

THE CONCEPTUAL FOUNDATIONS OF LOGISTICS FLOWS IN THE MANAGEMENT ACCOUNT OF THE UTILITY SERVICE SYSTEM

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ABSTRACT

In the article, the problems of organizing logistics flows and processes in the management accounting of water supply and sewage enterprises, the management of logistics flows and making effective management decisions, as well as the theoretical and methodological aspects of management accounting and the results of scientific research on their improvement, are highlighted.

KEYWORDS: *Management Accounting In Water Supply And Sewage Enterprises, Logistic Flows In Management Accounting, Material Flows, Financial Flows, Information Flows, Management Of Logistic Flows, Sources Of Pollution Of Water Bodies, Classification Of Water Transfers And Pipelines.*

INTRODUCTION

The unique priority of the logistics approach to the management of the utility service sector is the establishment of high-level inter-organizational relations, as well as the integration of the participants of the logistics chain into a single material transfer system. The main goal of the logistics approach in the management of the utility service system is the detailed management of logistics flows.

Material flow management, considered one of the logistics flows in management accounting, has always been considered a significant managed area of economic activity. However, it was not long ago that the management of material flows became the most necessary task of the entire economic life (that is, the second period of the logistics development stage, the periods after the 60s of the last century). The main reason for this is the transition from the utility market to the consumer market, resulting in the need for utility service and sales systems to be able to respond skillfully to rapidly changing consumer preferences.

The world experience shows that in today's competitive struggle, those who are aware of the logistical views and are well versed in its methods are achieving success at the cost of management.

In this place, the doctor of economic sciences M. Sh. We would like to agree with the following comments of Mamatkulov, "It should be noted that until recently, the prices/tariffs for the maintenance, use and repair of housing have been regulated by the state at the legislative level. Today, the amount of payment for the maintenance, use and repair of housing is determined by a majority vote at the meeting of the owners. Thus, the transition to a competitive market in the

field of housing and communal services is underway. The main purpose of housing and communal services is to provide comfortable living conditions for the population"[1, p. 346].

The efficiency of carrying out reforms in the housing and communal sector is largely determined by their systematicity and comprehensive application of economic mechanisms to this sector. Therefore, taking into account the fact that the owners of houses are different, it is necessary to redistribute communal services based on market principles.

Literature review

It is necessary to improve the effectiveness of transactions related to the movement of material values and material flows, which are part of the technological process of commercial activity in the water supply and sewerage system, directly related to financial and information flows.

Material flow is a flow that represents the movement of material values and carries out various logistics operations on them, moving around the entire logistics chain. From this point of view, material flows are important in that the following two steps are simultaneously in motion:

- Movement of incoming material flows (purchase, storage and inclusion of raw materials in service);
- Movement of outgoing material flows (storage of finished goods, sale and delivery to the customer).

The inflow is concerned with water source and supply, providing water treatment materials for use in services, and it starts with market research. Because it is necessary to solve the purchase of materials in the market, identification of suppliers, prices of materials and other issues.

Outflow is the supply of treated water to consumers and the removal of wastewater.

There are different opinions on these concepts in the literature. For example, A. D. Chudakov, "Material flow is a quantitative combination of cargo units of commodity material assets belonging to the period when cargo units of commodity material assets appear and develop in a certain period" [6,p. 178].

L. B. Mirotin [5,s. 9], A. A. Kanke and I. P. Kosheva [4, p. 46], according to their definition, "Material flow is a product (product in the form of freight, parts and inventory) that is considered in various logistic (transportation and storage of goods in transport) and technological (mechanical processing, assembly) impact processes and subjected to a certain time interval".

Transport-economic relations arise as a result of economic and technological relations of production enterprises and firms located in one economic zone, as well as their relations with enterprises and firms located outside this zone, as well as the establishment of correspondence between them. The material appearance and form of these connections is material flow.

According to our interpretation, material flow is one of the main links of logistics flows in the accounting of management, it is the material current assets that are purchased and released for spending on certain purposes of the enterprise operating in logistics processes.

The service of the head of the financial department is incomparable in the management of financial flows of the enterprise, and he must be able to fully understand the content of financial management. In the process of fully (complex) implementation of logistics at the expense of

management, the task of using all forces, opportunities, and capacities give way to the task of minimizing the period of circulation means flowing through the enterprise. The exchange of information about where to find materials and their supplies as quickly as possible is important for the enterprise's maintenance of material and technical supply, and it shows the importance of financial flows on the basis of this.

