

THE RISK ANALYSIS OF DISPATCHING ACTIVITIES IN THE TRANSPORT COMPANY

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Summary: The article is focused on the issue of the activity at the dispatching workplace of a smaller transport company dealing with road transport by own trucks up to 3.5 tons. It describes and analyze the basic activities of the dispatcher and select the problems of the dispatching activities. To understand the risks, SWOT analysis is included. The article also points to risks arising from the activity of the driver.

Key words: Transport company, road transport, dispatcher, risk analysis.

INTRODUCTION

Transport and dispatching activities are closely related in the area of business. The dispatcher and its activities can be characterized as an integral part of a transport company dealing with transport. In my analysis and consideration, I draw on real experience and characterize the problems that exist in smaller firms. The main objective of the article is to find some of problematic areas of dispatching activities and also make a risk analysis of dispatcher activities by using SWOT analysis.

1 CHARACTERISTICS OF DISPATCHING ACTIVITY

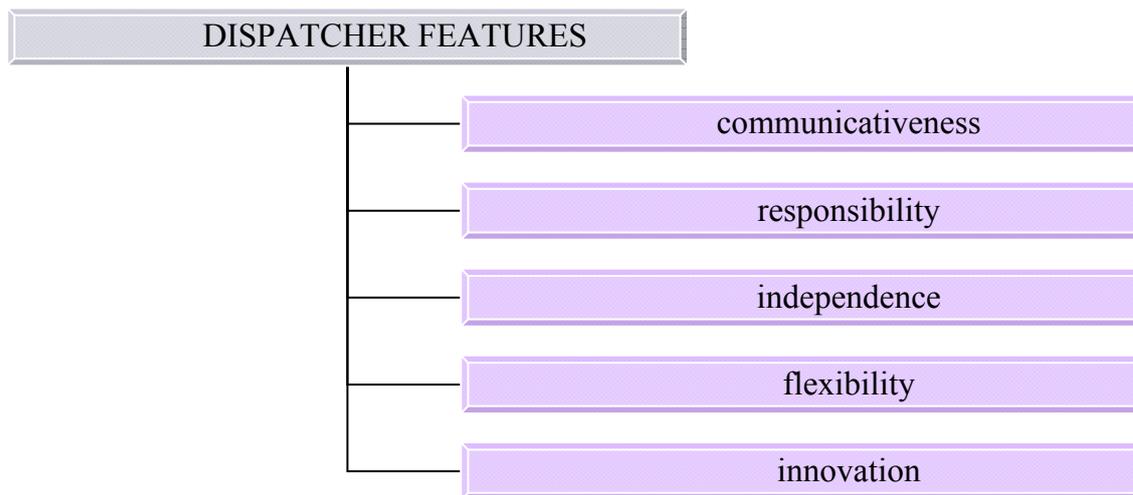
The transport company performs the function of relocating goods, animals and persons from one place to another for profit. It becomes a tool and a carrier of transport. Transport includes all transport management and organization activities. This article is closer focused on road transport like a dispatcher of smaller companies, which use their cars for transporting goods exclusively.

The carrier for its proper and prosperous business needs a well-functioning dispatching center. An important and specific job position at the dispatching center is the dispatcher. The scope of work at the dispatcher's workplace is not precisely defined and depends on company policy, company size, number of employees and other indicators. In smaller companies, there is a tendency for the dispatcher's position to be expanded by other working tasks, for which specialized workers (accountants, etc.) will be hired in large companies. If we consider the activity of a smaller company's dispatcher, it is possible to include a large number of diverse activities in its work.

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The efficient operation of the transport company requires a balanced extraction of the means of transport available to the company. One of the most important activities of the dispatcher is to ensure smooth transport activities for all vehicles entrusted to him.

The dispatcher has an important role in communication with potential and existing customers as well as with other carriers, freight forwarders and authorities of various kinds. The emphasis is placed on the characteristics and capabilities of the dispatcher. Important features are shown in Figure 1.



Source: author

Fig. 1 – Required features of the dispatcher

The existence of the customer is the primary prerequisite for the economic success of the business entity. The transport company is dependent on demand of transport requirements. Dispatching workplaces may differ in access to customer acquisition. Company policy is the decision of the company's management in cooperation with authorized personnel.

2 PROBLEMATIC AREAS OF DISPATCHING ACTIVITIES

The activity of the dispatcher affects a variety of different factors. The successful existence of the transport company on the market depends on the transport, which is led and directed by the dispatching workplace. Activities are interdependent. The transport operator is the driver of the vehicle, which is directed by the dispatcher.

