



RISK MANAGEMENT ISSUES IN TRANSPORTATION AND LOGISTICS COMPANIES

Maria Luskova

University of Zilina, Faculty of Security Engineering, Zilina, Slovakia

Katarina Bujanova

University of Zilina, Faculty of Security Engineering, Zilina, Slovakia

©MESTE

JEL Category: **M14, M31, L91**

Abstract

Transportation business as a specific kind of a service must take into account a lot of risks resulting from the variable nature of external as well as internal factors of changing business environment. Transportation business is one of the most problematic spheres in the Slovak business. It is important to work with risks and manage them not only during establishing the business but also during the whole run of business activities. Risk management in business is the assumption that business risks will be properly identified, assessed and managed and business opportunities will be fully exploited. The aim of this paper is to point out the possible forms of risk management use in the transportation business. The process of business risk management in transportation company is related to its transnational character or the nature of stakeholders. Standards and norms, used in this area, can be applied. Since the transport companies now operate in an environment with high degree of uncertainty and are exposed to various risks it is not possible to define some stable and exact process and exact solution that would guarantee risk elimination or successful crisis encompassment. Risk management as well as solving each crisis situation has individual and specific character. It is connected with various circumstances, performed in different conditions and accompanied by different events. Encompassment of each crisis situation requires great practical experience and professional knowledge in various fields. At present, risk elimination and solving crisis situations is understood as the top of managerial wisdom and the most demanding manager task.

Keywords: Management, marketing, quality, transport, service, business risks, risk management

Address of the corresponding author:

Maria Luskova

✉ maria.luskova@fbi.uniza.sk

1 INTRODUCTION

Any business activity that is realized in a certain business environment is affected by many risks. These risks result from the variable nature of external as well as internal factors affecting the enterprise in this business environment. The

business in transportation as a specific kind of services must take into account this changing nature of the environment. Specifically, transportation business is one of the most problematic spheres in the Slovakian business. For example, although the business in road freight transport over 3.5 tons belongs to the frequent business sphere, authorization to perform the profession of the operator of road freight transport and the Community license for national / international transportation over 3.5 tons even before the establishment of the company is required. However, many entrepreneurs in developing their business plans do not count on the fact that obtaining permission and license can be a long and difficult process. In the worst case, the issue of permission can be rejected by the District Office, Department of road transport. Except for the problems during the establishment of the company when it is necessary to document financial and professional competence, vehicle ownership, technical base, etc., a variety of documentation and permissions are also needed for carrying out the operation of transport business. The carrier must know national laws and also the regulations of the European Union.

Most of the companies engaged in business activities in the transport sector can be ranked among small and medium-sized enterprises (SMEs). Based on data from Eurostat, out of the total number of new enterprises in Slovakia, only 74,9% were still active at the end of the first year of existence and only 44,4% were still in business after five years. This means that over 50% of new enterprises in Slovakia do not survive longer than five years. According to the Eurostat data, Slovakia belongs among the EU countries with an above average number of founded and wound-up enterprises. It is also a country with the lowest enterprise survival rate within two years from being founded (ENTIRE, 2013).

Just for this reason, it is important to work with risks and manage them not only during establishing the business but during the whole run of business activities. The aim of this paper is to point out the possible forms of use of risk management in the transport business.

2 BUSINESS ENVIRONMENT OF TRANSPORT COMPANIES AND ITS SPECIFICS

Globalization has increased the consumption of communication, travel and information services. The increasing specialization of enterprises has led to close cooperation with external service providers. The current phenomenon of the economy is the effort of enterprises to buy also such activities which until now were carried out on their own. Many enterprises have realized that it is preferable to specialize in a particular area and other activities to keep for external specialists which are much more effective in them. It is a logical consequence of the growing complexity of the market and competition. These activities include the transport, too (Bujanova & Luskova, 2011).

Transport significantly contributes to the creation of the present modern world. Life today would be unthinkable without it, so each country seeks to build its own perfect transport system. The goal of each transport service provider should be to optimize its services so that they are effective and quality and meet the customer needs as much as possible (Dvorak, Leitner, & Novak, 2012).

