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NATIONAL AVIATION UNIVERSITY
Faculty of Transport, Management and Logistics
Logistics Department

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«03» June 2024

QUALIFICATION WORK

(EXPLANATORY NOTES)

OF GRADUATE OF ACADEMIC DEGREE

«BACHELOR»

THEME: **«Distribution management for pharmaceutical products»**

Speciality 073 «Management»

Educational and Professional Program « Logistics »

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I certify that in this master thesis
there are no borrowings from the works of other authors
without appropriate references *Mariia MARIANOVYCH*
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Kyiv 2024

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
НАЦІОНАЛЬНИЙ АВІАЦІЙНИЙ УНІВЕРСИТЕТ
Факультет транспорту, менеджменту і логістики
Кафедра логістики

ЗАТВЕРДЖУЮ
В.о. завідувача кафедри логістики
Світлана СМЕРІЧЕВСЬКА
(підпис, власне ім'я та прізвище)
«03» червня 2024 р.

КВАЛІФІКАЦІЙНА РОБОТА

(ПОЯСНЮВАЛЬНА ЗАПИСКА)

ЗДОБУВАЧА ОСВІТНЬОГО СТУПЕНЯ

«БАКАЛАВР»

ТЕМА: **«Управління дистрибуцією фармацевтичної продукції»**

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Засвідчую, що у цій кваліфікаційній роботі немає запозичень з праць інших авторів без відповідних посилань *Марія МАР'ЯНОВИЧ*
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Київ 2024

NATIONAL AVIATION UNIVERSITY
Faculty of Transport, Management and Logistics
Logistics Department

Academic Degree Bachelor

Speciality 073 «Management»

Educational and Professional Program « Logistics »

APPROVED
Acting Head of the Department

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«13» May 2024

TASK

FOR COMPLETION THE QUALIFICATION WORK OF GRADUATE

Mariia Marianovych
(name and surname)

1. Theme of the qualification work: «Distribution management for pharmaceutical products» was approved by the Rector Directive №624/ст. of April 24, 2024.

2. Term performance of the work: from May 13, 2024 to June 16, 2024.

3. Date of submission work to graduation department: June 03, 2024.

4. Initial data required for writing the work: general and statistical information about pharmaceutical market in Ukraine, information of the company «Sona-Pharm», production and financial indicators of the company «Sona-Pharm», literary sources on distribution management and distribution logistics, Internet source.

5. Content of the explanatory notes: introduction, study of the essence of distribution management; Specifics of distribution management for pharmaceutical products; analysis the activity of the company «Sona-Pharm»; identification of possible ways to improve the distribution management of pharmaceutical products; recommendations regarding the implementation of Distributed Order Management system in the activities of «Sona-Pharm» company; calculation of the economic effect of project proposals; conclusions and appendix.

6. List of obligatory graphic matters: tables, charts, graphs, diagrams illustrating the current state of problems and methods of their solution.

7. Calendar schedule:

№	Assignment	Deadline for completion	Mark on completion
1	2	3	4
1.	Study and analysis of scientific articles, literary sources, normative legal documents, preparation of the first version of the introduction and the theoretical chapter	13.05.24-16.05.24	Done
2.	Collection of statistical data, timing, detection of weaknesses, preparation of the first version of the analytical chapter	17.05.24-20.05.24	Done
3.	Development of project proposals and their organizational and economic substantiation, preparation of the first version of the project chapter and conclusions	21.05.24-26.05.24	Done
4.	Editing the first versions and preparing the final version of the qualification work, checking by standards inspector	27.05.24-29.05.24	Done
5.	Approval for a work with supervisor, getting of the report of the supervisor, getting internal and external reviews, transcript of academic record	30.05.24-02.06.24	Done
6.	Submission work to Logistics Department	03.06.24	Done

Graduate_____
(signature)

Supervisor of the qualification work _____
(signature)

8. Consultants of difference chapters of work:

Chapter	Consultant (position, surname and name)	Date, signature	
		The task was given	The task was accepted
Chapter 1	Associate Professor, Karpun O.V.	13.05.24	13.05.24
Chapter 2	Associate Professor, Karpun O.V.	17.05.24	17.05.24
Chapter 3	Associate Professor, Karpun O.V.	21.05.24	21.05.24

9. Given date of the task May 13, 2024.

Supervisor of the qualification work: _____ Olga KARPUN
(signature of supervisor) (surname and name)

Task accepted for completion: _____ Mariia MARIANOVYCH
(signature of graduate) (surname and name)

ABSTRACT

The explanatory notes to the qualification paper «Distribution management for pharmaceutical products» comprises of 103 pages, 22 figures, 20 tables, 63 references and 4 appendixes.

KEY WORDS: DISTRIBUTION MANAGEMENT, PHARMACEUTICAL PRODUCTS, GOOD DISTRIBUTION PRACTICE, DEMAND DRIVEN SUPPLY NETWORKS, DISTRIBUTED ORDER MANAGEMENT

The basic principles of distribution management improving for pharmaceutical products are considered in the qualification paper.

The theoretical part covers the essence of distribution management and specifics of distribution management for pharmaceutical products. The analytical part is devoted to the analysis of financial and economic activity of «Sona-Pharm» company and to study of the state of distribution management for pharmaceutical products. The project part is devoted to identification of possible ways to improve the distribution management of pharmaceutical products and development recommendations regarding the implementation of Distributed Order Management system in the activities of «Sona-Pharm» company.

The object of the qualification work is the distribution process of the «Sona-Pharm» company. The subject of the qualification work is the modern approaches to improving efficiency of distribution management for pharmaceutical products.

Methods of research are analysis, synthesis, induction, deduction, modeling, generalization.

Materials of qualification paper are recommended to be used during scientific research, in the educational process and in the practice of specialists of logistics departments.

CONTENTS

NOTATION

DC – Distribution Center;

DDSN – Demand Driven Supply Networks;

DOM – Distributed Order Management;

DTC – Direct-to-Customer;

GDP – Good Distribution Practice;

ME – Medical Equipment;

NPV – Net Present Value;

PE – Pharmaceutical Enterprises;

PP – Pharmaceutical Preparations;

WMS – Warehouse Management System.

INTRODUCTION

The basis of market relations is the process of buying and selling raw materials, materials, components, and finished products (services). Before the material flow in the form of pharmaceutical products begins its movement from the manufacturer to the consumer, there is a need to form a distribution network, choose a distribution channel and conclude a contract for the distribution of pharmaceutical products, etc. The logistic approach in the management of the distribution processes of pharmaceutical products involves: the organization of full-fledged, operational information support with reliable data on the progress of processes related to the processes of order implementation; analysis of the fulfillment of the obligations of the pharmaceutical company regarding the order fulfillment period, product quality and level of customer service; providing a full range of logistics services related to the distribution of pharmaceutical products.

Currently, research on making strategic logistics decisions in the distribution of specific pharmaceutical products, which require a special approach on the part of pharmaceutical companies to forecasting demand and planning distribution needs, managing stocks and other logistics processes, ensuring a high level of service through compliance with the terms and conditions of the contract, is gaining relevance distribution, elimination of target conflicts in distribution, which will improve the efficiency of the distribution system.

Taking into account the specifics of the pharmaceutical market and products, the need to continuously provide customers with high-quality and affordable goods, there is an urgent need to make logistical decisions to improve the distribution of pharmaceutical products.

All this determined the relevance of the chosen topic of the qualification work.

The purpose of the qualification work is to study and generalize theoretical approaches, as well as to develop practical recommendations for improving distribution management for pharmaceutical products.

The object of the qualification work is the distribution process of the «Sona-Pharm» company.

The subject of the qualification work is the modern approaches to improving efficiency of distribution management for pharmaceutical products.

The main tasks of the work are as follows:

– to study the essence of distribution management;

– to study the specifics of distribution management for pharmaceutical products;

– to consider the general characteristics of the «Sona-Pharm» company;

– to evaluate and analyze the economic and financial activity of the «Sona-Pharm» company;

– to analyze of the company's distribution process;

– to identify possible ways to improve the distribution management of pharmaceutical products;

– to give recommendations regarding the implementation of Distributed Order Management system in the activities of «Sona-Pharm» company;

– to calculate economic efficiency of project proposals for the «Sona-Pharm» company.

Methods of research are analysis, synthesis, induction, deduction, modeling, generalization.

Materials of thesis are recommended to be used during scientific research, in the educational process and in the practice of specialists of logistics departments.

CHAPTER 1
THEORETICAL PRINCIPLES OF DISTRIBUTION MANAGEMENT FOR PHARMACEUTICAL PRODUCTS

1.1 Study of the essence of distribution management

As the research has shown, the essence of the concept of distribution management refers primarily to the process of controlling the movement of goods from the supplier or manufacturer to the point of sale [33]. It can be argued that it is an overarching term that refers to numerous activities and processes such as packaging, inventory, warehousing, logistics and supply chain.

Distribution management is an important part of the business cycle for both manufacturers and retailers. The level of profit of any enterprise depends on how quickly it can turn over its goods. The more companies sell, the more they earn, which in turn contributes to a better future for the business. Having effective distribution management is also important for a company to remain competitive and have satisfied customers.

Effective distribution management is critical to customer satisfaction, profitable operations, and increased competitiveness. The larger the corporation or the greater the number of supply points within the company, the more it will need to rely on automation to effectively manage the distribution process.

Modern distribution management encompasses more than just moving products from point A to point B. It also involves gathering and sharing relevant information that can be used to identify key opportunities for company growth and market competitiveness.

Basically, two types of distribution can be distinguished [33]:

- commercial distribution (commonly known as sales distribution);
- physical distribution (better known as logistics).

Distribution management includes various functions such as customer service, shipping, warehousing, inventory control, private fleet operations, packaging, receiving, material handling, as well as plant, warehouse, store location planning, and information integration.

The main idea of distribution management from the point of view of the marketing function is that distribution management involves taking into account the following (Table 1.1).

Table 1.1 – Distribution management from the point of view of the marketing mix [based on 33]

№	Element of marketing mix	The fundamental idea of distribution management
1	2	3
1	Product	Not always a tangible object, product can also refer to an idea, music, or information.
2	Price	This refers to the value of a good or service for both the seller and the buyer, which can involve both tangible and intangible factors, such as list price, discounts, financing, and likely response of customers and competitors.
3	Promotion	This is any communication used by a seller to inform, persuade, and/or remind buyers and potential buyers about the seller’s goods, services, image, ideas, and the impact it has on society.
4	Placement	This refers to the process that ensures the availability, accessibility, and visibility of products to ultimate consumers or business users in the target channels or customers where they prefer to buy.

Effective distribution management involves selling a company's products by ensuring adequate inventory in channels while managing promotion in those channels and their varying demands. It also involves making sure that the supply chain is efficient enough so that distribution costs are low enough to allow the product to be sold at the right price, thus supporting the company's growth strategy and maximizing its profit.

The scheme of the distribution management is presented in Fig. 1.1.

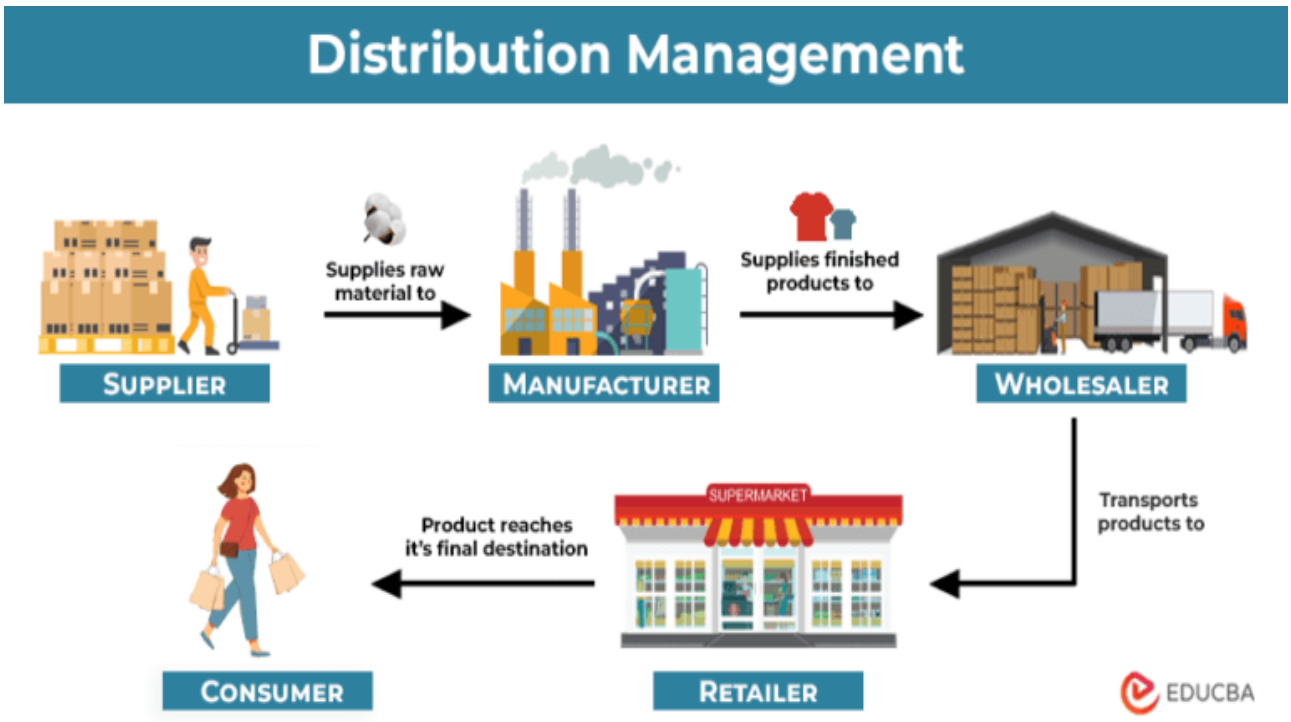

Figure 1.1 – The scheme of the distribution management [17]

We can say that distribution channel is a medium through which manufacturers distribute products or services to customers.

Wholesalers purchase certain products wholesale from the manufacturer at a low price. They then send it to distributors or retailers. Some wholesalers may also supply manufacturers with raw materials to make finished products.

Retailers usually buy products from wholesalers, suppliers, or directly from manufacturers. Retailers then sell these products to consumers.

A distributor is an intermediate link between a manufacturer and wholesalers or retailers. When manufacturers increase sales of their products, they need to hire distributors.

The digital age has replaced traditional digital channels with e-commerce platforms and direct-to-customer (DTC) models. Here, an e-commerce website can display products and when a customer places an order, the items can be picked from the inventory or warehouse and can be distributed directly to the consumer.

The process of distribution management is as follows (Fig. 1.2).

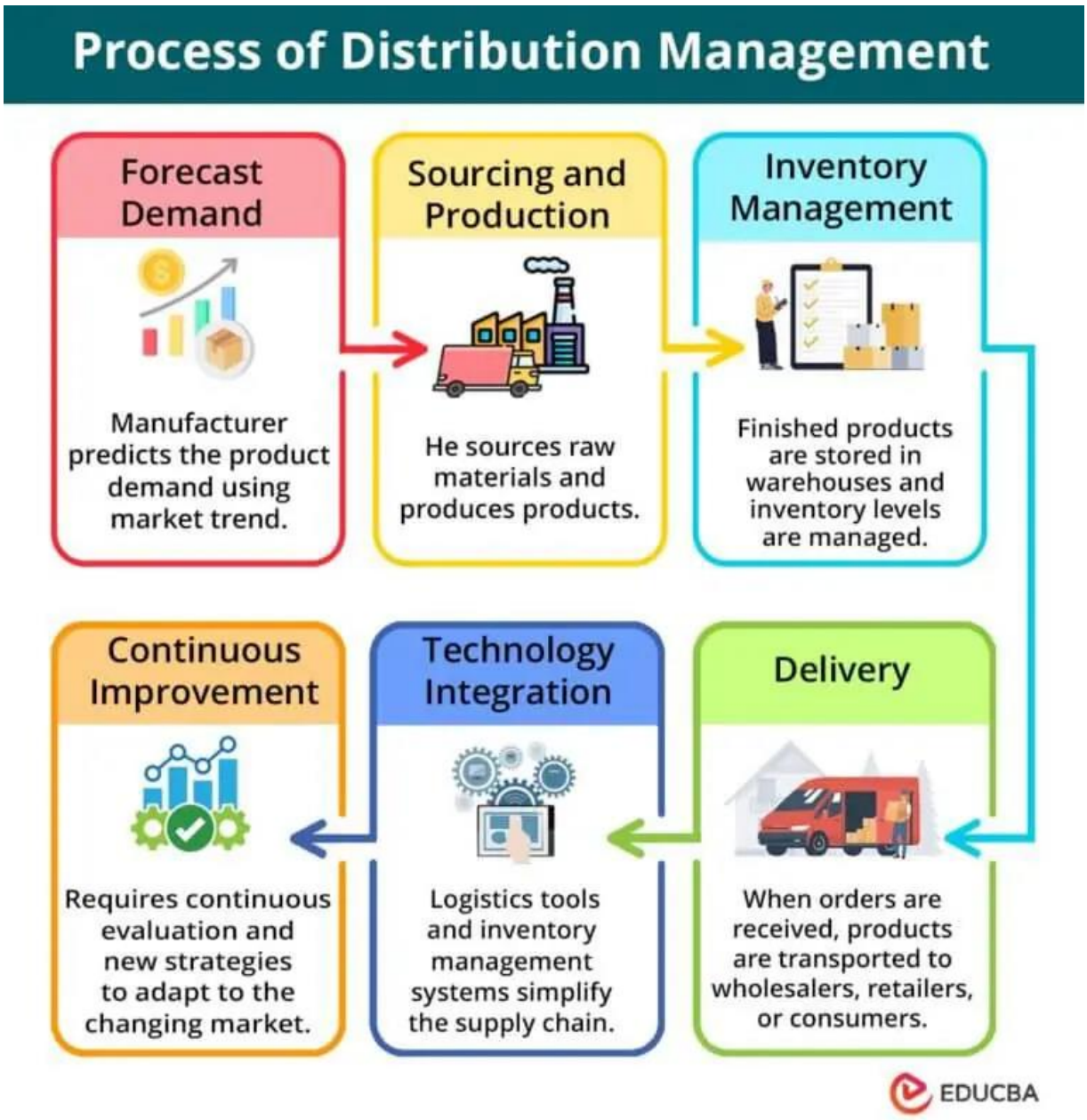

Figure 1.2 – Distribution management process [17]

As can be seen from the figure, everything starts with demand planning – this is the starting point for further distribution management. The next stage is the search for the necessary materials and the production of finished products. Next comes the stage of inventory management, followed directly by delivery. But there are two more stages in this process, namely: technology integration and continuous improvement.

