

Seminar 5

Topic: Logistics audit. Logistics outsourcing.

Questions on the topic of the lesson:

1. Definitions of concepts: audit, logistics audit. Types of logistics audit.
2. The concept of audit in logistics research.
3. Requirements for participants in logistics audit.
4. The procedure for conducting a logistics audit: principle of implementation, stages, directions.
5. Contents of the internal audit procedure.
6. LFA technology (Logis - tics Field Audit): the essence of the procedure, advantages.
7. The essence of logistics outsourcing.
8. Advantages and disadvantages of logistics outsourcing.
9. Insourcing and outsourcing as directions for improving logistics processes.

Auditing is “entrepreneurial activity for independent verification of accounting and financial statements of organizations and individual entrepreneurs”, that is, it is one of the forms of independent financial control of an organization.

Logistics audit is an impartial assessment of the entire supply chain of a company, conducted by an independent party. Along with the general features in relation to accounting audit, logistics audit has its own distinctive features.

When conducting a logistics audit, the following issues are studied:

- the nature of the relationship between a manufacturing or trading enterprise and suppliers and customers;
- features of planning, procedures, document flow in organizing the movement of material flows at the macro and micro levels;
- the composition of the infrastructure that ensures the movement of material flows;
- methods of quality control and discipline of deliveries to and from the enterprise;
- compliance of costs for organizing the movement of material flows with local market conditions;
- determination of the strengths and weaknesses of the enterprise’s logistics system;
- identification of sources of excess logistics costs at the enterprise;
- assessment of the state of the logistics risk management system.

One of the differences between accounting in logistics and financial and accounting is the assessment of the system's activity in dynamics, since the material flow passing through the enterprise is measured by the quantity of goods related to a unit of time. Consequently, the use of

traditional financial indicators (usually averaged), reflecting the state of the system at a specific point in time for assessing the state of logistics systems is not objective. Another feature of research in the field of logistics is a comprehensive approach to studying the enterprise. When creating an enterprise and determining its organizational structure, a logistics service is formed. In accordance with this, specialists are selected who organize supplies, warehouse work, delivery of goods to consumers and other logistics operations. All this presupposes the existence of a well-established and effectively functioning logistics system at the enterprise. In some cases, enterprise managers make a number of serious miscalculations, which leads to a slowdown in the passage of material flows through the enterprise, a decrease in the throughput of the logistics system and, accordingly, to an increase in logistics costs and a decrease in the level of customer service. Most often, this is due to the lack of a systematic approach in the actions of specialists responsible for different functional areas of logistics (purchase, production, sales and distribution). Each is responsible for his own area without taking into account the impact on the next stage of goods movement. In addition, the external environment of enterprises is a dynamic, changing environment, and the logistics service at the enterprise must quickly respond to external changes. This involves effective feedback, that is, the development of proactive impacts on changes in the external environment and changes in the composition and structure of the enterprise. An important aspect of the existence of a commercial enterprise in a highly competitive market is an effectively operating logistics service at the enterprise and strategic planning of the enterprise's logistics. In the event that the management of the enterprise is unable to cope with the problems arising in the field of logistics on their own, they resort to the services of external consultants to conduct a logistics audit.

The purpose of the audit is to identify hidden problems of the enterprise, determine possible ways to solve them and implement developed methods to optimize the enterprise's logistics system.

Types of logistics audit.

The requirements of enterprises in the field of logistics are constantly growing. New technologies in the organization of business management appear. Consequently, today many companies are forced to review their logistics strategy in order to determine reserves for competitive struggle.

In this situation, logisticians face the following important questions:

1. How many distribution centers are needed and where should they be located?

2. What should be the relationship between inventory levels and service levels for each center?

3. What types of transport should be used and how to choose routes?

4. Should distribution centers be equipped with new cargo handling technologies?

In order to answer these questions, it is necessary to conduct a logistics audit of the company.

At the enterprise level, the following **types of logistics audit can be distinguished:**

- ✓ general functional audit;
- ✓ special functional audit;
- ✓ inventory audit;
- ✓ audit of transport documentation and settlements for transportation operations;
- ✓ financial audit.

Type 1. General functional audit.

Conducted once a year to assess the correctness of the performance of logistics service employees' functions. In this case, an expert commission is appointed, consisting of representatives of the enterprise's management and third-party consultants, which evaluates the performance of employees' job responsibilities, the results of the work of the logistics service departments for the reporting period, the level of quality and efficiency of the personnel's work.

