

### *Streszczenie rozprawy doktorskiej w języku angielskim*

The aim of the following dissertation is to identify the constituents and creating a functioning process of the supply chain management, where transport would be the biggest benefit-generating factor. Businesses constantly look for new solutions, which would shorten the delivery time, but which will be also characterized by complementary and coherent approach to the whole process. More and more often, transport companies are given a free hand when it comes to finding and creating new ways and solutions in the supply chain management.

The supply chain is constantly under pressure and influence of its stakeholders, which means it must be able to react and adjust to the changes quickly. The main factors which determine these changes are global economy, competition and also vision of the future. Cooperation and operational integration is becoming more and more important. The efficiency of transport processes often determines the outcome of the company's operations. The quest for constant improvement of this process results in new solutions which can be seen in the change of the structure of a company but also in a way how they operate.

The entire dissertation has been described in six chapters, which order results from the aim of the dissertation. The subject matter of the dissertation is supply chain management and the role of companies, which provide transport services. In the conclusion there is the analysis of the significance of transport providers for functioning and the coherence of supply chains.

Chapter 1 provides information on logistics management in the current progressive globalism. It refers to extracting specific logistics processes, and also methods and ways for logistics management. In this chapter the specific nature of logistics services and the importance of global supply chains has been described.

Chapter 2 is devoted to the integration of companies in the structures of global supply chains and functioning of logistics operators in these supply chains. The topic of chapter 2 is also the coherence in the logistics chains, especially when it comes how they are being formed and how they function.

Chapter 3 describes the nature of intermodal transport, which is currently trying to be an answer for the challenges of modern logistics. Intermodal transport between Poland and Turkey has been used here as a specific example of implementing intermodal transport in Europe and to show the EU politics regarding it.

Chapter 4 presents the possibilities for transport and benefits in operating in new European transport corridors such as the Baltic-Adriatic Corridor, the Trans-Caspian International Transport Route or the example of Elbe river used in inland waterway shipping. In this chapters the paradigms, barriers and ways for evolving European transport are being discussed.

In Chapter 5 new information technologies in transportation (the concept of Transport 4.0 ) and the coherence of companies in global supply chains have been described. The digitalization of the Sea Port of Hamburg and the new virtual fleet introduced by Daimler Chrysler has been presented as an example of changes that are happening in transport. The importance of new intelligent transport systems for the coherence of supply chains has been the conclusion of this chapter.

In the last 6<sup>th</sup> Chapter the author explains the ways of conducting the studies on the importance of transport for the coherence of logistics processes. In a detailed way the research process and also used instruments have been presented. In addition the author describes the outcome of the research on transport solutions for supply chains, among companies using these services and among transport companies providing them. In the end result of the analysis, the author proposes a functioning model for synchromodal transport, based on logistics centers and an efficient information flow, which allows digitalization of supply chains using the current transport corridors.

The analysis of the research and the theoretical dissertation led to identifying the role and importance of transport providers for functioning in coherent supply chains. Their significance is rising together with the rising responsibility. Synchromodal transport gives the organizer of the whole transport process, more influence on the decisions-making throughout its course. Implementing the proposed model should create new possibilities of coherent cooperation in supply chains. At the same time it should increase the importance of transport providers and a better use of logistics centers infrastructure, intermodal transport and integration of telematics solutions being used.

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*Grzegorz Marzec*