A more detailed description of each stage of the distribution management process is given in Table 1.2.

Table 1.2 – Description of each stage of the distribution management process [based on 17]

№	Stages	Description of the stages
1	2	3
1	Forecast Demand	Manufacturers predict customer demand for products using sales patterns and market trends. They forecast the required quantity of products and plan distribution channels, inventory levels, and logistical strategies accordingly.
2	Sourcing and Production	Manufacturers then buy raw materials and manufacture products and ensure they meet quality standards before distribution.
3	Inventory Management	Now, finished products get stored in warehouses of manufacturing facilities or distribution centers. Here, inventory levels are managed for efficient distribution, maintaining supply and demand to prevent overstocking or shortages.
4	Delivery	Once orders are received, manufacturers transport products from warehouses to distributors, retailers, or directly to consumers.
5	Technology Integration	Technology like inventory management systems, logistics software, and tracking tools will help track products, streamline operations, improve efficiency, and simplify the supply chain.
6	Continuous Improvement	Thus, distribution management requires continuous evaluation and implementation of new strategies to adapt to changing market conditions and optimize the distribution process.

As the research has shown, distribution management is sometimes identified with the concept of logistics.

Let's analyze both concepts and try to understand the similarities and differences between them.

As features, consider the following: definition, focus, types, activities and challenges (Table 1.3).

As we can see, the concept of logistics is still broader. Therefore, in this work we will focus on a narrower object of research, namely distribution.

Table 1.3 – The difference between distribution and logistics in the supply chain [17]

№	Particulars	Distribution	Logistics
1	2	3	4
1	Definition	It is the process of transporting finished goods from manufacturers to consumers.	It is the complete process of organization, storing, and moving of products from the beginning stage to the end users.
2	Focus	To deliver products to end consumers.	To manage the supply chain.
3	Types	Retailers, wholesalers, e-commerce platforms, and distributors.	Reverse logistics, Inbound logistics, outbound logistics, etc.
4	Activities	Order fulfillment, packaging, storage, transportation, and customer service.	Supply management, inventory management, fleet management, delivery management, warehousing, and shipment tracking.
5	Challenges	Maintaining inventory levels, transportation costs, timely delivery, and market demand fluctuations.	Complexity in supply chain, high logistics management process cost, and advanced technology

Advantages and disadvantages of distribution management are shown in Fig 1.3.

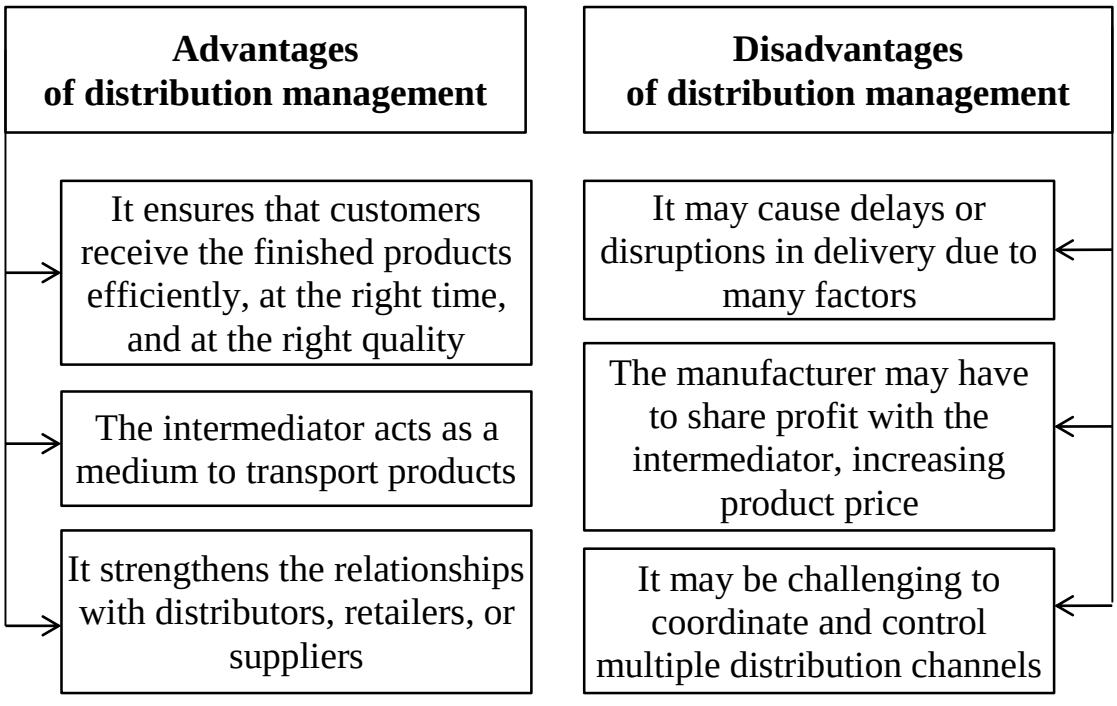

Figure 1.3 – Advantages and disadvantages of distribution management

The following are some distribution management challenges companies face while managing product distribution (Table 1.4).

Table 1.4 – Distribution management challenges [based on 17]

№	Challenges	Description of the challenges
1	2	3
1	Natural disruptions	Climate change or unpredictable weather conditions like floods and earthquakes can damage crops, leading to a shortage of raw materials. It affects inventory, leading to shortages in warehouses and disturbing supply chains.
2	Transportation Issues	Sometimes, natural disasters like earthquakes can damage transportation routes and cause delays in delivery services. Other challenges include traffic, lack of vehicles, accidents that cause an increase in maintenance cost, delays in flight carrying products, and disruption in the transportation system and overall delivery timeline.
3	Pandemics	Pandemics can severely disrupt global supply chains. For instance, the COVID-19 pandemic led to a shortage of raw materials and products, closures of many small-scale industries, shortages in labor or workers, and more.
4	Lack of Skilled Workers	It is challenging for companies to find and retain skilled workers for distribution operations. A lack of trained workers and specialized professionals can pressure companies to spend more on training and recruiting processes. A lack of skilled workers may lead to errors in handling goods or inventory management.
5	Economic Issues	Fluctuating currency exchange, market volatility, inflation, recessions, and trade policy changes can impact expenses, demand, pricing, and supply chains. Companies must adopt proper strategies to adapt to changing economic conditions in distribution management.
6	Inaccurate inventory management	Inaccuracies in inventory tracking and management can result in overstocking or stock outs. If goods are there in the warehouse for a longer time, they will get damaged, causing a loss to the company. It will increase storage costs and cause product delays, causing customer dissatisfaction and indirectly damaging the brand’s reputation.
7	Shipment issues or delays	Issues with shipments, such as damaged goods, customs clearance delays, or documentation errors, can disrupt the flow of products. Other challenges include issues in packaging, quality control problems, changes in shipment address, and returning damaged goods, which also cause a loss to the company.

The end of the Table 1.4

1	2	3
8	Supply chain shortages	Disruptions in the supply chain due to raw material shortages, production delays, or supplier issues can lead to insufficient inventory levels and hinder timely deliveries.
9	Customer Expectations	Customer demands for faster deliveries, flexible shipping options, and real-time tracking can cause the implementation of new technologies, which leads to expenses and creates pressure on the distribution systems.
10	Globalization Challenges	Companies operating in global markets deal with diverse regulations, cultural differences, longer periods of supply chains, and varying consumer preferences, making it difficult to distribute products across borders.

The goal is to achieve maximum efficiency in delivering products to the right place and time in the right condition [33]. However, besides increasing profits, there are many other reasons why a company may need distribution management. First, it keeps the whole process in order. In the absence of a proper management system, retailers are forced to store inventory in their own warehouses. And that can be a bad idea, especially if the seller doesn't have proper storage space.

A distribution management system also makes things easier for the customers. This allows them to visit one place to purchase a variety of products. If this system did not exist, customers would have to visit multiple locations to get what they need.

Implementing effective distribution management also reduces the chance of delivery errors and also reduces product delivery times.

1.2 Specifics of distribution management for pharmaceutical products

Distribution is an important part of the pharmaceutical market. Pharmaceutical distributors play a key role, as their activity is quite significant in shaping the market structure and increasing the circulation of medicinal products. In Western countries, this component comes down to optimizing the product circulation of pharmacies, and

the pharmaceutical distributors themselves play the role of logistics operators. Due to the unstable economic situation and high competition, domestic wholesale pharmaceutical enterprises are forced to build sales channels and carry out active marketing activities.

The supply chain of medicines, like most consumer goods, includes the following links: manufacturer – distributor – retailer (pharmacy) or hospital – consumer [49].

Each individual pharmacy is an unprofitable customer for the manufacturing company due to the small volume of supplies. In turn, retailers do not have the opportunity to study all the price lists of manufacturing companies in search of the right assortment, prices and terms of delivery, there are also no guarantees that the drug will be available, and if it is, then the transaction costs and the costs of its delivery may be unaffordable for one pharmacy. However, there are examples of direct contracts between large pharmacy chains and manufacturing companies, but this is more the exception than the rule [63].

The main task of a pharmaceutical distributor is to coordinate the interests of manufacturers, subjects of the commercial retail sector, medical organizations and the state. Distributors usually work in all three sectors of the pharmaceutical market [49]:

- commercial retail segment;
- hospital segment;
- the public procurement market.

The capacity of the pharmaceutical market consists of the capacity of two standard market segments: the retail market of pharmaceuticals and the segment of medical facilities (hospital segment). At the same time, the share of the retail segment is approximately 80% of the total capacity of the pharmaceutical market, and the share of the hospital segment varies between 15-20% [45].

The change in the pharmaceutical market situation, the growth of the market share of domestic pharmaceutical companies, the increase in the volume of sales of «pharmacy basket» products actualizes the issue of substantiating and choosing the most effective approaches, methods and tools for inventory management,

optimization of distribution activities, which will allow to reduce distribution costs and obtain competitive advantages.

The result of adopting the option of distribution of pharmaceutical products should be substantive logistic solutions of the perspective and current plan (Fig. 1.4).

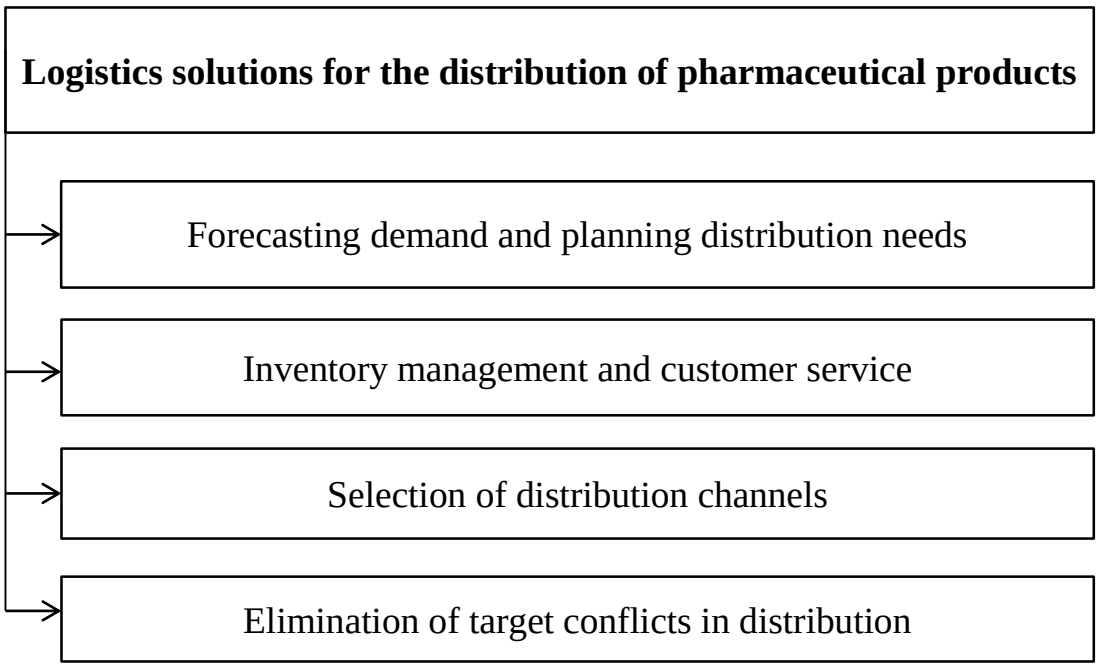

Figure 1.4 – Logistics solutions for the distribution of pharmaceutical products [based on 45]

Let's consider them in more detail.

1. Forecasting demand and planning distribution needs.

The peculiarities of the distribution of pharmaceutical products require the adoption of strategic decisions related to such distribution variables as the client (level of service), channel (costs, level of service), product (ratio «cost-result», «demand-supply»), integration (synergistic effect logistics system). Integrated optimization of the state and dynamics of the mentioned factors of the distribution system of pharmaceutical products enables the rationalization of material, information and financial flows in a certain localized system, ensuring the optimal ratio of distribution costs and the level of customer service.

2. Inventory management and customer service.

The problem of stock management in the process of distribution of pharmaceutical products deserves special attention due to the following reasons:

– the impossibility of allowing the absence of the necessary medicines and the importance of uninterrupted provision of the necessary medicines to consumers in the appropriate amount with a guarantee of their quality;

– difficult to predict and seasonal nature of demand for pharmaceutical products;

– the presence of a time gap between a sharp change in demand for certain groups of medicines (as a result of epidemics and other force majeure circumstances) and the ability of manufacturers to instantly satisfy it, which requires the creation of insurance stocks;

– the high cost of the inventory management process in this particular branch of pharmacy – inventory management costs in pharmaceutical distribution account for up to 50% of all costs;

– high level of customer service.

The primary task in customer service is to determine the customer's needs. It is the distributors who ensure the fulfillment of these basic tasks of pharmaceutical logistics. After receiving information about the client's needs, the pharmaceutical company needs to offer the necessary product and the necessary set of services that will satisfy all the requirements and expectations of the client. Further stages relate to the definition of the tasks facing the logistics of the distribution of pharmaceutical products, the assessment of distribution capacities and the level of quality of products and processes, the formation of a complex of distribution services, the agreement of the level of service, the conclusion of an agreement on the distribution of pharmaceutical products and its implementation.

3. Selection of distribution channels.

One of the peculiarities of the pharmaceutical market is the variety of distribution levels. Thus, there are three types of distribution channels between manufacturers of pharmaceutical products and consumers.

The first channel is characterized by the direct supply of products from the domestic manufacturer to the retail company (pharmacies, pharmacy kiosks, medical institutions). Direct supply of goods from the manufacturer to retail companies usually leads to relatively high retail prices, since the manufacturer does not provide price discounts for small volume purchases of pharmaceutical products.

The second channel is characterized by participation in the distribution of pharmaceutical products of a wholesale company (distributor). The founders of wholesale companies, as a rule, are drug manufacturers, who in this way try to make a profit from wholesale trade, as well as reduce costs for the distribution of drugs.

The third distribution channel is characterized by the participation of relatively large independent wholesale companies, the sales of pharmaceutical products of which are relatively small (approximately 15% of the total domestic sales of pharmaceutical products of domestic production). Wholesale companies prefer imported pharmaceutical products, as their sale allows for large profits.

