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FOOD TRANSPORT MANAGEMENT IN A SELECTED LOGISTICS COMPANY

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Purpose: According to data from the National Center for Agriculture Support, food product transport is the most common type of transport, as food is essential for everyone. Therefore, organizing and implementing such transport must meet the highest standards. At this point, it is worth mentioning the standards and regulations governing food transport. Strict regulations govern food transport, and any violations can have serious consequences. As is commonly known, transport generally involves the movement of people or loads from point A to point B, using appropriate means, with the cargo type and transport method being key factors of consideration in this article.
Design/methodology/approach: The article contains a SWOT and TOWS analysis of a transport company specializing in road transport of goods under controlled temperature and additionnal food trade services. The aim of the article is to analyze a logistics company in organizational and technical terms in the area of road refrigerated transport.
Findings: The tool used to conduct the analysis will be a matrix in the form of a four-field table, and the results of the SWOT and TOWS analysis will also be presented.
Research limitations/implications: The research used SWOT and TOWS analysis, i.e. research methods that present the research results very clearly and legibly and are perfect for the issue of logistics services.
Practical implications: Enhancing food transport processes is crucial. If the examined company stopped at the stage of identifying its strengths, there would be a high probability that transports would not be carried out with the appropriate quality of cargo, because failure to address possible threats in any way would bring results that would be counterproductive. The permanent development of the examined company in the examined aspects bodes well for the future of the organization.
Social implications: The issue of food transport in general, but also in the context of technical and organizational conditions, is important because it directly or indirectly affects every population that depends on products from the food sector.
Originality/value: There are not many studies on the transport of food products in the context of technical and organizational conditions, which makes the article original.
Keywords: transport of food products, technical and organizational conditions, SWOT and TOWS analysis
Category of the paper: research paper.

1. Introduction

The aim of the research article is to analyze a selected logistics company in terms of organizational and technical aspects in the area of road refrigerated transport. Food logistics is a vital element of the food supply chain (Fredriksson, Liljestrand, 2015). To do this more reliably, the characteristics of individual processes were related to a real company that transports products with a short expiry date. When carrying out the analysis, the main guideline was to solve the research problem, which was a reference point for confirming or denying the hypothesis, according to which the company had the necessary tools and knowledge at an optimal level to carry out food transports at an appropriately high level, while maintaining attention to quality values. and safety of fresh products.

2. Research group and course of study

The transport of perishable products is regulated by many standards and regulations. In this respect, every company providing specialized transport is obliged to comply with them. However, the implementation and organization of transport by individual units may differ in terms of the solutions used, innovative ideas and devices, or their lack in the entire chain. Therefore, the aim of the work is to analyze a logistics company in organizational and technical terms in the area of road refrigerated transport. The question that will be answered after analysis is whether the company has the necessary tools and knowledge in the area of functioning of the food sector to ensure that the transport is carried out at an appropriately high level in terms of quality. In this case, quality depends on the company's own resources, but above all on the ability to use them when faced with such a demanding type of transport as the transport of products with a short shelf life. In the analyzed case, external factors are also of great importance, as they can slow down the processes related to the movement of loads, but can also act in the opposite way - that is, provide an opportunity to develop and improve certain solutions, depending on the method of verification and use of given opportunities and elimination of threats by examined entity. It was assumed as a hypothesis that, thanks to extensive experience in the food industry, the company has the necessary knowledge about the transportation of this type of cargo and that the organization's fleet is able to meet the requirements of such transportation through the use of innovative systems, the company should not experience any difficulties in carrying out food transportation.

The hypothesis may be verified after the analysis. The conclusions drawn from the study will allow for a full diagnosis of the company. In the article, the authors will also attempt to analyze SWOT and TOWS for the discussed logistics company providing road transport of goods

under controlled temperature conditions and additional services related to food trade. The tool used to carry out the analysis will be a matrix in the form of a four - field table.