A. V. Vahobov and T. S. According to the opinions of Malikov, "The movement of funds in terms of quantity and quality in the process of forming and using the savings, income and centralized and decentralized financial resource funds of enterprises is called financial flow" [2, p. 144].

In the conditions of the market economy, the increase in the efficiency of the movement of material flows is mainly achieved at the expense of the financial service factor. This, in turn, requires the need to study the logistic financial flows related to the transfer of goods.

Financial flows are reflected in the recovery of costs and expenses, the attraction of funds from financing sources, and payments for the services provided to other participants of the logistics chain. The mechanism of providing financial services to material flows is currently considered one of the most urgent problems that need to be studied in the management account of logistic transactions.

A. A. Kanke and I. P. According to the opinions of Kosheva, "Financial flows are directed movement of financial resources connected with material, information and other flows within and outside the logistics system" [4, s. 51].

This view also complements the essence of the concept of financial flows.

In our opinion, financial flows are material and information flows, as well as a set of financial resources that are received and spent in the mobilization of labour resources.

Financial resources are a set of national and foreign currencies, securities, and financial and real investments (domestic and foreign).

Financial flows in one form or another have always been present in any way of organizing business activities. However, practice shows that the high efficiency of their movement is achieved by applying the logistical principles of material and financial resource management. As a result, a new economic category - logistic financial flow - appears. In this procedure, the logistic financial flow is created and used to ensure the efficient movement of material flows. In this case, the specific feature is primarily the need to serve the process of moving the material flow in space and time.

Because logistic financial flows are different in terms of their composition, direction of movement, purpose and other characteristics, it is necessary to classify them. Financial flow is divided in to external and internal types in relation to the logistics system.

The external financial flow flows in the external environment, i.e. flows outside the boundaries of the logistics system in question, the internal financial flow exists within the logistics system and changes due to the performance of several logistical transactions in relation to the corresponding material flow.

V. V. Ivanov, S. P. Kusakin and E. Yu. According to the Gutarevas, "The time and volume of receipts and deposits, the value of credit instruments, money from the enterprise by other participants of the logistics process in all directions: warehouse for consumption and goods suppliers; It is calculated according to the connections of the logistic links of transport flows in terms of port and customs terms. Thus, the directions of resulting flows and other necessary characteristics of flow control are determined" [3].

The main idea of applying logistics transactions in management accounting is to consider all stages of production (raw materials and transformation into consumer goods, preparation of finished products from them, transportation and sale) as a single and continuous process of transformation and movement of products and related information.

A. A. Kanke and I. P. Kosheva, "Information flow is a document, (paper and electronic) verbal message flow accompanying material or service flows in the logistics system under consideration and mainly intended to have managerial influence" [4, p. 55] - they say.

Information flows that occur during external influence on there levant environment transfer information (message) from their source to their consumer. These flows can be of critical independent importance for operational management and strategic decision-making, and material flows can be matched and controlled. It is possible to adjust the difference in the speed of material and information flows, to ensure the convergence of time between them.

A. D. According to Chudakov, "Information flow is a combination of in separable information quanta that appear and circulate within the logistics system or between the logistics system and the external environment, necessary for the formation of logistics transactions and monitoring their implementation" [6, p. 49].

In order to process information flows, modern management has its own information responsibility centres. The task of such a centre is to collect the received information, that is, to ensure that it becomes the necessary information for solving the logistical task. In this case, the centre's connection within formation sources can be one-way, two-way, or multi-way. Modern management uses a multifaceted method of communication.

Usually, the information flow comes before or after the material flow. Information flows also play an important role in the emergence of financial flows, for example, financial flows are created as a result of the movement of information flows during the sale and purchase of goods, contracts, etc. There may be multiple information flows accompanying one financial flow.

Research Methodology

In the preparation of the article, a systematic analysis of issues related to the use of logistics transactions at the management expense of water supply and sewerage enterprises and the effective organization of material, financial and information flows and processes, as well as the application of the logistics chain system at the expense of management and disclosure of procedures.