The pharmaceutical market is saturated with imported products, which are characterized by high quality, but also high prices compared to domestic analogues. Foreign manufacturers do not distribute pharmaceutical products through wholesale and retail companies, so the first and second distribution channels are infrequently used.

The nature of the third distribution channel, which is used by foreign manufacturers of pharmaceutical products, may differ depending on the method of product supply: direct supply from abroad; delivery from customs-licensed warehouses located in Ukraine; supply from free warehouses under direct contracts.

4. Elimination of target conflicts in distribution.

The activity of distributors in the pharmaceutical market is characterized by a high level of complexity and responsibility. This, on the one hand, is related to the specificity of pharmaceutical products as a commodity, as there are many restrictions associated with specific requirements for their storage, transportation, warehousing, documentary support, etc. On the other hand, there is a certain conflict of goals in the process of distribution of pharmaceutical products: against the background of the

trend of increasing costs for distribution, companies are trying to reduce stocks of pharmaceutical products, but this, in turn, is associated with the risk of reduced sales and reduced customer loyalty.

Pharmaceutical logistics is the process of managing material and accompanying financial, personnel and information flows to accelerate physical distribution and minimize total costs in the process of supply, production and sale of pharmaceutical preparations (PP) and medical equipment (ME) in order to achieve their required quality and maximum satisfaction of consumer requirements [47].

Distinctive features of the logistic approach to resource management in pharmaceutical production are:

– a high degree of integration of individual links of the material-conducting chain into a single system capable of adequately responding to changes in the external environment («end-to-end flow»);

– focus on the production of optimal batches of PP and ME in order to ensure production flexibility; optimization of material and related financial, personnel and information flows by closely linking the activities of the company's structural divisions;

– substantiating the size of stocks by the current need for production and the need for timely fulfillment of the terms of agreements and contracts;

– focus on the most effective use of warehouse space; formation of long-term relationships with suppliers, which is carried out on the basis of ongoing monitoring and auditing of the activities of supplier firms considered as partners;

– optimization of the duration of the operational cycle, which is maintained at the minimum acceptable level due to the coordination of the movement of material resources;

– reduction of the number of auxiliary workers due to the optimization of the process of movement of material resources, starting with the purchase of substances and materials and ending with the sale of PP and ME;

– focus on achieving the efficiency of the resource management system as a whole as a result of achieving consistency of their movement at all stages of the operational cycle.

The implementation of logistics functions is based on the observance of certain rules: providing a specific consumer with the necessary PP and ME of the required quality with a competitive level of costs in the required quantity at the specified time and in the required place, as well as the personalization of the service system, which is developed for each order separately.

Logistics function is an enlarged group of logistics operations aimed at realizing the goals of the logistics system. According to modern logistics tasks, two types of functions are distinguished: operational and coordination. Operational functions are related to the direct management of the movement of material flows in the sphere of supply, production and distribution.

The main logistics functions include the planning of material support for production, management of the execution of production orders, inventory management, and product distribution management. Logistics functions can also include forecasting, control, and regulation. Each of the functions of logistics is a homogeneous (from the point of view of the goal) set of actions.

A brief description of the types of logistics functions for pharmaceutical enterprises (PE) is given in the Table 1.5.

A medical facility is a health care institution that operates on the basis of a license and carries out the wholesale sale of drugs, medical devices and medical products to other wholesale and retail trade entities, health care institutions according to the rules established by current legislation and international standards of the appropriate distribution practice – Good Distribution Practice (GDP) [8].

The function of the medical warehouse includes storage, sale of pharmaceutical and medical products, pharmaceutical and sanitary-hygienic goods to other market subjects (trade function); information provision of trade and intermediary activities on pharmaceutical markets (information function).

Table 1.5 – Characteristics of types of logistic functions in pharmaceutical

№	Logistic functions	Characteristics
1	2	3
1	Procurement	For production PE: provision of procurement of raw materials in accordance with the production program (time, quantity, quality, and assortment) with minimal costs. For warehouses: ensuring the order of PP and ME in accordance with the program of sales activities (time, quantity, quality, and assortment) with minimal costs.
2	Production	Organization in accordance with the order of a continuous technological process while simultaneously minimizing the presence of drugs in the manufacturing process and pharmaceutical production costs.
3	Sales (Distribution)	Management of all functional subsystems of the pharmaceutical industry related to the flow of medicinal products from the manufacturer to the consumer and the necessary channels of their distribution, with the aim of optimizing sales activities based on maximizing utility for customers while minimizing the total costs of drug storage, packaging, inventory management, loading and unloading work, transportation, etc.
4	Transportation	Provision of the necessary transport services under the condition of reducing the need for transport and minimizing the costs of resources and time.
5	Warehouse	Processes and operations directly related to the processing and registration of cargo and coordination with purchasing and sales services, calculation of the optimal number of warehouses and their locations, systems and means of storage, storage and control of stocks of PP and ME.
6	Waste management	Management of the flows of industrial and consumer waste of pharmaceutical production from the moment of their occurrence to acceptable in terms of economic feasibility and environmental safety of utilization and/or removal (disposal) together with the information flows necessary for this.
7	Informational	Management of the information flow at the enterprise and in its environment for the purpose of using information to regulate economic processes.
8	Financial	Management and rationalization of financial flows of financial institutions at all stages of the movement of financial resources.
9	Personnel	Management of labor flows in order to optimize the socio-economic efficiency of the use of labor resources of the enterprise on the basis of the formation of an appropriate system aimed at obtaining an additional effect from the rational interaction of personnel functions.

When it comes to good distribution practices for medical products, patient safety is the highest priority. From the moment a pharmaceutical product leaves a manufacturing plant until its delivery to a patient, GDPs play a vital role in a secure medicines supply chain. They help to ensure drug quality is preserved during transportation and storage, for example, by addressing risks that can stem from potential exposure to extreme temperatures and humidity, tampering, or unauthorized diversion.

Chapter 1 summary

In this chapter we have studied of the essence of distribution management.

It was note that distribution management refers primarily to the process of controlling the movement of goods from the supplier or manufacturer to the point of sale. Effective distribution management is critical to customer satisfaction, profitable operations, and increased competitiveness.

Effective distribution management involves selling a company's products by ensuring adequate inventory in channels while managing promotion in those channels and their varying demands. It also involves making sure that the supply chain is efficient enough to allow the product to be sold at the right price, thus supporting the company's growth strategy and maximizing its profit.

Also we have studied the specifics of pharmaceutical products distribution management.

Pharmaceutical distributors play a key role, as their activity is quite significant in shaping the market structure and increasing the circulation of medicinal products. The main task of a pharmaceutical distributor is to coordinate the interests of manufacturers, subjects of the commercial retail sector, medical organizations and the state.

Pharmaceutical logistics is the process of managing material and accompanying financial, personnel and information flows to accelerate physical distribution and minimize total costs in the process of supply, production and sale of pharmaceutical preparations and medical equipment in order to achieve their required quality and maximum satisfaction of consumer requirements

It was note that from the moment a pharmaceutical product leaves a manufacturing plant until its delivery to a patient, Good Distribution Practice plays a vital role in a secure medicines supply chain.

CHAPTER 2
STUDY OF THE STATE OF DISTRIBUTION MANAGEMENT FOR PHARMACEUTICAL PRODUCTS OF THE «SONA-PHARM» COMPANY

2.1 Organizational characteristics of the activities of the «Sona-Pharm» company

«Sona-Pharm» is an international company that has brought together professionals in the pharmaceutical industry. The company was founded in 2004. Since then, it occupies a leading position in the Ukrainian market and is a reliable partner of Merck (Germany), which is a world leader in pharmaceuticals [19].

The company «Sona-Pharm» provides the needs of modern medicine and actively develops sales of drugs in such areas as reproductive medicine, oncology, neurology and endocrinology (Fig. 2.1).

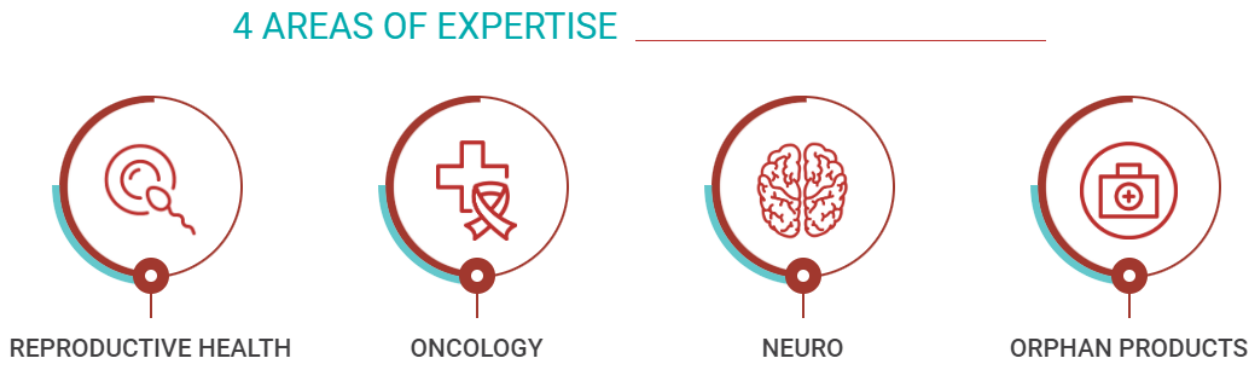

Figure 2.1 – Areas of activity of the company «Sona-Pharm» [19]

Let's analyze the range of products sold by Sona Pharm:

1. Reproductive Health:

1.1. Gonal-f / Follitropin alpha – 75:

Medicinal form. Powder and solvent for solution for injection.

Pharmacotherapeutic group. Gonadotropins.

ATC code G03G A05.

1.2. Gonal-f / Follitropin alpha – 300:

Medicinal form. Solution for injection.

Pharmacotherapeutic group. Gonadotropins. Follitropin alfa.

ATC code G03G A05.

1.3. Gonal-f/Follitropin alpha – 450:

Medicinal form. Solution for injection.

Pharmacotherapeutic group. Gonadotropins. Follitropin alfa.

ATC code G03G A05.

1.4. Gonal-f/Follitropin alpha – 900:

Medicinal form. Solution for injection.

Pharmacotherapeutic group. Gonadotropins. Follitropin alfa.

ATC code G03G A05.

1.5. Crinone / Progesterone:

Medicinal form: Gel vaginal.

Pharmacotherapeutic group. Gestagens Progesterone

Code ATX G03D A04.

1.6. Ovitrelle / Choriogonadotropin alpha:

Dosage form: Injectable solution.

Pharmacotherapeutic group. Gonadotropins and other stimulants of ovulation.

ATS code G03G A08.

1.7. Pergoveris / Follitropin alpha / Lutropin alpha:

Medicinal form. Powder and solvent for solution for injection.

The main physical and chemical properties: the drug is a white or almost white lyophilisate in the form of a pellet; the solvent is a clear, colorless liquid.

Pharmacotherapeutic group. Gonadotropins. Combinations.

ATX code G03G A30.

1.8. Cetrotide / Cetrorelix acetate:

Medicinal Product: Powder and solvent for solution for injection.

Pharmacotherapeutic group. Anti-gonadotropin releasing hormones.

ATC code H01C C02.

2. Oncology:

2.1. Erbitux:

Medicinal form. Solution for infusions.

Basic physical and chemical properties: the solution is practically free of visible particles.

Pharmacotherapeutic group. Monoclonal antibodies, cetuximab.

3. Neuro:

3.1. Mavenklad® 10 mg:

The drug MAVENKLAD® is registered in Ukraine for the treatment of patients with relapsing forms of multiple sclerosis with high disease activity.

3.2. REBIF – 22 / REBIF – 44:

Medicinal form. Solution for injection.

Basic physical and chemical properties: the drug is a transparent or opalescent colorless or yellowish solution.

Pharmacotherapeutic group. Interferon beta-1a.

ATX code L03A B07.

4. Orphan products:

4.1. SAIZEN:

Medicinal form. Powder for preparation of solution for injections.

Pharmacotherapeutic group. Hormones of the anterior lobe of the pituitary gland and their analogs. Somatropin.

PBX code H01A C01.

The main and additional types of activities of Sona-Pharm LLC according to classifier of types of economic activity are the following [58]:

– 46.46 Wholesale trade of pharmaceutical goods;

– 46.19 Activities of intermediaries in the trade of a wide range of goods;

– 47.73 Retail trade of pharmaceutical goods in specialized stores;

– 47.74 Retail trade of medical and orthopedic goods in specialized stores;

– 70.22 Business and management consulting;

– 73.20 Research of the market situation and identification of public opinion.

Own external service, drug registration department, quality control department and transparent relationships with manufacturers, distributors and medical institutions, as well as a deep understanding of market needs, legislation and national characteristics, enable the company to respond in a timely manner to constant changes and market requirements.

The structure of the «Sona-Pharm» company is presented in Fig. 2.2.

Figure 2.2 – The structure of the «Sona-Pharm» company [19]

Since 2009, the «Sona-Pharm» company began working in Kazakhstan and Moldova, and in 2017 it increased its presence on the CIS market and added Belarus, Georgia, Armenia and Uzbekistan to its area of responsibility (Fig. 2.3). Work is currently underway to enter the market of Mongolia and other Central Asian countries.

The company currently has more than 100 employees. The team of the «Sona-Pharm» company is a friendly family of experienced doctors, pharmacists, marketers

and financiers who are united by the common goal of improving the lives of thousands of patients.

Figure 2.3 – Geography of activity of the company «Sona-Pharm» [19]

The company's daily work is aimed at providing the opportunity for patients to be treated with high-quality drugs, and for doctors to be able to work with modern, safe and effective drugs. The company's employees are proud to help people in many countries improve the quality of life, treat serious diseases and give the happiness of parenthood.

The company independently determines the prospects for development and plans its activities based on the demand for its products, services and works and the need to ensure industrial and social development and increase its income.

The company's mission is to provide the population with necessary and affordable high-quality medicines in order to ensure the economic well-being of society. In accordance with the company's mission, we can formulate its main goals of «Sona-Pharm» company (Fig. 2.4).

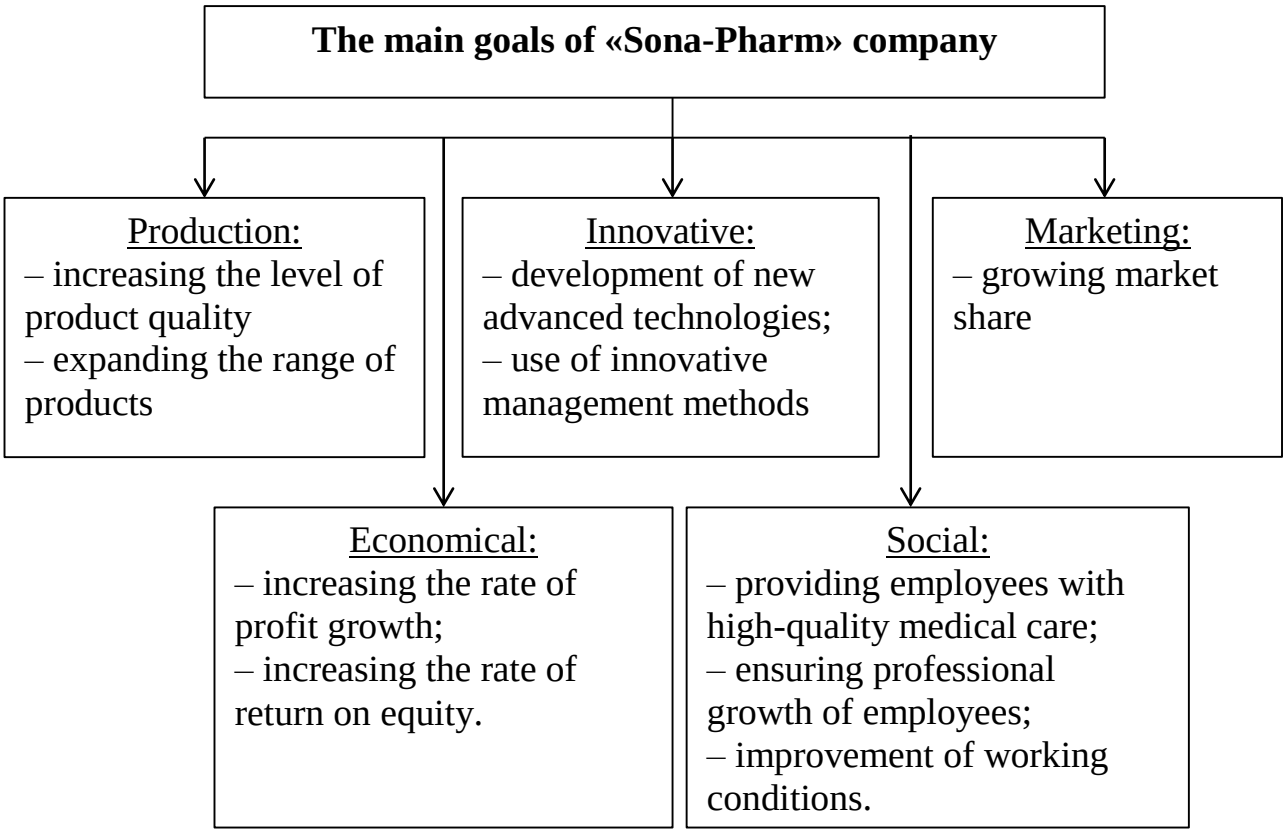

Figure 2.4 – The main goals of «Sona-Pharm» company

To achieve the set goals, the company «Sona-Pharm» sets itself the following tasks:

– constant maintenance and strengthening of reputation;

– use of acquired work experience and development of new advanced technologies in pharmacy;

– ensuring the priority of quality issues in all activities, application of modern quality management methods by the management of the company;

– purposeful professional training and involvement of all workers in the process of ensuring and improving the quality of all company activity processes;

– systematic control and analysis of activities to ensure compliance with the needs and expectations of consumers;

– further development of the quality management system in accordance with the development of the technology of pharmaceutical activity.

