A CONCEPTUAL APPROACH TO MANAGING MATERIAL RESOURCES IN PRODUCTION ENTERPRISES

Abstract. The applied methods and methods of managing the provision and use of material resources at production enterprises in Kazakhstan are the adaptation of traditional methods for centrally planned economy to the conditions of emerging market relations. The practice of economic activity of industrial enterprises shows their desire to preserve the existing relations with suppliers of material resources in the past. This one-sided orientation leads to the complete dependence of the enterprise on a single partner. The inert policy of enterprises-consumers of material resources encourages suppliers to raise prices above the current level on the world market. In industrial enterprises, the dismantling of centralized material management was not supplemented by the formation of an appropriate mechanism for managing the material intensity of products. As a result, the efficiency of using material resources decreases.

The lack of an adequate mechanism for managing processes related to the provision and production use of material resources makes it necessary to study the problem of managing the material resources of production enterprises in the conditions of the formation of market relations.

At the same time, the analysis of works that reveal certain aspects of material resource management, rationalization of their use in production enterprises shows that there is no complete concept of management of the enterprise provision and production use of material resources as a single system, the efficiency of which largely depends on the level of costs and the need for working capital.

Production enterprises in Kazakhstan need an appropriate methodological basis to form their own model of material resource management, taking into account the specifics of internal potential and the variability of the external environment.

In accordance with the intended purpose in the study solved the following tasks: revealed the economic laws of material resources use and the features of their exploitation as an object of management in manufacturing enterprises: based on the selected patterns of use of material resources and synthesis of existing concepts for the management of material resources define the content of management of material resources for the production of the company; reviewed and summarized from the perspective of admissibility for p of industrial enterprises of Kazakhstan; developed by Western experts, methods for managing purchases, deliveries, and inventory of material resources in manufacturing firms; based on system and situational approaches, methodological foundations for managing material resources of an industrial enterprise have been developed.

Key words: management, material resources, production, efficiency, formation, cost level.

Introduction. Globalization of the modern economy, activation of integration processes, rapid changes in the sectoral structure of the economy and the development of high-tech knowledge-intensive industries, fundamental changes in production technology in most industries require changes and transformations in the management of the reproduction cycle as a whole and its individual stages - implementation, production, material and technical support of production, regulatory, organizational and design preparation of production.

In most industrial production sectors that convert material resources into finished products, the cost increment is more determined by their correct choice and effective use. Due to the fact that in a market economy, economic relations with suppliers of material resources, coordination of order and delivery
schedule, pricing and forms of payment associated with a high degree of uncertainty and risk, it is assumed, first, the strategic management of this process and, secondly, the application of methods of management of logistics, adequate to new economic conditions.

So far, the share of material resources in total production costs exceeds 60%, i.e. it has a decisive impact on the cost and financial results of organizations, determines the competitiveness of a particular type of goods (works, services) and the organization as a whole [1].

Methods. Methodological research is a General method of scientific knowledge-analysis and synthesis, Content-Media analysis of sociography, system-comparative method that allows you to determine the Genesis, sequence and functioning of the stages of development of the meat market, the attractiveness and effectiveness of the meat market.

Research and experimental-methodical work in the field of development and effective management of material resources at production enterprises.

Results and discussion. The art of inventory management is: optimizing the overall size and structure of inventory of inventory items; minimizing maintenance costs; ensuring effective control over their movement. [2]

Thus, the economist T. P. Karpova [3] believes that the purpose of inventory management is to keep the annual total cost of inventory provision at a minimum level. For this purpose, it is necessary to minimize the following indicators: the number of orders per year; the duration of insurance cycles; the duration of supply cycles and intra-plant movements; the size of ordered batches; the number of materials in stock and the number of storerooms and warehouses; the total order cycle.

The inventory management system includes the correct accounting organization that allows you to control the balances, receipts, and expenditures of inventory in the warehouses of the enterprise. To improve the accounting of material resources, it is necessary to constantly improve the documents and accounting registers used, as well as to increase the level of automation of accounting and computing work. If the company has implemented a stock management program or other similar information system, you can get monthly (or more often) all the necessary information about the actual state of stocks.

