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## **Strategic Planning of Supply Chains in Modern Business**

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In the modern logistics business, there is an effective process of organizing and managing the chain of spacers. The formed supply chains perform the functions of exchange and distribution, and they also determine the dynamics of financial, information and inventory flows in the implementation of the production process. Effective management is impossible without strategic planning of enterprises activities, without a holistic definition and continuous monitoring of supply goals. It should be under line that strategic planning is the process of developing and maintaining a balance between common goals and supply chain capabilities in a rapidly changing environment. The main goal of strategic planning is to determine the main directions of supply chains that ensure its efficiency and competitiveness.

Planning is divided into several levels, such as: 1) The first level is defined by the supply chain. The activity of planning at the first level is to define the purpose, mission and goal, as well as the definition of strategies. Thus, the basic tasks of this level are: defining the mission, formulating the concept, and defining the goals and objectives of the supply chain. 2) Formation of the supply chain configuration. It consists in determining the form of organization of the supply chain and distribution network, the choice of suppliers, sales programs, the choice of raw materials and materials, places of purchase, the structure of supplies and distribution. The goal of this level of planning is to minimize the costs in the supply

chain, as well as the costs of production, procurement, storage, and transportation. 3) The third level includes the strategies of enterprises that are part of the supply chain. At this level, strategies for their field are developed, based on a single supply chain plan, the main goal of which is to increase the competitiveness of enterprises and their competitive potential. These three levels of planning are interrelated.

Strategic planning includes stages: supply chain resource analysis; creating prerequisites for changing the state of the supply chain by viewing its mission and goals; refine strategic objectives based on supply chain threats and opportunities; strategy development; coordination of the strategy; development of supply chain enterprise policies; monitoring and evaluating the performance of the supply chain. And it is also worth considering the elements of supply chains. These elements include: resources, physical and human resources, as well as information resources, marketing resources, organizational resources, and legal resources. All these resources can take different forms. They can be both tangible and intangible, as well as organizational capabilities [1].

The main task in forming a strategic plan is to establish a balance between the indicators of the supply chain-total costs and the level of service, in order to assess the possibility of improving the service, taking into account the set limits on the amount of costs throughout the supply chain. And also, the planning tasks include: determination of the most profitable period for the implementation of changes; determining the optimal location of new regional warehouses and distribution centers; determining the level of inventory in the supply chain; identification of sources of supply of raw materials and materials; calculation of the level of stocks of raw materials and materials; evaluation of the application of various pricing policy options; identification of sources of financial resources and options for their placement. Basically, these tasks are

competing. Strategic supply chain planning begins with modeling. A supply chain model is a simplified representation of a supply chain consisting of: supply chain facilities; the shoulders connecting these objects; transformation processes and resources; material values and finances that form material and financial flows; model parameters and constraints. The modeling process consists of the main steps: creating a supply chain model, optimizing the model parameters. Optimization of the model is finding the best solution to the existing constraints on the given factors: maximum profit, maximum income. Depending on the type of model, the most appropriate optimization algorithm is selected. The main types of models: speculative (heuristic); physical (full-scale); descriptive; verbal; graphic; mathematical methods; simulation models; mathematical programming. The key features of these methods are: determinism; dynamism; optimality. In modern business, the most common model is mathematical programming. This method is the most successful. Mathematical programming has been used for a long time in industry, agriculture, logistics, and the healthcare system.

In modern business, strategic planning is of great importance. A huge number of enterprises single out the organization and management of supply chains as the most important factor. And it becomes clear that there is a need to manage, plan, and optimize supply chains. Supply chain management is a strategy in modern business that provides management of all flows, financial, information, and material, to ensure their synchronicity in the structures of the organization.

#### References:

1. Leontieva, E. V. Material responsibility/ E. V. Leontieva. – Minsk.: Information and publishing house "Filin", 2007. – 772 p.