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## STRATEGIC INVENTORY MANAGEMENT OF A TRADING ENTERPRISE

*In modern economic realities, the problem of strategic inventory management of a trade enterprise does not lose its relevance, because inventories are the main tool for ensuring business success, and at the same time they represent the main danger, since the share of goods inventories for an enterprise is about half of all its current assets. The article provides a critical analysis of the main types of inventory management strategies at the enterprise and proves the importance of the product sales management process in the strategic management system of a trading enterprise. Methods of stimulating the sale of goods and services are proposed, taking into account the specific features of the trade enterprises functioning. A scheme of strategic inventory management of a trading enterprise has been developed and strategic directions for inventory management have been proposed, which will help to solve problems in the enterprise's supply chains, reduce logistics costs, increase production efficiency, as well as ensure the competitiveness of goods, which will positively affect the final financial result of the enterprise.*

**Keywords:** strategy, strategic management, inventory, inventory management strategy, trade, trading enterprise.

**JEL classification:** F10, L10, L81, M21

## СТРАТЕГІЧНЕ УПРАВЛІННЯ ЗАПАСАМИ ТОРГОВЕЛЬНОГО ПІДПРИЄМСТВА

*Стаття присвячена питанням, пов'язаним із стратегічним управлінням запасами торговельного підприємства. Управління запасами один із ключових аспектів підвищення ефективності діяльності торговельного підприємства, оскільки, з одного боку, торговий бізнес неспроможна функціонувати без товарних запасів, а з іншого – частка торгових запасів на підприємствах торгівлі становить близько половини всіх його оборотних активів, а отже, існує загроза заморожування фінансових ресурсів підприємства та, в результаті, зниження ефективності функціонування. Метою статті є розробка економічно обґрунтованих заходів, спрямованих на удосконалення стратегії управління матеріальними запасами торговельного підприємства. В статті розглянуто теоретичні та методологічні аспекти стратегії управління запасами на торговельному підприємстві. На основі дослідження теоретичних підходів до визначення поняття «управління запасами», розкрито економічну сутність запасів та виявлено їх різновиди у діяльності торговельного підприємства. В статті проведено критичний аналіз основних типів стратегій управління матеріальними запасами на підприємстві та з'ясовано критерії вибору ефективної системи управління ними. Доведено важливість процесу управління збутом продукції у системі стратегічного управління торговельного підприємства. Запропоновано способи стимулювання збуту товарів та послуг з урахуванням специфічних особливостей функціонування торговельних підприємств. За результатами дослідження теоретичних аспектів формування стратегії управління матеріальними запасами в ланцюгах постачання підприємства, в роботі сформовано схему стратегічного управління запасами торговельного підприємства. Запропоновані стратегічні напрями щодо управління запасами, сприятимуть вирішенню проблем в ланцюгах постачання підприємства, а також скорочення логістичних витрат, підвищення ефективності виробництва, забезпечення конкурентоспроможності товарів, що позитивно вплине на кінцевий фінансовий результат підприємства. Практична цінність статті визначається розробленими та обґрунтованими заходами, які спрямовано на удосконалення стратегії управління матеріальними запасами торговельного підприємства.*

**Ключові слова:** стратегія, стратегічне управління, запаси, стратегія управління запасами, торгівля, торговельне підприємство.

**Relevance of the research topic.** An important component of the economic development of the world's leading countries is small business. Its significant role and rapid development is due to its availability to a wide range of consumers and the absence of the need for significant financial, material and labor costs. The activities of small

business entities are most common in trade, services, light and food industry, and transport.

In the conditions of the crisis associated with the coronavirus pandemic, small business entities faced many problems both in development and functioning. Due to the increase in competition, decrease in demand, disruption

of logistics processes and decrease in the solvency of the population, trade enterprises are forced to use new sales channels, mechanisms of product sales and significantly change their activities in order to ensure the viability of the small business entity.

The competitiveness and financial results of the activity are significantly influenced by the management of the company's inventory. Without creating the optimal amount of stocks, it is impossible to ensure the reliability of the products supply to consumers. If the company uses its resources irrationally, it risks losing customers and, therefore, profits.

