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Basic Methods of Strategic Management of Commodity Flows in the Domestic Market

Abstract. The article examines the theoretical foundations of methods of strategic management of commodity flows at the micro level. The tasks of forming an organizational and economic mechanism for managing commodity flows (macro level), which provides the optimal variant for the movement of goods, i.e. what is aimed at when managing commodity flows at the macroeconomic level, are defined. A mathematical description of the general equilibrium is presented. The basic methods of managing intra-production commodity flows at the micro level are formulated. The authoritarian solution of the rationing mechanism is substantiated, and the difficulties of implementing the rationing mechanism are provided.

Keywords: commodity flows, rationing mechanism, strategic planning, consumer demand
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1. Formulation of the Problem

At the present stage, strategic planning is one of the principal functions of management and in no way can be overlooked by either practitioners or scientists. From various aspects of planning (operational, current, prospective), the majority of experts now pay maximum attention to the prospective one, which is based on models of the enterprise development strategy in the changing conditions of the external and internal environment. The strategy is implemented in the context of the organization’s mission, and its fundamental objective is to ensure that the mission is interconnected with the organisation’s main goals in the changing economic environment. In terms of goals, it outlines the general contours of the organization’s future; in terms of means, it shows how this goal should be achieved,
this is prospective management related to the development and conceptualization of ideas about where the organization should go.

2. Research Objectives and Methodology

This research is devoted to the assessment of the basic methods of strategic management of commodity flows at the domestic level. Strategic management can be characterized as management activity aimed at achieving set goals in an unstable, competitive, market environment, which includes diagnostic analysis of the region’s situation, strategic planning and implementation of the chosen strategy. The ability to model the situation makes it possible to establish long-term directions of development and indicates the intention of the region to occupy certain positions in the national market of Ukraine.

3. Main Results of the Study

In recent years, scientists dealing with issues of strategic management and development of enterprise behaviour strategy at the interregional level have created a comprehensive system of basic knowledge about strategic management and planning. Among them, the most significant studies in the field of strategic planning were conducted in the works by Ukrainian scientists Tertychka (2014), Lihonenko (2006), Skamai (2017), Martsyn (2008), Stok & Lambert (2014), Volobueva (2016) and others. They examined the development of strategic planning taking into account the peculiarities of the Ukrainian economy.

In the course of quantitative and qualitative changes in the scale of economic activity and environmental management, the spread of practical application of scientific achievements and information technologies, the increasing openness of national, regional and corporate borders for information, goods and services, capital and labour force, and under the conditions of increased competition, the supply began to prevail over demand. The nature of consumer demand was also changing (Hevko, Shveda, 2016).

More and more attention is paid to social needs and protection of consumer rights, as well as the problems of socio-economic development, environmental management, ecological balance, and education which are becoming more urgent. The dynamism and uncertainty of factors and processes in socio-economic systems are growing essentially. This fact fundamentally changes the economic situation, considerably enhancing its diversity and complexity. There is a need
to reform the existing system of views on management. It is no longer possible to maintain compliance between the growing demands of the market and the activities of society and organizations to take them into account in their activities. Strictly regulated management systems appeared to be unable to solve the problems of effective functioning under conditions of instability and uncertainty of the environment. A methodology of strategic management has emerged, the task of which is to achieve the set goals and ensure that the potential of society meets the requirements of the environment in which it operates, under conditions of dynamic changes.

In solving this problem, it is proposed to focus on strategic management, namely, the mechanisms of managing the flows of resources of consumer goods. The enterprise strategy is the basis of strategic planning, which helps an enterprise to weigh a complex of problems related to the targeted reorientation of the production of new products and assortment, the introduction and use of new technologies, the development of marketing, the improvement of the enterprise management structure, the timely and high-quality training and retraining of personnel.

Strategic planning is the process of developing strategies and managing an organization for their successful implementation. Strategically minded organisations and leaders look ahead and determine the direction in which they want to move. Despite their conviction that businesses, like executives, must do well right now in order to do well in the future, they are interested in the broader range of challenges they face and the overall direction they should take to address those challenges.

At the current stage, the system of managing commodity flows is carried out with the help of organizational and economic mechanisms (Lahutin, 2008, p. 115).

The organizational and economic mechanism is a system of economic links and relations, and the corresponding organisational and economic forms that ensure the coordination of economic interests.

When determining the task of forming an organizational and economic mechanism for managing commodity flows (macro level), we actually mean the creation of an organizational and economic mechanism for ensuring the balance of production and consumption, since it provides the optimal variant for the distribution of goods, i.e. what we strive for when managing commodity flows at the macroeconomic level. The mathematical description of general equilibrium is presented in Formula 1.

If the volume of production — $P_a, P_b, \ldots, P_k$ of goods and services in the national economy is equal to the volume of consumption of these goods — $C_a, C_b, \ldots, C_k$, ($P_a = C_a, P_b = C_b, \ldots, P_k = C_k$), then the sum of the corresponding volumes will be equal:
\[ Pa + Pb, \ldots + Pk = Ca + Cb, \ldots + Ck \quad (1) \]

That is, a general equilibrium is achieved between production and consumption. It is possible to balance the production and consumption of a specific product by using one of two organizational and economic mechanisms: the rationing mechanism or the market mechanism.

