

## T Y P O L O G Y A N D T Y P E D I V E R S I T Y O F L O G I S T I C S I N T H E E C O N O M Y

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The expediency of separate distinguishing in types and kinds of entrepreneurial logistics has been grounded. Main reasons of widening the use of the term "business logistics" outside the material flows under current conditions have been defined. Two most universal types of entrepreneurial logistics have been determined. Author's definition of business logistics types through rational and supporting character of its contemporary manifestation has been provided. Interconnection between types and kinds of logistics in the economy has been revealed. Some classificatory features and types of entrepreneurial logistics have been added.

*Key words:* entrepreneurial logistics, classification, type, kind, feature, interconnection, economy.

### Т И П О Л О Г І Я Т А В И Д О В А Р І З Н О М А Н І Т Н І С Т Ь Л О Г І С Т И К И В Е К О Н О М І Ц І

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Обґрунтовано доцільність розмежування типів і видів підприємницької логістики. Встановлено основні причини розширення середовища використання терміна "бізнес-логістика" за межі матеріального потоку в сучасних умовах. Визначено два найуніверсальніших типи підприємницької логістики. Наведене авторське тлумачення типів бізнес-логістики через раціоналістичний і забезпечувальний характер її сучасного прояву. Встановлено взаємозв'язок між типами і видами логістики в економіці. Доповнено окремі класифікаційні ознаки та види підприємницької логістики.

*Ключові слова:* підприємницька логістика, класифікація, тип, вид, ознака, взаємозв'язок, економіка.

### Т И П О Л О Г І Я И В И Д О В О Е Р А З Н О О Б Р А З И Е Л О Г И С Т И К И В Э К О Н О М И К Е

УДК 65.012.34

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Обоснована целесообразность разграничения типов и видов предпринимательской логистики. Установлены основные причины расширения среды использования термина "бизнес-логистика" вне пределов материального потока в современных условиях. Определены два наиболее универсальных типа предпринимательской логистики. Представлено авторское толкование типов бизнес-логистики через рационалистический и обеспечительный характер ее современного проявления. Установлена взаимосвязь между типами и видами логистики в экономике.

Дополнены отдельные классификационные признаки и виды предпринимательской логистики.

*Ключевые слова:* предпринимательская логистика, классификация, тип, вид, признак, взаимосвязь, экономика.

Any objective phenomenon in science is connected with the process of classification due to which certain type variety is defined and described.

Classification (French, English "classification" derives from Latin "classis" – type and "facio" – make) is a system of distribution of objects (processes, phenomena) by types (groups and so on) according to defining features. Classification is also an action (process) with the meaning of the verb "to classify". As the result of classification at least one type (group) is formed, with minimum one element. Classification can be defined as type formation in creating classes of objects which closer coincide with the etymology of the word "classification". Though classification to a certain extent is conditional and subjective concerning the subject which forms it and its ability to distinguish features of objects of classification, yet it helps to simplify the speech by allowing us to use narrower and more specific notions [1].

Widespread consequences of classifications are separation of certain types, kinds and levels. Carrying out detailed classificatory analysis and defining precise structural-logistics connections between types and kinds of logistics in the economy are not only of theoretical but also of practical value. Effectiveness of management and quality of legislation regulating separate aspects of entrepreneurial activity and might depend upon objective respond to such specific issues. Thus, the study of this problem is an actual and important task.

Profound study of separate issues in general logistics theory is reflected in publications by Anikin B. A. [2], D. Bauersocks [3], D. Bade [4], Kalchenko A. G. [5], Krykavskiy Y. V. [6], J. Kolin [7], Lepeyko T. I. [8], Ponomarenko V. S. [8], Ponomaryova Y. V. [9], Sergeyev V. I. [10], Stahanov V. M. [11], Tankov K. M. [8], Frolova L. V. [12] and others.

Most of contemporary researches on classification of logistics are focused on defining its separate levels and types.

In this way one of the approaches implies separation of different levels which define specific hierarchical placement of objects, types and so on.

Besides, Professor Krykavskiy Y. V. classifies logistics by defining six main levels of logistics integration and forms of the logistics system [6].

Typical variety of logistics based on defining separate levels is described by Kalchenko A. G. But his approach has specific differences from the former one. Thus, the scientist believes that it is necessary to distinguish two levels of logistics under modern conditions: macrologistics with tasks to deal with global issues of managing material and informational processes and micrologistics, which studies local problems of managing material and informational flows on the shop-floor level.

Macrologistics includes interbranch processes – logistic processes between different companies, transportation, middlemen on stocking and storage. It may include processes connected with manufacturing, transportation, provision of different types of services. Micrologistics is intrasectoral logistics connected with normal functioning of a certain company. Micrologistics itself is divided into three types: 1) logistics connected with stocking and purchasing goods (stocking logistics); 2) manufacturing logistics; 3) logistics which deals with sales of goods (distributing logistics). If within logistics system there are functions of supply, production, sales, distribution and transportation, consumption

and market, the system is called macrologistics [5].

