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## **OPTIMIZATION MODELS IN LOGISTICS MANAGEMENT OF ENTERPRISES IN A DYNAMIC BUSINESS ENVIRONMENT**

The article is devoted to the study of optimization models in the logistics management of enterprises in the conditions of a dynamic business environment, military risks and economic instability in Ukraine. The relevance of using economic and mathematical methods and models as tools for increasing the efficiency of managing material, information and financial flows of enterprises is substantiated. The work systematizes the scientific approaches of domestic researchers to the optimization of logistics processes, determines their role in ensuring the adaptability and resilience of enterprises to external challenges. Based on the financial and production indicators of the leading dairy processing enterprises of the Dnipropetrovsk region, the dynamics of development and the state of logistics activities are analyzed. The use of a system of key indicators of logistics efficiency, in particular the complex indicator of logistics (logistic entropy), is proposed to assess the level of orderliness and predictability of logistics processes. The calculations conducted indicate a tendency to reduce logistics entropy, which indicates an increase in the manageability of logistics systems and the quality of logistics service. The article models and optimizes the distribution channels of dairy products using linear programming tools. The results obtained confirm the possibility of increasing sales volumes, increasing the level of product marketability and increasing sales revenues. In addition, the linear programming transport problem was solved, which made it possible to form an optimal transportation plan and achieve a reduction in transport and logistics costs. It is concluded that the use of optimization models in logistics management is an effective tool for increasing the competitiveness of enterprises, rational use of resources and ensuring their sustainable development. Prospects for further research are associated with the deepening of the digitalization of logistics processes and the integration of optimization models into the strategic management system of enterprises.

**Keywords.** Optimization models, logistics management, enterprises, business environment, economic and mathematical methods, logistics entropy, sales channels, transport problem.

