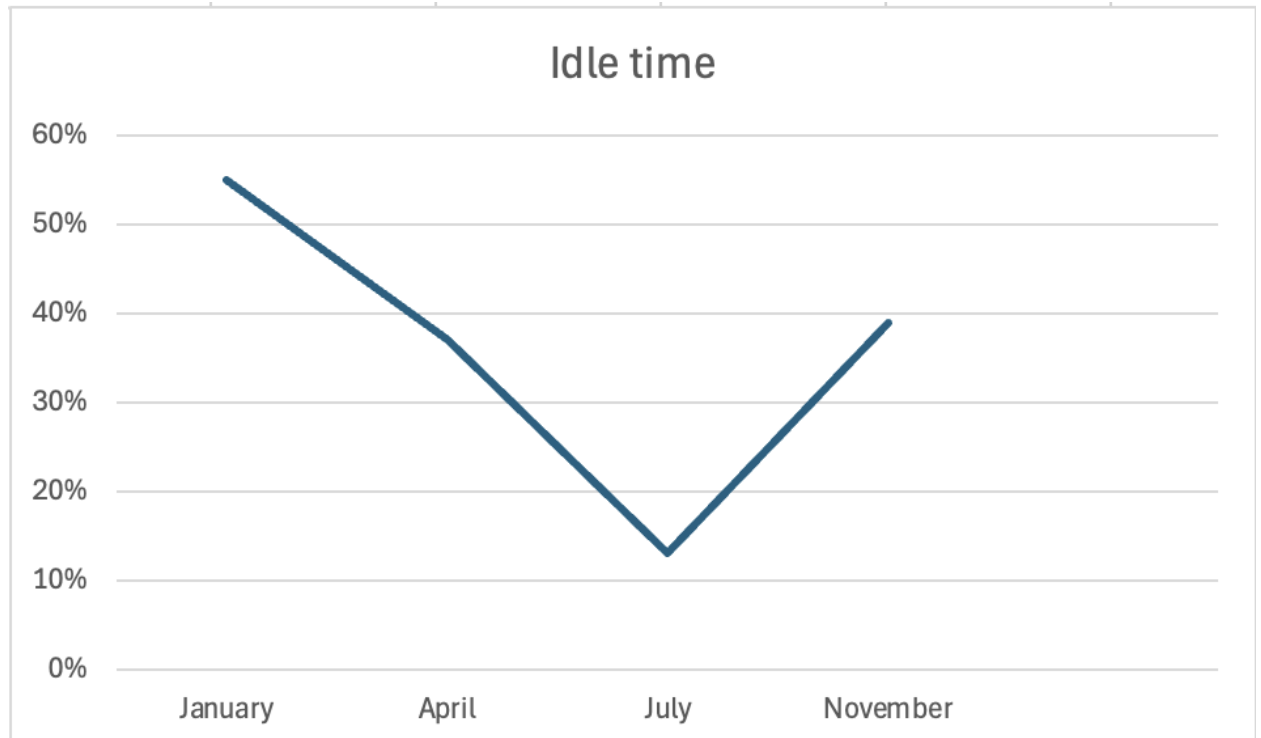


Figure 11. Idle time coefficient

This indicator shows seasonal fluctuations in the freight market, i.e. in summer the number of shipments increases significantly compared to winter. In summer, trucks are practically not idle, as the indicator is 13.7%, which means that the time the vehicle is at the base is much less than the time spent on the road. However, by winter the number of shipments decreases, and the total downtime also increases, and in peak months it can reach more than half of the working time. Due to the specifics of the category in which the company operates, the values that are considered optimal are from 15 to 40 percent, this is the so-called average for the niche. Long-term cooperation with other companies that are regular customers helps to reduce downtime, which is clearly visible on the graph.

During the analysis of the digital values, which were provided to the target company for a more in-depth analysis, 2 values were selected, the ratio of operating time to downtime (idle time) and the ratio of mileage with cargo to

mileage empty (Milliage coefficient). Since these are the most key KPIs in the logistics sector, especially for a company engaged in a narrow niche. These metrics allow the company to analyze the correctness of the implemented additions or corrections, if any.

During the analysis for two graphs, a pattern of the mileage coefficient dependence from year to year appeared, it is negative, since earlier, before the onset of a turbulent situation, it was much easier for the company to find reverse loads, which significantly affects this indicator, and the general state of the economy was much better, which allowed not only intercountry transportation, but also regional ones. According to the pattern of the idle time graph, the company is subject to seasonality, especially in winter, when the equipment is idle more than half the time at the base waiting for any cargo, which also has significant weight, when the financial condition of the company is unstable, and the need to work without downtime is a vital necessity for survival.

