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## ABSTRACTS

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### INCREASE OF EFFICIENCY OF LOGISTICS FLOWS IN SHARING ECONOMY CONDITIONS OF A SPECIFIC COMPANY

(pages 65-69)

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**Keywords:** logistics flow, sharing economy, efficiency, logistics

**Abstract:** The thesis deals with the description of the connection of sharing economy and the logistics flows in business company. At the same time it aims to examine adjustments of logistics flows in practice, in order for them to meet the conditions of sharing economy and increase efficiency. The goal of the thesis is to create a draft of a system of logistics flows, which would increase efficiency of the company and would be more favourable for the company than the current system of product sales. The thesis is divided into three parts. The first part includes list of the most used key concepts and theoretical foundations and paradigms of logistics in connection to sharing economy. The second part makes use of the systematic analysis in order to analyse the three main logistics flows in detail, especially how they influence the current model of product sales to the end-use customers; and lists advantages and disadvantages of the current system. The third part focuses on the possible drafts and adjustments of logistics flows. Gradually, efficiency of flow of material, flow of information and flow of finance is increased. Simultaneously, the proposals for platform for sharing and a micrologistic shared model are drafted.

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### EUROPEAN RAILWAY INFRASTRUCTURE: A REVIEW

(pages 71-77)

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**Keywords:** railway, freight, logistics junction, European Union

**Abstract:** Presented paper deals with important freight railway infrastructure review in the Europe. The shrinking situation on the road makes companies do to think more and more about alternative ways of transporting goods from remote industrial zones quickly, safely and taking into account an ever more important environmental aspect. The quantity of goods transported in freight transport is increasing every year, which is also reflected in the unfavourable increase in road transport. Road journeys are often used, roads are more prone to wear, and their repair requires significant financial costs each year. Important part of presented paper is focused on the traffic situation that the future of transport will be on the rail. Moving transport from road to rail is also the intention of the European Union, which is declared in the “White Paper on Transport”. In addition to other targets, it states that by year 2030 the 30% of road freight over the 300 km should be transferred to other modes of transport such as rail or waterborne transport, and by year 2050 this should represent more than 50% of freight transportation.

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## **FACILITY LOCATION MODEL WITH INVENTORY TRANSPORTATION AND MANAGEMENT COSTS**

(pages 79-86)

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**Keywords:** supply chain networks, model, facility location problem, inventory management

**Abstract:** This work is focused on the integration of the standard EOQ (Economic Order Quantity) model within the facility location decision model. This is proposed to extend on the facility location task which is usually performed based on just the overall demand of the customer locations to be served. If the inventory costs are considered within the demand supply process, these may affect the overall transportation costs as these are not linearly dependent of the demand. As such, the extended model considers, besides the distances, performance and capacity of the vehicles, the order quantities and the period in which they should be fulfilled. This model was tested with a reference instance of 200 suppliers and one distribution centre. The distances were estimated by considering the geographical locations of all elements in the network and the spherical model of the Earth's surface to obtain the metric in kilometres. As analysed, by considering the inventory costs within the facility location model, it can lead to refine the location to obtain long-term savings in transportation.

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## **A LOGISTICS SYSTEM IN MANAGEMENT OF FLOWS IN THE AREA OF AGRIBUSINESS**

(pages 87-92)

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anna.brzozowska@wz.pcz.pl**Keywords:** logistics system, agrilogistics, food supply chain, synergy effect**Abstract:** Today, the subject of management in Polish agribusiness needs to be looked at in a more comprehensive way. With Poland's accession to the European Union, it is necessary to implement the solutions defined by the Common Agricultural Policy in agribusiness, whereas entrepreneurs from rural areas need to give more attention to issues connected with logistics and the process of management. This papers considers the problems of logistics management in the area of agribusiness. It has been pointed out that new paradigms that continuously appear in this area pose a huge challenge both for theoreticians and practitioners. Aiming to achieve a synergy effect and added value for activities that involve movement processes in agribusiness, both decision-makers and those managing farms and rural areas should consider and implement the right principles and solutions that will allow them to achieve this goal.*doi:10.22306/al.v5i3.101**Received: 19 Sep. 2018**Accepted: 27 Sep. 2018*

## **THE INFLUENCE OF TRUST ON REDUCTION OF COOPERATION RISK IN LOGISTICS**

(pages 93-99)

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malkust@uek.krakow.pl**Keywords:** cooperation, logistics service, risk factor, trust, response to risk**Abstract:** The influence of logistics on competitive advantage of cooperating parties, as well as risk associated with changing operating conditions increase the importance of trust, that partner works for mutual benefits, even if detailed regulations regarding the response to changes in the environment are not included in contract. The objective of paper is to present the role of trust in reduction of risk of logistics cooperation between principal and provider of logistics service. Typology of main risk factors, characteristics of trust between companies, as well as role of trust in different types of cooperation relationships are taken into consideration.