Type 2. Special functional audit.

It is carried out by consultants and senior management of the enterprise to assess:

- compliance of the enterprise's logistics strategy with its corporate strategy;
- the degree of customer satisfaction with the quality of service based on the internal documentation of the enterprise (claims, reports);
- compliance of the level of the offered logistics service with the requests and expectations of customers.

Type 3. Inventory audit.

It is used to control the efficiency of inventory management at the enterprise. At the same time, the levels of insurance, seasonal, current and other types of inventory are monitored, and their optimality is determined.

Type 4. Audit of transport documentation and settlements for transportation operations, including transportation, forwarding, loading and unloading.

Caused by errors by staff when filling out documents or incorrect data entry into the computer.

Type 5. Financial audit.

Conducted by third-party auditors using traditional accounting audit methods. In the process of this work, the financial results of the enterprise's logistics departments are checked. When conducting a logistics audit at an enterprise, depending on the goal, a comprehensive audit or an assessment of the activities of a separate warehouse, transport facilities, as well as identifying the causes of a specific problem can be carried out.

Procedure for conducting a logistics audit.

The key principle of a logistics audit is to move from the general to the specific. That is, from the global goals of the enterprise to the causes of low efficiency, low productivity and missed opportunities. After working through the general issues, a detailed study of the functional areas of logistics at the enterprise is carried out. In accordance with the key principle of a logistics audit, the corporate mission, production, marketing and purchasing strategies of the enterprise, which can affect the organization of the movement of material flows, are studied first. As a result of the audit, a database is formed that can be used to assess the state of the enterprise's logistics system.

To conduct a logistics audit, a team is created that includes representatives of the logistics service and other functional departments of the enterprise (finance and accounting, marketing and sales, production and procurement, information service), as well as third-party experts. When conducting an external audit, it is advisable to involve students from specialized universities.

There are **preliminary**, main and **final stages** of logistics **audit**.

At the preliminary stage, the functional areas of supply, production, distribution or sales are studied over the course of two to three days.

Then, over the course of a week, experts process the research results and prepare a list of logistics functions that will be subject to thorough verification.

After this, questions are formulated for interviews and questionnaires, and indicators are identified by which logistics functions will be assessed.

The main stage is divided into **internal and external audit**.

Internal audit begins with an interview with the top management of the enterprise. The audit is then **conducted in the following directions**.

Direction 1. Survey of representatives of the enterprise's functional divisions on issues related to logistics (purchasing, transport, warehouses, sales).

Direction 2. Working with a selection of enterprise documents.

Direction 3. Collection of data on supply contracts for statistical analysis (accuracy and timeliness of delivery; discrepancies in quantity and quality of deliveries).

During the internal audit, **three groups of indicators are used:**

Group 1. Indicators of the quality of service to internal and external consumers (order fulfillment time, stability of order fulfillment time, ability to change order characteristics according to customer requests or service flexibility).

Group 2. Indicators related to financial costs of performing logistics operations. When analyzing costs, an assessment is made of the cost-benefit ratio, i.e. the benefit received by clients from performing logistics operations at the enterprise.

Group 3. Indicators of the use of warehouse facilities or own fleet of rolling stock (coefficient of warehouse volume use, coefficient of use of the load capacity or load capacity of the vehicle). Having the results of the internal audit in hand, the team can move on to an external audit, during which the expectations and requirements of customers are studied in order to identify the optimal performance indicators of the enterprise, the methods used by competitors are considered, and the level of service to consumers of the material flow is assessed.

External audit is conducted in the form of sending out questionnaires, selective interviews with representatives of the serviced enterprises, buyers with different volumes of purchases or from different geographic locations. Standard questionnaires are adapted for each enterprise. In this case, the head of the enterprise and individual departments, individual specialists are interviewed. The results of the external audit allow us to formulate recommendations for the enterprise and indicate the changes that need to be made in the current logistics system.

The final stage.

At this stage of the audit, the following analytical reports are prepared:

Report 1. Analysis of the stock structure. This determines the stock level by groups, categories or product range items, and also evaluates the turnover and turnover of the average stock in the warehouse.

Report 2. Analysis of material flow movement at the enterprise and outside the enterprise. For example, a detailed description of the movement of material flow in the warehouse as a whole and the volume of material flows for each logistics operation separately. The amount of material flow is also indicated on the sections of the path between warehouse zones. The results obtained are used to determine the number of labor units and intra-warehouse transport.