Transport companies are surrounded by an environment that certain way - positive or negative - affect them and affect their behavior. If the company wants to be successful, it must analyze all these influences, know the direction of their activities, exploit them and adapt its behavior as current as the expected development in which it exists. At the same time, it must be stressed that these effects operate in a variety of the firms and generally the firm cannot directly control them. What for one business may represent a threat to its existence; it may be for another important opportunity for further development

Business activities in transport enterprises must focus on addressing the following questions: what, whom, how many, how, when, where, for how much to carry?

In view of the perspective, the overall business objectives of each transport company will be in the near future aimed at:

- Orientation towards the market and customer.
- Increasing productivity through flexible adaptation to market requirements.

- Improving the quality of services through innovation of technical and technological base.
- A targeted approach to competition.
- Focus on the quality of human resources.

Individual transport companies will have also an opportunity to strengthen their competitiveness in connection with the ongoing integration processes in Europe. However, increasing the market share and achievement of faster growth compared to the competition means to strengthen the marketing approach and go to marketing management of the company. Business in the field of transport notes the transport market and transportation in their mutual relationships. It examines not only the current state of the transport market but also directions of future development of demand in this market and possibilities of its satisfying.

3 POSITION OF THE RISK MANAGEMENT IN RELATION TO THE MANAGEMENT OF TRANSPORT COMPANIES

From the general point of view management in transport means the complex of universally valid models, approaches, methods and techniques applied by adding the values of resources and achieving the goals of a business-oriented entity whose product is an intangible service.

Transportation service can be characterized as an activity of a transportation service provider for the moving of persons or goods from a point of departure to a destination. Provider of transportation service may be legal or natural person e.g. carrier, freight forwarder or another intermediary, providing transportation service to the customer.

Management and marketing activities in transportation services are affected especially by four basic features, which are also a source of risk:

- Intangibility - unlike the physical products services are not able to be seen, tasted or heard before the purchase.
- Indivisibility - the services are characterized that they are produced and consumed at the same time, in contrast to physical products which are first produced, then stored, and subsequently distributed and consumed later.
- Variability - it's a feature of service indicating its nature, quality, progress and dependency

on the person providing it, where and when is provided. E.g. no two rides one and the same trolleybuses on the same route are not identical.

- The inability of being stored - it is obvious that it is not possible to ride one day as a reserve and on the second day not to drive at all and rely on that we have something in stock. The inability of being stored is not a problem in the case of persistent demand and offer when the necessary staff is ensured in advance.

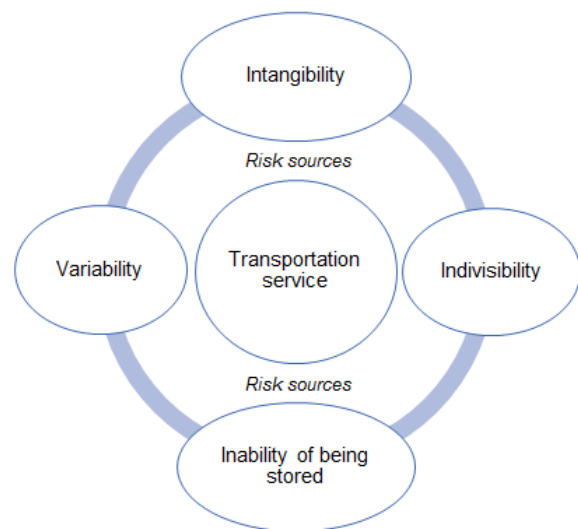


Fig. 1 Basic features of transportation services

In addition to these basic attributes transport services are also characterized by attributes such as complexity in understanding the product and assortment within the range of transportation services. The offer consists of a set of elementary services, where it is possible to distinguish between basic and supplementary services. Collectivity represents the fact that a part of the transportation services is provided by non-market or only by the partially-market way, what means that certain specific types of transportation services require various forms of state interventions.

Based on these facts, in the management of transport companies, it is necessary to apply the management procedures that take into account these specific features. One of the forms of management in the specific conditions of transport is marketing in transport. It represents tool aspect of specific techniques and procedures enabling application of management in real conditions of transport. This fact should be taken into account also in the application of management of business

risks and prevention of crisis situations in transport companies. Management and marketing in transport together represent, on the one hand, various forms of applications of general knowledge and, on the other hand, application of specific approaches in specific conditions of real practice.