With an insufficient level of inventory, the company suffers losses associated with the loss of potential customers. Too significant level of inventory limits the possibility of profitable use of working capital, which affects the financial results of the enterprise. Thus, from an economic point of view, both a shortage and an excess of commodity stocks harm the effective economic activity of a trading company. Thus, today inventory management is the key to the effective functioning of a trading company.

**Analysis of recent research and publications.** The theoretical and methodological principles of logistics and stock management of a trading enterprise are outlined in the works of authoritative foreign scientists, such as D.J. Bowersox, D.J. Kloss, M. Christopher, D.M. Lambert, J.R. Stock, D. Waters, J.G. Shatt. The work of J.B. Ayers, K.Yu. Kovaleva, M.E. Odegaard, S.A. Uvarova, P.E. Shehlova. Despite the significant scientific work on this issue, the question of determining the optimal strategy for managing stocks of a trading enterprise remains unresolved.

**The purpose of the article** is to develop economically justified measures aimed at improving the strategy of managing material stocks of a trading enterprise.

**Presentation of the main research material.** In the field of trade, solving the tasks of inventory management is one of the key aspects of improving the organizations efficiency, due to the fact that inventories are the main tool for ensuring business success, and at the same time they represent the main danger, since the share of inventory for an enterprise is about half of all its current assets.

Stocks as a phenomenon in the functioning of logistics systems are commodity and material values that await consumption [4]. In logistics, the term "inventory" is applied in addition to material flows. Stocks in supply chain management of the enterprise's logistics system constitute commodity values. Stocks can be formed by both manufacturing enterprises and enterprises of wholesale and retail trade, enterprises of the service sector, as well as logistics intermediaries and operators, banks, stock exchanges, insurance organizations, ports, etc. In all these organizations, stocks provide commodity and material values for the main and auxiliary activities [8]. Inventory management is one of the urgent tasks for enterprises in almost any field of activity. At the enterprise, it is always necessary to create reserves to ensure the continuity of production and economic activity.

Despite the advantages of universal inventory management systems, it should be noted that each specific field of activity has its own specific features that must be taken into account when choosing management tools. Trade business has a number of such features, for example, a significant breadth of nomenclature items, which differ

significantly in terms of various goods stocks storage, the need for pre-sale preparation of products, etc. Taking into account the fact that the items for sale must always be in the necessary quantity in the company's warehouses and stores to meet the needs of consumers, the trading company cannot minimize the amount of stock. That is why it is necessary to form a policy of effective inventory management for every enterprise in the field of trade. It should maintain a balance between deficit and surplus availability of stocks in the organization, that is, sufficient to satisfy the needs of all customers, while not creating illiquid stocks.

As you know, inventory management is a process of optimizing operations directly related to the process of material stocks movement from procurement through warehousing to the final consumer through all links of the logistics chain. Stock management also means "the process of forming and using stocks aimed at achieving the economic goals of the enterprise's development" [5]. The main goal of inventory management is to increase the profitability and speed of turnover of invested capital [3].

Manufacturing companies, as a rule, strive to reduce inventories to almost zero, that is, to organize "just in time" supply. In this case, the organization promptly responds to the consumer's request and satisfies it in full. Thus, stocks are not created and this allows to minimize the costs of maintaining stocks and warehouses. A very important place in the inventory management process is the question of forecasting the demand for goods and the nature of inventory consumption [9].

Effective inventory management can be conventionally divided into three parts: procurement management, warehouse inventory management, and product sales management.

Management of material stocks consists in the justified determination of the orders volume for their formation and distribution of the newly arrived batch of ordered products (raw materials, materials, etc.) by links of the supply system. The set of rules by which these decisions are made is called an inventory management strategy. Each such strategy is associated with certain costs for bringing material resources to consumers. Finding optimal strategies is the subject of the optimal inventory management theory [1].

To date, three main types of strategies for managing material stocks at the enterprise are widely known: the strategy of prudence, the strategy of additional reserves and the strategy of percentage of demand [6, p. 10]. As a result, stocks are created that practically cannot be fully used at the time of placing the next order for their replenishment.

According to the strategy of additional reserve, the guarantee of needs in material stocks is provided by creating an additional reserve of material resources. The basis of the percentage of demand strategy is the analysis of the frequency of demand for material stocks based on the results of work during the day. The data on the amount of demand are entered in the schedule of the distribution of products with increasing results. Then, that part of the total number of issuing orders periods is established, for which it is permissible to completely spend stocks that do not entail a violation of the production process. According to this value, the amount of demand corresponding to the established cases of stocks full use is determined from the specified schedule.