4.5 Different between approaches to work

As a result of the analysis of the information obtained through the interview, it becomes clear that each company adheres to its own development strategy. However, during the analysis of the information, it is possible to highlight the advantages of each approach to work and understand the most important points that any logistics company can implement for further growth. Of course, the possibility of implementing certain changes may require additional investments from the company.

Methods for improving the economic condition of the company:

The diversification approach, this approach is applicable to companies that have been engaged in the logistics business for a long time, but at the same time worked in one or more narrow niches. This method requires investment, since it implies that the company rents or buys semi-trailers of other formats to expand the product range. However, it does not require the purchase of additional trucks, that is, the total number of semi-trailers can exceed the number of trucks. This allows you to reduce risks when working all year round, as well as with market volatility, since in any case the company will be able to find the goods that need

to be transported. As an additional plus, the company's image will improve and the list of potential clients will expand, i.e. it will open up new markets for work.

Table 2. Diversification pros and cons

Pros	Cons
New niches	Need for additional vehicles during the season
Increase in transportation volume	Need for investment
Reduction of the seasonality factor	More careful control of the process

However, this method has several disadvantages, in the case of long-term contracts with clients, during the seasonal period, when transportation prices can increase significantly, in order to earn excess profit, the company will need to understand how it can find a few more trucks just for the season so that the trailers do not stand idle. Also, the peculiarities of implementing such a plan include the need for the company to carefully monitor the quality of delivery of each of the cargo, since there is a very big difference between the transportation of ordinary goods and, for example, food products, in terms of timing, time and other important indicators in transportation.

The approach of collaborative outsourcing

The collaborative outsourcing approach is quite new for the companies that was interviewed. Collaborative outsourcing is relevant for use when transportation is quite long or affects a large number of regions, for example, in which the conditions for transportation are difficult, as well as in cases where one company does not have knowledge, for example, in the field of documentation, it can ask for help from its partners. However, this method is also applicable when a company has an application for transportation in one direction, but also in the opposite direction, but with slightly different addresses, that is, the company somewhere transfers the cargo to other carriers for delivery to the customer, and itself takes the return cargo. Thus, it is possible to increase the mileage coefficient. However, this method has several disadvantages, the most important of which is the reliability of the partners with whom the company plans to cooperate. The second disadvantage is the importance of fast communication

between the two companies, since the speed of making any decisions depends on it.

Table 3. Collaborative outsourcing pros and cons

Pros	Cons
increase in mileage coefficient	Partners realibility
Increase in transportation volume	Need for fast communication
increasing market presence	

Full logistics outsourcing approach

As a result of the conducted research, the approach of full logistics outsourcing is not widely applicable at the moment, but it is a good tool for improving the company's performance by increasing the number of shipments. It can also be interpreted as one of the methods of anti-crisis influence within the company, since it does not require any investments, but only processing of applications and transferring them for execution. It is for this reason that a large number of companies specialize in working as intermediaries, and do not enter the full-fledged logistics business. However, according to one interview, the company was able to combine work with its own fleet and mediation, due to which they are not afraid of any seasonal or other changes.

Table 4. Full logistics outsourcing pros and cons

Pros	Cons
Does not require costs	Dependence on a second company
Increase in transportation volume	Lack of complete control
Improving customer relationships	

5 CONCLUSION

Based on the conducted research, it becomes possible to answer the research questions in detail.

The main question of the research can be answered that the effectiveness of the organizational stabilization impact on the company can be increased by implementing a comprehensive method, which is described in Chapter 5.2 Management perspective.

Also, the main objective of the study is considered satisfied, since the most frequently used and important methods were studied by obtaining information

from several sources at once. The theoretical foundations of anti-crisis logistics methods were considered in Chapter 2, which were subsequently confirmed by information from the interviews. Also, in Chapter 2, the best methods of stabilizing the financial stability of the company were systematized, which made it possible to understand the clear angle of the study. Subsequently, as part of the interviews, information was obtained on the possibility of using various anti-crisis methods depending on the situation of the crisis, as well as the size of the company. Subsequently, thanks to the information received, an analysis of the effectiveness of the methods was carried out, which subsequently helped in compiling the author's combined stabilization method to achieve maximum efficiency.

