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THE LOGISTICS PROCESS AND ITS ROLE IN THE ACTIVITIES OF MODERN ENTERPRISES

Zoryna SHATSKA, Oleksandr STUZHNYI
Kyiv National University of Technologies and Design, Kyiv, Ukraine

THE PURPOSE OF THIS ARTICLE is to study the peculiarities of the logistics process in the activities of domestic enterprises.

RESEARCH METHODS. In the process of writing the article, general scientific and special methods of researching the logistics process at the enterprise were used, including: epistemological analysis, theoretical generalization, analysis, synthesis, tabular and graphic.

PRESENTATION OF THE MAIN RESEARCH MATERIAL. The article defines that at a modern enterprise, the organization of production, supply and sales processes is ensured with the help of logistics. The essence of the concept of "logistics" from the point of view of foreign and domestic scientists is summarized. It was found that the logistics process is the basis of logistics. The main and auxiliary logistics processes at the enterprise, which consist of separate logistics operations and functions, are summarized. A diagram of the logistics process at the enterprise, which occurs simultaneously with material and information flows, has been formed. Logistics operations with material flow in the logistics process of the enterprise are systematized, which include: supply, transportation, storage, production and sales. Logistics operations with information flow in the logistics process of the enterprise include: information collection; accumulation and storage of information; data processing; transmission of information. A descriptive description of the specified logistics operations is given. It has been proven that the complexity of the logistics process at the enterprise depends on the specifics of its activity and the technological process of manufacturing products.

CONCLUSIONS FROM THE CONDUCTED RESEARCH. Under the influence of modern digital technologies, the enterprise's logistics process will continue to undergo transformations that will affect its duration, the change in the number of logistics operations and functions, the transition to automation, and the level of cost effectiveness.

KEYWORDS: logistics; logistics process; logistics operations; logistics functions; enterprise; digitalization.

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22	1	1

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ЛОГІСТЧНИЙ ПРОЦЕС ТА ЙОГО РОЛЬ В ДІЯЛЬНОСТІ СУЧАСНИХ ПІДПРИЄМСТВ

Зорина ШАЦЬКА, Олександр СТУЖНИЙ
[1] Київський національний університет технологій та дизайну, Київ, Україна

МЕТОЮ ДАНОЇ СТАТТІ є дослідження особливостей логістичного процесу в діяльності вітчизняних підприємств.

МЕТОДИ ДОСЛІДЖЕННЯ. В процесі написання статті використано загальнонаукові та спеціальні методи дослідження логістичного процесу на підприємстві, серед яких: гносеологічного аналізу, теоретичного узагальнення, аналізу, синтезу, таблично-графічний.

ВИКЛАД ОСНОВНОГО МАТЕРІАЛУ ДОСЛІДЖЕННЯ. В статті визначено, що на сучасному підприємстві організація процесів виробництва, постачання та збуту забезпечується з допомогою логістики. Узагальнено сутність поняття «логістика» з точки зору закордонних та вітчизняних науковців. З'ясовано, що логістичний процес є основою логістики. Узагальнено основні та допоміжні логістичні процеси на підприємстві, які складаються з окремих логістичних операцій та функцій. Сформовано схему логістичного процесу на підприємстві, який відбувається одночасно з матеріальним та інформаційним потоками. Систематизовано логістичні операції з матеріальним потоком в логістичному процесі підприємства, до яких віднесено: постачання, транспортування, складування, виробництво і збут. До логістичних операцій з інформаційним потоком в логістичному процесі підприємства віднесено: збору інформації; накопичення та зберігання інформації; обробка інформації; передача інформації. Надана описова характеристика зазначених логістичних операцій. Доведено, що складність логістичного процесу на підприємстві залежить від специфіки його діяльності та технологічного процесу виготовлення продукції.

ВИСНОВКИ З ПРОВЕДЕНОГО ДОСЛІДЖЕННЯ. Під впливом сучасних цифрових технологій логістичний процес підприємства і надалі зазнаватиме трансформацій, які впливатимуть на його тривалість, зміну кількості логістичних операцій і функцій, переходу до автоматизації, рівень витратності.

КЛЮЧОВІ СЛОВА: логістика; логістичний процес; логістичні операції; логістичні функції; підприємство; цифровізація.