SWOT analysis is one of the most frequently used analytical techniques in a company (Szmitka, 2015). It involves determining the strengths (S) and weaknesses (W) of the examined organization, product or venture, as well as opportunities (O) and threats (T) appearing in the environment of a given entity 70 (Tylińska, 2005). It is important to optimally determine all the above-mentioned factors, as this will enable a more accurate analysis of the company. Strengths are reflected in internal factors, i.e. those that will enable the company to stand out on the market. Weaknesses, just like strengths, refer to internal factors. When determining weaknesses, it is necessary to objectively assess the company's shortcomings, which may allow them to be reduced in the future. Opportunities appear in the company's external environment. These include specific factors that, if properly used, can bring tangible benefits to the functioning of the organization. Threats also occur as an external stimulus. It is necessary to analyze what threats arise from the company's immediate environment. When determining all internal and external dependencies, you should focus on the measurable and most important ones, which will affect the quality of the analysis. In the next stage, it is necessary to assign weights to each strength /weakness and each emerging opportunity and possible threat. The sum of the weights for individual categories should be equal to 1. In the next stage, a TOWS analysis will be performed. It is the opposite of SWOT analysis. This means that the research begins with factors arising from the company's environment, i.e. opportunities and threats, as well as their impact on the company's strengths and weaknesses. It is mainly used to determine whether and to what extent external factors influence the company's resources.

In both cases, conducting a reliable analysis requires asking a sequence of questions that differ in form. For a SWOT analysis, the questions that will allow you to determine the existence of connections between individual factors are (Szmitka, 2015):

- Will specific strengths allow you to take advantage of existing opportunities?
- Will specific strengths help overcome existing threats?
- Whether specific weaknesses will negatively impact the use of available weaknesses chances?
- Do specific weaknesses magnify threats?

Referring to the information that the TOWS analysis is used to examine the company's environment and resulting dependencies on internal resources, questions that will allow they will be defined as:

- Will emerging opportunities support strengths?
- Will specific threats limit strengths?
- Do emerging opportunities weaken weaknesses?
- Will specific threats amplify the impact of weaknesses?

Factors affecting the company are divided into external and internal attitude towards the organization and having a negative or positive impact. Crossing the two the resulting divisions, the following groups of factors are obtained:

- external positive nature - opportunities,
- external negative nature - threats,
- internal of a positive nature - strengths,
- internal of a negative nature - weaknesses.

In both cases discussed, when determining the dependencies that occur in the result of asking specific questions, it is helpful to summarize them in tabular form, giving them appropriate values from 0 to 1. If a specific factor influences another, you should assign them a value of 1, but if one factor does not influence the other, they are assigned a value value equal to 0. The final stage of strategic analysis is the summary of collective results. They will also be presented in tabular form, as it is the most readable. The next step will be to compare the results and place the logistics company in one of the four possible strategies. The first one is an aggressive strategy, according to which the examined organization is in the most favorable position in relation to its environment. If the examined entity is assigned to this strategy, it will mean that it is at the optimal moment of its activity and does not require any changes or improvements. The second possible strategy is a conservative strategy, which states that the company has a stable position on the market, but does not have the possibility of development. In this situation, it will be necessary to propose solutions that will have a positive impact on the company's external environment. The third - competitive, according to which the entity, despite the lack of development opportunities, has a chance to survive, but it will be necessary to present solutions that will allow for the elimination of weaknesses. The last possible one is a defensive strategy, according to which the company assigned to it is in the survival phase. If the examined company is assigned to this strategy, it will be necessary to propose solutions that will allow for a complete change of the system of activities undertaken.

