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## **STRATEGIES OF LOGISTICS PROJECT MANAGEMENT IN DIFFICULT TIMES, INCLUDING THE BROWN PAPER METHOD**

The purpose of the paper is to present the issues relating to methods of transport and commercial process management and support in logistics. Moreover, it will describe shipping actions in relation to the conflicts in Europe and worldwide. The study follows the work plan described as follows: The first chapter comprises an overview, logistics function, and classification of strategies in a logistics project. The second chapter includes information about the review and selection of methods of logistics project management. The third chapter pertains to the application of solutions restoring an old form of value stream mapping, known as the brown book exercise or the brown paper method. The fourth chapter refers to the aspects and solutions used in logistics project management in the hard times of logistic service market operations. Finally, the fifth chapter specifies the forms of trust management as the methods supporting logistics project management.

**Keywords:** logistics project management, brown paper method, logistics function, methods of logistics project management, trust management.

### **1. INTRODUCTION**

The challenges of the new logistics are related to the introduction of novel solutions regarding logistics project management, notably in the difficult times of logistics market operation. The latter comprise periods of logistics overcrowding, i.e. excessive numbers of collective or commercial processes which constitute a given logistics unit, as well as the periods of military actions, including the times of war and armed conflicts. The ability to apply methods of project management to the solving of logistics tasks as part of company operations, particularly challenging in difficult times, requires the use of relevant tools and methods deriving from project management. The paper is rounded up with a summary comprising conclusions and impressions of the author regarding the search for the strategies in logistics project management in difficult times and seeking answers to the research questions posed in the article. The basic sources of data have become a review of the subject literature and webography of selected issues, above all, those related to the application of the brown paper method. The presented examples have been taken directly from companies applying the said methods of logistics project management in practice.

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## **2. CHARACTERISTIC FEATURES, LOGISTIC FUNCTIONS AND CLASSIFICATION OF LOGISTICS PROJECT STRATEGIES**

Project describes it as a sequence of “unrepeatable, complex and interrelated tasks which have a common goal and which are destined to be completed within a specific time period and within a predefined budget, in accordance with assumed requirements”. Claims that the commonly accepted definition of a project describes (Wysocki, 2013).

By way of illustration, the determination and selection of management methods has a material impact on the development of a competitive advantage, both in terms of manufactures, packaging producers for instance, and entities using the packaging for their products. And thus, a suitable selection of packages to fit various types of products becomes the basic marketing instrument. It also plays specific roles and has certain functions, such as the protection of product’s utility value, streamlining of its distribution, protection of consumer interests, product promotion, identification and brand differentiation. One should pay attention to the fact that a good package has an effect of a five-second commercial since it attracts attention to product’s features, inspires confidence, and makes a positive impression. This regards not only consumer and trade goods, but also innovative transport packages, above all, the environment-friendly ones. A number of market successes is a consequence of the application of suitable methods, in this case, the selection of packaging (Daszkiewicz, Dobiegała-Korona, 1998).

According to A. Daszkiewicz, packaging means, in most general terms, a product used to protect the material it contains against damage and harmful impact of external factors and, conversely, to protect the environment against the harmful impact of packaged hazardous materials. The functions performed by packaging start to be dominated by those playing the role of a sales tool and product relocation tool so that the good reaches its final recipient untouched. The differentiation of package sizes and types, also referred to as diversification, allows for the satisfaction of diverse customer needs. One of the most crucial information packaging provides is the name and type of a given product. The remaining data that should be included on a packaging is the name of the manufacturer, the size of the packaging unit, trademark, product’s ownership, its application and method of use, as well as the condition of storage. However, it would be difficult to prioritize one of the said functions over another.

The formal definition supplemented by the Institute of Project Management is that project management is “the application of knowledge, skills, tools and techniques of anticipating actions allowing to reach the goals set as part of a given project”. A more accurate definition of a project defines it as “a sequence of finished and related actions the successful completion of which involves the delivery of expected business value, which provides a justification for its completion.” According to R. Wysocki, project management may also signify “an orderly and sound approach which delivers results in line with customer expectations and generates expected additional business values”. R.K. Wysocki also provides a somewhat broader definition of project management, referring to it as “a set of tools, schemes, and processes designed with the search for logistics’ answers in mind”.