Anikin B. A. and other Russian scientists also define two levels of logistics: micro- and macrologistics. Besides, they are focused on types (spheres) of logistics which are used by majority of western scientists (purchasing, production, distribution, stocking, transportation, information, service and so on) [2].

In the above-mentioned approaches classification of logistics by types and levels integrate functional purpose, scale of the tasks and features of logistics in certain companies and so on.

Meanwhile, system logistics implies that separation of types must include a clearly defined classificatory feature.

According to Frolova L. V., types of logistics must be classified as follows:

- 1) sectoral (entrepreneurial, commercial, industrial, trading, bank, building, touristic, stock-exchange, customs, military);
- 2) resource (informational, financial, personnel, service);
- 3) functional (marketing, purchasing, stocking, transport, manufacturing, distribution, sales) [12].

More structural approach to the classification of logistics is described by Ponomaryova Y. V., who offers to define logistics by the following features:

- 1) areas of management (internal, external);
- 2) type of business activity (purchasing, manufacturing, distribution, transportation, storage, stocking, information);
- 3) scale of tasks (macrologistics, micrologistics) [9].

Stahanov V. M. and Ukraintsev V. B. carried out the typology of logistics by numeral classificatory features. But the types and kinds of logistics are the same. However, Russian scientists claim that general theory of logistics continues to develop in the direction of adequate representation of real economic processes in logistics models and systems as well as in the direction of improving logistics conceptions [11].

Bondarenko O. S. carried out generalization of classificatory features and types of logistics defined by many researchers. But he defined certain types of logistics considering features of local legislation [13].

Hence, the process of classification of entrepreneurial logistics in professional circles has a rather debatable and arguable and in some cases insufficiently developed character. Moreover, types of logistics as a notion in general theory are either overlooked or identified with kinds which are not very objective. Certain types of logistics require specification of classificatory features and some others require additional positioning.

The main purpose of the study is the definition of the universal types of entrepreneurial logistics and addition of specific types and features of classification as well as specification of interconnection between types and kinds of logistics in modern economy.

A type (Greek "preimage, main image" and so on) is the highest subdivision in systematization (classification) [14; 15]. Hence, the kind of logistics is the lower subdivision in systematization (classification) which itemizes typology of a specific object, phenomenon, process and so on.

Under modern conditions the widening of the usage of the term "entrepreneurial logistics" outside the material flows is connected with its development towards rationalization and provision of business processes in the economy. In its first meaning the entrepreneurial logistics is the object of more attention within scientific-theoretical field, and in the second – it is more often used in practice of running a business. Each of them is based on ideas of separate divisions of military

logistics, while rationalistic logistic integrates certain principles of logistics as a science about features and methods of thinking.

Rational logistics is focused on mastering scientific principles, formal models and methods of logistics optimization of economical activity in business and support of decisions in the system of management. Supporting logistics is connected with formation and functioning of different logistics formations (providers, objects, networks, chains, channels and so on) and logistics operations (processes) which create the necessary conditions for the operation of the company.

The author considers that rational and supporting logistics, as its two main manifestations, are on the highest level of the classification of entrepreneurial logistics. Consequently, they form its two universal types. It means that any kind of logistics at the lower level of classification is connected with its rational and supporting types (Figure).

For example macro- and micrologistics can be both rational and supporting. On the other hand, rational and supporting type of logistics integrate supply, manufacturing, sales and other kinds of logistics of enterprise by functional and other meanings.

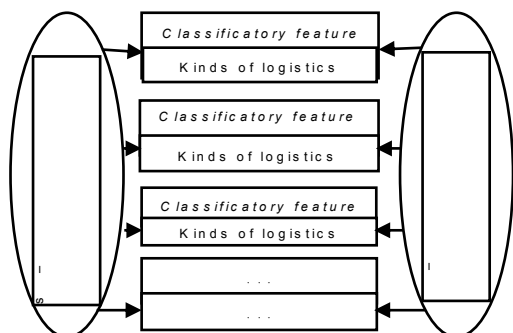


Fig. Connection between types and kinds of entrepreneurial logistics (developed by the author)

Approaches to classification of entrepreneurial logistics of all above-mentioned scientists form separate contribution to increase the level of systematization of type diversity of entrepreneurial logistics. In the meantime it is worth paying attention to actuality of defining such important additional features as degree of unification in carrying out separate functions, time measurement, type of control over logistics chain and origin of sources of logistics maintenance in flow processes (Table).

Table

Specific classificatory features and types of entrepreneurial logistics (developed by the author)

Classificatory feature	Kind of logistics
By degree of unification in carrying out separate functions	integrated logistics
	specialized logistics
By time measurement	strategic logistics
	tactic logistics
	operative logistics
By sources of logistics maintenance in flow processes	internal logistics (in general interpretation)
	external logistics (in general interpretation)
By type of logistics chain control	corporative logistics
	cooperative logistics

D. Baueresocks and many other American scientists

distinguish the term "integrated logistics". This type of logistics evolved in the 1980s. Today due to the system of integrated logistics goods pass through consecutive stages which increases the added value. As a result goods arrive at the necessary place in the required amount and form [3].