Report 3. Resource equipment. Classification and description of loading and unloading equipment for assessing the material and technical equipment of the enterprise. Depending on the objectives of the logistics audit, other types of reports can be prepared. The logistics audit is conducted to identify the causes of failures in the operation of the enterprise's logistics system. After identifying "bottlenecks" in the movement of material flows at the enterprise, as areas of

increased risk, recommendations are developed to correct the problematic situation. As a result, material flow management is improved and the level of customer service is increased.

A modern approach to conducting a logistics audit.

One of the effective approaches to conducting a logistics audit is the LFA (Logistics Field Audit) technology, which involves introducing logistics auditors into the enterprise management system. Currently, clients no longer expect consultants to come and solve their problems. They expect consultants to act as mentors and advisors for the company's employees, and the employees will be able to independently apply the knowledge they have gained when the consultants have finished their work.

This approach is more effective, as it allows for continuous improvements in the company's performance indicators and saves time on studying the current situation, as no one except the company's specialists is so well versed in the problems of material flow management. Using LFA technology allows for the rapid collection of complete information required for a balanced and well-founded decision aimed at improving the logistics system.

LFA technology is based on three key principles for building an effective logistics strategy:

Principle 1. Material flow management strategy in accordance with the overall objective of the enterprise. Every time an enterprise develops a new corporate strategy from the marketing perspective, it is necessary to change the logistics strategy.

Principle 2. Calculating the total costs of logistics functions. Many companies do not evaluate the total costs of performing logistics functions due to a lack of experience in cost analysis. However, without this step, it is impossible to achieve measurement of results in the implementation of corporate strategy. To do this, it is necessary to create a system for accounting of logistics costs in the enterprise.

Principle 3. Defining the performance indicators of the logistics system and their continuous monitoring. Accounting and evaluating logistics indicators are becoming key factors in achieving leadership in the industry. Logistics auditors help the enterprise to quickly identify and characterize the existing problems of the enterprise. A modern approach to conducting a logistics audit involves the participation of consultants and employees involved in improving the enterprise's logistics system.

Logistics outsourcing.

In the modern economy, the combined supply of "goods - services" is becoming increasingly important, i.e. when the buyer is offered services related to the purchase of the goods (transportation, intermediate storage of goods, warranty service, forwarding) along with the goods. Consequently, in addition to the production or sale of goods, enterprises are engaged

in the promotion of products, customer service and the performance of other logistics operations and functions, the cost of which not only approaches production costs, but can also exceed them many times over. This means that the activities of enterprises are becoming increasingly multifaceted. The functioning of a modern enterprise requires a variety of resources and a wide range of personnel qualifications, which complicates the management process and the organizational structure of the enterprise. In this regard, enterprises engaged in multifunctional activities have begun to concentrate their available resources on a limited number of selected processes. Functions not related to the core business are gradually being outsourced to other enterprises for which these functions are core.

Translated from English, outsourcing means "using external sources" (out - external, source - source). This is the transfer of some functions or a set of functions of the enterprise to a third-party contractor. The term outsourcing arose relatively recently, although it can be said that examples of outsourcing are already tens of thousands of years old.

Outsourcing of production functions involves the transfer of individual or all production functions to specialized organizations. For example, the company "Hewlett-Packard" has virtually no production of its own, i.e. it is almost a complete outsourcer of production functions.

Business process outsourcing involves the transfer to third-party organizations of functions that are not core, but are necessary for the implementation of production or trading activities.

The subjects of such outsourcing may be: accounting; personnel management; information and computer support of the enterprise; finance; legal support; logistics. Therefore, recently, enterprises offering consulting, insurance, commercial intermediary and information services have become increasingly popular. Together with the concept of "outsourcing" in the theory and practice of logistics, synonyms are used. For example, "contract logistics".

The World Trade Organization has proposed a classification of types of outsourcing based on the following criteria:

1. depending on the location of the service provider;
2. depending on the customer's participation in the contractor's ownership;
3. depending on the type of activity being transferred.

Depending on the location of the service provider:

- ✓ domestic outsourcing – onshore;
- ✓ International outsourcing – offshore.

Depending on the customer's participation in the contractor's ownership:

- ✓ intra-company;
- ✓ outsourcing of independent enterprises.

The difference lies in whether or not the customer company has participation and control in the ownership of the contractor.