As for the management of the goods sale, the management of trading enterprises independently forms the product range, chooses technologies, and organizes the stimulation of goods and services. In the system of this organization, the most important activities are: advertising, sales stimulation, direct marketing, public relations. In this regard, it should be noted the elements of the management mechanism for the integration of trade with other functional subsystems, due to the state of intra-industry competition, necessary for implementation at the micro level. A number of elements of this mechanism are used in the practice of any trade enterprise, but they are not used as integrative tools aimed at forming sustainable long-term relationships with consumers of goods and services and suppliers of resources.

The leading place in the activities of trading enterprises is given to advertising, which should be divided into advertising of goods and advertising of the trading enterprise itself, which ensures the improvement of the culture of service, expansion of the functions of stores, assortment of goods and services. Every store comes into contact with different groups of people, so relations with the public create a favorable communication climate. However, these connections are characterized by a lag effect, so it is difficult to establish exact quantitative relationships between their implementation and the volume of goods sales and provision of services. This is one of the prerequisites for establishing and increasing the level of technological imbalance in terms of spatial and functional characteristics of trade enterprises [7].

Since the fight for a buyer is quite tough, trade employees are constantly trying to attract new buyers. Sales stimulation is used to solve this problem. In order to achieve a long-term effect, to "institutionalize" the relations of a trading company with buyers, to form a kind of cluster that unites the seller and buyers into a certain stable community, it is necessary to form a new system of incentives. An important element of sales stimulation, necessary for the integration of buyers into a stable group,

focused not only on the purchase of a certain product or service, but also on a specific trade enterprise, is a change in the system of planning its activities. In planning, it is necessary to distinguish two levels of goals, as basic elements of the management mechanism: strategic and tactical.

In the process of planning sales stimulation, it is necessary to take into account two target groups (consumers and store employees), each of which requires specific methods of promotion. The methods of stimulation proposed by us are divided into two groups, based on the object of managing the integration of trade with other functional subsystems in the conditions of competition for sales markets and labor resources: consumers, employees of retail enterprises (Figure 1). In this case, it is necessary to take into account possible changes in sectoral and inter-sectoral functional relationships and the trade management system as a socio-economic subsystem of the region on the part of authorities and management at different levels. That is, the sales stimulation system must be adaptive to inevitable changes in the external environment.

Inventory management strategies at the enterprise are based on the implementation of well-known management systems and consist of a set of measures for their creation and replenishment of stocks, operational planning of supplies and the organization of continuous control [2]. These inventory management systems include:

- a system with a fixed order size;
- a system with a fixed periodicity of orders;
- a system with a fixed periodicity of stock replenishment to a constant level;
- "minimum-maximum" system».

These systems are fundamental in inventory management. All the huge variety of inventory management algorithms is based on the technique of fixed order size or the technique of fixed time interval between orders.

A material inventory management system with a fixed order size in that restocking orders are made at the moment

