Social Aspects of Logistics - Social Logistics and Socially Oriented Business Logistics

Vanya Banabakova  
*Vasil Levski National Military University*, v.banabakova@abv.bg

Canko Stefanov  
*Veliko Tarnovo University*, cankostefanov@abv.bg

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Social aspects of Logistics - Social Logistics and Socially oriented Business Logistics

Vanya Banabakova¹, Tsanko Stefanov²

¹ Vasil Levski National Military University, Veliko Tarnovo, Bulgaria,
² St. Cyril and St. Methodius University of Veliko Tarnovo Veliko Tarnovo, Bulgaria,

Abstract. Logistics continuously expands its application areas. In modern conditions, there is a need to apply logistics in areas not related to its traditional applications such as military and business spheres, resulting in the identification of a third area with the name social logistics. For the purposes of this paper, a number of scientific approaches and methods have been applied, such as system approach, comparative analysis, critical analysis, synthesis and others. Social logistics aims to introduce a social (human) factor into the systems and to apply logistic principles and methods in solving the problems of society. Social logistics can be defined as a set of actions that ensure the effective functioning of social systems (such as a set of social phenomena, processes and subjects), applying the principles of logistics. Also important for social aspects of logistics is the development of socially oriented business logistics, which is based on the application of corporate social responsibility. The purpose of this paper is to explore the characteristics and importance of social logistics and socially oriented logistics, to define the concept of social logistics, and to outline its areas of application in the public sphere.

Keywords: social logistics, corporate social responsibility, social oriented business logistics

Introduction

Modern realities impose a new model of application of management science in areas beyond the traditional business sphere. This trend is particularly relevant for logistics. It originates in the military field, but in the 1950s it began its active application in the business. For decades, logistics as a science area of knowledge has been looking for opportunities to continually expand its application areas - from fragmented tasks to managing material and technical supplies to activities that integrate the entire supply chain management and management process of material production to the management of intellectual production. [14]

In today's conditions, the idea of applying logistics in areas that are not related, neither with the military nor with the business spheres, is urgently needed, as a result of which a third area with the name of social logistics is identified. Parallel to its development is the development of socially oriented business logistics, which is based on the application of the concept of corporate social responsibility.

The purpose of this paper is to explore the characteristics and importance of social logistics and socially oriented logistics, to define the concept of social logistics, and to outline its areas of application in the public sphere.
Defining the notion of social logistics

Social logistics aims to introduce a social (human) factor in the systems and to apply logistic principles and methods in solving the problems of society. [2] The first publications on the application of logistical principles to social processes emerged in the early 21st century, with social logistics gradually expanding its reach by addressing not only processes and flows at household level but also at city, regional and state level. For its part, the complexity of social flows raises problems, the solution of which requires the application of logistic rules and principles. The distinction between the three types of logistics - military, business and social - can be achieved on the basis of two criteria: rationality and a top priority of implementation. [15] (Table 1.)

Table 1. Distinctive features of major types of logistics

<table>
<thead>
<tr>
<th>Type of rationality</th>
<th>Military logistics</th>
<th>Business logistics</th>
<th>Social logistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority of application</td>
<td>Safety</td>
<td>Profit</td>
<td>Quality of life</td>
</tr>
</tbody>
</table>

On this basis, social logistics can be defined as the art of managing socially significant material flows (and related information flows) in order to achieve certain spatial and temporal advantages necessary to ensure the proper functioning of society and to provide adequate quality of life.[10] Social logistics is also seen as a set of algorithms that regulate social interactions. In social interaction, the subject of interaction is defined as a social actor - an actor (individual or collective), while in social logistics the subject is always an individual. Social logistics can also be defined as a set of actions that ensure the effective functioning of social systems (such as a set of social phenomena, processes and entities), applying the logistics principles.[14] Social logistics can also be seen as a means of forming socially accepted behavior of individuals and legal entities.[1]

The concept of social logistics (logistics of social flows and processes) is related but not identical with the concept of socially oriented logistics (study of the problems related to the impact of transport on the environment, packaging, processing and reverse logistics). Unlike socially oriented logistics, social logistics does not consider logistics of material goods and services. In its essence - optimizing material flows, social logistics remains unchanged from the traditional view of logistics, but the specificity of its application in the social sphere imposes a new vision for its development.

The public sphere is a new field of application for logistics. The connection is logical, because practically all logistics activities are carried out with the participation of people, in the social sphere they directly or indirectly concern people and as a result they serve people. There is a need to take into account the needs and requirements of the individual, not just large groups of people (teams, staff in the enterprise, etc.), which also determines the role of logistics in the social sphere. Another reason for the development of social logistics is the growing tendency to achieve sustainable development, environmental protection and enhancement of corporate social responsibility.