The authoritarian solution of the rationing mechanism is the volume of consumption of a given product, which is limited to a certain quantity, and which is provided by a certain volume of production. There are difficulties in implementing the rationing mechanism, namely:

- reliable information on actual production volumes, taking into account the amount of inventory, is necessary;
- information about needs (including potential consumption) is required;
- difficulties in establishing real consumption rates (the solution is the distribution according to requests);
- difficulties in distribution, that is bringing the goods exactly to those for whom they are intended.

The peculiarity of the market mechanism implies that the equilibrium between production and consumption is established through the law of supply and demand in a free market. Difficulties of implementing the market mechanism are the following:

- a perfect market is required, where each participant has immediate and full access to information about the conditions of all agreements concluded on the market;
- formation of standardised ideas about a given product is necessary;
- existence of motives of personal interest arising among the participants of the exchange is needed;
- market freedom should be based on individualism;
- bankruptcy procedures should be clearly regulated, i.e. inefficient producers should be removed from the market.

The market mechanism exists only under conditions of perfect competition and does not allow for deviations from it. Within the framework of macro logistics systems, connections are established on the grounds of commodity-monetary relations. At the microeconomic level, the basis of interaction between various subsystems is non-commodity. These are relationships between individual
units of a company, association, or other economic system that work for a single economic result.

The management of intra-production commodity flows (at the micro level) can be carried out using various mechanisms, of which two main ones are distinguished: a push system and a pull system (Porokhnia, Bezzemelna & Kravchenko, 2012, p. 94).

1. A push system is a system of production organization in which the items of labour arriving at the production site are not directly ordered by that site. The material flow is pushed to the recipient by command from the central production management system (Figure 1).

![Figure 1. Push system](image)
Source: Author's development

A push system is characteristic of traditional methods of production organization. The possibilities of its application have increased due to the computerization of production. This enables a prompt agreement and coordination of the actions of all units in the enterprise. However, the material flow parameters are optimal to the extent that the central control system is able to take into account all the factors influencing the production situation. The modern push systems are the material control systems for production. They make it possible to ensure the current regulation and control of production inventories, and to coordinate and quickly adjust the plans and actions of various services of the enterprise — supply, production, and sales.

2. A pull system is a production organization system in which labour items are submitted to the next technological operation as necessary. The central management system does not interfere in the exchange of material flows between different units of the enterprise, determining the task only of the final link of the production chain (Figure 2).
The main goals of the pull (pulling) systems are:

- preventing the spread of growing fluctuations in demand or production volume from the next process to the previous one;
- minimizing fluctuations in inventory parameters between technological operations;
- maximum simplification of inventory management in the production process through its decentralization, increasing the level of operational workshop management.

An example of a modern pull system is the Kanban system. The system does not require total computerization of production but demands high discipline of deliveries and high responsibility of personnel. The Kanban system was first developed and implemented by the Toyota company (Japan).

The Kanban system allows for a significant reduction in production inventories. The Kanban system also allows you to speed up the turnover of working capital and improve the quality of the products produced.

In developed countries, strategic inventory management is based on the use of powerful information technologies, which make it possible to monitor their condition and dynamics on an almost daily basis, automatically place orders through a computer network, and replenish inventories to the optimal level. The most
Common inventory management systems are based on the use of the EOQ model, the red line method, the two-sector model. Recently, the Just-In-Time method of inventory management has become widespread. In this case, the completeness and reliability of the information base is ensured due to the automation of accounting and the use of the international product coding system.

4. Conclusions

In the social aspect, a special role is given to the harmonization of intra-production relations, which are constantly under threat of disruption of social balance for a variety of reasons. Management functions arise on the basis of the division and specialization of labour, they characterize any management process and determine the types of activities that reflect directions or stages of targeted influence on the relations of people in the process of production and its management. The purpose of functional strategies is to create a highly effective functional potential of the enterprise that will ensure the manageability of strategic changes, which is determined by the integrity and balance of their content and implementation mechanisms in the management system. In market-oriented organizations, the following functional strategies are developed: marketing, R&D, production, financial, personnel development, logistics management, etc.

When implementing strategic management of commodity flows at the inter-regional level, it is important to consider the following principles:

- the possibility of implementing a system approach to solving management problems;
- the establishment of connections: scientific and methodological, regulatory, material and others;
- the coordinating role of management consists not only in determining the general goal and the individual goals arising from it but also in the rational distribution of resources to ensure their joint and targeted use;
- the ability to quickly regulate the process itself, make adjustments to individual decisions, connect them with the output of the program as a whole, depending on the change in the situation of the organizational development of the system.
References


Podstawowe metody strategicznego zarządzania przepływami towarowymi na rynku krajowym

**Streszczenie.** W artykule zbadano teoretyczne podstawy metod strategicznego zarządzania przepływami towarowymi na poziomie mikro. Zdefiniowano zadanie stworzenia mechanizmu organizacyjno-ekonomicznego zarządzania przepływami towarowymi (makropoziom), który zapewnia optymalną opcję przepływu towarów, czyli to, do czego dążymy, zarządzając przepływami towarowymi na poziomie makroekonomicznym. Przedstawiono matematyczny opis równowagi ogólnej. Sformułowano główne metody zarządzania wewnętrzprodukcjnymi przepływami produktów na poziomie mikro. Autorytarne rozwiązanie mechanizmu racjonowania jest uzasadnione. Przewiduje się trudności we wdrażaniu tego mechanizmu.

**Słowa kluczowe:** przepływy towarów, mechanizm racjonowania, planowanie strategiczne, popyt konsumencki