3. Organization and problems related to the transport of perishable products on the example of the examined logistics company

The specificity of transporting perishable products has its source in the properties of these products, namely their instability. Low resistance to damage, sensitivity to temperature changes, low transportability and demanding storage conditions make the most difficult task to plan and organize the supply chain in a way that will ensure the safety of the cargo throughout the entire process cycle (Leleń, 2014). Even though the analyzed company is technically adequately prepared for this type of specialized transport, this does not mean that such transports do not require involvement in the organizational aspect and that there are no problematic situations

that need to be solved before commencing the transport, and also many times during its implementation. The main goal during transport is to maintain a constant temperature. One way to save energy in a refrigeration device is to appropriately select the groups of products being moved. Small shops located near the organization are supplied using smaller vehicles. In the company in question, these are buses. When delivering goods to small stores, it is grouped so that it is possible to select the temperature that will be appropriate for each product. If the goods transported at a given time include specific types of fruit and vegetables, the temperature is adjusted accordingly so that each product group is provided with appropriate transport conditions at a given time.

In order to prevent the interruption of the cold chain, which is the reference point for all food-related operations, the company focuses on situations that threaten its maintenance. Factors that may negatively affect the cold chain include operations directly related to the loading or reloading of goods - i.e. situations in which the operator changes. The organization places great emphasis on temperature control during these activities. Immediately after loading the trailer, the driver is obliged to check whether the temperature of the cargo has not exceeded the upper limit of the spectrum. It is also necessary for the trailer's loading surface to be properly cooled beforehand, as the company tries to prevent the goods from being loaded into an uncooled room. If a situation arises in which the temperature of the product increases to limits that result in a loss of quality and properties of the product, it is necessary for the driver to write down an appropriate report and dispose of the damaged load, as the delivery of such goods could pose a threat to the health of potential consumers.

To reduce the possibility of contamination of sensitive products, the company attaches importance to the cleanliness of trailers. Before each transport begins, the trailer space is checked for any possible mold growth, which is very likely in the case of transports using vehicles such as refrigerated vehicles due to the temperature and air humidity conditions prevailing there. It is also checked whether there are any foreign odors that are absorbed by fresh products in the trailer. Possible traces that would indicate the presence of rodents, which pose a significant threat to food due to the bacteria they carry, are also taken into account. After completing a specific transport process, the trailers are also checked and cleaned of any remains of previously transported food. In order to avoid damage to fresh products, the company uses specialized containers to transport them. They are appropriately adapted to transport fruit and vegetables. They have been designed in a way that allows them to stay fresh longer and optimally ripen, thanks to the holes that allow air exchange. They also provide protection against mechanical damage due to the rounded internal edges. They are made of material approved for contact with food. Specialized containers made of Styrofoam are also used to transport meat and fish. If these are short-distance transports, the meat is transported without additional coolants. However, if these are long-distance transports, even though the cargo is transported by an appropriate means of transport, the meat is placed in closed containers, and for additional protection, an additional source of coolant in the form of dry ice is used. Products such as butter, kefir

or yogurt require specially selected protection - it is not enough to use optimal cooling systems in means of transport, but appropriately selected containers with appropriate protective coatings must be provided. Therefore, the unit in question uses bulk packaging, which is useful when grouping products such as butter into larger batches. Yogurts are packed in low cardboard containers with appropriately sized holes cut out in them, thus protecting the product against tipping over. Cardboard packaging is additionally covered with a laminate, which increases its resistance. Chicken eggs are transported within the company using "eggs cargo system" containers.

These are packaging in the shape of an ordinary egg tray, but they are made of polypropylene, which is one of the safest materials in terms of food contact. Despite the fact that the company carries out transports using specialized containers, it is also necessary to secure the entire pallet on which the load is piled. For this purpose, the company uses stretch foil. The finished, palletized unit is wrapped in several layers of foil before the main loading operation. It is necessary to stretch it first, because only then can the foil fulfill its function. By stretching it, adhesive compounds are released, thanks to which it is possible to properly secure the pallet. In addition to foil protection, the company also uses poles to secure the pallet in the trailer, but this topic has already been discussed in chapter three. When transporting different types of products, they must be separated from each other. This is also what happens within the organization in question (Cieślikowska, Caban, 2017).