Statement of the problem. World globalization and integration processes are changing the traditional channels of distribution of goods and services, the rational organization of which is provided by logistics. Today, logistics has become the main driving force of enterprise activity, as it ensures effective management of flows of material, information and financial resources from the producer to the consumer. The basis of logistics activity at the enterprise is the logistics process, which is undergoing transformation under the influence of digital technologies.

Analysis of recent publications on the problem. The work of leading foreign scientists, including: J. Busher, Donald F. Wood, O. Oaklander, J. Heskett and others, is dedicated to the study of the problems of implementing logistics at enterprises. Among domestic scientists, A. Butov, I. M. Karp, A. G. Kalchenko, E. V. Krykavskyi, A. V. Kruk and K. V. Tserkovna are studying the problems of implementing logistics at enterprises. and other. Their work is devoted to defining the essence of the concept of logistics, defining its role in the activities of enterprises, describing the tools of logistics management from the point of view of a systemic approach. However, the problems of the formation of the logistics process and its transformation under the influence of modern digital technologies are still insufficiently described and require further in-depth research.

Statement of the main results and rationale. The main goal of the activity of a modern enterprise is the organization of uninterrupted production of products, performance of works, provision of services. The implementation of the production process is not possible without ensuring the rhythmic arrival of raw materials and materials for production, as well as the delivery of finished products to the final consumer. At a modern enterprise, logistics helps to organize these processes.

Logistics, "as a science that has existed for many years and emerged as a result of the integration of material, production management and marketing, still attracts increased attention from scientists, which is reflected in various aspects of the use of the term "logistics" (Butov, 2012). The definition of the essence of the concept of "logistics" by domestic and foreign scientists is summarized in the table 1.

At every enterprise, logistics is manifested through logistics activities, as a practical implementation of complex logistics functions and elementary logistics operations (Logistics activity). Logistics processes are the basis of the company's logistics activities. A logistics process is a time-organized sequence of logistics operations that allows you to achieve a set goal (Logistics activity). The logistics process is a mutually determined, purposeful movement of a set of resource flows and their transformation in the process of meeting the solvent demand for the finished product (Korolenko, 2013). Some scientists equate the

concepts of logistics process and logistics business process, understanding by it "an interconnected set of operations and functions that translate the company's resources in the flow management process into the result determined by its logistics strategy" (Chuyeshov, Sagaydak-Nikityuk and Kozyreva, 2015).

Table 1

Definition of the essence of the concept of "logistics"

Authors (organizations)	Essence
Logistics as a planning process	
American Logistics Society "Logistics Management Council" (Coyle, Bardi and Langley, 2002)	the process of planning, implementing and controlling the cost-effective movement and storage of raw materials, work-in-progress stocks, finished products and related services and relevant information from the place of origin to the place of consumption to ensure compliance with consumer requirements
Donald F. Wood (https://www. britannica.com)	the process of planning, implementing and controlling the efficient, effective material flow and storage of goods, services and related information from the point of origin to the point of consumption in order to meet customer requirements
J. Busher and G. Tyndall (1987)	the process of planning, implementation and management of efficient, economical movement and preservation of raw materials, work in progress, finished products, related information from the point of origin to the point of consumption in order to ensure compliance with consumer requirements
Logistix Partners Oy, Helsinki, FI (Kumar and Chia, 1996)	the basics of business planning for managing goods, services, information and capital flows. It includes complex information, communication and management systems necessary in the modern business environment
Logistics as a science	
ECRC University of Scranton / Defense Logistics Agency Included with permission (http://www.logistics world.com)	the science of planning, implementation, and the acquisition and use of resources necessary to support the operation of the system
MDC, LogLink / LogisticsWorld (http://www.logistics world.com)	the science of planning, organizing, and managing activities that ensure the delivery of goods or services