2.2 Analysis of the company's financial condition

Indicators of the company's financial condition are a system of indicators used to analyze the financial condition of the enterprise [36]. These indicators are calculations based on company reports and other information used to characterize the company's financial structure.

The financial condition of the company is formed in the process of all its production and economic activities. Therefore, the assessment of the financial condition can be objectively carried out only with the help of a complex, system of indicators that characterize the economic situation of the company in detail and comprehensively.

Indicators for assessing the company's financial condition should be such that all those connected with the company through economic relations can get an answer to the question of how reliable the company is as a partner in financial terms. Based on this, a decision is made about the economic feasibility of continuing or establishing such relations with the enterprise. Each of the partners may have their own criterion of economic feasibility. Therefore, the company's condition assessment indicators should be such that each partner can make a choice based on their own interests.

The financial condition of any company is formed in the process of its relations with suppliers, buyers, shareholders, creditors and other legal entities and individuals. On the other hand, the extent of its economic attractiveness for all these legal entities depends directly on the company.

Therefore, it is necessary to systematically, in detail and dynamically analyze the company's finances, since its economic prospects depend on the improvement of its financial condition.

The initial data for the analysis is the financial reporting presented in Appendixes A, B, C, D [59, 60, 61, 62].

Summary data on the Balance Sheet (Assets) is presented in Table 2.1.

Table 2.1 – Summary data on the Balance Sheet (Assets), thousand UAH

№	Indicators	Code	2019	2020	2021	2022	2023
1	2	3	4	5	6	7	8
1.	I. Non-current assets. Intangible assets	1000	454	614	393	211	83
2.	initial value	1001	1632	1690	1583	1457	954
3.	accumulated depreciation	1002	1178	1076	1190	1246	871
4.	Unfinished capital investments	1005	350	106	1791	293	574
5.	Fixed assets	1010	10722	8995	9975	10990	10810
6.	initial value	1011	16142	15618	17862	19366	19795
7.	wear and tear	1012	5420	6623	7887	8376	8985
8.	All according to section I	1095	11734	9923	12367	11494	11467
9.	II. Current assets. Inventories	1100	42961	49992	36595	90771	95234
10.	Inventories	1101	444	180	685	64	179
11.	Goods	1104	42517	49812	35910	90707	95055
12.	Accounts receivable for products, goods, works, services	1125	120341	145870	245609	34759	35499
13.	Accounts receivable according to calculations	1130	1543	3669	6983	1761	2757
14.	with a budget	1135	734	21	297	2952	2331
15.	Other current receivables	1155	8816	10324	5809	140412	244698
16.	Money and its equivalents	1165	6837	47862	72519	56831	64475
17.	Bank accounts	1167	6837	47862	72519	56831	64475
18.	Expenses of future periods	1170	537	548	766	630	932
19.	All according to section II	1195	181777	258286	368578	328116	445926
20.	Balance	1300	193511	268209	380945	339610	457393

Calculation of absolute and relative changes in asset indicators is presented in Table 2.2.

As we can see Non-current assets has a downward trend in the last years. According to the results of 2020, it decreased by 15.43% compared to 2019. In 2021, we observed an increase in this indicator by 24.63%. According to the results of 2022, it decreased by 7.06%, and according to the results of 2023, it decreased by 0.23%.

Therefore, we can hope for a further increase in the value of this indicator.

Table 2.2 – Calculation of absolute and relative changes in asset indicators

№	Indicators	2019	2020	Absolute change, +/ -	Relative change, %	2021	Absolute change, +/ -	Relative change, %	2022	Absolute change, +/ -	Relative change, %	2023	Absolute change, +/ -	Relative change, %
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	I. Non-current assets. Intangible assets	454	614	160	35,24	393	-221	-35,99	211	-182	-46,31	83	-128	-60,66
2.	initial value	1632	1690	58	3,55	1583	-107	-6,33	1457	-126	-7,96	954	-503	-34,52
3.	accumulated depreciation	1178	1076	-102	-8,66	1190	114	10,59	1246	56	4,71	871	-375	-30,10
4.	Unfinished capital investments	350	106	-244	-69,71	1791	1685	1589,62	293	-1498	-83,64	574	281	95,90
5.	Fixed assets	10722	8995	-1727	-16,11	9975	980	10,89	10990	1015	10,18	10810	-180	-1,64
6.	initial value	16142	15618	-524	-3,25	17862	2244	14,37	19366	1504	8,42	19795	429	2,22
7.	wear and tear	5420	6623	1203	22,20	7887	1264	19,09	8376	489	6,20	8985	609	7,27
8.	All according to section I	11734	9923	-1811	-15,43	12367	2444	24,63	11494	-873	-7,06	11467	-27	-0,23
9.	II. Current assets. Inventories	42961	49992	7031	16,37	36595	-13397	-26,80	90771	54176	148,04	95234	4463	4,92
10.	Production stocks	444	180	-264	-59,46	685	505	280,56	64	-621	-90,66	179	115	179,69
11.	Goods	42517	49812	7295	17,16	35910	-13902	-27,91	90707	54797	152,60	95055	4348	4,79
12.	Accounts receivable for products, goods, works, services	120341	145870	25529	21,21	245609	99739	68,38	34759	-210850	-85,85	35499	740	2,13
13.	Accounts receivable according to calculations	1543	3669	2126	137,78	6983	3314	90,32	1761	-5222	-74,78	2757	996	56,56
14.	with a budget	734	21	-713	-97,14	297	276	1314,29	2952	2655	893,94	2331	-621	-21,04
15.	Other current receivables	8816	10324	1508	17,11	5809	-4515	-43,73	140412	134603	2317,15	244698	104286	74,27
16.	Money and its equivalents	6837	47862	41025	600,04	72519	24657	51,52	56831	-15688	-21,63	64475	7644	13,45
17.	Bank accounts	6837	47862	41025	600,04	72519	24657	51,52	56831	-15688	-21,63	64475	7644	13,45
18.	Expenses of future periods	537	548	11	2,05	766	218	39,78	630	-136	-17,75	932	302	47,94
19.	All according to section II	181777	258286	76509	42,09	368578	110292	42,70	328116	-40462	-10,98	445926	117810	35,90
20.	Balance	193511	268209	74698	38,60	380945	112736	42,03	339610	-41335	-10,85	457393	117783	34,68

The Current assets indicator has a slightly different trend. According to the results of 2020, it increased by 42.09% compared to 2019. In 2021, it increased by another 42.70%. According to the results of 2022, it decreased by 10.98%, and according to the results of 2023, it increased by 35.90%.

We can observe a similar trend in the dynamics of the asset balance. According to the results of 2020, it increased by 38.60% compared to 2019. In 2021, it increased by another 42.03%. According to the results of 2022, the balance decreased by 10.85%, and according to the results of 2023, the balance increased by 34.68%.

Dynamics of changes in the main indicators of assets is shown in Fig. 2.5.

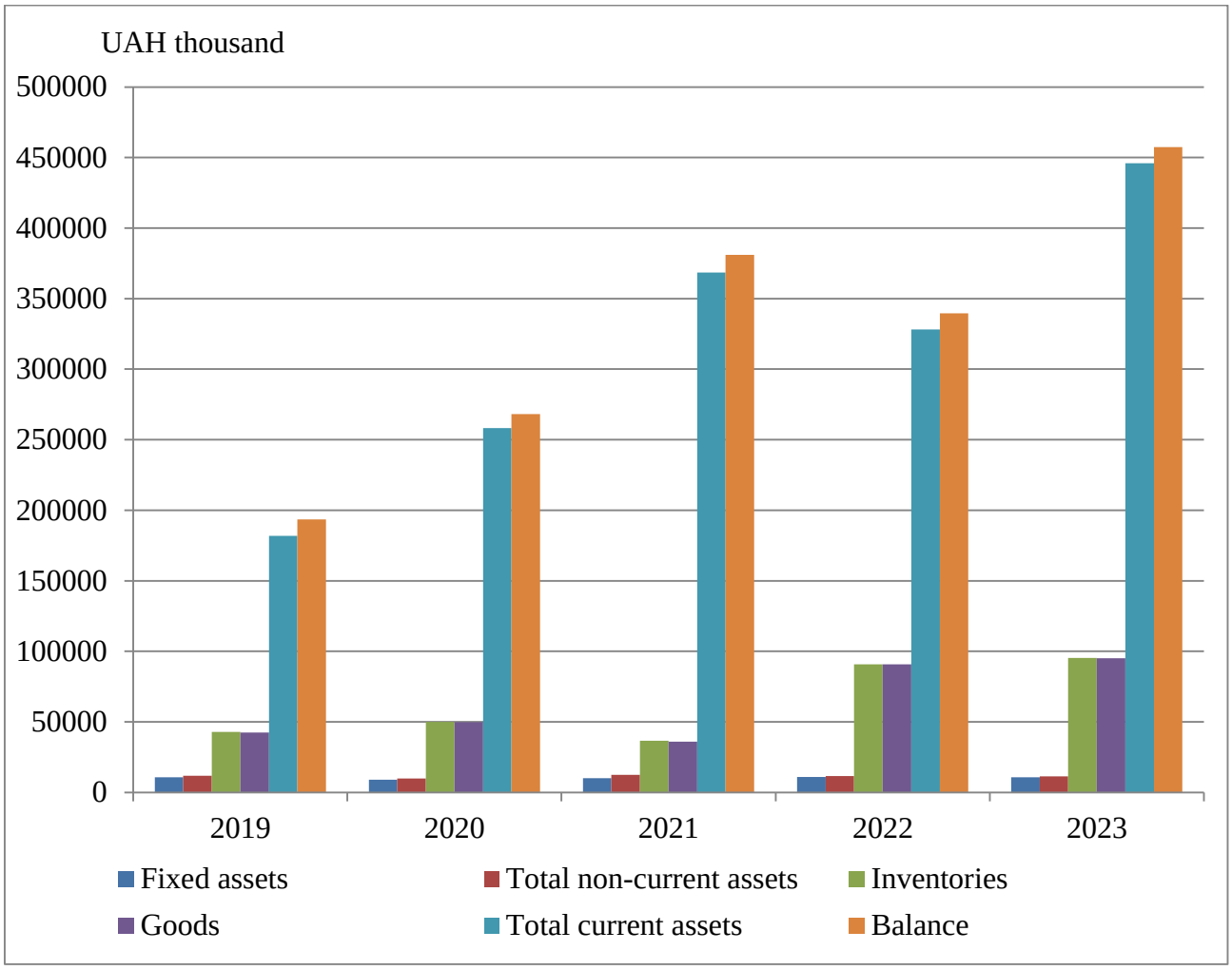

Figure 2.5 – Dynamics of changes in the main indicators of assets

Summary data on the Balance Sheet (Passive) is presented in Table 2.3.

Table 2.3 – Summary data on the Balance Sheet (Passive), thousand UAH

№	Indicators	Code	2019	2020	2021	2022	2023
1	2	3	4	5	6	7	8
1.	I. Equity. Registered capital	1400	508	508	508	508	508
2.	Retained earnings (uncovered loss)	1420	68044	122631	182982	260502	323868
3.	All according to section I	1495	68552	123139	183490	261010	324376
4.	II. Long-term liabilities and security. Deferred tax liabilities	1500	0	0	0	0	0
5.	long-term bank credits	1510	905	454	0	0	0
6.	Other long-term liabilities	1515	1485	922	322	0	446
7.	All according to section II	1595	2390	1376	322	0	446
8.	III. Current liabilities and collateral. Short-term bank loans	1600	0	0	0	0	0
9.	Current accounts payable for: long-term liabilities	1610	1120	1026	592	440	148
10.	goods, works, services	1615	111272	135198	177631	59999	92319
11.	calculations with the budget	1620	182	5533	10752	6251	11019
12.	including income tax	1621	182	4016	9719	6251	11016
13.	payroll calculations	1630	0	17	15	0	85
14.	for advances received	1635	2391	0	0	0	50
15.	Current provisions	1660	1750	1733	1718	2511	6638
16.	Other current commitments	1690	5854	187	6425	9399	22312
17.	All according to section III	1695	122569	143694	197133	78600	132571
18.	Balance	1900	193511	268209	380945	339610	457393

Calculation of absolute and relative changes in passive indicators is presented in Table 2.4.

As we can see, the Equity indicator is constantly increasing. According to the results of 2020, it increased by 79.63% compared to 2019. According to the results of 2021, it increased by another 49.01%. In 2022, the increase in this indicator was 42.25%. And according to the results of 2023, it increased by another 24.28%.

Now let's analyze the dynamics of the Long-term liabilities and security indicator. According to the results of 2020, it decreased by 42.43% compared to 2019. According to the results of 2021, it decreased by another 76.60%.

Table 2.4 – Calculation of absolute and relative changes in passive indicators

№	Indicators	2019	2020	Absolute change, +/ -	Relative change, %	2021	Absolute change, +/ -	Relative change, %	2022	Absolute change, +/ -	Relative change, %	2023	Absolute change, +/ -	Relative change, %
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	I. Equity. Registered capital	508	508	0	0,00	508	0	0,00	508	0	0,00	508	0	0,00
2.	Retained earnings (uncovered loss)	68044	122631	54587	80,22	182982	60351	49,21	260502	77520	42,36	323868	63366	24,32
3.	All according to section I	68552	123139	54587	79,63	183490	60351	49,01	261010	77520	42,25	324376	63366	24,28
4.	II. Long-term liabilities and security. Deferred tax liabilities	0	0	0	–	0	0	–	0	0	–	0	0	–
5.	long-term bank credits	905	454	-451	-49,83	0	-454	-100,00	0	0	–	0	0	–
6.	Other long-term liabilities	1485	922	-563	-37,91	322	-600	-65,08	0	-322	-100,00	446	446	–
7.	All according to section II	2390	1376	-1014	-42,43	322	-1054	-76,60	0	-322	-100,00	446	446	–
8.	III. Current liabilities and collateral. Short-term bank loans	0	0	0	–	0	0	-	0	0	–	0	0	–
9.	Current accounts payable for: long-term liabilities	1120	1026	-94	-8,39	592	-434	-42,30	440	-152	-25,68	148	-292	-66,36
10.	goods, works, services	111272	135198	23926	21,50	177631	42433	31,39	59999	-117632	-66,22	92319	32320	53,87
11.	calculations with the budget	182	5533	5351	2940,11	10752	5219	94,32	6251	-4501	-41,86	11019	4768	76,28
12.	including income tax	182	4016	3834	2106,59	9719	5703	142,01	6251	-3468	-35,68	11016	4765	76,23
13.	payroll calculations	0	17	17	–	15	-2	-11,76	0	-15	-100,00	85	85	–
14.	for advances received	2391	0	-2391	-100,00	0	0	–	0	0	–	50	50	–
15.	Current provisions	1750	1733	-17	-0,97	1718	-15	-0,87	2511	793	46,16	6638	4127	164,36
16.	Other current commitments	5854	187	-5667	-96,81	6425	6238	3335,83	9399	2974	46,29	22312	12913	137,39
17.	All according to section III	122569	143694	21125	17,24	197133	53439	37,19	78600	-118533	-60,13	132571	53971	68,67
18.	Balance	193511	268209	74698	38,60	380945	112736	42,03	339610	-41335	-10,85	457393	117783	34,68

In 2022, this indicator was 0, and according to the results of 2023, we observe an increase in this indicator by UAH 446 thousand.

Now we will analyze the Current liabilities and collateral trend. According to the results of 2020, it increased by 17.24% compared to 2019. According to the results of 2021, it increased by another 37.19%. In 2022, this indicator decreased by 60.13%. And according to the results of 2023, it increased again by 68.67%.

We can observe a similar trend in the liability balance. According to the results of 2020, it increased by 38.60% compared to 2019. According to the results of 2021, it increased by 42.03%. In 2022, this indicator decreased by 10.85%. And according to the results of 2023, it increased again by 34.68%.

