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LOGISTICS CONCEPTS IN THE PERFORMANCE OF ENTERPRISES

The concept of "logistics" as a tool of management has been studied and the concepts of logistics have been analyzed.

A research urgency In connection with the development of market relations a new scientific and practical direction – logistics has recently appeared and started its development. It can be explained by the significant results which were obtained due to the use of logistic approach to the economy of the developed capitalist countries. Logistics has become a tool of business of such well-known corporations as IBM, Procter & Gamble, General Motors, Ford Motors, Johnson & Johnson and many others. Aim of research: to analyze the possibility of applying the concepts of logistics in order to increase profitability and optimize the production process in a competitive environment

A research objective: The original area of logistics in ancient times used to be the substantiated distribution of products. By the second half of the 80's logistics won international recognition and became an authoritative new economic science. There is no common definition of logistics yet. However, a large number of interpretations of the concept have been suggested

Professor B.A.Anikin thinks that logistics is the science which deals with planning, organization, management, control and regulation of material and information flows in space and time from their original source to the end-consumer.

From the standpoint of business, logistics is an integral management tool promoting to achieve the aims of starting a business. Activities of enterprises and organizations in the area of logistics in order to achieve competitive advantages consist of several rules, which are called "six rules of logistics": cargo is the necessary product; quality is the required quality; number is the required amount; time is to be delivered in time; place is to be delivered to the right place; costs are to be minimal ones. Western scientists and specialists have developed a number of logistics concepts which are successfully applied in many companies. The basic concepts are given in Fig. 1.

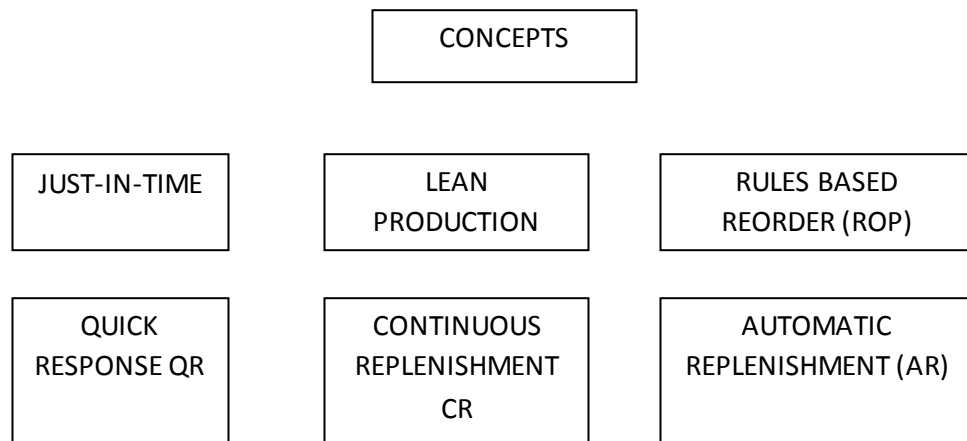


Fig. 1 — Logistics concepts

Concepts allow companies to be more productive and efficient working. The essence of the concepts given in Fig. 1 is given *The logistics concept "JUST-IN-TIME" (in time)*. This concept is the most widespread. Its appearance dates back to the late 50's, when Japanese company Toyota Motors and then other motor-car manufacturers in Japan began to actively implement the system konban. The slogan of the concept is the potential exclusion of stocks of materials, components and semi-finished products in the manufacturing process. The original formulation was as follows that if the production schedule is set, we can organize the process so that all the materials and semi-finished products will be delivered in the right quantity to the right place and exactly at the appointed time for manufacturing or assembly of finished products. To do this you need quickly to transfer data among the departments and coordinate the suppliers of the parts. "Toyota Motors" was able to achieve that due to the transfer of information in the system by means of a special cards "konban" in a plastic envelope, which carry information on the amounts of expended and manufactured products. These cards circulate within the enterprise and among the suppliers being attached to a certain part or a semi-finished product. The application of this concept can significantly improve the product quality, reduce production costs, virtually reduce reserve stocks and accelerate the turnover of the working capital of the firm.

Makrologistics concept of "LEAN PRODUCTION". The essence of this concept is expressed in a creative combination of the following components: high quality, small size of production batches, small amount of inventories, highly skilled personnel, adaptive equipment. This concept was named "lean manufacturing" because it requires far fewer resources than mass production - less inventory, less time per unit of production, less losses because of production faults as production batches and production time are minimized. *The logistics concept RULES BASED REORDER (ROP)*. This concept is used to determine and optimize the level of insurance reserves for elimination of demand fluctuations. It's

effectiveness depends on the accuracy of demand forecasting, as well as data forecasts are not very accurate, this method is not widely used, but with the introduction of new information technologies this method begins to catch on. *The logistics concept QUICK RESPONSE QR*. It is translated as a method of rapid response and is a logistics co-ordination between retailers and wholesalers with the view of improving promotion of the finished product in their distribution networks in response to additional demand change. The implementation of these concepts is performed by monitoring retail sales and transferring the information on sales volume on the specified stock-list and assortment as well to the wholesalers and from them to the producers of finished products. Applying the concept of QR can reduce the stocks of finished products up to the required level but not below the amount allowing you to meet quickly a consumer demand, and at the same time significantly improve inventory turnover. *The logistics concept CONTINUOUS REPLENISHMENT CR*. This concept is a modification of QR concept and is designed to eliminate the need for orders to replenish stocks of finished products. The purpose of CR is to establish an effective plan designed to replenish stocks of finished goods by retailers. The required total demand in quantity and assortment of goods is calculated. Then, an agreement between suppliers, wholesalers and retailers is reached in order to replenish their stocks of finished goods by signing the purchase commitments. For efficient operation of CR system two terms should be complied with: 1. Reliable information from retailers and reliable delivery of finished products should be provided. 2. The amount of cargo deliveries is to fit the tonnage of vehicles.

The logistics concept AUTOMATIC REPLENISHMENT (AR) (Automatic Replenishment). An even more advanced concept of QR and CR. The strategy of this concept provides the suppliers (producers) of finished products with necessary set of rules for making decisions on commodity attributes and categories. Category is a combination of size, color and related products, usually presented together in a particular retail outlet. Using this concept the supplier can meet the needs of retailers in the product category by eliminating the need to track single sales and inventory of the commodities of rapid implementation. This strategy also allows retailers to reduce costs associated with the separation of supplies and to ensure the reliability of their replenishment.

The conclusion. Thus, there are 6 logistics concepts, which enable domestic enterprises to be more productive and efficient working like many foreign ones which have already applied and adapted one or more logistics concepts at their enterprise.

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