2.1 Human factor

An important group of transport company employees are truck drivers, which I will focus on it. Drivers work closely with dispatchers, who are managing and regulating their activity. Under the current economic conditions, most companies are not able to make a very high financial evaluation of the driver's work, and in the transport sector there is a large fluctuation of drivers, looking for better working conditions. When looking for the advantages and disadvantages of working with individual employers, they play a role beyond the usual factors and driver preferences. Time usually means money. In our case we are talking about

the time spent behind the wheel. As part of saving time, there are cases where the driver knowingly violates the law in terms of non-observance of mandatory breaks. This is done by the will of the employee, but often also by the employer. Such behavior may have disastrous consequences in extreme case.

In the following SWOT analysis I will evaluate some risk factors of dispatching activity. We will find out which factors have positive and negative influence on society and to what extent we are able to correct and influence the effects of individual factors.

2.2 Technical factors

Costs for the acquisition and operation of freight vehicles are an important item in the budget of each transport company. When buying vehicles, the owner decides whether to buy new or second-hand vehicles. With the purchase of a new vehicle, the owner is entitled to several months to several years of free service. Vehicles used by the vehicle are solely covered by the owner. In both cases, the owner must pay attention to the safety of the vehicle in the first place. The dispatcher ensures fleet monitoring and observes the dates of mandatory inspections. Together with the driver, he performs a pre-travel guided tour, prepares a handover protocol, and receives reports of problems that subsequently escalate adequately. Ignoring the technical state of the vehicles is a serious threat and forms a field for potential problems during transportation.

2.3 Factors of the economic environment

A strong economic tool is competition, which in its consequences can have a positive and a negative impact on the operation and functioning of the transport company. Strong competition, by its nature, tends to do not always act properly. Enforcement efforts may lead to a tendency to breach the law in small or larger forms. Not always in case of negative phenomena coming from competing firms it is a violation of the law. In many cases, it is only a competitive fight that is inappropriate but legal. These include for example underestimation of the cost of shipment to obtain by a customer. Competitors are not only domestic carriers, but also foreign carriers offering their services to us. The dispatcher must ensure compliance with the rules laid down by law but, in the context of maintaining good reputation and market position, he should take care of decent conduct and choose adequate ways to achieve his own advantage.

2.4 Factors of the route of transport and the nature of the cargo

The essence of road transport is to get a vehicle with cargo from one place to another. Different complications may occur during the journey. Removing all obstacles is impossible and you need to be aware of the risks in transportability, that is, how we are able to transport cargo before the monitored operation. This aspect is influenced in particular by the country's legislation, terminals (costs), the possibility of safe decommissioning of the vehicle, border crossing, etc. In terms of the cargo being transported, depends on a character (characteristics), the degree of risk to the cargo or the threat arising from the nature of the cargo being carried are important.

3 RISK ANALYSIS OF DISPATCHER ACTIVITIES

The dispatching activity must be conducted with an individual focus on the company, and the general rules of successful management of the workplace must be adapted based on experience. Internal guidelines and regulations need to be carefully considered and operationally changed. Keeping up with the competition, appropriately directing employees, maintaining own specifics and reputation is one of the prerequisites for success in the transport market.

SWOT analysis is sometimes known as internal-external analysis and can be used in combination with brainstorming techniques to help discover and document potential risks. Steps in applying the technique:

- Step 1: Identify the SWOT analysis resource(s). It is important to work with individuals who understand the culture in which the project will function since they will have a better sense of the strengths and weaknesses portions of the analysis.
- Step 2: Identify and list Organizational Strengths and Weaknesses using brainstorming. These are INTERNAL - things for which you have control over.
- Step 3: Derive Opportunities associated with the project and Threats that could harm the project. These are EXTERNAL – outside of business direct ability to control. (1)

To understand the risks, SWOT analysis is included. It is a tool for describing the strengths and weaknesses of the internal environment and the opportunities and threats of the external environment. The factors of the internal environment, which have been evaluated as the most important on the basis of experience and resources, will be broken down and described in the strengths and weaknesses of SWOT analysis and external environment factors in the opportunities and threats. We assign a factor V to each factor, the value which expresses the influence of the external factor on the achievement of the target and the influence on the strategic position of the enterprise. We use values from 0 (insignificant effect) to 1.0 (the most important effect). The assigned value H expresses the intensity, extent and size of the external factor acting on the enterprise. It takes values from 1 (minimum intensity) to 5 (maximum intensity). The weighted VH value is obtained by the product of the preceding values. Assess risks based on expert judgment. I evaluate probability of occurrence and intensity of negative influence.