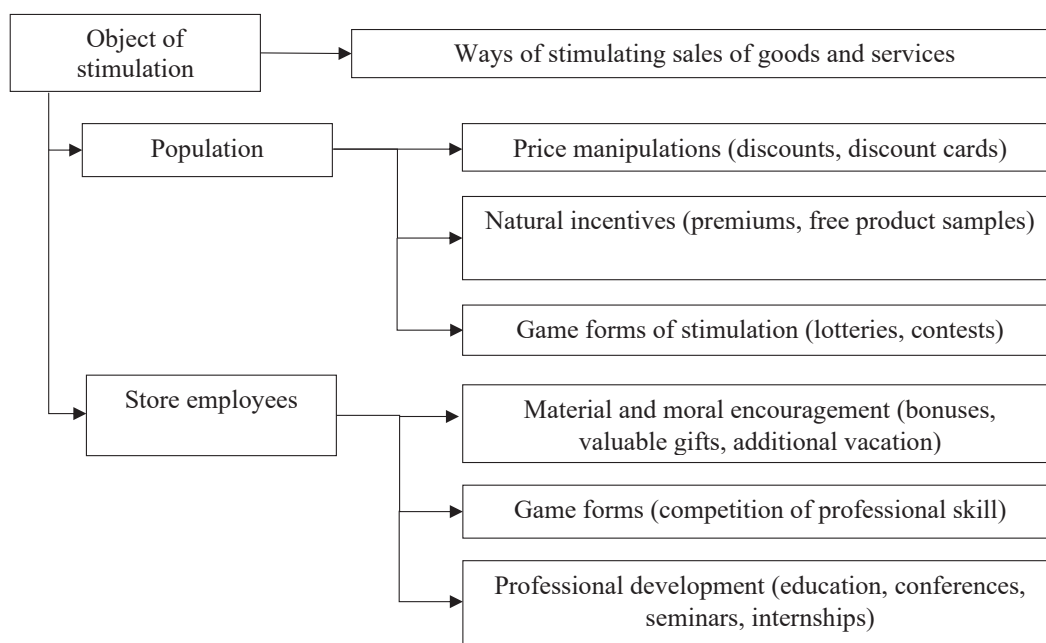


Figure 1. Ways of stimulating sales of goods and services by trade enterprises

when the inventory is reduced to a pre-determined, threshold inventory level with a volume equal to the optimal order size. All the parameters of the system are calculated in such a way that, with compliance to the initial data, the system guarantees non-deficit service of needs under conditions of certainty, that is, under conditions of a constant rate of consumption.

The starting points for calculating the parameters of the inventory management system with a fixed size of orders are the volume, the optimal order size, the order fulfillment time and possible delivery delays. However, the maximum desired inventory in this system is usually smaller than in an inventory control system with a fixed time interval between orders, due to the frequent binding of the time interval between orders. One way or another, the inventory management system with a fixed order size does not allow you to avoid their shortage when the need for them fluctuates.

In general, an inventory management system with a fixed time interval between orders gives a worse result than a system with a fixed size of orders, because in the latter case there is constant control over the level of stocks, which allows you to quickly make decisions about their replenishment. At the same time, the inventory management system with a fixed time interval between orders takes into account delivery delays by limiting insurance stocks. In the inventory management system with a set periodicity, their replenishment to a constant level of the order is repeated at equal time intervals.

The "minimum-maximum" inventory management system is focused on the situation when the costs of inventory accounting and the costs of placing orders are so significant that they become commensurate with the losses from a shortage of inventory. Therefore, in this system, orders are not made at every given interval, but only on the condition that the stocks in the warehouse at that moment are equal to or less than the minimum level. When an order is issued, the size is calculated in such a way that the delivery replenishes the stocks to the maximum desired level.

So, having studied the theoretical aspects of the formation of the strategy of managing material stocks

in the company's supply chains, it is possible to identify the general features of the strategy of additional reserve, in which the guarantee of needs is provided by creating an additional reserve of material values. At the same time, the company does not have a specific method for calculating the reserve number of storage units in warehouses. In turn, the strategy of managing material stocks should be based on the implementation of a specific system of their management. Control over the state of stocks and formation of orders at the enterprise is carried out periodically according to the operational management system. After a certain period of time, an operational decision is made - "to order" or "not to order". If ordering, how many units of material resources. However, such a system is able to work effectively only in conditions where the amount of demand can be predicted. Otherwise, unexpectedly increased demand in the period between orders can lead the logistics system to a deficit state. The scheme of strategic inventory management of a trading enterprise is shown in Figure 2.

Therefore, the development of an effective inventory management strategy involves the following sequential stages:

- 1) grouping of goods and material values based on the composition of the ABC- and XYZ-analysis matrix;
- 2) calculation of the stock rate and demand forecasting for goods and material values;
- 3) selection of a material inventory management system for each received group of goods and material values;
- 4) determination of the methodology for calculating the main parameters for each of the inventory groups of goods values, taking into account the selected system of their management: calculation of the inventory norm, annual need for purchases, warranty stocks, the threshold level of stocks in the warehouse, the maximum desired level of stocks and the size of the order.