## **3. OVERVIEW AND SELECTION OF MANAGEMENT METHODS IN LOGISTICS**

In response to the needs of the logistics industry, which has complained of a limited impact of the methods of management on its development, a sequence of actions depending

on technical requirements has been initiated. For the sequence to be correctly determined, one must think in terms of inputs and outputs, which means finding answers to the questions:

1. What inputs are needed to start an action?
2. What outputs will an action generate?

A. Korzeniowski and M. Skrzypek believe that the dynamics of changes in the transport industry has been caused by the developmental tendencies in the packaging of goods, which refer to the current environment-related issues in logistics. The development of green awareness in logistics project management also exerts a profound impact, for instance through the advantages generated by the logistics of recycling and the application of control rights and informatization, the quality of raw material flow, related to recycling in delivery networks.

The major methods of logistics process management followed as part of the national recycling system comprise:

- raw materials and packaging waste flow processes,
- records related to the above flow processes,
- packaging information flow processes,
- funds and product fees and environmental fees flow processes,
- applied modifications in logistic flow processes as part of delivery networks. The above applications increase effectiveness of operations of recycling logistics and the flow and life cycle of packaging use, including e-commerce packaging (Korzeniowski, Skrzypek, Szyszka, 2001).

The method of logistics management must be a function of graphic symbols and signs which appear on packaging, above all:

- signs related to environmental protection requirements,
- signs identifying packaging materials,
- signs confirming compliance with certain criteria and requirements with respect to environment protection,
- signs of packaging recyclability,
- signs of multiple-use packaging,
- signs confirming the content of renewable raw materials, carbon dioxide reduction, and packaging waste management. Signs determining how to proceed with packaging or membership to a specific legal and organizational system linked to packaging waste management, other signs used by producers (Rakowski, 2015).

The earned value method considers the following components when evaluating project's progress: the scope, cost, and third dimension that is the earned value (received value) which represents a planned value of the actually performed scope of works. The combination of the three elements of the project, i.e. the scope, schedule, and cost, allows not only for the evaluation of what has been done but also for the analysis of the tendencies of project realization efficiency and a forecast of future outcomes of company logistics operations ([https://mfiles.pl/pl/index.php/Earned\\_Value](https://mfiles.pl/pl/index.php/Earned_Value)).

Among other methods of management in logistics, for example those related to stock and material flow management, there is the ABC method. It consists in the division of stock into three main groups. The division is based on the assumption that there is a stock which holds a large share of the total stock when it comes to quantity, but which at the same time is small in terms of value. And the other way round, there is a stock with large value share but small quantity share.

Group A – the precious stock (the vital few) which constitute 5 to 20% of stock assortment quantity but which has a significant, 75–80%, share in the value. The group of high value and large share in the total material costs must be treated with utmost attention with respect to:

- market, price and cost structure analysis,
- detailed preparation of commercial orders,
- precise disposal procedures in the company,
- sound management of stock levels,
- exact assessment of safety stock levels.

Group B – the stock which has a 15 to 20% share both in terms of assortment numbers and in terms of value. Group C – the stock of mass nature (the trivial many) which is largest in terms of assortment numbers (60–80%) and lowest in terms of value (approximately 5%). The XYZ analysis supplements the ABC method, where the stock is considered in accordance with the regularity of demand and accuracy of forecasting. When the XYZ method is applied, the individual types of materials are divided on the basis of their demand regularity into three groups:

- group X which consists of materials characterized by regular demand (if it is assumed that some insignificant fluctuations may occur), there is also high accuracy of forecasting the demand levels (level of use),
- group Y, i.e. materials which feature seasonal fluctuations and trend-specific demand and average accuracy of forecasting,
- group Z which comprises materials of highly irregular demand and low demand forecasting accuracy (Bril, Łukasik, 2013).

#### **4. APPLICATION OF SOLUTIONS IN THE FORM OF VALUE STREAM MAPPING, KNOWN AS THE BROWN BOOK EXERCISE OR THE BROWN PAPER METHOD**

The old form of value stream mapping referred to as the brown book exercise has been restored in logistics. Long time before the invention of computers, value stream mapping had only been possible on paper. The use of paper allows one to create maps which are not limited by the size of a monitor or a screen.