Material cost analysis is important for effective financial management. Inventory can make up a significant share not only in the current assets, but also in the assets of the enterprise as a whole. This may indicate that enterprises are experiencing difficulties with the sale of their products, which in turn may be due to poor product quality, violation of production technology and the choice of inefficient sales methods, insufficient study of market demand and market conditions. According to analyst Savitskaya G. V. for effective inventory management, it is necessary to conduct an analysis of the use of material resources, which includes the following types of analysis: analysis of the company's availability of material reserves; analysis of the effectiveness of the use of material resources [4].

A sound regulatory framework on reserves generated throughout the specified item used in the enterprise material resources, taking into account the current conditions and specifics of supply and marketing is the tool that allows us to solve large complex problems in management of material flows to identify the scarce and unnecessary material items, to determine the required delivery time, the required amount of working capital for the acquisition of tangible resources. Professor V. Paliy in his work defines the optimal procedure for determining the standard costs of materials, which includes two stages: determining the physical standards, that is, the type and quantity of materials required for a given product; determining the standard prices for materials, that is, current or expected prices for the period of the standards [5].

To keep the annual total cost of inventory provision at a minimum level, you must correctly determine the optimal order size, that is, determine the ordered quantity at which the cost of the entire inventory volume and its storage will be minimal. It is also important in inventory management to determine the moment when you need to make an order to receive materials this requires regulating the delivery time and determining the amount of insurance stock.

Volodina V. E. in her works considers increasing the economic efficiency of material inventory management of an industrial enterprise on the basis of a logistics concept [6].

She argues that the solution to the problem of effective inventory management in the modern economic environment requires a transition from traditional management methods to logistics, which allows you to include inventory management methods in the main strategies of market behavior. Logistics
is used to optimize inventory in space and time. It coordinates the movement of inventory and ensures that the necessary materials are provided in a timely manner, in the right place, in the required quantity and quality. As a result, the cost of warehousing and the duration of capital in stocks are reduced, which helps to accelerate its turnover and improve the efficiency of the enterprise.

Each enterprise should have its own inventory management system designed to meet its specific requirements [7]. It will be effective only with the participation and support of all divisions of the enterprise. An effective way to get support is to provide information to Department managers.

Material and technical support of production as a component of logistics and the supporting subsystem of the production management system largely determines the quality of the processing process of the system's input to its output—the finished product. If the input quality of the system is low, it is not possible to get a high quality of its output.

Process logistics of production to timely delivery to warehouses or directly to the jobs required under the business plan of material and technical resources.

The material and technical resources include: raw materials, materials, components, purchased technological equipment and technological equipment (tools, cutting and measuring tools), new vehicles, loading and unloading equipment, computer equipment and other equipment, as well as purchased fuel, energy, and water. In other words, everything that comes to the enterprise in material form and in the form of energy belongs to the elements of material and technical support of production.

For the smooth functioning of production, well-established material and technical support is necessary, which is carried out at enterprises through the logistics bodies.

The purpose of logistics of production:
- timely provision of enterprise divisions with the necessary types of resources of the required quantity and quality [8];
- improving the use of resources increasing labor productivity, capital return, reducing the duration of production cycles of manufacturing products, ensuring the rhythm of processes, reducing the turnover of working capital, full use of secondary resources, improving investment efficiency;
- analysis of the organizational and technical level of production and quality of products from the supplier's competitors and preparation of proposals for improving the competitiveness of the supplied material resources or changing the supplier of a specific type of resource. In order to improve the quality of «input», enterprises should be afraid of changing non-competitive resource suppliers [9].

To achieve these goals, employees of supply agencies must study and take into account the supply and demand for all material resources consumed by the enterprise, the level and changes in prices for them and for the services of intermediary organizations, choose the most economical form of commodity movement, optimize inventory, reduce transport, procurement and storage costs.