Continuation of Table 1

Authors (organizations)	Essence
E. V. Krykavskyi (2004, p. 12)	the science of planning, control and management of transportation, warehousing and other material and non-material operations carried out in the process of bringing raw materials and materials to the production enterprise, in-plant processing of raw materials, materials and semi-finished products, bringing finished products to the consumer in accordance with the interests and requirements of the latter, and as well as transmission, storage and processing of relevant information
I. M. Karp (2006, p. 7–8)	the science of rational thinking and practical activity in the field of research, design, development, production, supply and sale of the necessary, specific product or service from the initial moment to the final, with minimal costs of material, informational, financial, technological, labor resources and time interval for micro-, macro-, meso-, mega- or meta levels with mandatory control of all operations
A. Butov (2012, p. 162)	a scientific and practical tool for the joint management of many economically independent market structures, which allows achieving a rational organization of flow processes that occur in a spatio-temporal sequence, with the aim of identifying and realizing potential management reserves and obtaining, ultimately, additional income and profit by these structures mainly at the expense of socially useful, mainly production factors and sources
Logistics as a direction of management	
J. L. Heskett (1977)	a set of activities for managing product flows, coordinating production and sales markets at a set level of services with minimal costs
K. V. Tserkovna, A. V. Kruk (2018)	scientific and practical direction of management and optimization of logistics flows to achieve operational, tactical and strategic goals in a certain logistics system
M. A. Oklander (2008, p. 5)	concept, integrated function of material flow management in microeconomic systems
A. G. Kalchenko (2003)	the art of managing the flow of materials and products from an external source to a consumer

Source: compiled by the authors.

The key logistics processes at the enterprise, as defined by D. V. Borysenko, are: customer service; movement and transportation; warehousing and storage; inventory management; order processing; logistic communications; procurement; processing of materials; packaging; demand forecasting; return of goods (Borysenko, 2022).

The logistics process at any enterprise, as noted by A. S. Zaitseva, has a rather complex structure and can be considered at different levels of detail (Zaitseva, 2023).

In the most general form, the logistics process at the enterprise is divided into main and auxiliary processes, which consist of separate logistics operations and functions. Logistics operation is an independent part of the logistics process, which is a separate set of actions aimed at the generation, transformation or absorption of the main – material and accompanying – information, financial, service, personnel flows (Tserkovna and Kruk, 2018). The main logistics processes include:

– planning of goods movement;

– resource process (delivery of materials from suppliers);

– organization of warehouse processes and accounting of products in warehouses;

– product sales process;

– performance of service logistics functions (Shishkin, 2016).

Auxiliary logistics processes include project-organizational processes; financial and fiscal; economic and legal; marketing; processes of economic and technological development (Cherchata and Matveeva, 2011).

Based on the fact that "a perfect logistics system at an enterprise should ensure the achievement of goals and objectives of any complexity, provided that the multi-level nature of decision-making processes under the pressure of numerous factors is taken into account" (Trifonova and Kravets, 2019), the logistics process of the enterprise can be depicted as follows: fig. 1.

The logistics process at the enterprise occurs simultaneously with material and information flows. The logistics process with material flow includes logistics operations with:

– supply of raw materials, materials or components from the supplier to the enterprise;

– transportation of raw materials, materials or components to the warehouse of the enterprise;

– storage of raw materials, materials or components at the enterprise (unloading, assembly, storage);

– transportation (internal movement) of raw materials, materials or components for production;