5.1 Key findings

This study was aimed at a detailed study of the methods of organizational and stabilization impact on the company in a turbulent economic situation, as well as the real practical applicability of methods in companies. A comprehensive approach to obtaining and further analyzing information allowed us to completely cover the needs. The studies carried out supplemented what is already known at the moment, and also allowed us to understand their relevance in various situations.

The main question of this study was to analyze the possibility of increasing the effectiveness of current anti-crisis methods for a logistics company in a turbulent economic situation. The study showed that logistics companies experience any economic instability due to complete dependence on other participants in economic activity. And they also depend very much on external factors that they cannot influence, namely the prices of various consumables, such as fuel and spare parts, which are a significant part of the costs. Therefore, it is vital for each company operating in this sector to implement various anti-crisis methods.

The study showed that traditional methods such as budget planning and seasonal workload plans are not sufficient for companies to function stably in any

conditions. Since this approach does not take into account changes in the economic situation, which can occur almost suddenly. However, during the work, the most commonly used methods that companies are currently manipulating were identified. These are the methods of diversification, collaborative outsourcing and full logistics outsourcing. The companies interviewed consider these methods to be the most necessary and important, but none of them used all parts of this anti-crisis method together.

Based on this, we can imagine a method that will combine all of the above together. The created method, both for the key company and suitable for other companies in the logistics industry, will be presented in Chapter 5.2 Managerial perspective.

During the conduct of this study, as well as during the analysis of data obtained from all sources, the main findings were formed. The most important thing is the dependence of transport companies on government decisions, that is, the state can regulate how much cargo can be transported from one country to another through the territory of a third. For this reason, in some cases, companies need to transfer transportation tasks to companies that have the ability to implement this, or refuse the client and thus lose him. Since this reduces the level of customer satisfaction, and most likely the next time, the customer will turn to another company. The second finding can be called a variety of logistics outsourcing methods that are used by companies. The variability of application and use of methods allows organizations to provide a wider range of services to clients, even in niches where they do not work.

In conclusion of this subsection, it is possible to say that anti-crisis measures are a vital necessity for any logistics company. Since financial indicators are correlated with the general economic state of the economy. And all companies that have ever used anti-crisis measures have been able to get ahead of their competitors.

5.2 Managerial implication

In situations of turbulent economic conditions, companies begin to implement anti-crisis measures to stabilize indicators. This study was conducted to present a method that will combine all the positive features of the most used separately, to achieve maximum efficiency. Subsequently, almost any logistics company will be able to use this approach to improve its position in the market.

As a result, based on the results obtained, a combined method was made. It is initially based on the static indicators of the company, that is, to implement it, it is necessary to understand the initial indicators.

A combined method is a process in which a company, depending on its capabilities, can implement several approaches in parallel. It is initially based on several key indicators of the company, and then on secondary indicators. The very first of them is the indicator of idle time, since it implies more active use. The second is the indicator of the number and activity of clients, that is, how many applications the company receives at the moment, and how many are predicted. Thirdly, the company needs to understand whether it has a partner who deals with other cargoes, which either have a high idle rate or the transportation season begins in winter, in the case of the main season of the target company - summer. Next, it is necessary to proceed to secondary analysis, namely, how heavily the employees are loaded, as well as possible investment opportunities.

Based on the analysis carried out in the points above, it becomes clear which part of the combined method should be applied first. However, in conditions of good indicators, and investment opportunities, the company can initially rent a semi-trailer, to obtain true information about the state of the market, while there is a seasonal decline in the main area. Also, from this point on, it is necessary to begin to implement a collaborative outsourcing system, mainly with companies working in other areas, for example, in the type to which the new semi-trailer belongs.

Further, when the indicators return closer to their usual indicators, due to work in the collaborative outsourcing environment, the company will have partners, mainly those who work in other niches, and these companies will most likely have a seasonal decline at a different time than the main company, due to which the target organization will be able to use the principle of partial outsourcing and discuss the possibility of renting the truck itself or with a hired driver from another organization, to increase its own indicators.