In a situation where, for example, fruit, vegetables and meat products are transported in one transport, they are separated onto two pallets. Vegetables and fruit constitute one pallet unit, while meat constitutes a separate unit. The same palletizing and loading scheme applies to other product groups, i.e. dairy products, fish and chicken eggs. Fish and meat, due to the type of animal products, can be combined into one palette, just like vegetables and fruits, as well as dairy products and eggs. However, in the case of eggs, the company transports them as a separate unit due to their fragility and susceptibility to damage. When transporting fresh products, time is an important issue. The company plans the logistics chain in a way that will limit the time of individual operations to a minimum. Many factors matter in this aspect. The key phase is planning. At this stage, the company optimizes routes that will allow for quick delivery of the cargo. During this process, it must be taken into account that the vehicle must not exceed the maximum load capacity and pallet spaces. However, if properly planned, it allows the company to transport loads from several orders, without breaking the standards regarding the weight and physical properties of the means of transport. Telematics - based devices also play a role in this process, thanks to which the information stream flows faster. Since the journeys themselves take place between specific loading and unloading points, the means of transport, after the last transport, waits at the final point for further instructions. Thanks to mobile devices operating on the basis of telematics solutions, the generated information efficiently reaches the driver, who is informed about subsequent actions, thanks to which the entire process is accelerated. All processes taking place in the company comply with the standards regarding driver's working time. Another initiative of the company, in order

to limit the loss of time, is to establish a pallet turnover system methodology with customers from nearby retail chains and stores.

In order to save time that the driver would have to spend waiting until the pallet is unloaded, the company agrees with individual units that the pallets will be collected during the next delivery. This is a practical solution because the driver can start another delivery right after unloading. This solution allows the company to improve and shorten the transport cycle. In terms of time, on-time delivery is equally important.

Automation is becoming more widespread and affect the entirety of the supply chain, spanning all of the food industry's sectors. Despite the promising benefits of automation and robotics, many companies hesitate to adopt them in logistics, mostly due to the lack of understanding of the technology, and their concerns regarding the cost of investment and maintenance of such systems (Dekhne, Hastings, Murnane, Neuhaus, 2019). Therefore, there is a need to disseminate information on the benefits of automation and robotics within the food logistics sector (Jagtap, Bader, Garcia-Garcia, Trollman, Fadiji, Solonitis, 2021).

For manufacturers who entrust transport to external companies, timely deliveries are very important, as any delay generates losses. Failure to meet deadlines may have various sources, including traffic jams, road accidents, unexpected detours or unfavorable weather conditions. These are factors that no organization can influence, but the examined company has tools that make it possible to determine some threats in advance and find an alternative solution early enough to avoid delays in deliveries. Moreover, the company employs a team of logistics experts who constantly monitor ongoing transportation operations. This team cooperate with drivers in real-time to resolve unforeseen issues and optimize delivery performance. Their expertise, combined with advanced systems, allows for more accurate and immediate problem resolution, improving overall efficiency. Thanks to the use of telematics solutions, the company is able to generate information about traffic intensity in a given area or a road incident that involves detours. The information is immediately transferred to the company's headquarters. This allows for a quick reaction, which involves setting a different route for the driver. After establishing new guidelines, the driver is informed about the route change, which does not mean that there will be no delays in delivery, but it gives the company a chance to reduce or completely eliminate them.

4. Logistics company in the future

The subject of the analysis will be to determine the perspective of transporting fresh products by the examined company, in terms of its organization and technical conditions. Conducting the analysis will allow you to determine the correctness of the current strategy companies in the scope of services offered. Based on the information collected about the logistics company,

Table 1 proposes the strengths and weaknesses of the organization in terms of transport, as well as opportunities and threats resulting from the impact of the environment.