From the results we graphically express the direction of all four pointers in the matrix of model strategies and the vector product we calculate the direction that our attention should take. We will identify the ability to respond to external influences, analyze the predicted external environment influences, and assess capabilities to respond effectively. Using the following SWOT analysis, we analyze the effects of external factors on individual internal and external factors influencing dispatching activity.

Tab. 1 - SWOT analysis of dispatcher activities

	Helpful	Harmful
Internal origin	Strengths 1. Goodwill 2. International contacts 3. Quality software 4. Good advertising	Weaknesses 1. Transport capacity 2. Employee turnover 3. Working time of the driver and dispatcher 4. The technical state of the vehicles
	Opportunities 1. Cooperation with competitors 2. Entry to foreign markets 3. Public transport database 4. Construction of motorways	Threats 1. Competition 2. Economic crisis 3. Energy price increases 4. Traffic constraints

Source: author

Tab. 2 - Calculation of SWOT analysis indicators

Strengths	V	H	VH	Weaknesses	V	H	VH
1. Goodwill	0,5	4	2	1. Transport capacity	0,2	3	0,6
2. International contacts	0,2	2	0,4	2. Employee turnover	0,5	3	1,5
3. Quality software	0,1	2	0,2	3. Working time of the driver and dispatcher	0,2	2	0,4
4. Good advertising	0,2	3	0,6	4. The technical state of the vehicles	0,1	4	0,4
Sum	1		3,2	Sum	1		2,9
Opportunities	V	H	VH	Threats	V	H	VH
1. Cooperation with competitors	0,3	4	1,2	1. Competition	0,5	5	2,5
2. Entry to foreign markets	0,3	3	0,9	2. Economic crisis	0,3	2	0,6
3. Public transport database	0,3	4	1,2	3. Energy price increases	0,1	2	0,2
4. Construction of motorways	0,1	5	0,5	4. Traffic constraints	0,1	2	0,2
Sum	1		3,8	Sum	1		3,5

Source: author

When considering the factors influencing the dispatching activity, it was guided by the practical experience and we can appreciate that the strong points are mainly good name, international contacts, quality software and good advertising. Among the opportunities which are there included cooperation with competitors, access to foreign markets, the possibility of public transport databases and construction of roads and motorways. As weaknesses, there are identified transport capacities, employee turnover, working time and vehicle technical

condition. Among the threats I have included competition, the economic crisis, energy price increases, and traffic constraints of various kinds.

On the basis of the calculated indicators, taking into account the four items influencing the individual SWOT fields, the weaknesses and opportunities over the threats prevail.

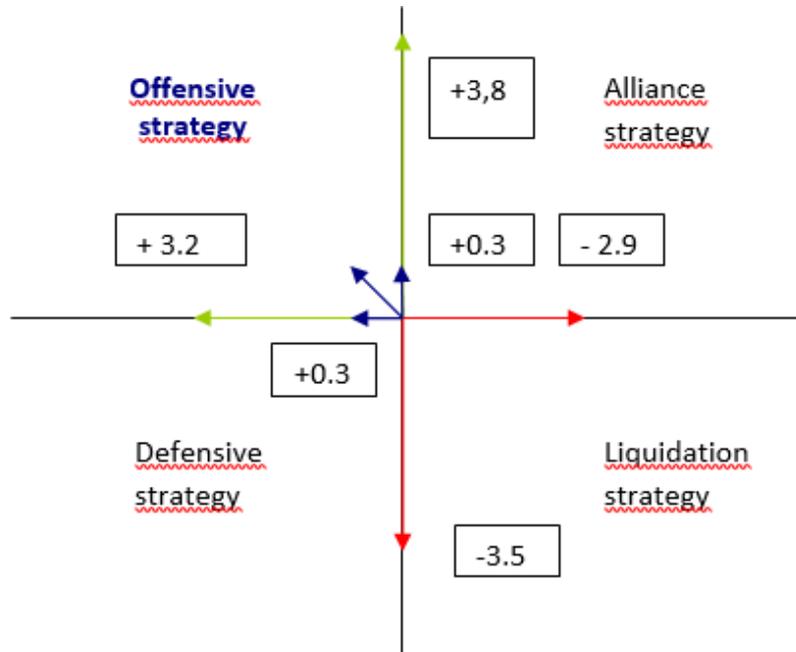


Fig. 2 - Diagram of SWOT analysis of dispatching activities

Source: author

The transport company must strive to take advantage of all the opportunities offered to make the workplace more and more efficient. On the other hand, it is necessary to eliminate the weaknesses through thoughtful changes and to count in their activities with threats from an external environment, which are difficult to influence. The SWOT analysis diagram (Figure 2) provides us with a strategy of offensive strategy, but it is necessary to focus on all the factors and try to comprehensively guide them towards the benefit of the company. The essence of the offensive strategy is to consolidate its own market position. This conclusion logically follows from the nature of the business plan, since road transport is a highly competitive environment. The specificity of competition in this sector is that companies are also competing with foreign carriers. The analysis shows that the company is on the good path to sustainability in the market. From the values of indicators, we can see that the largest space is opened on occasions of finding a new occasion. Collaboration with competitors is a good way to increase chance for finding more opportunities in this highly competitive sector. Access to foreign markets is closely related to searching for contacts, spreading good reputation, and using targeted advertising.