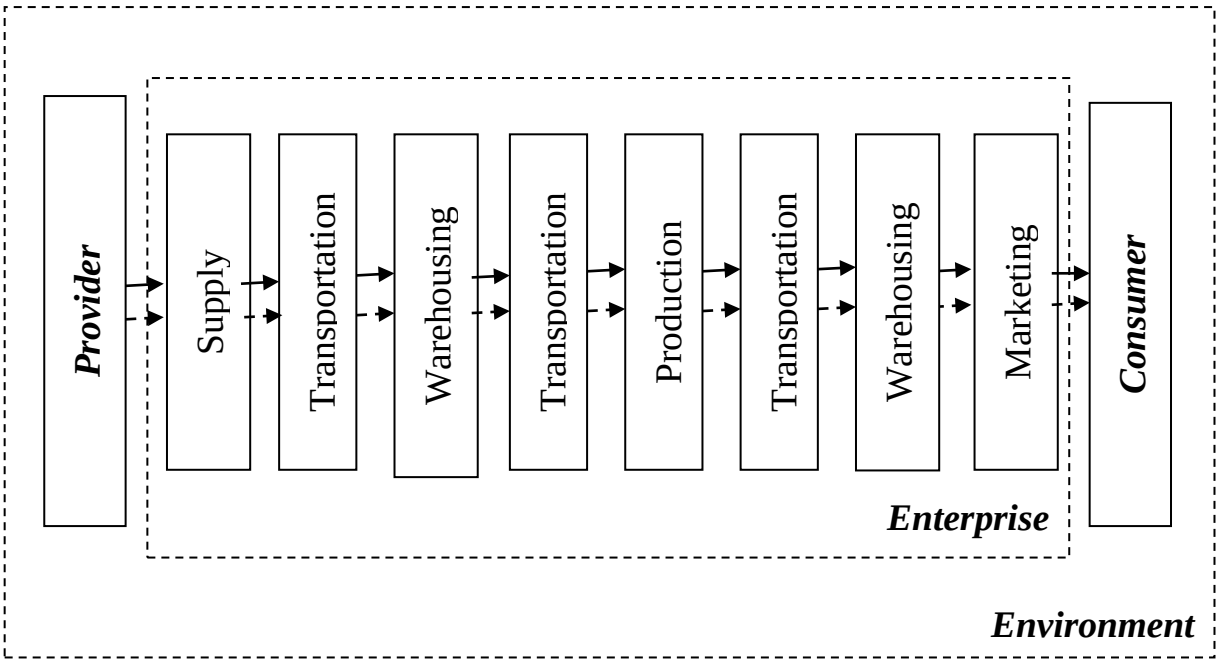
– production process;

– transportation (internal movement) at the stage of unfinished production in the production process;

– transportation of finished products to the warehouse of finished products of the enterprise;

– storage of finished products (unloading, assembly, labeling, packaging, storage);

– the process of selling finished products (packing cargo; consolidating cargo units; loading).



Legend:
→ Material flow
⇢ Information flow
Source: compiled by the authors

Fig. 1. **Logistic process at the enterprise**

The logistics process with information flow includes logistics operations with:

– information gathering;

– accumulation and storage of information;

– information processing;

– information transfer.

The complexity of the logistics process at the enterprise depends on the specifics of the enterprise's activity and the technological process of manufacturing products, which determines the required number of logistics operations with material and information flows.

At the current stage, further introduction of information and communication technologies is taking place in all spheres of the company's activity, including in the sphere of logistics. Digitization of logistics leads to the transformation of the logistics process at the enterprise, which:

- accelerates as a result of accelerating the processing of material and information flows;
- is reduced due to a reduction in the number or consolidation of individual operations;
- is automated and requires the involvement of a smaller number of human resources;
- becomes less costly due to acceleration, reduction and automation.

In the future, digital technologies will radically change the logistics processes at the enterprise already in the near future, as noted by all managers of enterprises in the field of logistics. At the same time, most of them claim that they do not currently have a formed strategy for the development of their enterprises taking into account new digital technologies, which makes their use less effective both for an individual enterprise and for the country's economy as a whole (Shatska and Stuzhnyi, 2023).

Conclusions and prospects for further research. The logistics process is one of the main processes at the enterprise, which ensures the process of production of products and their delivery to the consumer. In modern conditions, under the influence of digital technologies, this process is transformed and undergoes radical changes that contribute to its acceleration, reduction, automation, and cost reduction.

Further research in this direction will be aimed at the development of models and mechanisms of digitalization of the enterprise's logistics process, the formation of new indicators for evaluating its effectiveness.

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What is logistics? Logistics means having the right thing, at the right place, at the right time. URL: http://www.logisticsworld.com/logistics.htm.

AUTHOR (S) BIOSKETCHES

Shatska Zoryna, D.Sc in Economics, Associate Professor, Department of Smart Economics, Kyiv National University of Technologies and Design, Ukraine.

https://orcid.org/0000-0003-1600-148
Scopus Author ID: 36081324000
ResearcherID: D-4215-2019
E-mail: shatskaya@ukr.net

Stuzhnyi Oleksandr, D.Sc in Economics, Postgraduate, Department of Smart Economics, Kyiv National University of Technologies and Design, Ukraine

https://orcid.org/0009-0003-0663-2439
E-mail: stugha@ukr.net

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