The implementation of the proposed approach should begin with the systematization of the names of goods and material values. Then it is necessary to differentiate the material resources consumed by the structural divisions of the enterprise into groups, using ABC and XYZ analysis

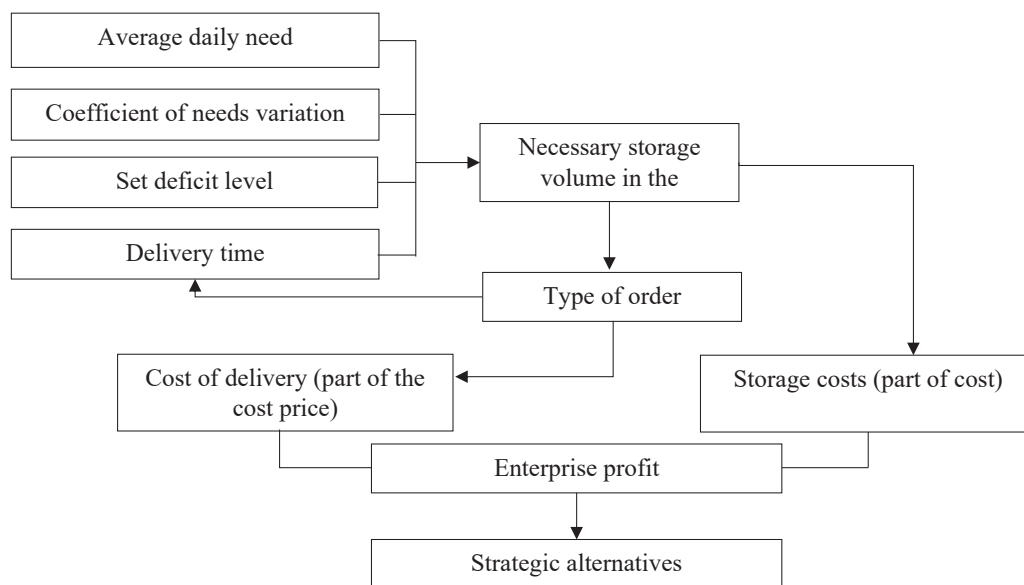


Figure 2. The scheme of strategic inventory management of a trading enterprise



methods. In the future, the forecast values of demand should be calculated taking into account the calculations of the stock level.

Therefore, to manage the stocks of the received groups of material resources, it is necessary to choose an effective management system, calculate and analyze its main parameters. Depending on the current conditions in one or another market segment, you should choose one of the strategies of inventory management at the enterprise, the ultimate goal of which is the continuous provision of any type of goods and material values. In addition, it is advisable to improve the staffing of the enterprise's warehousing.

The main problem in the management of material stocks at the enterprise is the lack of uniformity in the names of goods and material values. As a result of this fact, it is impossible to accurately determine the consumption of a certain type of goods and material values for a specific period of time, and accordingly calculate the stock levels. Consequently, there are significant difficulties in the organization of centralized purchases and centralized control over the balances, as well as the movement of goods and material values in warehouses and structural divisions of the enterprise. As a result, there is an inconsistency in the actions of the company's structural units when performing common business processes, which causes significant time and financial costs. The processes of keeping records, forming appropriate financial and management reporting on the scale of the entire enterprise are becoming more complicated.

The proposed strategic directions will contribute to the solution of the problems identified as a result of the analysis of the material inventory management system in the supply chains of the enterprise, as well as the reduction of logistics costs, the improvement of production efficiency, ensuring the competitiveness of goods, which will positively affect the final financial result of the enterprise.

**Conclusions.** Therefore, in the conditions of growing competition, the need for strategic inventory management does not lose its relevance for business entities in the field of trade. In the field of trade, the task of inventory management is one of the key aspects of improving the efficiency of business entities, since inventory is the main tool for ensuring its turnover. The work provides a critical analysis of the main types of strategies for managing material stocks at the enterprise. The importance of the product sales management process in the strategic management system of a trade enterprise is proven, in particular, the use of such tools as advertising, sales promotion, direct marketing, public relations, etc. According to the study results of the formation theoretical aspects of the managing material stocks strategy in the supply chains of the enterprise, the work has formed a scheme of strategic management of a trading enterprise stocks. The proposed strategic directions for inventory management will contribute to solving problems in the enterprise's supply chains, as well as reducing logistics costs, increasing production efficiency, ensuring the competitiveness of goods, which will positively affect the final financial result of the enterprise.

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