Business risk brings to business in the transport element of uncertainty which may affect the development and business results. Business risk always has two sides - positive and negative. The positive side is associated with the hope of success and development of the company and the negative side is expressed through the failure of the set objectives, incurring losses and, in the worst case of dissolution of the company.

The following diagram illustrates the fact that the risk management must be considered in all aspects of management and marketing, but there are also such tasks that most managers shift to the shoulders of consultants and external collaborators (Buganova at al., 2012) (Hittmar & Striss, 2001).

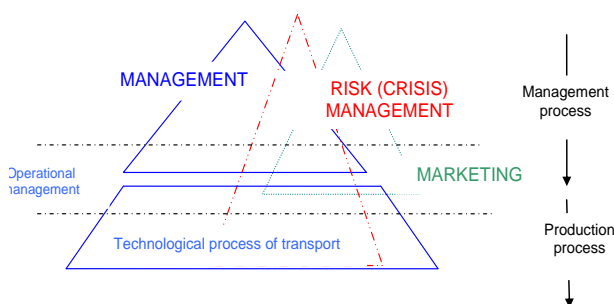


Fig. 2 Risk management in relation to the management of transport company

Risk management in business is the assumption that business risks will be properly identified, assessed and managed and business opportunities will be fully exploited.

Risk management can be described as a rational behavior in risk situation in order to protect and enhance the present and future assets of the company through the systematic integration of risk in key management decisions. Risk management cannot in small and medium-sized enterprises operate in isolation, detached from the company action. It must be integrated into the system and respected by all subsystems of the company. The introduction of risk management in small and medium-sized enterprises contributes to the maintenance or growth of the company's value for

its owners. It leads to higher quality of strategic management, increased stability, faster responses to changing market conditions and reducing the likelihood of mistakes, errors, and frauds (Belas, et al., 2014).

Risk management can be applied to the company as a whole or to certain areas of business activity, levels, or specific functions. The advantage for the company is, in particular, the move from a reactive to a proactive management which allows minimization of potential losses. One of the factors for successful risk management in the transport company is its integration into the strategic framework (Maris, 2013).

Strategic risk management framework ensures that risk information is reported to a sufficient extent and is used as a basis for decision making and responsibility acceptance at all important company levels.

Proposal of Strategic Framework of Risk Management consists of the following activities (Buganova at al., 2012):

Understanding of internal and external connections of enterprise – factors of internal and external business environment, relationships with stakeholders, company culture, etc. can have a significant impact on the proposal of the structure.

- Establishment of risk management policy, which has clearly defined objectives, intentions and direction of the company in the context of risk management.
- Assigning responsibilities and authorities, the organizational structure with a view to supporting the implementation of risk management, e.g. establishment of the risk management department, risk owners specification, etc.
- Integration of risk management into operational processes, integration of risk management into strategic planning, directions and implementation processes of a business and building a corporate culture. Development of a risk management plan.
- Allocation of resources needed for all stages of the risk management process (personnel, material, knowledge, experience, systems, technology, etc.).
- Establishing the mechanisms of internal communication presupposes the existence of

adequate internal information system which ensures that information from the application of risk management will be available in time and at the appropriate levels for all stakeholders.

- Establishing mechanisms for external communication, effective communication with external stakeholders in accordance with the intentions of the company. Confidence building and communication in crisis situations.

In addition to other international standards, the implementation of risk management in Slovakia is realized in accordance with the Australian Standard STN ISO 31000:2011 Risk Management – Principles and guidelines (STN ISO 31000:2011, 2011).

This standard can be used by any public, private or community enterprise, association, group or individual. It provides a common approach in support of standards dealing with specific risks or sectors but it does not replace those standards. Therefore, this International Standard is not specific to any industry or sector. It can be applied to any type of risk, whatever its nature, whether having positive or negative consequences.

