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Editor

Komarytskyy M.L.

Ph.D. in Economics, Associate Professor

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e-mail: manchester@sci-conf.com.ua

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**RESEARCH OF LOGISTIC MANAGEMENT OF COAL MINING
ENTERPRISE**

Mizina Olena

Ph.D. in Economics, Associate Professor

Khorunzhyi Illia

Student

Donetsk National Technical University,

c. Luzk, Ukraine

Amelnytska Olena

Ph.D. in Economics, Associate Professor

Priazovsky State Technical University

c. Dnipro, Ukraine

Abstract. The analysis of theoretical bases of logistic management at the enterprise is carried out, the essence and components of logistic management at the enterprise are defined, features of logistic management at the enterprises of coal mining branch are considered. The state of logistics management of a coal mining enterprise is studied. Practical measures to improve logistics management at the studied coal mining enterprise and measures to improve warehousing are proposed.

Keywords. Management, logistics management, coal mining enterprise, improvement of warehousing, correlation and regression analysis, logistics management department

In the current conditions of market relations and changing external environment, domestic enterprises do not use logistics approaches and concepts in their activities and management, which is due to the slow development of logistics in Ukraine as a science, despite the many prerequisites for widespread use of its tools. For the complex and practical application of the concepts of logistics, the formation of logistics systems of enterprises and logistics management systems in the management of enterprises are necessary conditions are the level of development of the enterprise and the level of economy and society as a whole. Therefore, the

problem of analysis of logistics management in enterprises needs further consideration and solution.

The analyzed definitions of logistics management of the enterprise describe the process of logistics systems management quite accurately, but it is advisable to specify them, namely:

- the object of logistics management is the logistics flow, which means a set of flow processes within the logistics chain;
- logistics management is aimed at ensuring sustainable economic growth of the enterprise as a whole, not limited to the implementation of logistical goals;
- as a result of the implementation of logistics management at the enterprise should be the achievement of optimization of logistics costs of the enterprise (in terms of finance - time) by optimizing different flows.

As a summary, it is advisable to understand logistics management as a component of the overall enterprise management system that implements a set of management functions, methods and forms of enterprise management aimed at optimizing various flow processes within the logistics chain "supply - production - warehousing - sales" to ensure sustainable economic enterprise growth.

The goal of logistics management is to find more efficient and effective ways to move resources and products from design to completion and, finally, to the consumer.

Realization of the specified purpose is provided by the mechanism of logistic management of activity of the enterprise which is intended for adjustment of movement of logistic and business processes of the enterprise.

The object of logistics management - logistics flow as a set of interdependent flow processes in the dynamics, described in specific spatio-temporal coordinates.

The subject of logistics management is the optimization of logistics flows through balanced interaction and the use of synergetic effects.

The subject of logistics management - organizationally separate subjects of processes or management staff in the functional areas of logistics.

The levers of the logistics management mechanism are selected within the weight and natural parameters and characteristics of the components and elements of the logistics flow.

Logistics management tools - models of selection, inventory planning, production, optimal volume of orders, determining the route and the optimal path, organizational and information, infrastructure infrastructure.

The criterion for the effectiveness of logistics management is to maximize the ratio between total revenues and expenditures in general for all parts of the logistics system.

Functions of logistics management - a set of generally accepted management actions with specific properties of a particular logistics system related to the planning, organization and control of procurement, transportation, warehousing, storage, implementation, maintenance.

Specialists highlight certain principles of logistics management and the corresponding formation of the mechanism of logistics support of the enterprise (Fig. 1).

In modern economic conditions, coal mining enterprises, operating in market relations, are forced to seek new formats for building relationships with consumers. Coal mining companies must study the situation on the coal market, improve the product range, develop and implement new mechanisms of the sales system that would meet the modern conditions of the industry.

In order to maintain and increase their competitiveness, coal mining companies must focus their activities on minimizing costs, risks and losses associated with the production, transportation and marketing of coal, while maximizing profits from its sale. The efficiency of domestic coal industry enterprises can be enhanced by measures such as coal shipment planning, improved marketing activities and improved procedures for concluding contracts with consumers. All of the above increases the role of logistics management, ie logistics management in order to improve logistics processes in the enterprise.

