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ORGANIZATION AND AUTOMATION OF LOGISTICS PROCESSES IN THE TRADING COMPANY

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Trading companies all over the world, in one way or another, interact with logistics processes. Consideration of these processes in more detail, their correct organization and automation allows the trading companies to rationalize the entire production process and further distribution. The article examines the essence of logistical processes and the software complexes and systems of automation of logistical processes, that are already operating in many countries.

Modern market relations contribute to the rapid adaptation and modernization of all processes in trading companies. Enterprises face the need to improve the logistics system to minimize costs in the production and marketing of finished products. The driving forces of the changes are competition and the growing demands of customers. For the purposeful and efficient management of trade networks, it is necessary to organize the proper management of logistics processes [1].

The main goal of the research is to develop the theoretical foundations of organization and automation of logistics processes in a trading enterprise, as well as to provide a set of practical measures and recommendations to improve their effectiveness in the process of development of logistics activities of enterprises.

The subject of the study are logistic processes and their organization, and automation.

The object of research are systems of organization and automation of logistics processes in trading companies.

The movement of flows in logistics, the creation and maintenance of reserves initiate and support processes and operations. The concept of the logistic process is connected with the construction and functioning of the logistics system. A study was made of the very concept of a "logistical process" on the basis of which the following definition can be proposed: a logistical process is a sequence of operations organized in time and in space designed to fulfill the objectives of a logistics system or its network units, as well as providing consumers with products of the appropriate assortment and quality in the right amount at the required time and place with the accompanying operations for information and financial provision of the flow [2–6].

Next, an analysis of the structure of logistics processes is presented and the types of logistic processes according to purpose and role in logistics are considered, which are subdivided into commercial, marketing, technological and management ones. Also, the processes were divided into complex and elementary, in composition and complexity. The functioning of all components of the logistics process was considered in the interconnection and interdependence, each stage of which is considered separately [7].

The integration of the logistics into the economy is largely a result of the computerization of material management. The computer has become an everyday element of office equipment for workers of various specialties. Computer software makes it possible to solve complex questions at every workplace to process information.

If the information system is automated processing of information, then the technical support includes electronic computing equipment and communication means among themselves. The main part of the technical support in this case is a computer.

Foreign information systems for solving the problems of logistics, marketing, production are distinguished by a great variety of different forms and content.

To improve the organization and automation of logistics processes in trading companies, the original procedure for the organization of logistics services in the company and the management of logistics processes in it [8]. Organization in the structural units of the logistics service is a set of features that provide for the proper operation of logistics processes.

The next point to study is the characterization of automation systems for logistics processes, consideration of the application of automation in various logistical processes.

The goal of trade rationalization based on the concept of logistics is the creation of highly efficient commodity distribution systems capable of ensuring the availability of the right product in the right place, at the

right time, in the right amount, at the minimum cost and at an affordable price. These systems should have a high ability to adapt to changes in the environment [9].

The following is an annotated review of the regulatory and legislative framework regulating the logistics activities and the functioning of logistics processes in the trading company [10].

As a practical example for studying the operation of logistics processes, commercial companies were considered ООО «ЕВРОТОРГ» «ЕВРООПТ» Republic of Belarus and ЗАО «ТАНДЕР» «МАГНИТ» Russian Federation.

The analysis of these organizations and automation of warehouse logistics processes in the warehousing activities of selected companies was carried out.

ООО «Евроопт» carries out direct deliveries of its products to outlets throughout the territory of the Republic of Belarus. In connection with the increase in the volume of supplies, the management of the concern decided to implement a system for automating the operation of the transport logistics division, with the goal of developing the company and improving its efficiency [11]. After a thorough research of proposals for automation of logistics, the company approved the decision to start a joint project with ООО «ТрансСис» and company «ПРАВИА» on the implementation of the software complex MapXPlus [12].

MapXPlus belongs to the class of systems TMS (Transport Managment). The main task of the systems is automation of transport logistics, planning of optimal routes and carrying out plan-factor analysis [13].

As for the trading company «Магнит» [14], an automated inventory management system has already been implemented and is actively operating in its warehouse activities Forecast NOW!

This automated inventory management system allows you to build demand forecasts, determine the optimal stock of goods and calculate the amount of required purchases. Also with the help of this tool you can conduct ABC-XYZ analysis by arbitrary criteria. In addition, you can generate various analytical reports on balances, sales and purchases. For calculations, data from the corporate information system is used, they are unloaded by exchange into the system Forecast NOW [15].

Each of the considered systems has its positive sides for companies using them. For each trading company and the system introduced in it, solutions were found for the development and improvement of warehouse logistics processes.

Effective warehouse management implies the use of optimal information and technical means in all segments of the warehouse economy, uniform distribution of loads to personnel and warehouse equipment, prompt response to any changes in business processes, full integration with related procurement, sales, production and other areas.

The warehouse of the retail operator is a distribution center intended for storage, processing and delivery of consumer goods (food and non-food groups) in accordance with orders of own stores.

To ensure the uninterrupted operation of such a warehouse complex in a round-the-clock mode with minimal losses and maximum quality, only warehouses of classes A and B + equipped with a warehouse management system can.

The introduction of the warehouse management system allows minimizing the risks associated with the human factor and achieving accuracy of 99.9% of all operations performed in the warehouse.

To improve the organization and automation of logistics processes in warehousing, it is possible to advise on the application of bar-coding technology in the warehouse activities of the company «Магнит ЗАО Тандер». Having implemented a bar coding system, the company «Магнит» will get 99% accuracy when entering data. Bar coding is the best tool for a company «Магнит», giving confidence in the consistency of input and input data, and thus significantly reducing the impact of human errors on the data collection process.

Further recommended development for optimization of warehouse activities of the trading network «Евроопт» is the introduction of additional modules that extend the functionality of the WMS-level system to the SCE system (Supply Chain Execution) and as the top of logistics - the SCM system (Supply Chain Management). And also the introduction of modules such as the warehouse and gate management module, the warehouse and gate management module, the introduction of voice selection technology and the processing of commodity flows through the use of RFID tags.

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