Table 1.
Identified strengths, weaknesses, opportunities and threats

Internal factors	External factors
Strengths (S)	**Chances (O)**
1. Many years of experience in the field of food transport. 2. Specialized fleet of vehicles. 3. Constant space control cargo. 4. Optimum protection load. 5. Modern devices refrigeration. 6. On-time delivery. 7. Respecting standards and regulations.	1. Constantly increasing demand for food transport. 2. Exploiting smart packaging during transport. 3. Establishing cooperation with countries outside the EU. 4. Technology development. 5. Improving road condition. 6. Possibility to expand transport for intermodal transport.
Weaknesses (W)	**Threats (T)**
1. Carriage only road transport. 2. Basing many tasks on IT systems that may turn out to be an emergency. 3. Empty runs appearing. 4. No shipping services.	1. Big competition. 2. External factors hindering implementation of transport. 3. Damage sensitive loads and temperature changes. 4. High fuel costs. 5. Possibility of breaking the chain refrigeration.

Source: Own study.

As the table shows, when determining individual factors, the focus was largely on those that directly affect the transport of fresh products. Referring to the purpose of the study, this is the most important relationship that will allow for the assessment of the current strategy of a logistics company. Table 1 shows the preponderance of strengths over other factors. This proves that the company is well prepared to carry out this type of transport. Problems that may arise during transport are largely influenced by external factors. Therefore, in order to determine the interrelationships and between individual factors, it is necessary to conduct a thorough analysis that will enable the assessment of the interdependence between strengths and weaknesses, as well as emerging opportunities and threats.

Table 2 presents the weights assigned to each factor affecting the analyzed logistics company. The size of the scales was determined in relation to the importance of a given factor for the transport of perishable products. The table shows that the strengths that have the greatest impact on transport are S2 and S3, i.e. a specialized fleet of vehicles and constant control of the cargo space. Referring to the weaknesses, the most significant is W2, i.e. basing many activities on IT solutions that may prove to be unreliable. The highest rated opportunities are O2 and O4, i.e. the possibility of using intelligent packaging and technology development. However, the most threatening factors are T3 and T6, i.e. the sensitivity of cargo to damage and temperature changes, as well as the possibility of interrupting the cold chain.

Table 3 presents the course of the SWOT analysis, which involves determining the relationship between the strengths of the examined logistics company and factors emerging from the environment. The table shows that strengths largely allow for the use of emerging

opportunities, as the sum of factor interactions amounted to 32/2. However, to an even greater extent, strengths allow you to limit possible threats because the sum of their mutual interactions was 56/2. Already at this stage of the analysis, it can be concluded that the analyzed logistics company has sufficient strengths to limit emerging threats.

Table 2.
Summary of weights for individual factors

Strengths (S)								
	S1	S2	S3	S4	S5	S6	S7	
Weight	0,10	0,20	0,20	0,15	0,15	0,10	0,10	**∑=1,00**
Weaknesses (W)								
	W1	W2	W3	W4				
Weight	0,20	0,30	0,25	0,25				**∑=1,00**
Chances (O)								
	O1	O2	O3	O4	O5	O6		
Weight	0,10	0,25	0,05	0,25	0,15	0,20		**∑=1,00**
Threats (T)								
	T1	T2	T3	T4	T5	T6		
Weight	0,05	0,15	0,25	0,20	0,10	0,25		**∑=1,00**

Source: Own study.

Table 3.
The impact of strengths on emerging external factors

Will specific strengths allow you to take advantage of existing opportunities ?									
Opportunities/ Strengths	**O1**	**O2**	**O3**	**O4**	**O5**	**O6**	**Weight**	**Number ***	**Product ****
S1	1	0	1	1	0	1	0,10	4	0,40
S2	1	0	1	1	0	0	0,20	3	0,60
S3	0	1	0	1	0	0	0,20	2	0,40
S4	0	1	0	1	0	0	0,15	2	0,30
S5	0	0	0	1	0	0	0,15	1	0,15
S6	1	0	0	0	1	0	0,10	2	0,20
S7	0	1	0	1	0	0	0,10	2	0,20
Weight	0,10	0,25	0,05	0,25	0,15	0,20			
Number *	3	3	2	6	1	1			
Product **	0,30	0,75	0,10	1,50	0,15	0,20			
Sum								**32/2**	**5,25**
Will certain strengths overcome the threat ?									
Opportunities/Strengths	**T1**	**T2**	**T3**	**T4**	**T5**	**T6**	**Weight**	**Number ***	**Product ****
S1	1	1	1	1	0	1	0,10	5	0,50
S2	1	1	1	1	0	1	0,20	5	1,00
S3	0	1	1	1	0	1	0,20	4	0,80
S4	0	1	1	1	0	0	0,15	3	0,45
S5	1	1	1	1	0	1	0,15	5	0,75
S6	1	0	1	0	0	0	0,10	2	0,20
S7	0	1	1	1	0	1	0,10	4	0,40
Weight	0,05	0,15	0,25	0,20	0,10	0,25			
Number *	4	6	7	6	0	5			
Product **	0,20	0,90	1,75	1,20	0	1,25			
Sum								**56/2**	**9,40**