Dynamics of changes in the main indicators of passive is shown in Fig. 2.6.

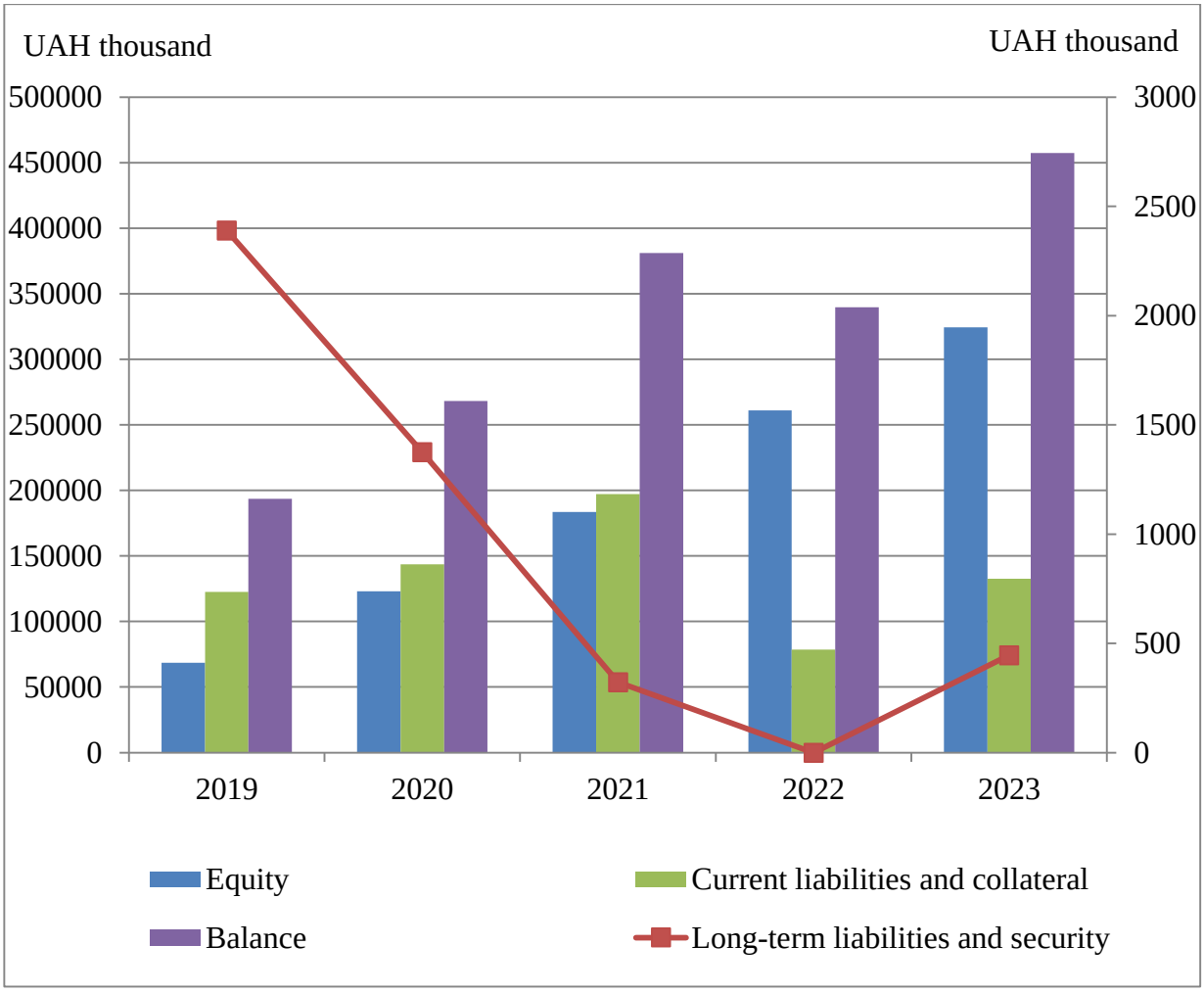

Figure 2.6 – Dynamics of changes in the main indicators of passive

Summary data on financial results of activity is presented in Table 2.5.

Table 2.5 – Summary data on financial results of activity, UAH thousand

№	Indicators	Code	2019	2020	2021	2022	2023
1	2	3	4	5	6	7	8
1.	Net revenue from the sale of products (goods, works, services)	2000	449053	478695	782832	541074	612111
2.	Cost of products sold (goods, works, services)	2050	330196	331616	549883	410749	461467
3.	Gross profit	2090	118857	147079	232949	130325	150644
4.	Other operating income	2120	49057	55477	33784	181456	103190
5.	Administrative expenses	2130	31886	33873	36424	33813	45065
6.	Selling expenses	2150	38067	37516	55786	62593	71024
7.	Other operating expenses	2180	52357	42027	27490	99301	28238
8.	Financial result from operating activities: profit	2190	45604	89140	147033	116074	109507
9.	Other financial income	2220	422	298	324	714	3559
10	Other income	2240	0	0	0	208	0
11	Financial expenses	2250	980	855	529	289	217
12	Other expenses	2270	4	0	0	208	55
13	Financial result before taxation: profit	2290	45042	88583	146828	116499	112794
14	Expenses (income) from income tax	2300	8256	15996	26477	20979	20368
15	Net financial result: profit	2350	36786	72587	120351	95520	92426

Calculation of absolute and relative changes in financial results is presented in Table 2.6.

Let's start with the analysis of Net income from the sale of products. According to the results of 2020, it increased by 6.60% compared to 2019. According to the results of 2021, it increased by another 63.53%. In 2022, this indicator decreased by 30.88%. And according to the results of 2023, it increased again by 13.13%.

Cost of products sold has a similar trend. According to the results of 2020, it increased by 0.43% compared to 2019. According to the results of 2021, it increased by 65.82%. According to the results of 2022, this indicator decreased by 25.30%, and according to the results of 2023, we again observe an increase of 12.35%.

Table 2.6 – Calculation of absolute and relative changes in financial results

№	Indicators	2019	2020	Absolute change, +/ -	Relative change, %	2021	Absolute change, +/ -	Relative change, %	2022	Absolute change, +/ -	Relative change, %	2023	Absolute change, +/ -	Relative change, %
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Net revenue from the sale of products	449053	478695	29642	6,60	782832	304137	63,53	541074	-241758	-30,88	612111	71037	13,13
2.	Cost of products sold	330196	331616	1420	0,43	549883	218267	65,82	410749	-139134	-25,30	461467	50718	12,35
3.	Gross profit	118857	147079	28222	23,74	232949	85870	58,38	130325	-102624	-44,05	150644	20319	15,59
4.	Other operating income	49057	55477	6420	13,09	33784	-21693	-39,10	181456	147672	437,11	103190	-78266	-43,13
5.	Administrative expenses	31886	33873	1987	6,23	36424	2551	7,53	33813	-2611	-7,17	45065	11252	33,28
6.	Selling expenses	38067	37516	-551	-1,45	55786	18270	48,70	62593	6807	12,20	71024	8431	13,47
7.	Other operating expenses	52357	42027	-10330	-19,73	27490	-14537	-34,59	99301	71811	261,23	28238	-71063	-71,56
8.	Financial result from operating activities	45604	89140	43536	95,47	147033	57893	64,95	116074	-30959	-21,06	109507	-6567	-5,66
9.	Other financial income	422	298	-124	-29,38	324	26	8,72	714	390	120,37	3559	2845	398,46
10	Other income	0	0	0	–	0	0	–	208	208	–	0	-208	-100,00
11	Financial expenses	980	855	-125	-12,76	529	-326	-38,13	289	-240	-45,37	217	-72	-24,91
12	Other expenses	4	0	-4	-100,00	0	0	–	208	208	–	55	-153	-73,56
13	Financial result before taxation	45042	88583	43541	96,67	146828	58245	65,75	116499	-30329	-20,66	112794	-3705	-3,18
14	Expenses from income tax	8256	15996	7740	93,75	26477	10481	65,52	20979	-5498	-20,77	20368	-611	-2,91
15	Net financial result	36786	72587	35801	97,32	120351	47764	65,80	95520	-24831	-20,63	92426	-3094	-3,24

The same trend is observed in the indicator of gross profit. But the net financial result has a slightly different trend. According to the results of 2020, it increased by 97.32% compared to 2019. According to the results of 2021, it increased by 65.80%. According to the results of 2022, this indicator decreased by 20.63. Also, we observe a decrease of this indicator by 3.24% according to the results of 2023. Although the profit itself remains positive.

Dynamics of changes in the main financial results is shown in Fig. 2.7.

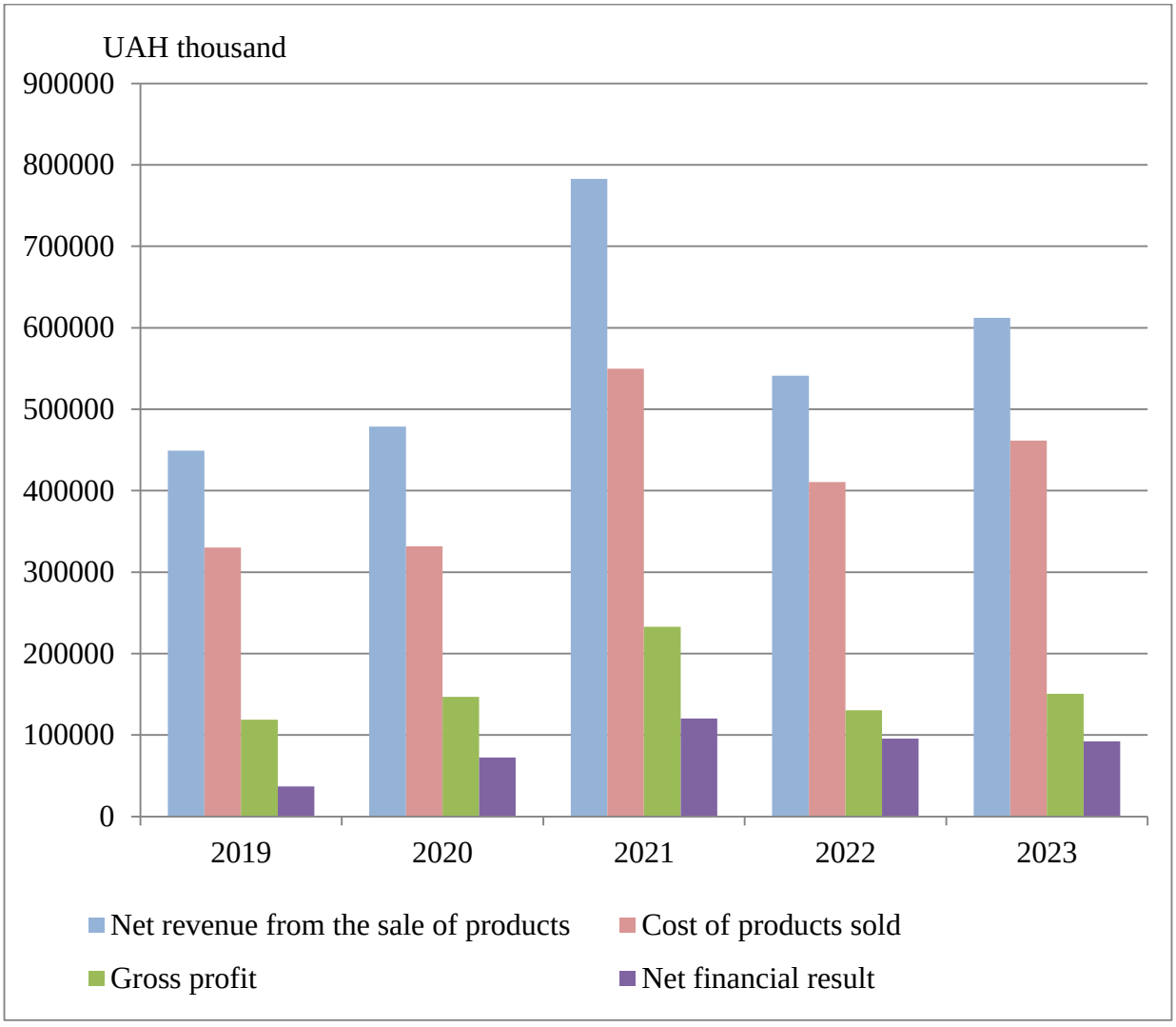

Figure 2.7 – Dynamics of changes in the main financial results

Summary data on the elements of operating costs is presented in Table 2.7.

Dynamics of changes in the operating costs is shown in Fig. 2.8.

Table 2.7 – Summary data on the elements of operating costs, UAH thousand

№	Indicators	Code	2019	2020	2021	2022	2023
1	2	3	4	5	6	7	8
1	Material costs	2500	3835	2164	2970	3720	1747
2	Salary expenses	2505	32611	33810	35524	33030	41993
3	Deductions for social events	2510	3644	4007	4354	4852	5611
4	Amortization	2515	2414	2388	2343	3045	1771
5	Other operating expenses	2520	79806	71047	74509	151060	93205
6	Total	2550	122310	113416	119700	195707	144327

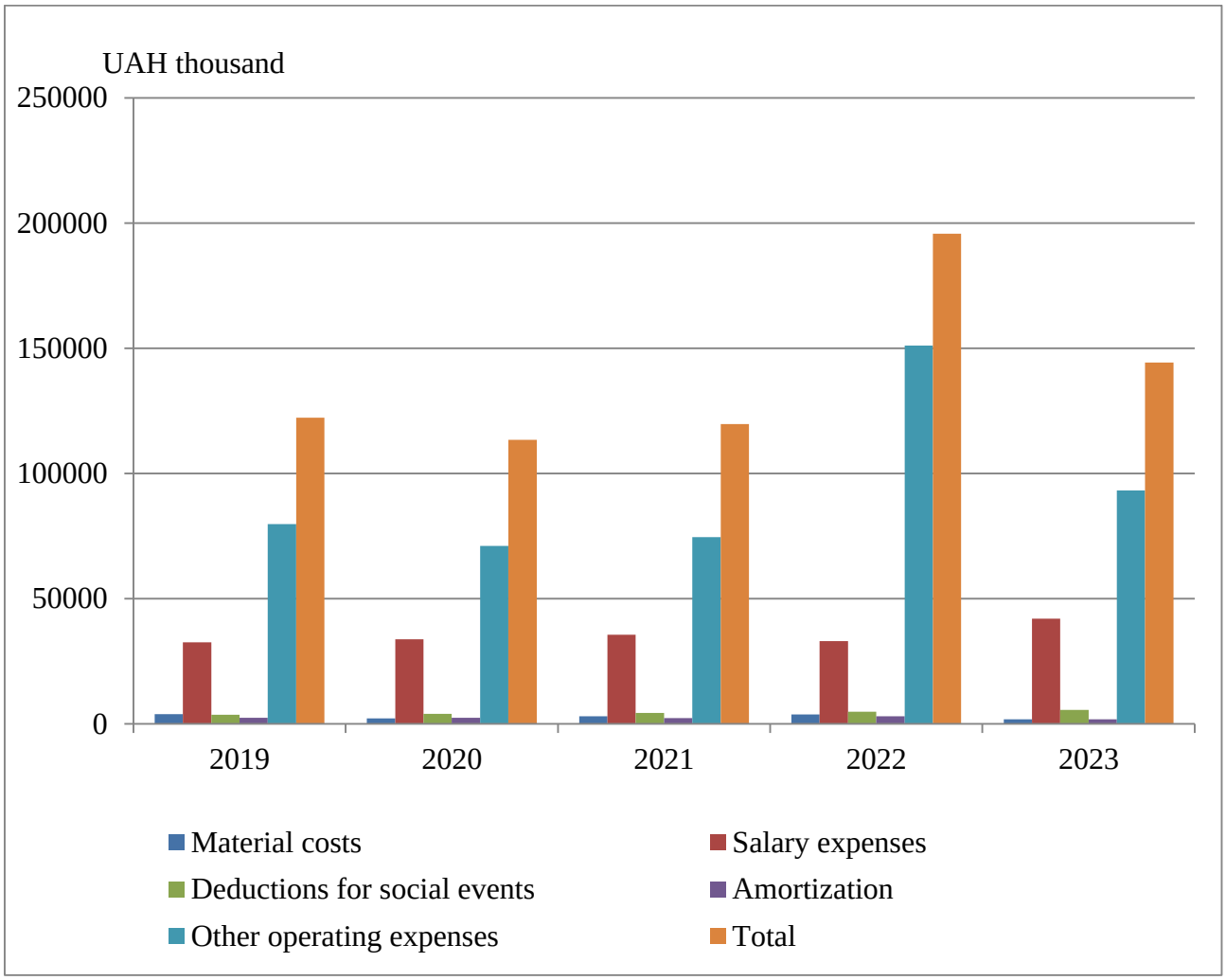

Figure 2.8 – Dynamics of changes in the operating costs

As we can see, the biggest increase in operating costs was observed in 2022.

Calculation of absolute and relative changes in operating costs is presented in Table 2.8.