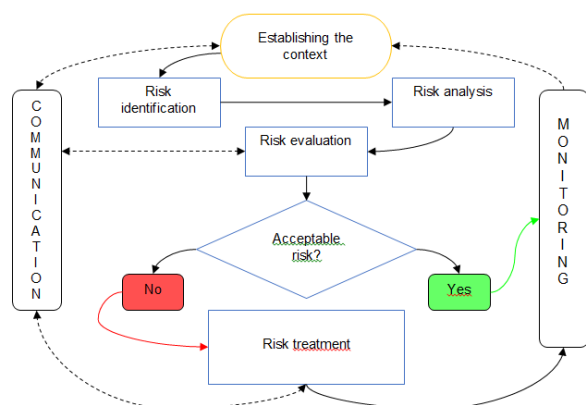


Fig.3: Risk management process

Source: Author based on (STN ISO 31000:2011, 2011)

The risk management process (Fig. 3) is formed by a set of the stages which are defined as follows (STN ISO 31000:2011, 2011) and (ISO 73:2009, 2009):

- Establishing the context – defines strategical and organizational relations to be taken into account when managing risk, sets the scope and risk criteria for the remaining process.
- Risk assessment:

- Risk identification – focused on identification of all risk sources which could have an impact upon assessed subject and provides inputs to risk analysis.

- Risk analysis – involves developing an understanding of risk. Identified risks are analyzed on the basis of consideration of the causes and sources of risk, determination of their positive and negative consequences, and the likelihood that those consequences can occur. The mutual conjunction of the criteria i.e. the likelihood and consequences represents the final point evaluation, respectively, the risk level. The individual criteria of certainly considered risk must be selected on the basis of the current and potential future situation of internal, external and financial continuity.

- Risk evaluation – involves comparing the likelihood of risk occurrence and its consequences with defined criteria. Based on this comparison considered risks are sorted according to management priorities followed by determining the boundary between acceptable and unacceptable risks.

- Risk treatment – involves elaboration of the proposal of measures only for unacceptable risks that require the development of a unique management plan together with the financing of the proposal. Acceptable risks are monitored because of the eventual future changes in the level of identified risks.

- Monitoring – this stage is focused on continuous monitoring and review of the risk management system, by reason of the constant changes in the internal, external and financial continuity. Subject to monitoring are acceptable and also the residual risks.

- Communication – involves mutual reviewing of individual processes and decisions in the system of risk management among stakeholders. Involvement of all stakeholders enables continuous improvement of processes and activities in the risk management system.

Since the transport companies now operate in an environment with high degree of uncertainty and are exposed to various risks it is not possible to define some stable and exact process and exact

solution that would guarantee risk elimination or successful crisis encompassment. Risk management as well as solving each crisis situation has individual and specific character, they are connected with various circumstances, performed in different conditions and accompanied by different events. Encompassment of each crisis situation requires great practical experience and professional knowledge in various fields. At present, risk elimination and solving crisis situations is understood as the top of managerial wisdom and the most demanding manager task (Bujanova & Luskova, 2011).

The process of the management of business risk for transport company is related to its transnational character or the nature of stakeholders. Standards and norms which are used in this area can be adapted based on these facts.

For transport companies, it is important to address the issues of risk management and management and marketing in transport. This is largely due to the fact that the State applies certain regulatory and other constraints in the transport sector which narrow the scope in implementing management and marketing activities. This is particularly the limitations in the provision of transport services, in pricing and in the field of social interests.

Passenger traffic is for its public action supported by the State and in these conditions is very difficult to obtain profit; moreover, it is very difficult to assert the abolition of some of its inefficient activities such as social tariffs, unprofitable lines, etc. Demand for transport services is usually derived from individual needs of passengers or the production needs of organizations. However, the offer has a standard structure in different modes of transport. Realization of transport service is often linked to the performance of the different modes of transport or is associated with other services and is not able of being stored. The necessity to cope with different kinds of variations (daily, monthly, seasonal etc. e.g. peak hours)

activates the need of maintaining excessive reserve capacity of vehicles and equipment.

Transport negatively affects the environment through the building of its infrastructure and operations. Public intervention into the process of providing transport services often overshadows the interest in the market orientation of the management of transport companies. Joining Slovakia, the European Union created scope for competition from the developed EU countries at the market of transport services. Transport companies who want in the new conditions not only to survive but also to benefit must be prepared in advance.