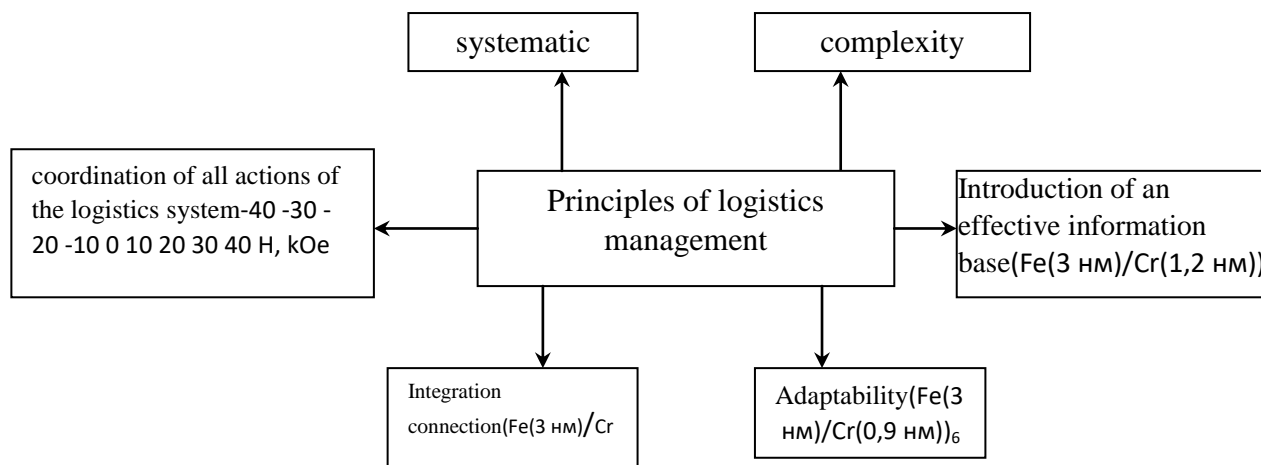


Fig. 1. General principles of logistics management [1]

The analysis showed that there are a number of shortcomings in the implementation of logistics processes, namely (Table 1).

In general, all identified shortcomings together lead to:

- increase in costs for the logistics activities of coal mining enterprises due to increased transport costs due to downtime of vehicles and inconsistencies in their schedules;
- increase in losses of coal mines due to non-compliance with the terms of contracts for the supply of coal products to consumers, increased costs for the purchase of material resources, storage of coal stocks in warehouses and the cost of
- deterioration of sales activities, reducing the level of coordination of actions of participants in logistics processes.

These consequences lead to an increase in the cost of coal products, reducing the profits of coal mining enterprises from the sale of finished products to consumers. One of the effective means of solving the problems of coal mining enterprises is to increase the efficiency of logistics processes in a single complex based on the formation of unified logistics centers [2, p. 56-57], which allows to improve the organization of processes of material and technical supply, coal production and marketing in a single complex.

Table 1**Disadvantages of logistics processes at coal mining enterprises**

Disadvantage	Effects
Inconsistency of actions between coal mining enterprises and suppliers of material resources	Increased costs of logistics, the occurrence of interruptions in production processes due to lack or purchase of low-quality materials, equipment and raw materials
Low level of coordination with transport organizations, subject to the conclusion of lease agreements for vehicles	Violation of schedules of transportation of coal products
Growth of stocks of products in warehouses of coal enterprises	Lack of warehouse space
Lack of effective customer service processes	Insufficient coherence of economic relations between mines and consumers in the sale of coal products
Insufficiently effective coordination of the activities of logistics, production and marketing	Increased costs of logistics activities

Source: compiled on the basis of [2, p. 56-57]

It seems expedient for the formation of specialized structural units for the management of logistics activities in coal mines to establish industry characteristics and the specifics of their operation from the standpoint of logistics [3]:

- products of enterprises - coal - are sold to large wholesale consumers (metallurgical, coke plants, thermal power plants); medium wholesale (intermediary organizations) and small wholesale (population);

- the coal sales channel is characterized as direct. Based on the research, it was found that almost 80% of sales at the coal company are direct deliveries [4, p. 123];

- due to the fact that the production of coal for coking and energy needs is carried out by different brands, the coal company must take into account in its production and marketing activities the main areas of work of consumers;

- management of stocks of coal products in order to minimize the risks of late delivery to consumers should be carried out on the basis of the warehouse form of supply;

- it seems expedient to use waste from coal mining and coal enrichment for the production of methane, fuel briquettes, etc. in order to obtain additional income from the coal enterprise.

One of the areas of logistics management at the studied coal mining company, which needs improvement based on the results of the study, is warehousing logistics. The control indicators of the warehousing of the studied coal mining enterprise include the number, composition, capacity and specialization of existing warehouses.

The organization of warehousing affects the capacity of warehouses, the complexity and cost of warehousing, the amount of internal transport costs and more. Thus, the effective operation of the warehousing of the studied coal mining company is able to ensure a constant flow of funds to the company and will be the basis of prudent financial planning.