Analysis and Results

In the management account, it is necessary to organize the movement of material flows in such a way as to make it possible to control the performance of tasks related to the purchase, transportation, storage, and storage of stocks. In other words, all tasks must be combined under

the appropriate control of centralized and decentralized management, and in order for the management apparatus to make effective decisions, each department must take responsibility for logistics transactions through interdependent management. Nowadays, many companies are combining two essential areas of their activities under common management, that is, inventory management and finished product distribution. In this way, the transportation and warehousing tasks of the business, which are considered extremely difficult, can be easily solved.

In the current conditions of rapid changes in the world economy, the use of logistic operations at the expense of management makes it possible to minimize stockpiles of goods, and in some cases it proves that it is possible not to use them at all, in addition, it determines ways to drastically reduce the period of water delivery to consumers without losses, speed up the process of information exchange, service causing the level to increase.

According to the nature of movement in time, continuous and discrete materials are divided in to streams. Continuous material flow includes, for example, the flow of raw materials and materials in continuous production (technological) processes in a closed cycle, for example, potable water, gas, oil, etc., transported by pipe transport. Many streams are discrete in time.

Material flows that are purchased and not spent on production or services are inventory (residues) at the end of the financial year. Quantitatively, material flow is reflected by intensity, density, speed and other indicators. From the point of view of management accounting, the classification of material flow for water supply and sewage supply, which is our research object, is presented in Table 1.

TABLE 1. CLASSIFICATION OF MATERIAL FLOWS FOR WATER SUPPLY AND SEWERAGE

<i>Nº</i>	<i>Classification symbol</i>	<i>Material flow types</i>	<i>Use in water supply and sewage system</i>
	In the logistics system	External material flow; Internal material flow.	External material flow - purchase of materials; Internal material flow - consumption of materials
	At the link of the logistic system	Incoming material flow; Outgoing material flow.	Incoming material flow - water source and water treatment; Outgoing material flow – water supply;
	By composition	An assortment of material flow; A wide range of material flows.	An assortment of material flow – pipes and fittings A wide range of material flow – chemicals used in water treatment
	By scope	Large material flow Medium material flow Fine material flow	Large material flow – spare parts of pumps; Medium material flow – pipes; Fine material flow - chemicals
	By units	Heavy weight material flow; Light weight material flow;	Heavy duty material flow pump spare parts;

	Oversize material flow.	Light weight material flow - pipes; Oversized material flow - chemicals.
By structure	Loads that require the use of special vehicles; Unpacked, unwrapped, loosely dumped cargo that does not require special sorting; Bulk and grain cargoes; Loads to be poured.	Loads requiring the use of special vehicles - cement, wastewater; Unpacked, unwrapped, loosely dumped cargo that does not require special sorting - building materials; Bulk and granular cargo - metal and metal products, engines and devices; Fuel and lubricants.

In Uzbekistan, monetary financial flows include the flow of cash financial instruments settled in soums and monetary financial flows settled in foreign currency, and the information-financial flows include payment orders, payment requests, collection orders, documentary letters of credit, corporate plastic cards and settlement Non-cash financial resources are included in accounts with checks.

Therefore, it is appropriate to study financial flows in logistics by dividing them into horizontal and vertical financial flows in terms of economic relations. Horizontal financial flows reflect the movement of financial resources between equal entities of entrepreneurial activity, vertical financial flows reflect the movement between subsidiaries and sponsoring commercial organizations.

The direction of financial flows serves as an indicator that determines the prosperity and stability of enterprises, information about it determines the efficiency of logistics activities, and they are necessary for planning and organizing interactions with counterparties. For example, in the preparation of the budget for the current year, future revenues and necessary investments are calculated, as well as profit and profitability indicators, which are necessary during the preparation of the financial report and which are necessary for attracting investments and loans, concluding contracts and agreements.

The quality of water pipes and pipes used in water supply systems can be distinguished by several classification signs (Table 2).

TABLE 2 CLASSIFICATION OF WATER PIPES AND PIPES

<i>Classification marks</i>	<i>Types of water transfers and pipes</i>
Content	Household-drinking water transfer Production waterproofing Fireproofing Integrated waterproofing
Water delivery method	Pressured It is self-flowing
Water treatment method	With water treatment and water treatment facilities Without special facilities
Water supply facilities	Pumping stations Wells

Method of using water	Water towers Water pumps (vertical artesian well pumps, centrifugal pumps) Direct flow Rotating
Device method	External Internal
Service methods	Trunk Distributor

The results of the detailed analysis show that the increase in the level of pollution of wastewater in the sewerage (removal of wastewater) service causes additional costs, in particular, the consumption of additional labour and material resources. As a result, the extra power of the fixed equipment leads to premature wear and tear and the need for repairs, which require additional time. It follows from this that it is necessary to take into account the movement of water from natural sources to the consumer and its return to the system with minimal contamination when accounting for logistics management in water supply (Table 3).