The realization of social logistics in the public sphere requires active state intervention and building of the necessary logistic structures at the national, regional and municipal level, the appointment of logistics specialists and the use of the accumulated experience in the sphere of business logistics.
Social marketing and social logistics are inextricably linked and their interaction is imperative. Social marketing aims to persuade people to adopt a certain idea for their benefit or benefit to the environment, to give up bad habits, to consume goods and services that are useful for them. However, presenting the message in an effective communication campaign is followed by its perception and as a result a change in people's behavior. Implementing this change, however, requires the application of social logistics, which should create the necessary conditions such as space, time, staff, optimal costs and more to provide the idea, product or service promoted by social marketing. The aim of the interaction between social marketing and social logistics is to achieve a synergistic effect in the social system.

For the practical implementation of the interaction between social marketing and social logistics, it is necessary to develop marketing and logistics programs by the appropriate specialists when launching a social-oriented campaign in order to ensure the necessary degree of synchronization and coordination. This is the way to ensure that the ideas, products or services presented by the social marketing will be put into practice.

Areas of application of social logistics

The applications of logistics may change over time depending on the development of the three components - organizational, economic and humanitarian, defined according to the type of rationality (according to Table 1). The sum of these three components, interpreted as the ultimate way of thinking when making logistics solutions, however, should seek to achieve the maximum degree of satisfaction.

The main aspects of logistics in the social sphere are distinguished in those areas where logistics has a permanent effect. Such is urban logistics, which is characterized by rising social requirements. The development of urban logistics begins with problems related to the supply of goods in the centers of major cities and the need for the private transport companies to be involved in the implementation of the city's delivery tasks for all consumers. Initially, the concept of "urban logistics" is not related to securing the well-being of the city, the standard of living or the development of the city, as the concept of "city" is considered in an architectural and economic context. However, it shifts to the spatial-social context of the city and on this basis "urban logistics" acquires a new, social sense. Urban logistics should be subordinated to the concept of integrated city flow management in order to streamline freight traffic in the city and position them in urban movements. The main task of urban logistics is the optimization of living space, which requires an adequate arrangement of the urban environment and the organization of public transport as a solution to the conflicts arising between "pedestrians - car - public transport - ecology". [14]

In current conditions, there is a tendency for the development of social logistics in relation to crisis management. [15] Crisis management is an extensive area of knowledge and application. Frequently, crisis management involves managing the crowd, transmitting specially prepared and processed information, and using physical coercion. Evacuation as one of the main forms of protection of the population in crisis situations requires, besides thorough planning and organizing, also all-round logistics. [9] Logistics to maintain order in the public space also has a growing role. Law enforcement organizations, police, riot police, city authorities, and public organizations are involved in action to maintain public order. Their actions should, however, be coordinated and resources identified and delivered on time, in the required quantity and quality, and at predetermined locations. These objectives directly correspond to the basic essence of logistics - management of material flows, but are realized in order to protect society.
Sports logistics include not only the crowd of viewers and fans but also all material support for sports facilities, sports teams, nutrition, accommodation and more. On this basis, the logistics of sport are directly related to the organization of the transport and hotel industries. Together, they are part of urban logistics, logistics, and health logistics.

An important application of logistical principles is observed in the cases of humanitarian aid and implementation of humanitarian operations. Assistance is organized and conducted in accordance with some modified principles for supply chain management. Managing decisions mainly take into account the speed (timing) of the aid, its effectiveness (not in monetary terms, but the number and quality of the assistance provided) and human dignity. The management of logistics of humanitarian aid is extremely complex and important, resulting in the creation of organizations fully committed to the development of this problem. The training of logistics specialists in crises management and the organization of charity events started in Poland - for example, in the Higher School of Management and Administration in Opole, Poland, in 2009, a Master's degree program in Crisis Management and Humanitarian Logistics. [15] has been opened.

A basic component of social logistics is logistics in healthcare. It has a prominent humanitarian character. The link between the ability to provide assistance in a timely manner and the organization of the material flows that contribute to the provision of this assistance are the subject of research and analysis. According to Rakovska and Stratieva, the supply chain management practices should also apply to hospital care establishments. On the basis of a hierarchical cluster analysis, three clusters of score are identified which, on the basis of assessments of these practices, are identified as "leaders", "developing" and "lagging" health establishments. Appropriate models and strategies for effective supply chain management in healthcare establishments can be applied on the basis of this classification. [13]

The logistics of blood resources, which can be defined as the logistics of blood supply management in the whole health system of one country, is one of the latest trends in logistics development. It is aimed not only at direct donor blood flow to a patient (through all chain elements), but also on optimization of stocks, based on group substitutability and the management of blood networks. [5]

The logistics of elections is extremely important as an element of social logistics. The organization of an electoral company requires major efforts, mainly on a national scale, but all important actions are carried out in the preparatory (local) and local (especially on the day of elections). Clarity, accuracy and speed are necessary features of democratic elections. In order to be secured, however, it is appropriate to apply the logistics approach. Social logistics is entirely based on the logistic concept, but rather, instead of the economic system, the social system is considered, and the individuals and relationships between them are perceived as elements and related links in the logistics chain.