Based on the information received from the company and its capabilities, namely trailers of various classes, which have a summer downtime due to seasonality in the main direction, the process of implementing a combined method looks like this

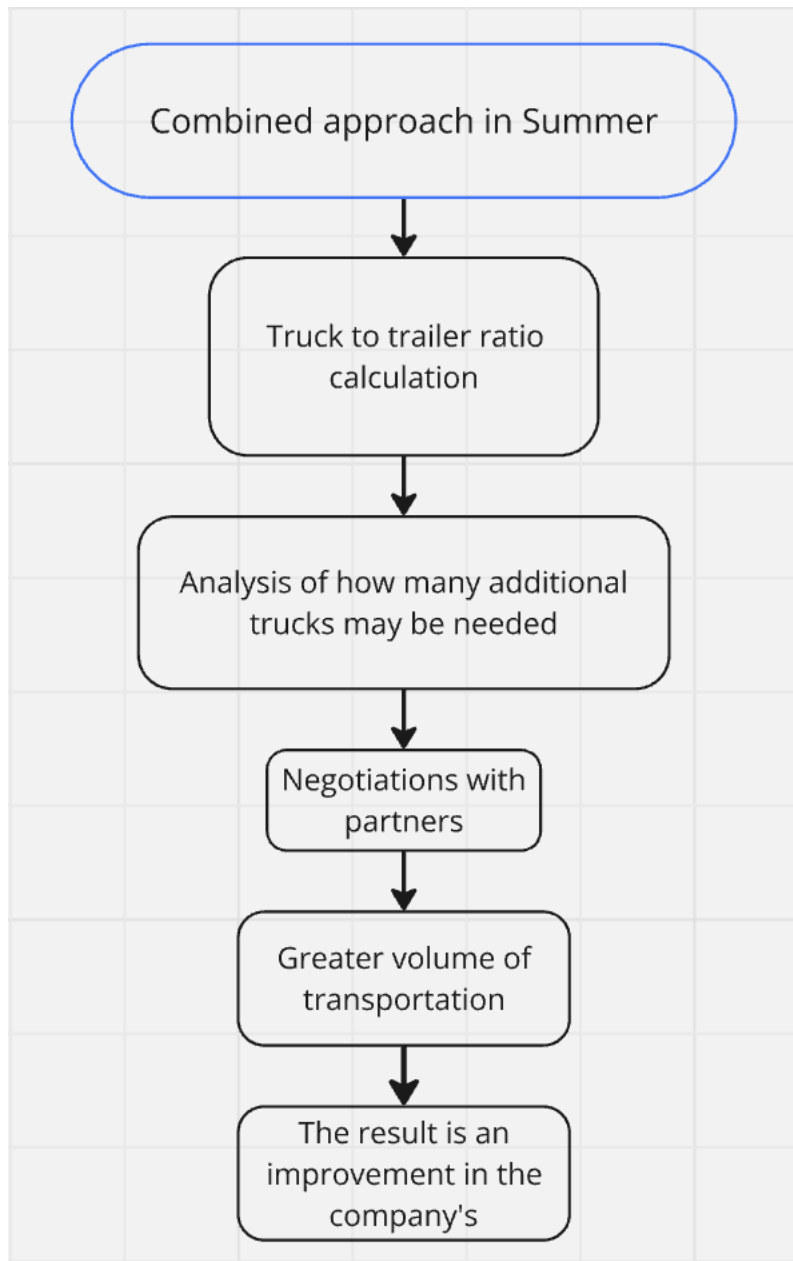


Figure 12. Combined method implementation for key company

However, in the case when the company wants to initially test the niche it will enter, or the indicators become really low, then it is first necessary to apply the concept of full logistics outsourcing in order to study the market size, the possibility and prospects of working on it with minimal costs. In order to subsequently begin to apply all aspects of the combined method.

5.3 Development scenarios

Also, two scenarios for the implementation of this method can be described, optimistic and pessimistic. And also make assumptions about the financial and time component.

The optimistic scenario of implementing a combined method assumes that all implementations and solutions of a key company will become in demand. After calculating the ratio of trailers to trucks, it will become clear how much more of these or those that are necessary to stabilize work in the summer and a full-fledged load. At the moment, the key company has a little more trailers, since during the winter the company began to transport goods that were not typical for itself. Therefore, by the summer season, it will be necessary to find additional trucks or rent them so that the downtime of trucks and trailers is minimal. Since the company has been on the market for a long time, the trust of its partners in it is high enough, which will allow for the implementation of a lease or partial outsourcing solution. As a result, the company will significantly increase the workload of both vehicles and employees in the summer, which will significantly affect the financial performance of the company. Approximate values can be said as follows - financial indicators will grow by 15-25%, this indicator depends very much on external influences, as well as the time of this scenario - 6-7 months, starting in spring to get trucks at your disposal on time, ending in late summer - early autumn, when leased trucks will need to be returned.

