ASSESSMENT OF THE EFFICIENCY OF THE IMPLEMENTATION OF THE COMPETITIVE STRATEGY OF LOGISTIC ACTIVITY MANAGEMENT OF AGRICULTURAL ENTERPRISES IN THE CONDITIONS OF THE ONLINE MARKET

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Abstract

An important condition for the implementation of an effective competitive strategy for managing the logistics activities of agrarian enterprises in the online market is the development of a methodology for its assessment. At this time in the scientific world, scientists have not finally formed the optimal method of such assessment. Therefore, the topic of our article is relevant and important in today's conditions. The development of methods for assessing an effective competitive strategy for the management of logistics activities of agrarian enterprises in the online market will ensure the development of optimal system for making and supporting logistics decisions, will allow managers to distinguish productive and unproductive operations or management actions. The aim of the article is to develop a methodology for assessing the competitive strategy for managing the logistics activities of agrarian enterprises in the online market, which will improve the logistics system of the enterprise, form an effective logistics chain and increase the profitability of production.

Basis of the study are agricultural enterprises of Ukraine and their annual financial statements (balance sheet and reports on financial results), as well as indicators of current logistics activities. The methodology for assessing the competitive strategy for managing the logistics activities of agrarian enterprises in the online market is proposed to be developed using the mathematical modeling method, which involves the use of artificial neural networks and specialized software (MATLAB, which includes the Neural Network Toolbox application package). The use of artificial networks in our study solves the problems of: limited input information, when traditional mathematical models do not give the desired result; increase the accuracy of calculations and reduce their subjectivity; simultaneously combine different methods of analysis and a large number of algorithms; make management decisions quickly.

An artificial neural network has been developed to predict the competitiveness of the logistics activities of agricultural enterprises. Using the developed neural network, the forecast values of the level of competitiveness of agricultural enterprises are calculated. It was determined that the highest level of reliability of the logistics system

was obtained by the company STOV "Victory" (2.02 units), and the lowest - PE "Nagy" (1.79 units). Based on these calculations, scenarios for ensuring competitive advantages in the future are proposed for each of the enterprises.

An assessment of the competitive strategy for managing the logistics activities of agrarian enterprises in the online market will provide a positive result, which is reflected in a slowdown in the growth rate of operating costs. This assessment contributes to the optimal logistics decision to ensure the strategic development of the agricultural enterprise. The developed methodology will be useful for entrepreneurs who are trying to increase the profitability of their enterprise through efficient logistics activities in conditions of uncertainty and speed of change in the environment.

Key words: *Online market, Management, Agrarian enterprises, Logistics system, Neural network.*