Table 2.8 – Calculation of absolute and relative changes in operating costs

№	Indicators	2019	2020	Absolute change, +/ -	Relative change, %	2021	Absolute change, +/ -	Relative change, %	2022	Absolute change, +/ -	Relative change, %	2023	Absolute change, +/ -	Relative change, %
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Material costs	3835	2164	-1671	-43,57	2970	806	37,25	3720	750	25,25	1747	-1973	-53,04
2.	Salary expenses	32611	33810	1199	3,68	35524	1714	5,07	33030	-2494	-7,02	41993	8963	27,14
3.	Deductions for social events	3644	4007	363	9,96	4354	347	8,66	4852	498	11,44	5611	759	15,64
4.	Amortization	2414	2388	-26	-1,08	2343	-45	-1,88	3045	702	29,96	1771	-1274	-41,84
5.	Other operating expenses	79806	71047	-8759	-10,98	74509	3462	4,87	151060	76551	102,74	93205	-57855	-38,30
6.	Total	122310	113416	-8894	-7,27	119700	6284	5,54	195707	76007	63,50	144327	-51380	-26,25

According to the results of 2023, we have a significant decrease in almost all components of operating costs. Total operating expenses decreased by 26.25%.

In general, operating costs tend not to fluctuate significantly and are more or less stable.

Cost structure in total operating costs is shown in Fig. 2.9.

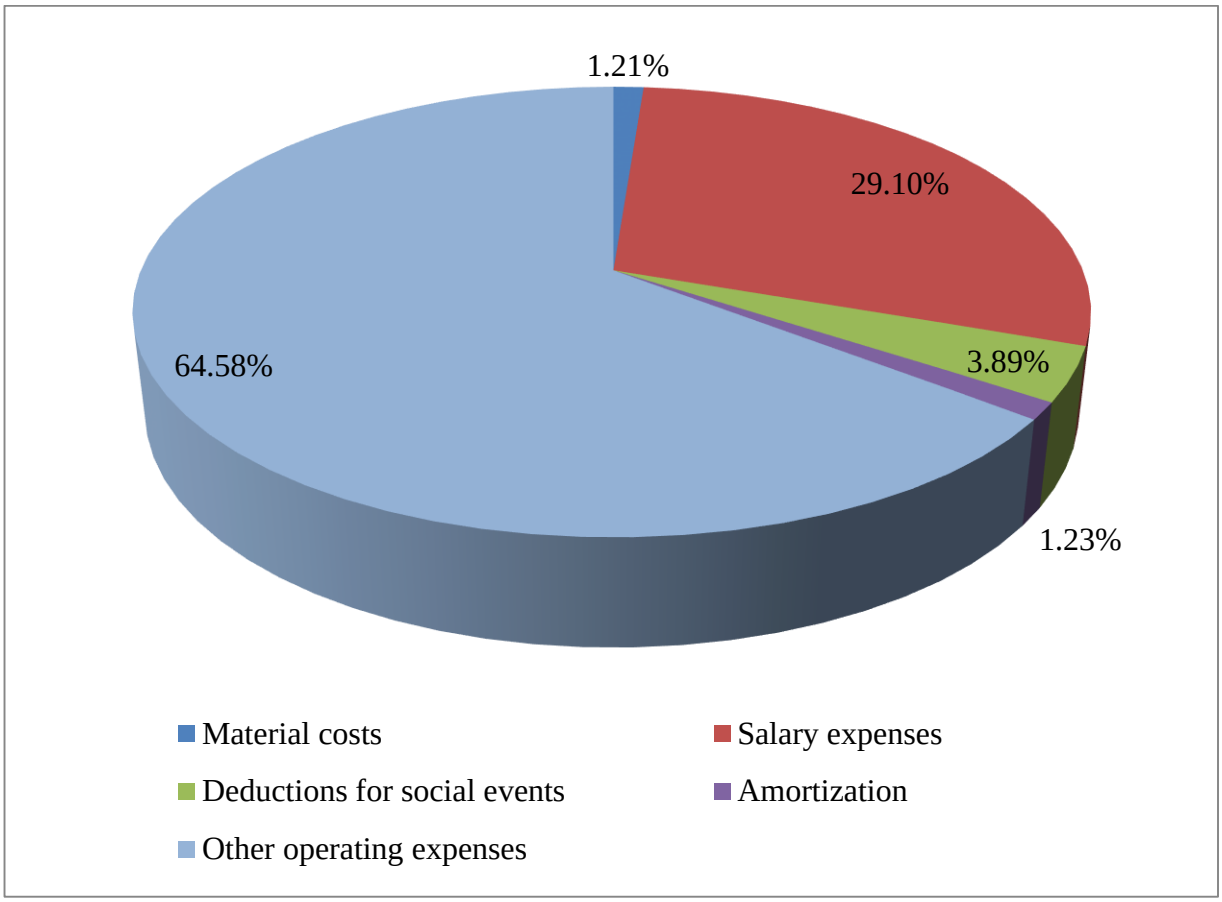

Figure 2.9 – Cost structure in total operating costs

We can see that in the overall structure of operating expenses, the main share is made up of other operating expenses (64.58%). In second place are the expenses for salaries (29.10%). All other components are less than 4%.

Thus, we can conclude that the company is actively developing, is financially stable, despite the crisis situation in the country. And therefore, it can make investments in improving the distribution management for pharmaceutical products.

2.3 Study of the state of distribution management for pharmaceutical products

Before the beginning of the war, the Ukrainian pharmaceutical market had all the necessary nomenclature of medicines and their stocks. In December 2021, all distribution channels were full. Consumption during January and February 2020 was very high, and network stocks were actively replenished by manufacturers. When the war began, there was a need for intensive care drugs for hospitals. We observed a shortage of some medicines.

The general situation in the field of drug distribution could not fail to be reflected in the following trends that were associated with military actions [42]:

– closure of part of the pharmacy establishments (destruction, evacuation of employees to safer regions);

– lack of drivers who delivered goods (many of them went to the Armed Forces or do volunteer work);

– frenetic demand from volunteers who buy medicines for Armed Forces (which are then deposited in the warehouses of military units) and from patients (they buy additional supplies for a «dark day»). This causes an outflow of goods from a limited number of pharmacies, which cannot always be replenished quickly;

– uneven geographical distribution of the pharmacy segment – shifting demand and consumption even more to the west of Ukraine due to the relocation of a large number of people;

– unfortunately, certain positions of foreign-made medicinal products have disappeared from the market, instead, Ukraine receives many medicinal products that are not registered in Ukraine as humanitarian aid.

The large-scale phase of the war stopped the growth of the Ukrainian pharmaceutical market, which was growing by 10-12% every year. According to Proxima Research, the total volume of sales in monetary terms in 2022 has decreased by more than 5%.

In the retail segment, even in January and February, the consumption of medicines grew in hryvnias by 31 and 45%, respectively, and in March it decreased by 11%. Due to inflation, as of the beginning of October, the rate of decline in this indicator slowed down to 9% compared to last year. On the other hand, in natural terms, sales volumes decreased by 30% [43].

The main problems of the pharmaceutical market caused by military actions can be formulated as follows:

– infrastructure losses (destroyed or blocked production facilities, warehouses, raw materials, etc.);

– complex and expensive logistics (rising fuel prices, destruction of usual supply chains);

– decrease in solvent demand due to lack of money among customers (inflation since the beginning of 2022 – 21.8%, forecast for 2023 – 30%), loss of income by citizens by 30-40%;

– increase in the price of raw materials (exchange rate change, increase in energy prices);

– foreign humanitarian medical aid (about 8.5 thousand tons worth over UAH 12 billion in 8 months), reduction of hospital purchases (from 18% to 10.5%);

– accounts receivable (overdue payments from distributors and pharmacies, suppliers do not work without prepayment);

– fewer consumers (according to UN data, about 6 million Ukrainians are abroad, that is about 15% of customers);

– lack of personnel (migration of the population, men at the front, pharmacy chains are experiencing personnel hunger).

Change in demand for medicines. In the first days of the war, the demand for medicines more than doubled: in the conditions of uncertainty, people formed a stockpile (in particular, patients with chronic diseases), and volunteers bought medicines on request. From the beginning of March, the sales volume started to decrease and from the middle of the month they became negative.

If we talk about the categories of drugs, then the demand increased for painkillers and neurological drugs, cardioprotectors, anti-inflammatory and anti-rheumatic drugs. The consumption of drugs for the treatment of chronic diseases remains at a stable level. The demand for nutritional supplements, vitamins, prophylactics, and anti-covid drugs has decreased significantly. As a result, overstock was formed in pharmacies. Ukrainians began to save, to buy only the most necessary.

After February 24, 2022, there was a shift towards the consumption of domestic medicines, because they have a lower price than imported analogues. According to Proxima Research, currently in packaging, 65% of the market is occupied by Ukrainian companies, which produce 61% of medicines from the National List. In monetary terms, foreign manufacturers are leading (64%), because their products are presented in a more expensive segment [42].

Currently, there are more than 100 drug manufacturing plants operating in Ukraine. Despite the war, they not only survived, but also increased pre-war volumes and help the army, hospitals and volunteers. For example, «Farmak» and «Darnytsia», whose enterprises are located in Kyiv, resumed the work of workshops by 100%.

«Farmak» suspended its work since February 24, but due to the destruction by the occupiers of the central warehouse in the Kyiv region, where all finished products and packaging worth UAH 1.5 billion were stored, the company needed to restore the assortment. That is why the enterprise started working already on March 8-9. The same amount of products was produced as last year, when there was no war.

The production of «Darnytsia» did not stop even in the first days of the war (the company prepared a stock of raw materials back in January-February). In March, the enterprise managed to produce medicines by 60% of the pre-war level, and in April – by 100%. The key role in the fact that the company continued to work was played by the automation and digitalization processes initiated by «Darnitsa» long before the war. Thanks to this, office workers were quickly transferred to remote work, as a significant number of projects work automatically and in a digital format. Medicines files are stored in the «cloud», the SMART HCM personnel management

system using artificial intelligence is used, a modern reporting visualization system and an electronic document management system were implemented, and the warehouse was fully robotized since 2007 [42].

«Arterium» produces products at the capacities of the «Kyivmedpreparat» and «Halychpharm» plants. The factory in Kyiv suspended work until mid-March for the safety of workers, but workshops in Lviv continued to work. At the end of March, «Arterium» evacuated part of the products produced before the start of the war from a warehouse near Kyiv to the west of the country, where it found a warehouse.

The international company «Teva» does not have production facilities in Ukraine, but imports more than 200 names of medicines from EU countries and Israel. Because of the war, until March 15, the mode of operation of their warehouse in the Kyiv region was slightly adjusted, in the first weeks, an alternative warehouse in the west of the country was used and logistical routes were changed. As for the volume of imports into Ukraine, the company plans to fulfill the annual plan approved even before the war.

One of the main problems of the pharmaceutical market remains the establishment of logistics, problems with which began during the coronavirus pandemic in 2020, and after the suspension of air and sea transportation from February 2022 came to the fore. To ensure uninterrupted supply in the first months of the invasion, manufacturers helped distributors find truck drivers and vehicles that met the technical requirements for drug transportation. This is especially critical in the field of export.

With the beginning of the war, suppliers revised the terms of work with Ukrainian companies, because international insurers refused to work under contracts for supply to Ukraine, citing force majeure. In order to avoid risk, foreign partners continued cooperation with domestic businesses only on the condition of prepayment.

Exports became more difficult and decreased. Over the past five years, the export of medicines from Ukraine increased by 64%, but the war stopped this growth. The volume of exports decreased due to logistical difficulties. «Darnytsia», as before, exports to 14 countries of the world: Europe, the Middle East and East Asia. Before

the war, the company's annual export growth was approximately 30%. Before the war, «Farmak» sold 25-30% of its manufactured products to more than 50 countries. After the loss of the warehouse in March and until June, the company gave almost all production capacity to the needs of the domestic market. Therefore, there was an expected drop in exports: in January-August compared to the same period last year, it decreased by 11%. Now «Farmak» sells products to more than 35 countries of the world [43].

As for producer prices, producers call the average percentage increase for products reluctant and emphasize that this figure is lower than the general level of inflation in the country. Indeed, according to Proxima Research, for January-August 2022, the overall inflation rate in the pharmaceutical market is 15% compared to the same period last year, while the overall inflation index rose to 19.5% over the period. In the first months, pharmaceutical companies kept prices at the pre-war level and began to raise them only from July to August after the NBU adjusted the exchange rate.

Undoubtedly, the distributors were forced to reformat the work. The three largest players – the companies «BaDM», «Optima-Pharm» and «Venta LTD» – share almost 92% of the volume of supplies to pharmacies. According to Proxima Research, in July 2022, «Optima-Pharm's» share was 45.5%, «BaDM's» was 39.3%, and «Venta LTD's» was 6.8%. The main difficulties for distributors were the blocking and loss of warehouses due to hostilities, the lack of employees, problems with logistics, large receivables and the closure or destruction of a significant number of pharmacies (19%).

Thus, at the beginning of the war, the warehouse near Kyiv was destroyed at the «BaDM» company. The regional warehouse of «Venta LTD» in Gostomel also found itself in the center of hostilities, was looted and partially destroyed. As of September 1, 2022, the company's sales for the same period in 2021 fell by 30%, the volume of supplies decreased by 35%, and the number of customers decreased by 25% [42].

According to «Venta LTD», with the beginning of the war, due to consumer inflation, the prices of pharmaceuticals increased by 25% on average from February to September. That is, there was an increase in prices from 10 to 50%. The main problem in the company is called receivables. After the end of hostilities, it is planned to audit and determine losses in relation to unreimbursed receivables and write-offs according to international financial reporting standards.

It affects the work of distributors and the reduction of the retail pharmacy network – before the war, there were about 21,000 pharmacies in Ukraine. According to Proxima Research, 19% of them closed due to the destruction of outlets, the occupation of the territories where they were located, and the migration of workers (pharmacists left for safe regions) [42].

So, before the invasion, there were about 1,100 pharmacies in the Low Price Pharmacy network, of which only 970 are working now, the other 130 have been closed. The network «Pharmacy 9-1-1» was seriously affected, 110 of its establishments were destroyed by shelling, 133 were robbed. According to the website of the pharmacy «Bud′te zdorovi», about 100 establishments are not working due to the occupation. «Apteka dobroho dnya» lost 47 pharmacies in the territory not controlled by Ukraine. Most of the drug sales points were closed in Luhansk, Donetsk, Kherson, Zaporizhzhia, Mykolaiv, Kharkiv, Sumy, Chernihiv and Kyiv regions.

If we count only the goods from the lost pharmacies, the amount of losses is more than UAH 200 million. This does not include equipment, furniture, premises, etc. During the 7 months of the war, the Low Price Pharmacy network lost approximately 20% of its business in terms of turnover. It is worth noting that at the end of 2021, this network was the market leader in terms of turnover amounting to over UAH 16.5 billion [43].

In addition to the loss of pharmacies, representatives of the retail segment cite broken logistics, a lack of staff and accounts receivable from distributors, working with them on a prepaid basis, as well as problems with supply to the frontline areas as

the main problems. The networks, which have their own logistics, used their own capacities during the war as needed.

There are also unresolved issues with compensation for lost products and excess stock. The biggest problem is compensation for destroyed goods and redistribution of demand. Manufacturers often refuse to participate in compensation for destroyed goods to retail chains. Pharmacy chains found themselves in a situation where they are not compensated for joint losses for destroyed goods and do not resolve the issue of overstocks.

According to the representatives of the networks, retail prices for medicines were not increased – the markup remained at the pre-war level. The increase in the price of medicines occurs due to the increase in the cost of logistics and raw materials of manufacturers.

Therefore, the pharmaceutical market continues to work in crisis conditions, providing the army and the civilian population with medicines, establishing new complex logistics.

Chapter 2 summary

In the chapter we have studied of the state of distribution management for pharmaceutical products of the «Sona-Pharm» company.

It was noted that «Sona-Pharm» is an international company that has brought together professionals in the pharmaceutical industry. The company «Sona-Pharm» provides the needs of modern medicine and actively develops sales of drugs in such areas as reproductive medicine, oncology, neurology and endocrinology

Own external service, drug registration department, quality control department and transparent relationships with manufacturers, distributors and medical institutions, as well as a deep understanding of market needs, legislation and national

characteristics, enable the company to respond in a timely manner to constant changes and market requirements.

Analysis of the company's financial condition have shown that company is actively developing, is financially stable, despite the crisis situation in the country.

In the conditions of martial law, the conditions of activity of distributors have undergone significant changes due to the loss of infrastructure, goods and vehicles, lack of personnel; disruption of logistics, decrease in solvent demand and decrease in the number of customers; rising prices of fuel, raw materials, energy carriers. There have been certain shifts in the structure of drug consumption, a reduction in hospital purchases. The main difficulties for distributors have been the blocking and loss of warehouses due to hostilities, shortage of employees, problems with logistics, high receivables and the closure or destruction of a significant number of pharmacies.