According to Frolova L. V. integrated logistics implies unification of different functions of logistics processes and their participants within one logistics system with the purpose of its optimization [12].

J. Colin claims that logistics can integrate distribution, manufacturing and delivery with the purpose of synchronizing rhythms and flows. Such a system is called "integration logistics" and it is often used by leading consumer goods manufacturing companies [7].

However Bondarenko O. S. doubts the actuality of integration logistics separate definition since logistics, which carries out system forming, integrating, regulating and resulting functions, is always integrated [13].

According to the author the term "integration logistics" is nevertheless actual to define along with the term "specialized logistics". In such a way classification must be carried out by means of separate functions unification.

Specialized logistics is logistics which implies relative focus of organization on carrying out a certain logistics function (process).

So, specialized logistics in a big extent can be typical for outside providers (operators), who provide separate logistics services while performing certain narrow functions (transportation, storing and others).

Integrated logistics is logistics which implies integration of several logistic functions (processes) in the process of business activity.

It can be typical for a certain enterprise which independently carries out such processes as supply, support of production and distribution while providing their optimization within the logistical system. Herewith integrated logistics is shown in activity of separate outside providers (operators) which provide complex logistical services aimed at general management of the supply chain.

Taking into account that logistic decisions are made at different levels of organization management, they can be operative, tactic and strategic. It must be shown in the classification of entrepreneurial logistics by a separate feature.

Besides, D. Baueresocks claims that attention of managers goes beyond existing structure of business and tries to include both suppliers and customers. Strategic logistics is defined as the use of concept of logistics and alliances with partners for achieving competitive advantage. A company which chose the right strategy, tries to inform clients about their abilities beforehand, and then it performs what it is expected, with maximum attention and punctuality. Effective strategic logistics demands unification of efforts of the company and main material and service suppliers [3].

To a great extent the term "strategic logistics" is connected with the term "leading logistics", which is also used in American sources.

Tactic and operative logistics are carried out within the existing structure of business and have a shorter measure of time.

According to the author strategic logistics decisions are focused on the direction in activity (cooperation) and have a long-term period.

Tactical logistics decisions are focused on carrying out corresponding measures and have a medium-term period.

Operational logistics decisions are focused on choosing certain actions and have a preferentially short-term period of realization.

Special attention should be paid to classification of logistics into internal and external.

According to Ponomaryova Y. V. internal logistics is aimed at coordination and improvement of business activity, connected with control over flow processes within a company or a corporation. External logistics deals with issues of regulating flow processes, which go beyond frames of activity but are in the field of company's influence [9]. Many other scientists share this point of view.

Meanwhile D. Bade and J. Muller and B. Youd connect internal logistics with insourcing [4].

It means that it is actual to additionally distinguish the essence of internal and external logistics by origin of sources of logistics maintenance in flow processes or in a general meaning.

Then internal logistics is logistics which implies the use of internal sources for carrying out logistical functions (processes).

External logistics is logistics which implies the use of external sources for carrying out logistical functions (processes).

The Russian scientist Sergeyev V. I. uses the term "corporate logistics". Also he considers that corporations are legal entities with unlimited time of operation, limited liability of participants, significant volumes of activity, which are widespread in countries with developed economy [10].

In Ukrainian legislation cooperative enterprises are different types of economic companies and cooperative societies [16].

However, in professional terminology such term as "cooperative logistics" is often used separately from corporate. In the world and Ukrainian practice the special and widespread representative of the former is service cooperative societies which, unlike corporations, have no target to receive a profit but are created with the purpose of rendering services to their members at cost price.

Both corporate and cooperative logistics are focused on their own mechanism of control over the logistics chain. The latter makes the difference between them despite the fact that both are connected with non-unitary organizations (have more than one owner). That is why such feature as the type of control over the logistics chain can be basic in classification of logistics as corporate and cooperative.

Hence, corporate logistics is logistics in which consequent stages of supply, production provision and distribution are preferentially within control of one person or several people. Cooperative logistics is logistics in which consequent stages of supply, production provision and distribution are controlled through democratic management and multi-personal equal joint ownership preferentially on the non-profit basis. The purpose of the former is to maximize corporate financial results while the purpose of the latter is to minimize logistical costs and increase profits of owners (members) of a cooperative.

Rational and supporting logistics are basic in the classification of entrepreneurial logistics as its two main manifestations, and consequently form its two universal types. Along with that any kind of logistics, by any classification feature is connected with its rational and supporting types.

In additional differentiation of logistics into kinds it is reasonable to separate or to generalize integrated and specialized logistics (by extent of unification in carrying out separate logistics functions), strategic, tactic and operative logistics (by time measurement), corporate and cooperative logistics (by type of control over the logistics chain) and internal and external logistics in general interpretation (by sources of logistics maintenance of flow processes).

It is essential that the further scientific research should be focused on them.

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