4 CONCLUSIONS

For the transportation and logistics companies, it is necessary to build protection against business risks, fraud, and data misuse. Just these companies are faced with competition on an international scale and are forced to cooperate with various nationalities and cultures. It is essential, that the risks resulting from these facts have been systematically assessed and managed and the necessary control mechanisms for their monitoring have been built.

Risk management in transport companies should be implemented in line with the strategy of the company. The role of strategic management is to maintain or gain a strategic competitive advantage, define and at a certain time to achieve real long-term goals. The aim is to reduce the risk of potential errors and bring the organization into a situation in which it can foresee the changes, respond to them, induces changes and use them to its advantage. Effective management and marketing help to improve the quality of business. It may have a significant impact on reducing business risk and a more effective achievement of business objectives (mainly profit). These facts may lead to reducing the likelihood of company losses, bankruptcy and reducing unemployment. A well-functioning business is the basis of regional development and well- functioning society.

WORKS CITED

Belas, J., Bujanova, K., Hostak, P., Hudakova, M., Luskova, M., Machacek, J., & Sobekova-Majkova, M. (2014). *Podnikateľské prostredie malých a stredných firiem v Českej a Slovenskej republike*. Zilina: GEORG.

Bujanova at al., K. (2012). *Manazment rizika v podniku*. Zilina: EDIS – Publishing ZU.

- Buganova, K., & Luskova, M. (2011). Components of risk management in transport company. *Perner's Contacts*, 6(5), 36-42.
- Dvorak, Z., Leitner, B., & Novak, L. (2012). National transport information system in Slovakia as a tool for security enhancing of critical accident location. *Transport means 2012 : proceedings of the 16th international conference* (pp. 145-148). Kaunas, Lithuania: Kaunas University of Technology.
- ENTIRE. (2013). Entire small and medium-sized enterprises. *Entire*, 2(1), 78. Retrieved from http://www.centire.com/sites/default/files/entire_web_1.pdf
- Hittmar, S., & Striss, J. (2001). *Management in transport*. Zilina: EDIS.
- ISO 73:2009. (2009). *ISO Guide 73:2009 Risk management – Vocabulary*. ISO.
- Maris, L. (2013). Risk management in selected international standards of project management. *Bezpečnostní technologie, Systémy a Management 2013 - Sborník příspěvků 4. mezinárodní konference*. Zlín: Univerzita Tomase Bati.
- STN ISO 31000:2011. (2011). *STN ISO 31000:2011 Risk management – Principles and Guidelines*. Bratislava: SUTN.

Received for publication: 31.03.2016
Revision received: 01.09.2016
Accepted for publication: 12.12.2016

How to cite this article?

Style – APA Sixth Edition:

Luskova, M., & Buganova, K. (2017, Jan 15). Risk management issues in transportation and logistics companies. (Z. Cekerevac, Ed.) *MEST Journal*, 5(1), 57-63. doi:10.12709/mest.05.05.01.07

Style – Chicago Sixteenth Edition:

Luskova, Maria, and Katarina Buganova. "Risk management issues in transportation and logistics companies." Edited by Zoran Cekerevac. *MEST Journal* (MESTE) 5, no. 1 (Jan 2017): 57-63. doi:10.12709/mest.05.05.01.07

Style – GOST Name Sort:

Luskova Maria and Buganova Katarina Risk management issues in transportation and logistics companies [Journal] // MEST Journal / ed. Cekerevac Zoran. - Belgrade - Toronto : MESTE, Jan 15, 2017. - 1 : Vol. 5. - pp. 57-63.

Style – Harvard Anglia:

Luskova, M. & Buganova, K., 2017. Risk management issues in transportation and logistics companies. *MEST Journal*, 15 Jan, 5(1), pp. 57-63.

Style – ISO 690 Numerical Reference:

Risk management issues in transportation and logistics companies. **Luskova, Maria and Buganova, Katarina**. [ed.] Zoran Cekerevac. 1, Belgrade - Toronto : MESTE, Jan 15, 2017, *MEST Journal*, Vol. 5, pp. 57-63.