Material resource management is one of the most important aspects of the activities of large industrial enterprises and includes a wide class of tasks—from selecting raw material suppliers and determining internal and external logistics schemes to making decisions on the construction of additional workshops and increasing (or reducing) production capacity [10]. The efficiency of using the material resources available to the organization largely determines the level of production costs and the quality of final products, which, in turn, has a direct impact on the competitiveness of the enterprise and its survival.

Material resource management involves organizing the supply of raw materials, materials, substances and components in accordance with established standards and regulations.

It is also the development, documentation and implementation of rational measures that contribute to reducing the amount of waste generated in the technological cycle and their high-quality utilization.

The effectiveness of material resource management is thus determined by the contribution of this process, as well as its subordinate processes, to the overall efficiency of the enterprise as a production system.

We will formulate the following conceptual provisions for the management of material resources of a production enterprise in modern conditions [11]:

1) The main tasks of material resources management are to control their rational use, as well as to improve the efficiency of the production system by changing the configuration (structure) of the production system and redistributing resources between its elements;

2) There should be flexibility in switching between different performance indicators of the production system (economic, environmental, hybrid and other indicators).
3) Effective management of material resources of a large industrial enterprise is impossible without forming a complete picture of the relationships between the elements of the production system and the environment;

4) Methods of managing material resources should be sufficiently universal in relation to the scale of the object of management (a separate division, an enterprise as a whole, or a group of enterprises).

The increase in economic activity during this period, the increase in market saturation with goods and services led to the fact that the duration of the presence of goods on the market was determined by their quality, price and speed of delivery to consumers ("diffusion" of innovations). Innovative features include the following:

- creating a new product;
- use of new raw materials (cheaper or better quality);
- application of new technologies;
- formation of new (more rational) organizational structures;
- development of new markets (sales of products, capital, cheaper or more skilled labor). It was during this period that transnational corporations began to actively develop in the world, seeking to combine all of the above innovative advantages and in logistics, the theory of systems and compromises was developed.

Systems theory assumes simultaneous implementation of system and complex approaches to management.

The system approach involves considering an enterprise as a system consisting of many interrelated elements (including logistics), on the one hand, and as an element of a larger system (in particular logistics) that unites several enterprises. An integrated approach involves considering the problems of production, logistics, personnel, Finance, and so on from a unified perspective, both at the intra-company and inter-company levels.

The theory of systems allowed us to consider the problem of commodity movement from a scientific point of view as a complex one, and to represent various enterprises involved in commodity movement as a single system. This has led to an understanding of the need to take into account and coordinate the characteristics, interests, internal and external relationships of all participants in the logistics chain. Coordination based on the principles of consistency and complexity of actions of participants in the logistics chain, taking into account their capabilities, interests and characteristics, allowed us to bring logistics activities to a new level of development.

The theory of compromises as a component of the theory of systems allows you to find solutions that minimize the total costs of logistics activities and maximize the gross profit of participants in the logistics process. The influence of systems theory and the theory of trade-offs is particularly pronounced in the activities of transnational corporations (TNCs).

The development of TNCs has led to the promotion of unification of the conditions of international economic activity in the form of standardization of norms, rules and technical means of implementing logistics activities both at the regional (EU, NAFTA, MERCOSUR, APEC) and at the world (WTO) level.

Before the development of TNCs, the share of which now accounts for about a quarter of world GDP, the physical transfer of material resources between States is largely complicated by differences in national legislations, which led to an increase in workflow in the border clearance of goods, growth period, time of delivery, and complexity of the order of financial calculations, etc. When manufacturers ceased to fit within the borders of one state, maneuvering between the price and quality of raw materials, labor, markets, etc., formed of TNCs.

During this period, the role of logistics has increased many times. At the same time, measures were taken to unify the rules of international economic activity, which led to the simplification of border and customs control. In the context of integration and globalization of the world economy, international transshipment, storage, distribution, information and other logistics centers have been formed. New transport technologies (including intermodal) have been developed.