CHAPTER 3
DEVELOPMENT OF PROJECT PROPOSALS FOR IMPROVING DISTRIBUTION MANAGEMENT FOR «SONA-PHARM» COMPANY'S PHARMACEUTICAL PRODUCTS

3.1 Identification of possible ways to improve the distribution management of pharmaceutical products

On the basis of the conducted research, it was found that the modern pharmaceutical market of Ukraine has a system of interconnected and interdependent entities and objects for the production, distribution, consumption of pharmaceutical goods, as well as the provision of pharmaceutical services. Legislative, economic, marketing, technological, social and psychological influences can be singled out among the most important factors influencing these processes.

We believe that today, building an effective distribution network is not just a competitive advantage, but the main task for any participant in the supply chain of pharmaceutical products. After all, it is almost impossible to imagine a large pharmaceutical company without a network of regional offices. At the same time, drug manufacturers understand that without a well-established regular supply system, their product will not reach retail outlets, and therefore the final consumer. At the same time, it is worth noting that modern supply chains are becoming increasingly complex, with numerous key links inside and outside the company (Fig. 3.1).

Given that supply chain issues have affected many industries in recent years, including the pharmaceutical industry, developing ways to address supply chain issues is important. Problems with this process can negatively impact patient safety and the healthcare industry as a whole. Understanding the key stages of pharmaceutical distribution management can help pharmaceutical companies create effective solutions.

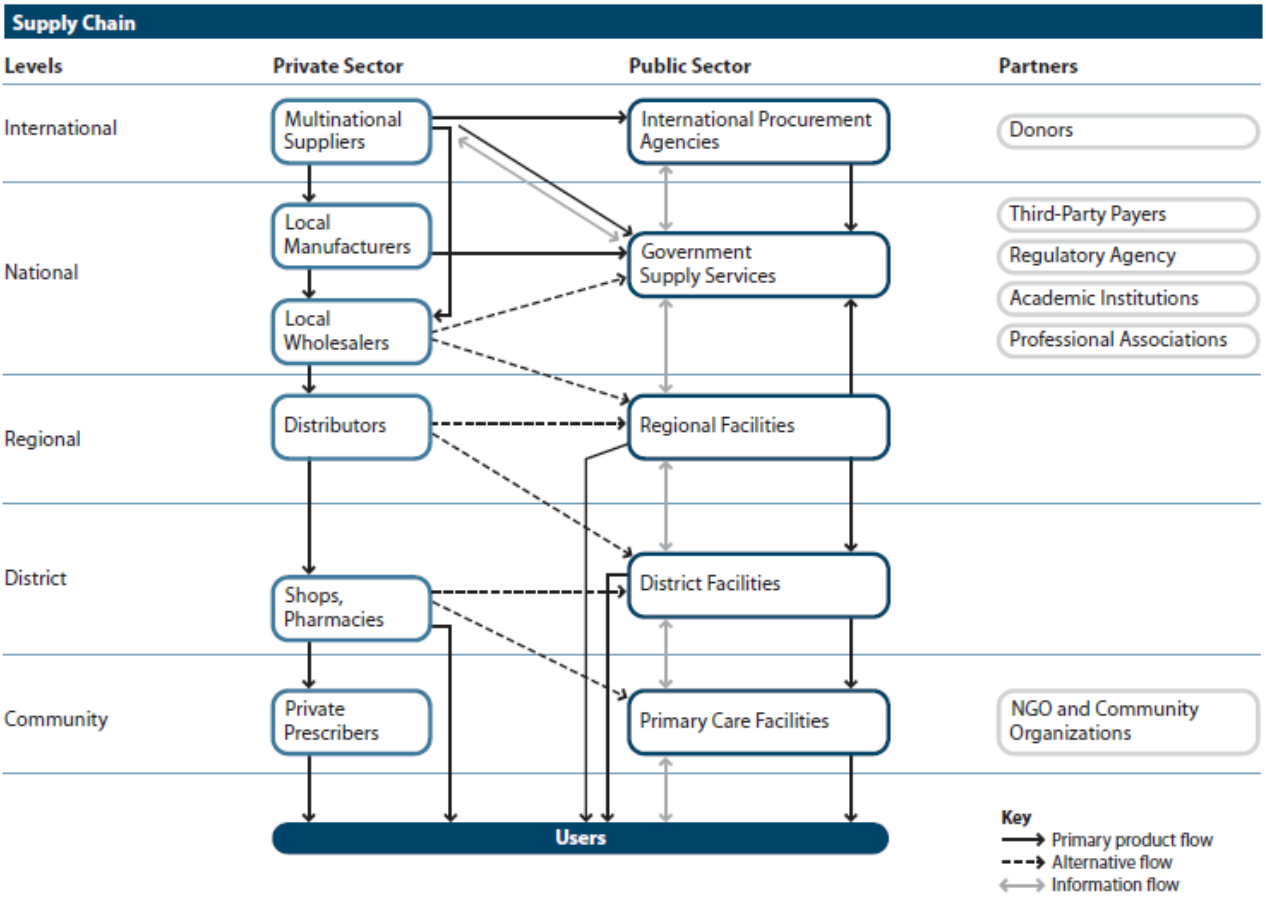

Figure 3.1 – Modern supply chain of pharmaceutical products [21]

The analysis of approaches to improving the management of the distribution of pharmaceutical products revealed three main directions (Fig. 3.2).

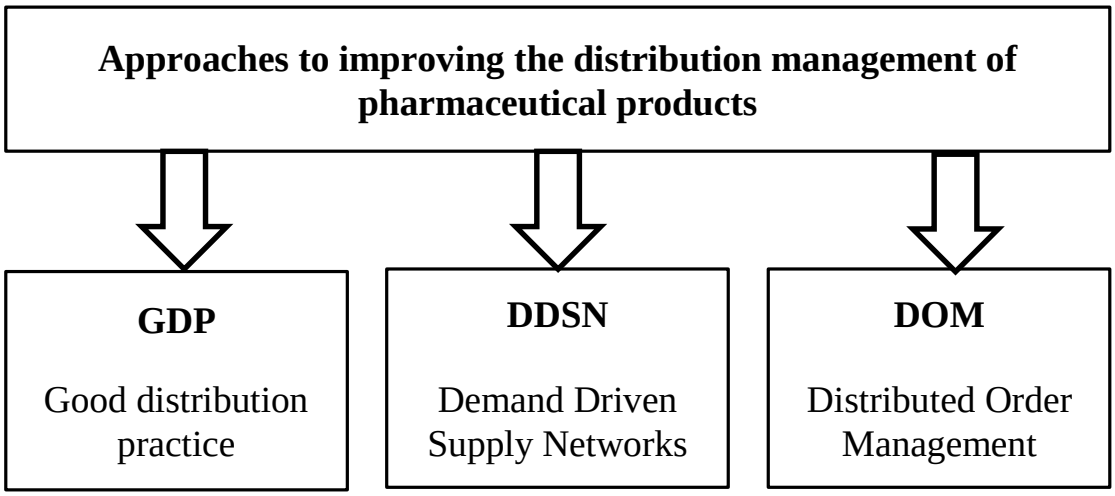

Figure 3.2 – Approaches to improving the distribution management of pharmaceutical products

Let's study them in more detail.

1. Good distribution practice (GDP) describes the minimum standards that a wholesale distributor must meet to ensure that the quality and integrity of medicines or pharmaceutical products is maintained throughout the supply chain [8].

As noted above, the task of supporting GDP is complicated by the modern global pharmaceutical supply chain, which includes manufacturers, distributors, third-party logistics providers, pharmacies, hospitals, and clinics (Fig. 3.3).

Due to numerous factors, which include multiple modes of transport, different climate zones and seasonal changes, as well as other environmental factors, pharmaceutical products can face risks, making GDP important to maintain its quality. In addition to proper documentation, storage, and transportation, GDP includes certain strategies to control perceived risks.

GDP also provides standards that help ensure the quality of pharmaceutical products throughout their life cycle, including distribution from raw material supply to manufacturing and healthcare delivery. Such standards help to increase the sustainability of supply chains around the world.

Unfortunately, the more complex the distribution model, the greater the probability of disruptions in the entire supply chain. There are situations where a drug intended to be shipped from one country to another was actually sent to several different countries around the world before it was finally delivered to the patient. Such cases demonstrate the need for constant monitoring and interaction of stakeholders to ensure GDP and timely access to pharmaceutical products.

Because the distribution process involves many stakeholders, efforts to keep potentially falsified pharmaceutical products out of the supply chain require coordination and collaboration both internally within companies and externally with third parties, including governments and regulators.

This included a focus on pharmaceutical storage and transport practices related to quality management, training, capacity building, monitoring, continuous improvement and enforcement.

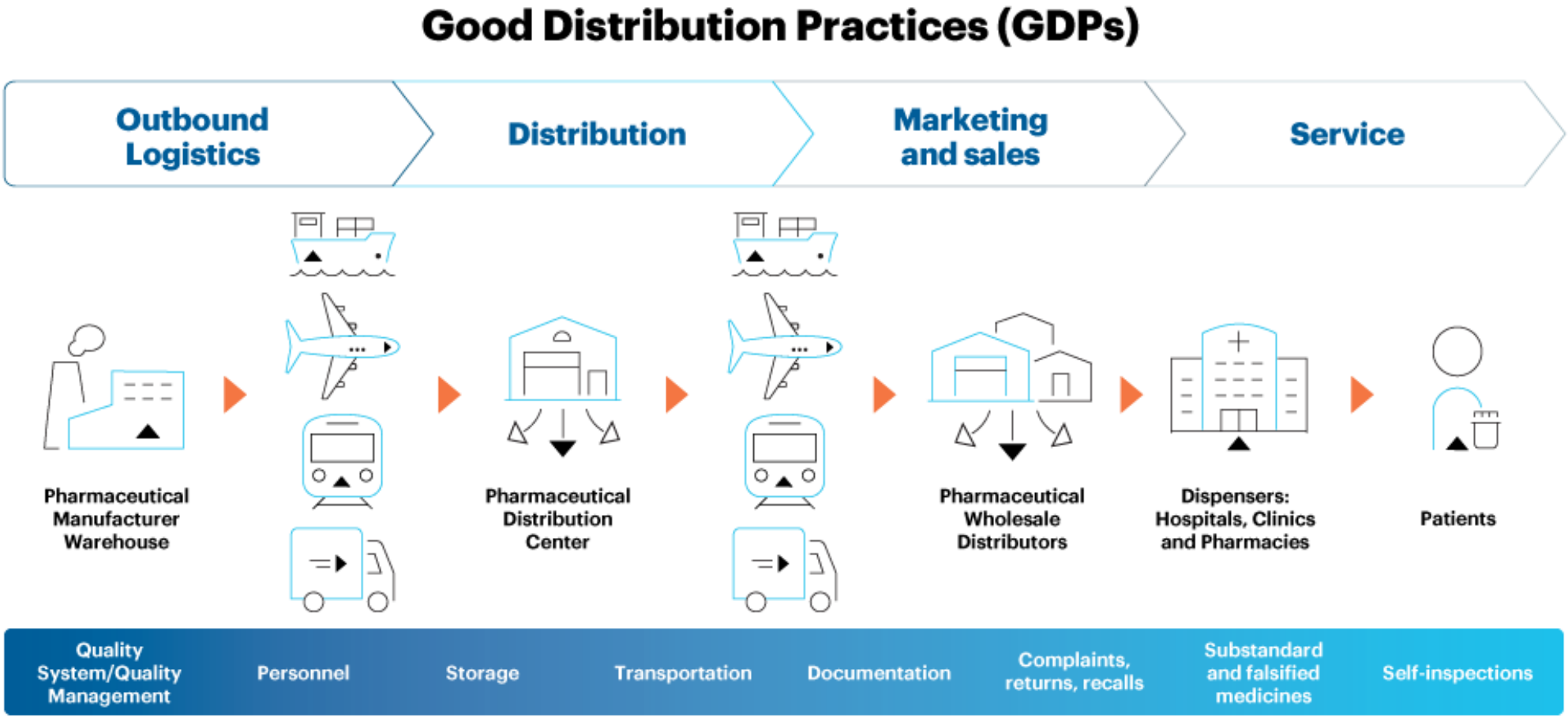

Figure 3.3 – Key touchpoints, processes and risks of the pharmaceutical supply chain that require GDP [9]

Through the implementation of GDP regulations, supply chain security methodologies and a focus on patient safety, there is an opportunity to help protect end consumers.

It is also necessary to emphasize the importance of creating a culture of continuous improvement throughout the pharmaceutical supply chain. GDPs, which are implemented through the quality management system of each pharmaceutical company, ensure that companies meet minimum standards while continuously improving their practices to improve efficiency. The rapid development of complex pharmaceutical products with specific environmental requirements creates new challenges, making continuous improvement and adaptation to new commercial and legislative requirements extremely important to the company's success. Identifying adverse events, analyzing signals and trends, investigating violations, and evaluating how to strengthen controls as pharmaceutical products move through the distribution chain can help companies, their partners, and regulators maintain pharmaceutical product quality and supply chain sustainability.

2. Demand Driven Supply Networks (DDSN).

The next actual direction of improving the efficiency of distribution management of pharmaceutical products is the creation of Demand Driven Supply Networks. Such networks are characterized by the integration of demand data and processes within the supply chain in order to achieve a balance between the level of the company's costs and the level of its revenues.

Demand Driven Supply Networks is a system that uses various e-commerce offerings, technologies and processes to measure demand in real time [38]. Unlike traditional supply chains that rely on demand forecasting and historical trends to estimate demand forecasts, DDSCs can respond almost instantaneously to changes in demand across the entire supply chain, including customers, employees and suppliers.

DDSC is built on the principle that companies can work together to collect accurate demand data and reduce information delays. This can help them increase the efficiency of their operations and maintain better control over the stocks of their products, including pharmaceuticals.

Using DDSC typically requires pharmaceutical companies and their partners to use various technologies, e-commerce platforms and data systems to track current demand information. Most mainstream supply chains use supply and demand forecasts to inform their operations. They can factor supply factors such as manufacturing, transportation, and delivery into their calculations. Thanks to DDSC, pharmaceutical companies can change the way they do things. Instead of looking at supply from a production perspective, they look primarily at consumer demand.

It is important that DDSCs are adaptable as they can change according to sudden fluctuations in the market. However, successfully matching production with demand in real time can allow companies to improve efficiency and reduce operating costs. The main elements of DDSC are the following (Table 3.1).

Table 3.1 – Key elements of a Demand-Driven Supply Chain [based on 32, 38]

№	Key elements	Their specificity
1	2	3
1	Demand	Demand-driven supply chains rely on demand because they use demand data to adjust processes and output.
2	Technologies	Technological advances have allowed some businesses to measure demand more quickly and efficiently. E-commerce sites often track consumer information to learn about habits and preferences. Access to additional data tracking systems and technologies can help businesses assess changes in demand faster than they could with traditional processes. Some companies even work together to monitor changes in the market and adjust their operations in time.
3	Management	DDSC can help reduce a company's overhead costs and meet customer demand more efficiently. For those with access to reliable, real-time data, DDSC can help solve supply chain management challenges.

By reducing the time it takes to receive information about changes in demand, pharmaceutical companies can respond more quickly to market fluctuations and adjust their operations accordingly.

The main advantages that the implementation of the DDSC system can bring to pharmaceutical companies are presented in in Table 3.2.

Table 3.2 – Main advantages of using DDSC [based on 32, 38]

№	Advantages	Their characteristics
1	2	3
1	Increasing the efficiency of the company's activities	With access to timely information, businesses can make informed decisions about their production processes. By leveraging enhanced access to communication and information at various points in the supply chain process, companies can use their data to drive informed business decisions. This can improve the efficiency of their operations and enable supply chain managers to implement deliberate strategies that are directly related to consumer demand.
2	Improvement of inventory control	Timely knowledge of spikes and fluctuations in demand can allow companies to keep only the inventory they need. This can help them reduce their working capital, which can free up cash flow for other investments or activities.
3	Improving the flexibility of customer service flexibility	Being flexible and aligned in the supply chain process is generally important for an efficient demand-driven supply chain. Companies that can quickly respond to changes in demand and new information often benefit the most from this style of system. Many consumers have high expectations of how quickly they will receive their products and services, especially when they order goods online. Companies that can successfully respond to the needs of their customers often do better than those that do not factor demand into their planning efforts.
4	Increasing customer satisfaction	For many businesses, demand awareness can help companies maintain inventory of critical items and meet needs quickly. This can increase their sales, which improves the company's overall profitability. Customers who can find and get what they need in a timely manner are often more satisfied. Companies that implement these processes often find increased efficiency in many other areas of business as well.

Thus, the optimal distribution system of a pharmaceutical company should be directed to the effective implementation of the strategy of achieving the optimal level of service to end consumers. For this, some companies consider it necessary to accumulate stocks in warehouses in the immediate vicinity of consumers for more efficient direct delivery of goods. Other companies consider it necessary to bet on long-term delivery of goods directly from production with minimal costs.

