

Streszczenie w języku angielskim pracy doktorskiej na temat:

„Zarządzanie logistyką w procesach odzysku produktów w przedsiębiorstwach motoryzacyjnych”

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Logistics management in the processes of product
recovery in automotive enterprises

The subject of the dissertation was logistics management in the processes of product recovery in the automotive industry. In an attempt to justify the subject matter, it was emphasized that the automotive industry belongs to those sectors that are particularly connected with the demand for logistic solutions that take into account the processes of product recovery.

The dissertation also attempted to determine the conditions of logistics in the processes of product recovery, with particular emphasis on the automotive industry, in selected automotive enterprises of the Silesian province. In this region there are many automotive companies that generate various types of automotive waste during their operations. It should be emphasized that the segregation, utilization and recycling of automotive waste in Poland is regulated by law. Logistic solutions predominate, which are aimed at the European Union's activities, which obliges all Member States to do business which includes the sustainable development policy, which is associated with the maximization of waste utilization as well as the recovery of possible materials, raw materials and components.

The automotive industry has been an important pillar of the Polish economy for several decades and has a large share in the creation of added value, which stands out, among others high employment and high investment expenditures. In recent years, a significant increase in the demand for the production of cars and spare parts can be observed. New foreign investments, increased sales on European markets and growing domestic demand show that the production and sale of motor vehicles and automotive parts has been gradually increasing in recent years. During the production process, the product is manufactured, and the side effect is automotive production waste that is a threat to the environment. These are often high toxicity materials. Therefore, it is particularly

important to "add" to the activities of the automotive industry, sustainable development policy, and this involves maximizing the recovery of products in the automotive industry. Such actions result in a reduction of both the costs incurred by automotive enterprises and minimization of the environmental risk with simultaneous social acceptance.

This doctoral dissertation in the main part concerns the indication of the conception of logistics management in the processes of product recovery in automotive enterprises.

Particular attention has been paid to these conditions, which contribute to a significant raising awareness of entrepreneurs and investors taking appropriate actions: planning, implementation and monitoring of product recovery processes. Research, analysis and opinion in the literature in the field of logistics management in the processes of product recovery in automotive enterprises presented do not fully explain their current essence and therefore a comprehensive approach to this problem is necessary.

With regard to the justification of the subject matter set out in the title of the dissertation, the purpose of the work was defined.

The aim of the doctoral thesis was to assess logistics management in the process of product recovery in the aspect of ecological, economic and social conditions, in the activity of business entities in the automotive industry in the Silesian province.

The aim of the doctoral thesis was carried out in individual parts of the dissertation: theoretical (first, second, third chapter of the thesis), empirical (fourth and fifth chapter of the dissertation) and in the utilitarian part (the fifth chapter of the dissertation - in particular, subsection 5.4). Thus, partial work objectives were defined.

The theoretical aim of the thesis was to define and evaluate the functions and tasks of logistics management in the processes of product recovery in automotive enterprises - literature review.

The empirical aim was to evaluate the recovery logistics system in automotive enterprises: the flow of recovered products, the impact of the process of product recovery on the quality of work and logistics efficiency, as well as the determination of determinants and barriers in logistics management.

The utilitarian aim was to supplement the research area and their analysis in the field of mutual relations of ecological, economic and social conditions as well as verification of tasks and the course of the logistics management process of products recovery in automotive companies.

The main research problem focuses on the issues of studying the determinants of logistics management that occur in the process of products recovery in automotive companies

in the Silesian province. Considering these dependencies, specific problems were indicated:

- what is the current state of the discussed logistics systems in question, and in particular the purposefulness of the logistic process of products recovery in automotive enterprises?
- what are the tasks of logistics management in the processes of recovery of automotive industry products and in what way are they being led?
- what is the level of impact on the process of products recovery, especially on the quality of work and logistics efficiency in the automotive industry?
- what are the determinants and barriers in logistics management in processes of recovery in automotive companies?

Taking into account the motives of taking up the subject of the doctoral thesis, the purpose of the work and the resulting research problems, **the main hypothesis** is being put forward:

Logistics management, taking into account the aspect of sustainable development, affects the efficiency of the process of product recovery flow in automotive enterprises.

The verification of the main hypothesis required the formulation of four **auxiliary hypotheses**:

1. The current logistics system in the processes of product recovery in automotive enterprises affects the implementation and accomplishment of logistics management.
2. Logistics management in the processes of products recovery requires delegation in this area, management and operational employees.
3. Logistics management in the processes of products recovery ensures higher quality of work and logistic efficiency.
4. Logistics management in the processes of product recovery stimulates higher quality of products and services and improves the image of automotive enterprises.

The appropriate dissertation layout was adopted to realize the identified research problems, the purpose of the work and to verify the main and auxiliary hypotheses. The dissertation consists of five chapters, introduction and ending.

The first chapter presents the issues of conditions for the development of logistics. This chapter includes considerations related to the concept of logistics and its role in terms of sustainable development, as well as goals, tasks and stages of logistics management.

The second chapter concerns the role of the logistics system relating to the logistics of spare parts. This chapter presents functionalities of reverse logistics, subsystem of spare parts logistics, subsystem of logistics of recyclable materials and their re-use, subsystem of

logistics of recovered products, spare parts and management of products recovery PRM (Products Return Management).

The third chapter presents the functioning of logistics and logistics management in recovery processes in automotive enterprises, with particular reference to the Śląskie province. An attempt was also made to analyze such issues as: logistics in systems for the re-production of spare parts in the automotive industry, conditions and functionality of logistics management in the processes of product recovery in the automotive sector, the situation on market of the spare parts as a premise for applying logistics management concepts in the processes of product recovery, as well as the characteristics of the specific nature of the operation of the automotive industry in the Silesian province.

Chapter four presents the methodological - research assumptions of the dissertation. This chapter has been divided into such parts as: characteristics of the automotive industry in Poland and in the Silesian province, issues and research scope, techniques and research tools, as well as the characteristics of the research sample.

In the fifth chapter all researches were analyzed. In the fifth chapter there was analyzes the obtained research results. That chapter deals with the analysis of logistics management conditions in the processes of products recovery in automotive enterprises. Chapter fifth presents all research results, both obtained through a questionnaire addressed to the operational employees of the automotive industry in the Silesian province, as well as an interview questionnaire addressed to the management staff of the automotive industry in the Silesian province. The research results were divided into such areas as: current state and purposefulness of the logistics process of recovery of automotive enterprises' products, tasks and course of logistics management in recovery processes - in the automotive sector, impact of logistics management and the process of product recovery on the quality of work and logistic efficiency of the discussed enterprises, also determinants and barriers in logistics management in the recovery processes of products in the automotive industry.

The dissertation was concluded with summary considerations and conclusions.

Key words: logistics management, automotive industry, process, product recovery, sustainable development, recyclable materials, re-use, quality of work, re-production

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