Depending on the type of activity being transferred:

- ✓ outsourcing of physical production;
- ✓ outsourcing of services;
- ✓ logistics outsourcing.

Thus, the use of an outsourcing strategy involves the transfer of enterprise functions to external execution.

Advantages and disadvantages of logistics outsourcing.

Logistics outsourcing or "contract logistics" is the involvement of a third-party organization to perform all or part of the logistics functions in order to improve the company's operations. The company-customer of the outsourcing company's services focuses on the core business and transfers non-core functions to external contractors. As a result, logistics costs are reduced, the quality of service is improved, and maximum operational flexibility is achieved. The use of outsourcing in the company's operations presupposes long-term partnership contracts. Therefore, before transferring the logistics function to external execution, changes are necessary both in the relationship with clients and in the internal processes of the company.

The following functions of the enterprise can be transferred to logistics intermediaries and providers:

- ✓ warehouse information support;
- ✓ transportation;
- ✓ warehousing;
- ✓ waste disposal;
- ✓ inventory management;
- ✓ cargo escort.

In this case, a logistics intermediary provides services within the framework of one function, and a logistics provider performs a set of functions. For example, distribution of finished products of a manufacturing enterprise or organization of cargo delivery in international traffic.

Reasons for transferring logistics functions to a specialized organization:

- the ability to increase the efficiency of one's own activities by freeing oneself from auxiliary, unprofitable work for the enterprise and concentrating on the main, most profitable types of activities;

- the need to strengthen competitive positions by improving the quality of customer service and providing them with services that the company cannot provide on its own;
- the desire to reduce the costs of performing logistics operations, which are carried out by specialized organizations with higher productivity and accuracy due to their experience and scale of operations, available unique technologies and equipment;
- lack of experience and qualifications among in-house staff to perform certain tasks and the desire to use the positive reputation or popular brand of the logistics service provider to increase competitiveness.

A number of factors may contribute to the decision against outsourcing functions:

- ✓ outsourcing of functions may lead to leakage of classified information and a decrease in the efficiency of providing information for enterprise management;
- ✓ the refusal of an enterprise to perform certain functions may lead to complete dependence on external contractors; the risk of losses due to low quality of services is quite high if there is no effective logistics intermediary or provider on the market;
- ✓ lack of full control over the activities of the organization providing services, since the Russian legislative framework for outsourcing has not been developed.

Thus, when transferring the logistics function to external execution, a thorough analysis of the state of the enterprise's logistics system and potential service providers is necessary.

It is also necessary to analyze how the transferred function is related to other functions of the enterprise and how its transfer will affect its future work.

Insourcing and outsourcing.

There are two interconnected directions for improving the enterprise's logistics processes:

- ✓ insourcing – refusal to perform work by external contractors or to provide services to third-party organizations;
- ✓ outsourcing or performing work with the help of an external organization.

Outsourcing and insourcing are not opposed to each other, since the choice does not consist of a complete rejection of one method of service in favor of another. It is quite possible to transfer only part of the logistics functions to third-party performers, that is, in certain conditions, a combination of insourcing and outsourcing is effective.

Depending on the acceptance and implementation of outsourced functions by logistics intermediaries or providers, the following **levels are distinguished** :

1PL – First Party Logistics – autonomous logistics, when an enterprise performs all logistics functions independently.

2PL – Second Party Logistics – partial outsourcing, when individual functions are transferred to logistics intermediaries.

3PL – Third Party Logistics – all logistics functions of the enterprise are transferred to a logistics provider that provides comprehensive services.

4PL – Fourth Party Logistics – in addition to the implementation of a set of logistics functions, management of supply chains for the resources or manufactured products required by the enterprise is added.

5PL – Fifth Party Logistics – a logistics provider uses Internet technologies when servicing clients, which ensures interaction and coordination of participants in the logistics process.

Currently, the Russian logistics services market is dominated by highly specialized logistics operators that perform only individual functions – for example, transportation, safekeeping, cargo insurance (2PL level).

Many logistics operators in Russia set as their strategic goal the development of the quality and complexity of the services provided to the level of 3 PL. In most developed countries of the world, providers of the 3 PL category form the basis of all participants in the logistics services market. They carry out international and domestic transportation by all types of transport, customs clearance of goods, intermediate warehousing and are responsible under the terms of the contract for the quality of the operations performed. The outsourcing of logistics functions by manufacturing and trading enterprises implies an increase in the quality of service and a reduction in the costs of physical movement of goods.