4 RISKS ARISING FROM THE ACTIVITY OF THE DRIVER

The driver is a very demanding job in terms of both physical and mental stress. Occupation of the driver is chosen by people for various reasons. Frequent reasons are the

lack of job opportunities in the labor market. Due to the large number of transport companies in the market, it is easy for drivers to find a job but also to change their employers. Creating ideal conditions is impossible, and drivers' experience is often dissatisfied, whether financially or technically.

The dispatching workplace is working closely with the truck drivers, who work for the company. There is no exception that drivers only communicate with the dispatcher's office and receive information and instructions from the dispatcher. In smaller companies, sophisticated systems are not always available, as the company's owner finds it financially disadvantageous. The dispatcher must improvise and rely on supporting documents. Thus, many steps of dispatcher management are carried out exclusively by the dispatcher, possibly with the help of the driver. The human factor is the risk of mistakes and easier abuse of the system set by the drivers themselves.

Significant driver risk is illegal enrichment itself of fuel. As a mileage checker we can choose a book of journeys. Each section of the drive and the number of kilometers traveled between the sections must be recorded. An appropriate tool is the help sheets of the driving book that the dispatcher will give to the driver before the start of each ride. Together they check the state of the tachometer and the amount of fuel to reduce the risk of inconsistency with the previous recorded condition. During the journey, the driver records the route locations, fueling and mileage.

If the dispatch center does not have a vehicle monitoring system, the risk of inaccuracy of the distance traveled increases. The dispatcher must therefore choose the appropriate route tracking and monitoring tool. An appropriate procedure may be to record the data after each ride. From the help sheet, dispatcher then transfers the data to MS Excel to help us efficiently create a book of journeys. The control options are very limited and only the approximate overview is obtained by the dispatcher.

Tab. 3 – Log book

Serial number	The course of the journey				Tachometer status			Refueling	
	Date	Time	Place	Break	Start	End	Kilometers	Quantity	Price
1									
2									
3									
4									
5									

Source: author

The certificate of attendance shall be handed over by the driver together with the other documents after the work. The dispatcher writes driving into an existing file, serving as a tool for tracking and tracking the tracks, as well as on the driver's monthly driver report. The road book for vehicles over 3.5 tons partially replaces tachographs, but they are not mandatory for vehicles up to 3.5 tons.

One of the tools to support fuel constraints and eliminate the risk of unauthorized diversion for one's own needs is to calculate the maximum consumption per kilometer. We use the formula in form

$$FC = p \cdot km \cdot k \quad (1)$$

where FC is fuel consumption, p is price of fuel, km is kilometers and k is the coefficient, which is added, depending on the season taking into account the need for heating, air conditioning or other assumed factors occurring during performance of duties.

If the driver exceeds the allowable calculated fuel quantity on his journey, he must adequately justify this increase in fuel consumption. The dispatcher's workplace determines the circumstances under which the consumption exceedance is accepted. (for example - unregistered detour due to traffic jam). In other cases, the driver has to balance the difference financially. The dispatching center records the movement on the tank cards if the driver is equipped with them and compares the consumption of mileage and records in the book of journeys. This tool is not popular on the part of drivers, but some of the transport companies are using it.

CONCLUSION

The dispatcher influences many factors of the external and internal environment in its operation. Negative factors need to be eliminated to ensure that the dispatching activity is continuing process and required for the success of the transport company on the market. The primary prerequisite for correcting dysfunction is the awareness of the risks and the context of the threat. There was defined problematic areas of dispatching activities like is human factor, technical factors, factors of the economic environment, factors of the route of transport and the nature of the cargo. Subsequently, SWOT analysis was performed. The results of the analysis pointed to the need to focus on an offensive strategy. The essence of the offensive strategy is to consolidate its own market position. This conclusion logically follows from the nature of the business plan, since road transport is a highly competitive environment.

Another part of article is about risks based on driver's activity and how important is to try to prevent them and which way we should use under normal conditions.

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