TABLE 3. CLASSIFICATION OF SOURCES OF POLLUTION OF WATER BODIES

<i>Classification marks</i>	<i>Source of pollution</i>
Water pollution by origin	At the expense of anthropogenic landscape creation At the expense of industrial waste At the expense of municipal waste On account of agricultural waste At the expense of vehicle emissions
According to the duration of exposure to pollution	Permanent Periodic
By types of pollutant components	Wastewater Water returned from irrigation and drainage Filtered water Groundwater Surface water Oil and gas seepage Contaminated water in the atmosphere and air
By types of pollution	Chemical Inorganic Organic Biological At the expense of heat Due to radiation Microbial Parasitic

In general, the problems of the network are that in the provision of water supply and sewage (wastewater removal) services, it is necessary to take into account the serviceability and efficiency of water packages and pipes, that is, the state of wear and tear of the main funds of the service enterprises, from the holes and cracks in the water pipes and pipes. is to determine the total volume of water supplied to communal and household needs as a result of water leakage and water supply failure, or the total volume of leakage and leakage from water pipes and pipes.

Given that the high level of wear and tear of water packages and pipes in the system inevitably leads to frequent accidents, it is important to pay attention to the volume and quality of their maintenance and current and capital repair-restoration costs.

CONCLUSION AND RECOMMENDATION

The main purpose of the service of material flows in the application of logistic transactions in the management account is to provide their movements with financial resources in the required volumes and in the required terms by using more effective sources of financing. A financial flow occurs at the beginning of the purchase of raw materials and materials, or at the beginning of their certain processing, or to achieve any goal for production, two bases - material and labour - must be spent.

In order to create a material flow, it is necessary to plan the execution of tasks such as its use and use, changing its form, and at this point, logistic concepts dominate, that is, in traditional views, the above-mentioned are defined in advance by someone or a higher organization, in logistic views, the most optimal ways to form a material flow are carefully thought out. must be selected.

We consider it necessary that the main requirements for the size of logistic financial flows in the management accounting system are as follows: availability - the availability of financial resources of the necessary volume to meet the needs of existing deficit; optimization of financial costs based on the compatibility of all types of volume and resources; compatibility of financial flows in the logistics system and other economic systems; adaptability of the size and structure of financial flows to the specifics of the logistics system and types of counterparties; when financial resources are needed, the appropriateness of the time of their arrival, reduction of time lag; the reliability of sources of attraction of financial resources; adaptation of financial flows to changes in the external and internal environment;

The flow of information can move in the direction of the financial flows to which it belongs or in the direction of the financial flows. In some cases, the direction of the flow of information may not be related to the movement of there levant financial flow at all. For example, components arrive from the supplier to the incoming warehouse, and the corresponding accounts go to the accounting department.

Thus, each type of information flow can move in the direction of the corresponding financial flow, in the opposite direction, or in a completely different direction from the financial flow.

In our opinion, it is appropriate to form information flows in the management account as follows: collecting information based on why the information is needed, not by who makes the management decisions; the level of confidence in internal information, that is, how complete and reliable it is; which external information from the external environment can be used; how

advanced modern technologies and personnel are used in the collection and processing of information; how quickly and long-term the level of reliability of the collected information.

We recommend the following measures in practice to solve the above problems:

- Organization of additional complex reservoirs and regional water basins, depending on the need, for efficient use of water;
- Reduction of water consumption in industrial enterprises, creation of circulating, repeated, multiple water supply systems and improvement of technological processes;
- Introduction of low-waste technologies in industrial enterprises;
- efficient use of water in agriculture (optimizing the use of fertilizers and pesticides);
- Protection of catchment zones and territories (not creating anthropogenic landscapes);
- The strict control of compliance with water protection standards during the mining and processing of underground minerals and their transportation;
- take strict measures against individuals and legal entities who pollute water.

Therefore, it is necessary to consider the management accounting of logistics costs in the provision of water supply and sewage services as one of the important aspects of increasing the efficiency of the sector, and in this regard, we believe that it is necessary to constantly improve the system of tariff and price formation for water supply and sewage services.

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