Summary and Conclusion. The decline in economic activity in the 2020s, caused by the global economic crisis of energy nature, according to forecast estimates, will put its imprint on the development of production and economic activities in General, and logistics in particular. The assumption about the development of combinatorial management tools (including logistics) in this period is based on the analysis of the following trends in socio-economic development.
First, in the conditions of the expected change of technological structures, the cluster of radical innovations is still at the stage of development and accumulation of new knowledge. To overcome, or rather localize, the decline, we are actively looking for options for local improvements of innovations coming off the market (product modernization), including the search for combinatorial options for their use.

Second, reducing the life cycle of products in the conditions of scientific and technological progress makes enterprises more often switch to new types of products, and this requires the universalization of both production and logistics schemes, including solutions of a combinatorial nature.

Third, the high degree of market saturation in a post-industrial society requires the formation of logistics systems to focus not only on the relatively frequent change of product types, but also on the frequent change of its producers. This trend requires that the construction of logistics systems also rely on the principles of combinatorics.

Fourth, in the context of the development of the information economy, the process of replacing physical volumes of final (finished) products, products in progress, and initial material resources with reliable information tends to slow down. Information flows are unable to completely replace the material. In this regard, logistics systems should be based on the principles of rationalization of combinations of managed flows, including: material flows, information flows, financial flows and service flows.

Thus, in the coming years, the development of logistics will be associated with the stage of combinatorial innovative solutions. It is on these logistics solutions that humanity will move to the sixth technological order.
Концептуальный подход к управлению материальными ресурсами на производственных предприятиях

Аннотация. Применяемые приемы и способы управления обеспечением и использованием материальных ресурсов на производственных предприятиях Казахстана являются приспособлением традиционных для централизованно-планируемой экономики методов к условиям нарождающихся рыночных отношений. Практика хозяйственной деятельности промышленных предприятий показывает их стремление к сохранению сложившихся в прошлом связей с поставщиками материальных ресурсов. Такая односторонняя ориентация ведет к полной зависимости предприятия от единственного партнера. Инертная политика предприятий-потребителей материальных ресурсов поощряет поставщиков поднимать цены выше уровня сложившегося на мировом рынке. На промышленных предприятиях демонтаж централизованного управления материалосбережением не был дополнен формированием соответствующего механизма управления материалоемкостью продукции. Как следствие, снижается эффективность использования материальных ресурсов.

Отсутствие адекватного рыночным условиям механизма управления процессами, связанными с обеспечением и производственным использованием материальных ресурсов, обусловливает необходимость исследования проблемы управления материальными ресурсами производственных предприятий в условиях становления рыночных отношений.

Вместе с тем анализ работ, раскрывающих те или иные аспекты управления материальными ресурсами, рационализации их использования на производственных предприятиях показывает, что до настоящего времени отсутствует целостная концепция управления на предприятии обеспечением и производственным использованием материальных ресурсов как единой системой, от эффективности, функционирования которой в значительной мере зависит уровень издержек и потребность в оборотных средствах.

Производственные предприятия Казахстана нуждаются в соответствующей методологической основе для формирования собственной модели управления материальными ресурсами, учитывающей специфику внутреннего потенциала и изменчивость внешнего окружения.

В соответствии с поставленной целью в исследовании решены следующие задачи: выявлены экономические закономерности использования материальных ресурсов и раскрыты особенности процесса их использования как объекта управления на производственных предприятиях; на основе выделенных закономерностей использования материальных ресурсов и обобщения имеющихся понятий по управлению материальными ресурсами определено содержание менеджмента материальных ресурсов для производственных предприятий; рассмотрены и обобщены с позицией приемлемости для производственных предприятий Казахстана; выработанные западными специалистами методы управления закупками, поставкой, запасами материальных ресурсов в производственных фирмах; на основе системного и ситуационного подходов разработаны методологические основы управления материальными ресурсами промышленного предприятия.

Ключевые слова: управление, материальные ресурсы, производство, эффективность, формирование, уровень издержек.

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