It seems appropriate to propose to optimize the warehousing of the studied coal mining enterprise by implementing rational places of storage of coal and enterprise resources in warehouses using methods and methods of logistics, which requires determining the optimal load level of warehouses and open areas.

In order to increase the efficiency of the warehousing of the studied coal mining enterprise, the following issues need to be addressed:

- the choice between the organization of different types of warehouses;
- determination of the total number of warehouses;
- determination of the rational location of coal products in warehouses and open areas, taking into account the specifics of the product;
- determination of the optimal level of load of the warehouse and open areas.

In order to determine the optimal level of warehouse occupancy, it is proposed to use methods of correlation-regression analysis, namely: to establish the dependence of the level of cash flow (from the choice of optimal storage and sales) on the degree of occupancy of warehouses and open spaces.

According to the proposed multifactor model, the influence of the load of all types of storage areas (warehouses - X1, open areas - X2) on the total income of the coal mining enterprise is studied (Fig. 2).

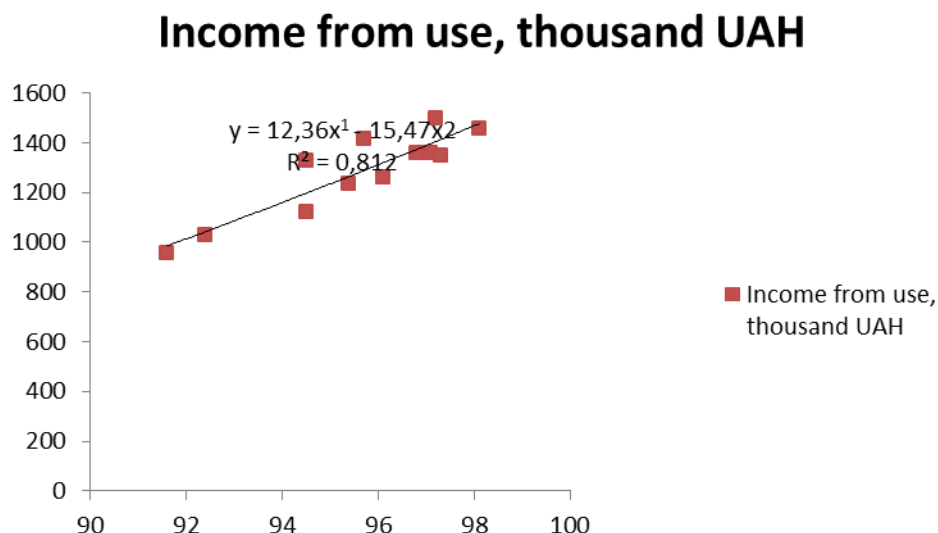


Fig. 2. Graph of the dependence of income on the load of warehouse space and open areas

The parameters of the obtained equation show that with an increase in the level of occupancy of warehouses by 1%, the increase in total revenue of the enterprise will be 12.36 thousand UAH, and increasing the load of sites by 1% will increase revenue by 15.47 thousand UAH. The reliability of this forecast is proved by the calculated correlation coefficient, the value of which is 0.812.

As a result of solving the model, the following equation was obtained:

$$Y = 956 + 12,36 * X_1 + 15,47 * X_2$$

The parameters of the obtained equation show that with an increase in the level of occupancy of warehouses by 1%, the increase in total revenue of the enterprise will be 12.36 thousand UAH, and increasing the load of sites by 1% will increase revenue by 15.47 thousand UAH. The reliability of this forecast is proved by the calculated correlation coefficient, the value of which is 0.812.

Thus, the proposed optimization of the level of occupancy of warehouses and open areas of SE "Mine" Kotlyarevskaya "SE" Selidivvugol "will allow timely and accurate forecast of the level of additional cash inflows to the coal enterprise.

References:

1. Important Tips For Effective Logistics Management. URL: <https://cerasis.com/effective-logistics-management/> (last accessed: 17.05.2022)
2. . Коніщева Н И., Трушкіна Н.В. *Обґрунтування доцільності створення логістичних центрів на вугільних підприємствах II Матеріали I Міжнародної науково-практичної конференції «Науковий потенціал світу' 2004»* (1-15 листопада 2004 р., м. Дніпропетровськ). Том 20 “Економіка підприємства”. Дніпропетровськ: Наука і освіта, 2004. С. 56-58.
3. Колодізева Т. О., Руденко Г. Р. Методичне забезпечення оцінки ефективності логістичної діяльності підприємств: монографія. Харків: Вид. ХНЕУ, 2012. 292 с.
4. Westland J. Logistics Management 101: A Beginner's Guide, Jun 18 2019. URL : <https://www.projectmanager.com/blog/logistics-management-101> (last accessed: 19.05.2022)