Note: * Number of interactions, ** Product of weights and interactions.

Source: Own study.

Table 4 shows the relationships between the company's weaknesses and factors in the environment. Interpreting the data from the table, it can be noticed that the weaknesses have a small impact on the emerging opportunities and possible threats, because the sum of their interactions is 10/2 and 14/2, respectively. Compared to the interactions between strengths and external factors, these values are small, but not low enough to be ignored. With respect to sensitive products, any hazard may prove significant and affect the quality of the cargo.

Table 4.
Relationships between weaknesses and environmental factors

Will specific weaknesses negatively impact the use of available opportunities ?									
Opportunities/ Weaknesses	**O1**	**O2**	**O3**	**O4**	**O5**	**O6**	**Weight**	**Number ***	**Product ****
W1	1	0	1	0	0	0	0,20	2	0,40
W2	0	0	0	1	0	0	0,30	1	0,30
W3	0	0	0	0	0	0	0,25	0	0,00
W4	0	0	1	0	0	1	0,25	2	0,50
Weight	0,10	0,25	0,05	0,25	0,15	0,20			
Number *	1	0	2	1	0	1			
Product **	0,10	0,00	0,10	0,25	0,15	0,20			
Sum								**10/2**	**2,00**
Do specific weaknesses magnify threats ?									
Threat / Weaknesses	**T1**	**T2**	**T3**	**T4**	**T5**	**T6**	**Weight**	**Number ***	**Product ****
W1	1	0	0	0	1	0	0,20	2	0,40
W2	1	1	0	0	0	0	0,30	2	0,60
W3	1	0	0	0	1	0	0,25	2	0,50
W4	1	0	0	0	0	0	0,25	1	0,25
Weight	0,05	0,15	0,25	0,20	0,10	0,25			
Number *	4	1	0	0	2	0			
Product **	0,20	0,15	0,00	0,00	0,20	0,00			
Sum								**14/2**	**2,30**

Note: * Number of interactions, ** Product of weights and interactions.

Source: Own study.

Table 5 presents the TOWS analysis, which involves determining how external factors influence the strengths of the examined logistics company. The table shows that emerging opportunities strengthen the strengths of the analyzed logistics company to a large extent, as the sum of their interactions is 30/3. However, the degree of weakening of strengths by possible threats should be assessed as average, because the sum of interactions was 16/2. This means that the company is in a rather unfavorable environment in terms of its operations.

Table 6 presents the relationships between environmental factors and the weaknesses of the examined logistics company. The table shows that emerging opportunities reduce weaknesses to a small extent, as the sum of their interactions is 14/2. With respect to strengthening weaknesses through possible threats, the sum of interactions was 20/2. The degree of impact in this case can be assessed as medium, as this result does not differ significantly from the other values in the TOWS analysis. However, the examined logistics company should focus its attention on threats, as this result should be slightly lower.