A negative scenario can occur in two cases, the first of which is the influence of external factors that the company will not be able to influence, or a sharp decline in production and purchasing power in all countries, which is also unlikely. If a company is unable to rent or use a truck during the season, transportation will be carried out only by its own equipment, and some trailers will be idle. As a result, financial indicators will not grow and will remain the same, unless external factors change, such as rising fuel prices. The approximate values in this case will be as follows - the financial indicators will remain the same, that is, as last year, and the time spent is 1-2 months on possible lease negotiations.

In conclusion, it is possible to say that these are only two possible scenarios, since in reality many variable situations can occur. However, the best option and the worst were considered.

General scheme to any logistics companies

Also, a general scheme was developed for logistics companies that want to use this stabilization method (Appendix 1). This scheme is cyclical, that is, after implementing one of the approaches, the company returns to the selection block, where it is necessary to answer the question in order to choose the right path for the company's development. The structure of the scheme is made as simple as possible to avoid misunderstandings or double interpretation. Thus, this scheme can be used by a company to stabilize its indicators through the combined method presented in this chapter.

5.4 Research trustworthiness

In this study, it is necessary to use research trustworthiness to assess reliability. The use of such a concept has fully satisfied the need for confirmation of reliability. To assess reliability, it is necessary to understand several points

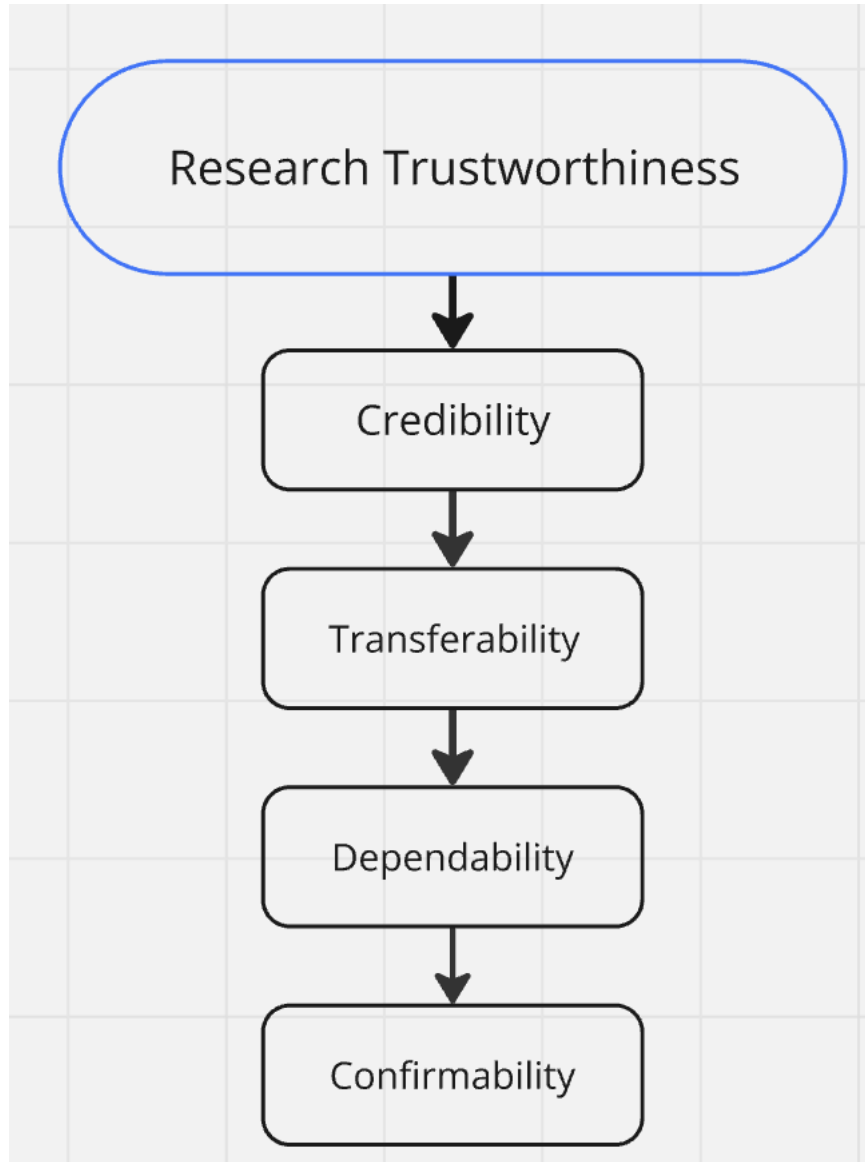


Figure 13. Research trustworthiness

The very first of them is credibility, an indicator of the author's involvement in the field about which the work is written. This is necessary to understand many aspects deeply enough, as well as to obtain any additional information that may not be on the surface, in the process of its collection. And also the process of confirming data using several sources of information. It is the process of