The brown book method is an interactive, playful tool which may be conducted through a hybrid personal and virtual model. The Brown Paper method is a crucial tool used daily in the reengineering process. It constitutes a part of our value stream mapping process. It provides many (virtual and personal) process owners and their internal suppliers and customers with an engaging and non-threatening manner of devoting time to a visual discussion about the effectiveness of work streaming; where it fails, where it could be improved, how to improve it, and where the technology fails. Most process failures typically ends with failure when forwarding functional group and their technology interfaces. With every project made, we hear people speaking: “I’ve had no idea you needed this” or “We may fix it now”. Oftentimes, during the first few meetings, multiple process-related problems are solved, sometimes paying for the entire project on the first day. There are several reasons for which the brown book methods works so well: 1. About 65% of the population are visual learners; 2. The brain processes visual information 60 000 times faster than text; 3. 90% of the information reaching the brain is of a visual nature; 4. 40% of all nerve fibers connected with the brain is connected with retina; 5. The ability to read and write is the ability to code (create a visual language) and decode (understand

the visual language). 6. Visual aids facilitate learning by as much as 400%. 7. Employees do not require any special skills (<https://www.group50.com>).

#### **5. ASPECTS AND SOLUTIONS APPLIED TO LOGISTICS PROJECT MANAGEMENT DURING DIFFICULT TIMES OF LOGISTIC SERVICE MARKET OPERATIONS**

It should be highlighted that the uniqueness of action results from the fact that a given project has never existed before and will not be repeated under the same circumstances. Activities pursued as part of the project are complex, and their complexity results from the variability of elements which form a given action and the relations amongst them

These, above all, involve the stocks of materials having the following features which:

- are critical to maintain production,
- have short shelf-lives,
- have long delivery times (the period between order and delivery),
- are theft-prone,
- are big or bulk.

#### **6. FORMS ON TRUST MANAGEMENT AS ONE OF THE METHODS SUPPORTING THE MANAGEMENT OF A LOGISTICS PROJECT**

Trust may be defined through a process approach, wherein it is both a product and a process. Trust management reinforces the processes of knowledge sharing because it reduces the level of fear of losing employee's individual values, such as the position or post within an organization. Trust should be shaped from the onset of cooperation, and the process of trust development will largely depend on the quality of knowledge and the speed of its exchange (Bugdol, 2010).

The process of gaining trust which plays such a significant role in the processes of knowledge management favors acquisition of quiet knowledge based on employees' experience. Express knowledge included in pictures and words is, without a doubt, easier to disseminate. The process of knowledge sharing depends on the participation of employees in trainings, open communication within the company and management's support. The effect of the exchange of knowledge is further subject to parties' reliability and remuneration. It is true that a motivated employee is open to knowledge sharing, whereas a controlled employee tends to shut oneself away. The greater the motivation, the bigger the chances of information sharing. The impact of external factors is also considerable. The level of trust shifts along with the level of motivation.

New trust-based tendencies in logistics project management will be applied to enterprises which behave dynamically against their competition and background. The factor differentiating the organization is the attitude of their boards or owners to external events. We may distinguish three types of behaviors: active or proactive, passive, and reactive ones. Such behaviors shape the environment of company operations and develop the methods of competing and gaining market advantages (Nogalski, 2004).

New opportunities for effective management of a logistic project based on trust management in contemporary enterprises are provided by an open attitude of organizations and the rejection of the myth of an ideal company. The open nature comprises cooperation with buyers and treating them as members of the organization itself. This is the result of the tendencies imposed by globalization processes, the development of technology, the

increase of the speed of innovation and promotion of products on the market (Kwiatkowski, 2003).

## 7. SUMMARY

The aspects and solutions which the application of the brown paper method include may be summarized as follows:

1. It is a visual method which proves to be more effective in the case of over 65% of employees,
2. It engages process owners in its creation, boosting work involvement and satisfaction,
3. It is an educational tool for all organizations, which is four times more effective than any other tool,
4. People who help create it, identify problems and are the owners of solutions,
5. The team becomes responsible for recommendations regarding any improvements,
6. It is a great fun,
7. It is a key part of the process of change management,
8. It makes the senior managerial staff support the recommended human, process and technology modifications,
9. It significantly increases the probability of succeeding.

What will the future be like? The global tendencies and the analysis of the international market of logistics will definitely remain related to the adoption of more and more innovations in the field of project management. The fast growth in the field will be focused mostly on the processes of production. The problems which affect organizations in relation to the above management are associated with new legal regulations, including the guidelines set by the European Union as regards packaging and waste packages management. They include, amongst other things, the EC Directive, the CEN standard and the harmonized standards. Innovations in logistics project management, the present-day market situation and the tendencies related, above all, to all consumption products designed for fast marketing development of the market of recycled material products. The development of the methods of logistics project management and other systems, including those for the production of biomaterial goods and materials for fast marketing, have led the international legal framework to focus even more on sustainable development and environment protection (<https://www.group50.com>).

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