Table 5.
The impact of external factors on the company's strengths

Do emerging opportunities enhance strengths ?										
Strengths/ Opportunities	**S1**	**S2**	**S3**	**S4**	**S5**	**S6**	**S7**	**Weight**	**Number ***	**Product ****
O1	1	0	0	0	0	0	0	0,10	1	0,10
O2	0	0	1	1	0	0	1	0,25	3	0,75
O3	1	0	0	0	0	0	0	0,05	1	0,05
O4	0	1	1	1	1	1	1	0,25	6	1,50
O5	0	0	0	1	0	1	0	0,15	2	0,30
O6	1	0	0	0	0	1	0	0,20	2	0,40
Weight	0,10	0,20	0,20	015	0,15	0,10	0,10			
Number *	3	1	2	3	1	3	2			
Product **	0,30	0,20	0,40	0,45	0,15	0,30	0,20			
Sum									**30/2**	**5,10**
Do specific threats offset strengths ?										
Strengths/ Threats	**S1**	**S2**	**S3**	**S4**	**S5**	**S6**	**S7**	**Weight**	**Number ***	**Product ****
T1	0	0	0	0	0	0	0	0,05	0	0,00
T2	1	1	0	1	0	1	0	0,15	4	0,60
T3	0	0	0	1	0	1	0	0,25	2	0,50
T4	0	0	0	0	0	0	0	0,20	0	0,00
T5	0	0	0	0	0	0	0	0,10	0	0,00
T6	0	0	0	1	0	1	0	0,25	2	0,50
Weight	0,10	0,20	0,20	0,15	0,15	0,10	0,10			
Number *	1	1	0	3	0	3	0			
Product **	0,10	0,20	0,00	0,45	0,00	0,30	0,00			
Sum									**16/2**	**6,65**

Note: * Number of interactions, ** Product of weights and interactions.

Source: Own study.

Table 7 presents the collective results of two analyzes performed, based on which it will be possible to completely assess the current situation of the company and propose an appropriate strategy that will allow for the improvement of processes taking place inside the company. Analyzing the results of Table 7, it can be concluded that the greatest dependencies occur between strengths and threats. This means that despite many strengths, the company operates in a rather hostile environment for its business.

Applying this statement to the transport of perishable products, it is true. The greatest threat to this type of transport are the natural properties of the products being moved, which the company has no influence on. According to the data in Table 7, the SWOT and TOWS analysis shows that the company should follow a conservative strategy in its activities. By optimally using its strengths, the organization can limit the impact of threats arising from the environment. This is also true, because through constant temperature control using telematics technologies, the use of specialized refrigeration equipment, an appropriately equipped fleet of vehicles, optimal load securing, as well as compliance with the standards and guidelines contained in the conventions and standards mentioned in the work, it is possible to limit the impact of unfavourable factors. To optimally use its strengths, the company should also take advantage of emerging opportunities. Thanks to the development of technology, it will be possible to improve IT systems that enable constant control of the cargo space in terms of temperature and air humidity.

Also, diversifying transport with intermodal transport may contribute to reducing fuel costs, which reach high amounts when transporting only by road. Also, the use of intelligent packaging during transport will contribute to energy savings of refrigeration units, which will significantly extend their "life" and more efficient use.

Table 6.
The impact of external factors on the company's weaknesses

Do emerging opportunities limit weaknesses ?							
Weaknesses/ Opportunities	**W1**	**W2**	**W3**	**W4**	**Weight**	**Number ***	**Product ****
O1	0	0	1	0	0,10	1	0,10
O2	0	1	0	0	0,10	1	0,10
O3	0	0	1	0	0,15	1	0,15
O4	0	1	1	1	0,25	3	0,75
O5	1	0	0	0	0,20	1	0,20
O6	1	0	1	0	0,20	2	0,40
Weight	0,20	0,30	0,25	0,25			
Number *	2	2	4	1			
Product **	0,40	0,60	1,00	0,25			
Sum						**14/2**	**3,95**
Will specific threats amplify the impact of weaknesses ?							
Weaknesses/ Threat	**W1**	**W2**	**W3**	**W4**	**Weight**	**Number ***	**Product ****
T1	1	1	1	1	0,05	4	0,20
T2	1	1	0	0	0,25	2	0,50
T3	0	1	0	0	0,25	1	0,25
T4	0	1	0	0	0,25	1	0,25
T5	1	0	1	0	0,10	2	0,20
T6	0	0	0	0	0,10	0	0,00
Weight	0,20	0,30	0,25	0,25			
Number *	3	4	2	1			
Product **	0,60	1,20	0,50	0,25			
Sum						**20/2**	**3,95**

Note: * Number of interactions, ** Product of weights and interactions.