confirmation using triangulation that is considered the most reliable and reliable since each information is checked several times. (Turner 2016.)

The next step is a process called Transferability. This point consists of analyzing the findings and results obtained, how detailed they are written for a reader who was not previously familiar with this topic. And also the possibility of transferring the results of this work from a key company to another.

Step three is the Dependability process. This involves transparency and detailed explanation of the nuances step by step. This process allows other people to obtain similar research results if all the steps are repeated in full.

The last step of this method is Confirmability. This is a process that requires verification from other people who work or have knowledge in this area in order to confirm the accuracy and practicality of the research findings. During this step, people who were interviewed or involved in the study or people who are experts in this area can be used. (Ahmed 2024.)

This work can be considered reliable, as it satisfies the requirements of the research confirmation method. Initially, it can be said that the author has certain experience and background in working in the logistics sector, so the information obtained during the interview is partially confirmed by observations, as well as information obtained from the literature. Which allows to talk about the reliability of the first point of confirming the veracity of the work. When writing this work, the author tried to describe terms and any processes that would be understandable only to a person with experience, with the goal of complete understanding when reading by people who do not have a large background in this area. And also a general table of results was made, which is suitable for any logistics company, and not just for the key one, in order to exclude the subjectivity of the study. Also, all the conclusions of this work follow from each other, which allows us to say that the work is transparent and if someone conducts exactly the same study, the results of the two works will correlate. Therefore, we can say that this work fits the second and third points of the process of measuring the veracity of the study.

To carry out the final point of research confirmation, this work was sent to the key company to confirm the correctness of the obtained results and conclusion, (Appendix 2).

5.5 Future research

Further research in this area is a necessity, since at the moment only a small part of the entire volume of information on the logistics market and their chains, and especially on optimization, is presented. However, even with the information obtained from this work, the company can improve its business processes and stabilize its indicators during periods of turbulent economic conditions.

During the stage of studying the already written literature, and further writing of the work, it was revealed that at the moment there are a large number of topics that relate to part of my work, the most striking example of them is the outsourcing of anti-crisis management in logistics companies. Anti-crisis methods are used by a large number of companies, but there are also companies that do not have the opportunity or understanding of drawing up an anti-crisis action plan. Therefore, the topic for further research, we can say, is about drawing up an anti-crisis plan for a logistics company of a certain segment through outsourcing. Also, as future research, we can name several topics that will correlate with the current one, but were not touched upon in this work. For a more comprehensive study of the impact on the company in a turbulent economic situation, it is also necessary to touch upon marketing changes, and therefore, a possible topic for future research can be called - Analysis of the possibility of influencing the stability of a logistics company in a turbulent situation through the use of marketing paths. This will allow in the future to combine both topics and obtain an option that will allow the company not only to remain in a stable position during turbulence, but also to grow significantly.