Socially oriented business logistics and corporate social responsibility

The concept of corporate social responsibility emerged in the late 19th and early 20th centuries as a result of the evolution of industrial society. With the establishment of the corporate structure of the economy, the responsibility of managers is gradually expanding in the social field. Their engagement is already affecting not only the shareholders, but also a wide range of stakeholders (customers, suppliers and the public). [4] Corporate social responsibility is a business philosophy that offers ethics and business to work together. Corporate social responsibility is a complex, multi-faceted socio-economic category that is constantly evolving
and enriching. At the heart of the idea of the new social contract is the understanding that the main role of each company is to create value, not only for the owners, but also for all stakeholders and society as a whole. Corporate social responsibility is the responsibility of the company for the impact it has on all the stakeholders on whom its long-term and successful development depends. [3] Corporate Social Responsibility affects many stakeholders and companies. It relates to many aspects of the strategic external environment of a company and, if effectively implemented, can be a tactically differentiated competitive advantage in terms of value creation model and value proposition. [6]

The development of socially oriented logistics is based on the concept of corporate social responsibility. Socially oriented logistics can be defined as a mechanism for optimal allocation of primary (produced) resources, taking into account the effectiveness of their use in socially significant areas and the mechanism for planning the cyclical nature of the processing of newly created materials and products using new methods and technologies. [11] The more general definition of socially oriented logistics is that it is regarded as a special form of logistics activity, the results of which are expressed not so much with economic effect but with social effect in the form of socially significant consequences of such activity, as in most cases can become a major goal of its implementation. The relationship between these two effects - economic and social - and their priority are largely determined by the mission, goals, sources of investment and management of logistic structures with a social orientation. [7]

Socially oriented logistics is characterized by certain characteristics that shape its nature and social significance.

First is the focus of socially oriented logistics, mainly on the systemic and even planetary interests of humankind, which often only seriously harms their interests as a result of their daily activities, and especially in pursuit of economic effect, maximizing income, profit and profitability.

The second important feature of socially oriented logistics is the pursuit of social impact, not just economic effect. [8]

The essence of social-oriented logistics is based on the nature of the relationship between social and economic effects. The development of social-oriented logistics related to saving resources and recycling can have a major economic impact, which, in addition to addressing global environmental problems - with the assistance of countries around the world, is linked to the creation of industries that provide jobs to the population, income and supply of the world with secondary raw materials and semi-finished products from that raw material. In this way, socially oriented logistics can solve major economic problems in the future. [7] Developing the production of products and services in remote areas of the world with relatively cheap labor and natural resources is beneficial for many countries and regions that use these products and services, if the logistical costs of delivering them are economically viable. Logistics simultaneously implements interregional and interstate division of labor and contributes to the socio-economic and cultural development of remote and particularly backward regions and countries. When selecting logistic structures to carry out this process, the social dimension of these supplies should be taken into account, and on this basis their capabilities assessed and their activities and infrastructure stimulated.

In the field of logistics and transport, the need for corporate social responsibility is urgent. According to the European Commission, the transport industry is responsible for almost a quarter of Europe's greenhouse gas emissions. Therefore, it is particularly important for businesses in the sector to minimize their environmental footprint and take specific measures to address this serious problem. It is important to view corporate social responsibility not as an expense, but as an investment that will ensure the sustainability of the company.

The main benefits in this regard are: [16] improved corporate image that maintains a strong brand; the actions of a company can also benefit the industry as a whole.
In summary, the application of corporate social responsibility in the logistics industry can lead to improved financial and social efficiency and differentiation from competitors, rather than the traditional tools of price competition.

Conclusions

Social logistics is entirely based on the logistical concept, but rather, instead of the economic system, the public system is considered, and the individuals and their connections are perceived as elements and relevant links of the logistics chain. These applications of logistics are based on basic logistics and principles, but they have a specific social direction.

The purpose of managing material flows and the accompanying information flows in these areas is to achieve the desired social effect, which is measured by the degree of satisfaction of basic society needs.

The realization of social logistics in the public sphere requires active state intervention and building of the necessary logistic structures at the national, regional and municipal level, the appointment of logistics specialists and the use of the accumulated experience in the sphere of business logistics.

Current trends in logistics are aimed at developing it in a sustainable direction, which is to strike a balance between economic interests, on the one hand, and the environmental and social interests of the individual, society and the planet, on the other.

The development of socially oriented logistics is based on the concept of corporate social responsibility. Socially oriented logistics is based on the nature of the relationship between social and economic effects. A characteristic feature of socially oriented logistics is its sustainable functioning and development, although the associated costs are higher. The overall economic impact of this logistics is shaped not only by the direct marketing of logistics services, but also by the positive effects of socially significant transformations. The aim is to produce a social effect that can, in the long run, many times exceed the main economic effect and costs and to provide a greater image and competitive position of companies in the market.

References