Source: Own study.

Table 7.
Summary of analysis results

	Chances	**Treats**
Strengths	**Aggressive strategy**	**Conservative strategy**
	Number of interactions	Number of interactions
	62/2	72/2
	Weighted number of interactions	Weighted number of interactions
	10,35	12,05
Weaknesses	**Competitive strategy**	**Defensive strategy**
	Number of interactions	Number of interactions
	24/2	34/2
	Weighted number of interactions	Weighted number of interactions
	5,95	6,25

Source: Own study.

5. Summary

From the conducted research analysis of the logistics company, it can be concluded that the examined entity has the necessary tools and knowledge to carry out the transport of fresh products at an appropriately high level - this is the answer to the question that constituted the research problem. The company undoubtedly has an appropriately equipped fleet of vehicles necessary for the implementation of transport processes. The refrigeration devices used also fulfill their role, which is additionally proven and controlled by constant observation of the cargo space. Cargo securing, which is so important when moving damage-sensitive products, is also carried out with appropriate care. An additional factor that works to the company's advantage is many years of experience in the food industry. Thanks to the knowledge acquired over many years of operation of the company, it is able to use its resources more effectively. However, thanks to all the above factors, is it possible to clearly confirm the hypothesis?

The working hypothesis assumed that thanks to its strengths, the company is able to carry out this type of transport, avoiding situations that threaten the quality of the cargo. However, after the analysis is completed, it cannot be fully confirmed. According to the data included in the summary of the conducted research, the company was assigned to the area of a conservative strategy, according to which the examined entity has many strengths, but is exposed to a strong impact of external factors. It is therefore impossible to clearly confirm that the company will not have any difficulties in carrying out transport services. Taking into account the specific nature of food transport, it can be concluded that this is indeed impossible. Even constant control of the cargo space can only speed up the response to emerging threats, which may include, for example, interruption of the cold chain. The partial confirmation of the hypothesis does not mean that the logistics company should not carry out this type of transport, on the contrary. By making optimal use of its strengths, it will be possible to reduce unfavorable factors that will not pose such a great threat that the company will have to give up this aspect of its operations. As already mentioned in the research summary, it will be important to take advantage of emerging opportunities in this process. By using the positive dependencies resulting from the company's environment, it will be possible to intensify the action of the company's strengths, which will ultimately bring measurable results, benefits, both in terms of securing and controlling the cargo, but also in terms of overall functioning of the research entity.

On the other hand, one may ask whether it is advisable to make so many efforts to reduce factors that cannot be completely eliminated? Each company should answer this question itself. However, if you want to transport food, the answer should be yes. Any action that can improve a specific process is intentional. If the examined company stopped at the stage of identifying its strengths, there would be a high probability that transports would not be carried out while maintaining the appropriate quality of cargo, because failure to address possible threats in any way would bring results that would be counterproductive. Failure to determine negative factors

coming from the environment would result in ignorance and, consequently, failure to determine methods of preventing threats and methods of control, which are tantamount to deterioration of the properties of products and even the complete necessity of their disposal. Innovative solutions that could have a positive impact on this type of transport remain an open issue. Due to the topic discussed, the work describes and characterizes existing devices and solutions that allow maintaining appropriate conditions both in organizational and technical terms. However, in the era of continuous development of technology, it would be advisable to research and introduce other improvements that would guarantee greater safety and control over the processes and operations carried out, which in the aspect of food transport are extensive and complicated, and, above all, significant in terms of the quality and durability of products.

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