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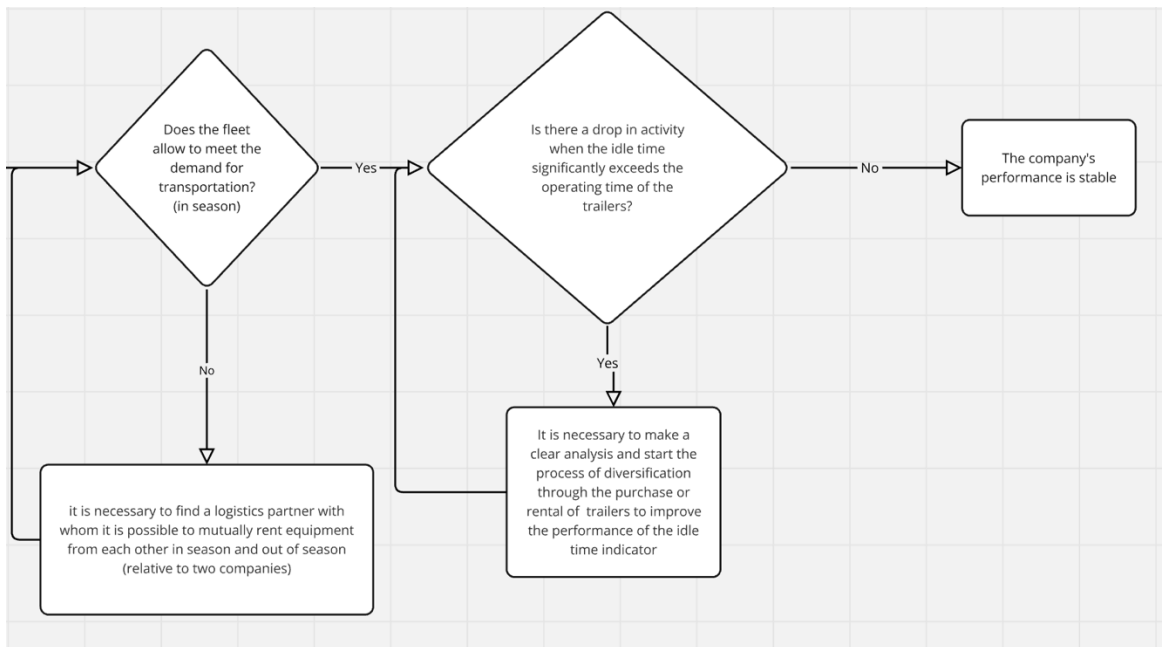
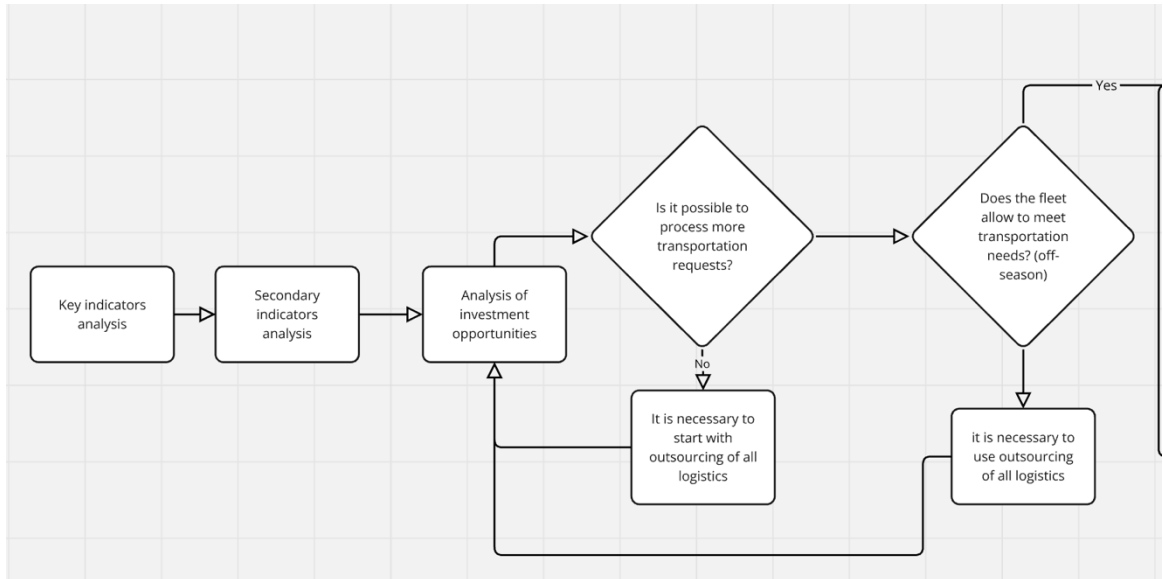
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Appendix 1

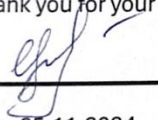


Appendix 2

Dear Pavinskii Iliia,

Thank you for the work you have done in the context of the *anti-crisis management study* for our company. We highly appreciate the depth of the analysis. We would like to separately note that the development methods you have proposed seem quite realistic and correspond to modern trends in our industry. We will definitely consider the possibility of implementing them in our company's work.

Thank you for your efforts and the work you have done!

A handwritten signature in black ink, appearing to be 'I. Pavinskii', written over a horizontal line.

Riga, 25.11.2024

SIA "CheckPoint Transport"