The design of effective distribution networks should allow to calculate the optimal distribution scheme for specific categories of goods in specific market conditions in specific territories, taking into account the specific strategy of the pharmaceutical company at minimum costs.

3. Distributed Order Management (DOM).

In today's customer-driven market, consumers want to be able to buy products where and when they want. And pharmaceutical products are no exception. Of course, e-commerce makes it possible to carry out this process with maximum comfort and minimal effort. However, very often consumers are faced with a situation where not all selected products are available online, although they may be available in other pharmacies of the same chain.

As e-commerce becomes dominant, companies simply need to focus on multi-channel fulfillment and distributed order management. The experience when a customer wanted to order a necessary product that was not available in the e-commerce center, and the system simply reported that it was out of stock, is no longer good enough for consumers.

With the evolution of e-commerce, customers now expect all their needs to be met instantly with convenience and ease. Orders must be accepted, processed, shipped and received by the customer and must arrive on time as promised at the time of ordering. In the past, this was relatively simple, as most retail pharmacy chains operated locally and had simple order fulfillment processes.

With the advent of multi-channel distribution, as well as increased options for customers in how they shop, how and where they receive products, retailers are facing increased complexity in fulfilling these orders. With the advent of multi-channel distribution, order fulfillment problems can no longer be solved in a suboptimal way. Advanced analytical techniques, including AI/ML and optimization techniques, can provide accurate analytical solutions to these problems.

One such method is Distributed Order Management (DOM).

Distributed order management provides advanced order processing and delivery logic to fulfill retail orders from the best locations, maximizing efficiency

and improving customer interactions. DOM provides the ability to use inventory in multiple locations throughout the network, including central warehouses, stores, regional distribution centers, and even suppliers, to fulfill orders and meet customer requirements.

This approach can give pharmaceutical companies more opportunities to fulfill customer orders through online and in-pharmacy transactions, improving customer satisfaction and inventory productivity.

Distributed order management is an important process for companies that want to provide efficient customer service. This process helps process orders more quickly and accurately, regardless of how the customer placed them.

Distributed order management provides the ability to view inventory and orders globally and determine the best fulfillment source by referring to complex rules including proximity, priority, capacity, and others (Fig. 3.4).

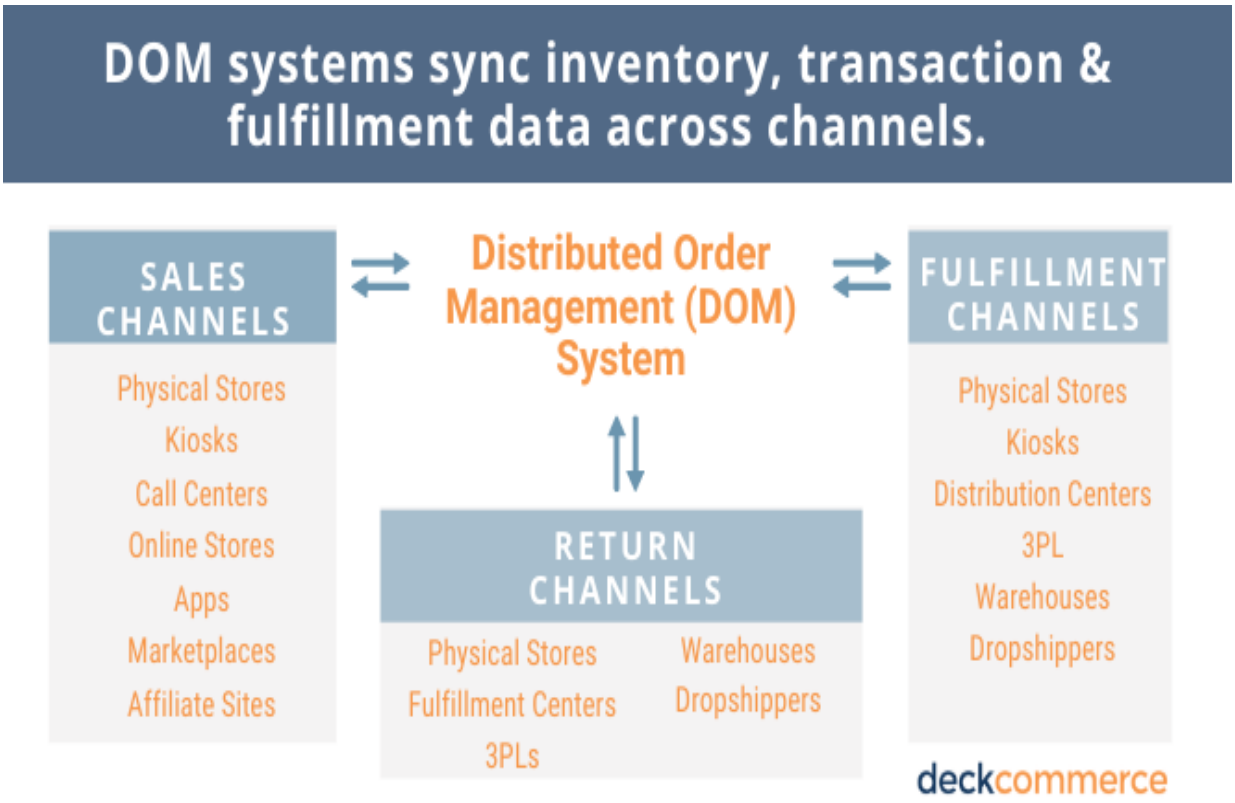

Figure 3.4 – Synchronization of inventory, operations and order fulfillment data through various channels in the DOM system [based on 34]

Research shows that standard or «traditional» order management focuses on automating order processing functions such as transactions, customer communication, and service. Distributed order management provides traditional order processing, with the addition of advanced order routing and logic-based rules that determine which fulfillment location can (and should) fulfill a customer's order.

Also, DOM can identify pharmacies/warehouses with excess inventory, manage multiple orders, allocate required inventory, optimize transportation costs, and manage multi-objective optimization problems for best results.

DOM enables an omnichannel strategy by managing orders from all channels in one place, so companies have the visibility and control to create the perfect order and make strategic business decisions. By accepting input for orders and creating outputs for an unlimited number of sales, fulfillment, and returns channels, DOM makes it easy to add, remove, or change process execution logic as needed to support both customer requests and business processes.

Based on the comparison, we can say that the third approach – Distributed Order Management – is better system suited for the «Sona-Pharm» company, taking into account the specifics of its activity and the subject of our research.

Therefore, the next point of the qualification work will be devoted to the development of recommendations for the implementation of Distributed Order Management system in the activities of «Sona-Pharm».

3.2 Recommendations regarding the implementation of Distributed Order Management system in the activities of «Sona-Pharm» company

So, our project proposal will be the implementation of distributed order management in the activities of the «Sona-Pharm» company.

As mentioned above, the Distributed Order Management system is built on the principles of optimizing the order fulfillment process. There are various ways to

improve the efficiency of this process, but the DOM requires four main data components to work effectively (Table 3.3).

Table 3.3 – The main components necessary for the effective implementation of DOM systems in the activities of the «Sona-Pharm» company

№	Main components	Their characteristics
1	2	3
1	Access to real-time order and inventory data	For real-time or near-real-time distributed order management, it is critical to have visibility into available pharmaceutical inventory data, including returns available for sale.
2	Operational and logistics costs	In order to evaluate different options for order fulfillment by obtaining inventory from multiple locations, the system must be aware of operating costs and constraints. This requires the system to include each potential fulfillment location (pharmacy, website, central warehouse, distribution network, etc.), the shipping costs and lead times between these locations, and the customer's fulfillment location.
3	Order fulfillment rules	Are there any priority clients? Is there an insurance stock of pharmaceutical products that needs to be maintained at all times? Are there any restrictions on where/where pharmaceutical products can be shipped from? Customer preferences for how they would like to receive their shipment. This is a list of some of the rules that can be included in order fulfillment.
4	Location restrictions	Not all actors in the supply chain may be configured to fulfill and/or have limited resources or capacity to store, pack or ship orders. Location-based constraints, such as how many packages they can ship per day or how many packages they can store for pickup, drive operationally realistic decisions.

Of course, the application of optimization methods is a very complex and dynamic process that works with the realities of the distribution network and can help maintain a balance between operating costs and customer requirements (Fig. 3.5).

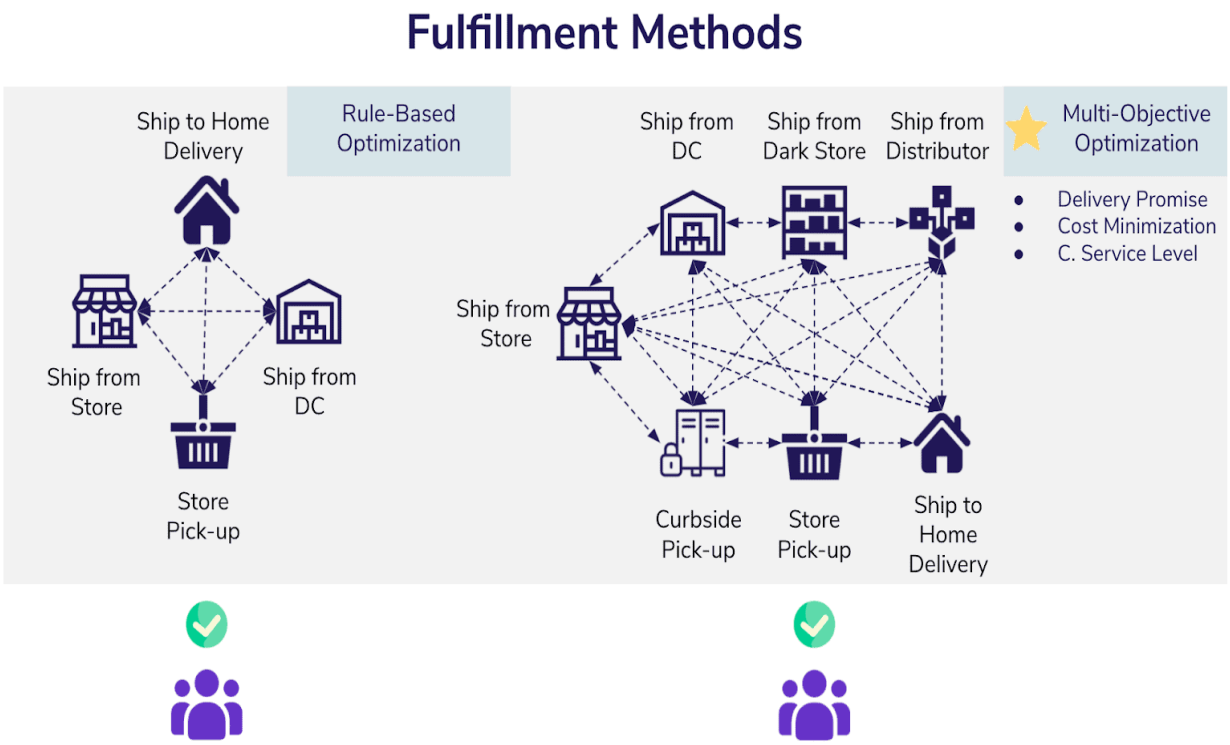

Figure 3.5 – Methods of fulfilling customer orders with the DOM system

Home delivery is an order fulfillment method in which products are delivered to customers' homes. This method is the most common order fulfillment method for e-commerce.

Ship from a store (pharmacy) is an order fulfillment method in which products are delivered to customers from a physical store (pharmacy). Of course, to use such a method, a pharmaceutical company must have a network of physical pharmacies [19]:

– Pharmacy Ltd. 7 Ya. Address: 7 Ya: Kiev – street. Sofievska, 6.
– Pharmacy 24. Address: Chernivtsi – st. Home, 200.
– Pharmacy 24. Address: Kharkiv – st. Poltava Way, 53/55.
– Pharmacy 24. Address: Lviv – st. Prince Mstislav the Udatnogo, 5.
– Pharmacy 24. Address: Odessa – st. Shipbuilding, 1.
– Pharmacy 24. Address: Dnipro – Blvd. of Glory, 40.
– Pharmacy 24. Address: Ivano-Frankivsk – street. Garkushi, 24.
– Pharmacy 24. Address: Kiev – street. Academician Efremov, 3.
– Pharmacy 24. Address: Zaporozhye – street of the European, 5-a.

Shipping from a distribution center (DC) is an order fulfillment method in which products are delivered to customers from a distribution warehouse. This method can be used by those pharmaceutical companies that have such distribution centers.

Dark Store shipping is a method of order fulfillment in which products are delivered to customers from a warehouse that is usually located within a city and is open only for order fulfillment. This method can be used by companies that want to quickly deliver goods around the city.

At the same time, there are three key factors that «Sona-Pharm» should consider when choosing a method of order fulfillment (Fig. 3.6).

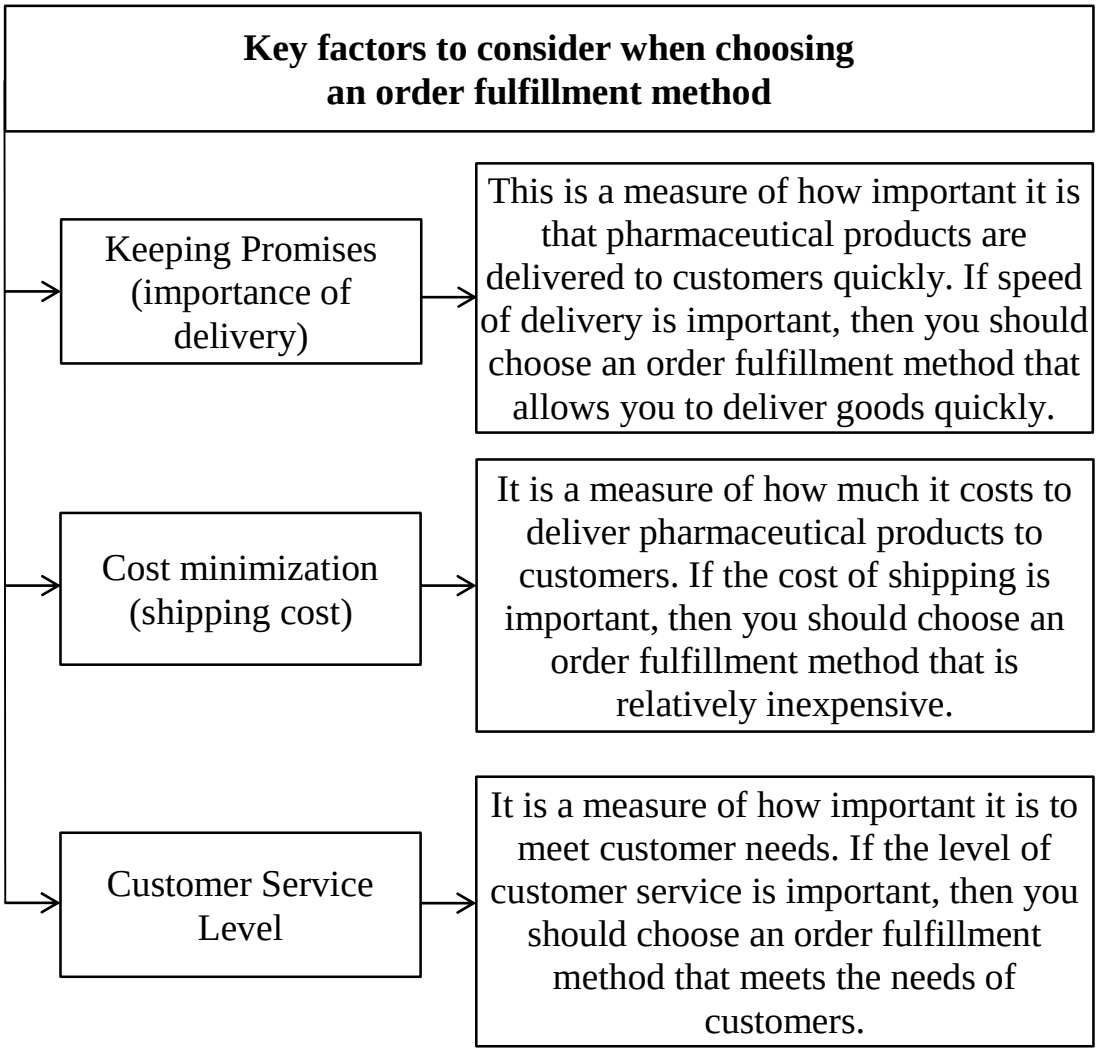

Figure 3.6 – Key factors to consider when choosing an order fulfillment method

The choice of order fulfillment method is an important decision for the «Sona-Pharm» pharmaceutical company. The decision about which method to use must be made taking into account the specific needs of the company and its customers.

Thus, the proposed model of distributed order management for managing the distribution of «Sona-Pharm» products is presented in Fig. 3.7.

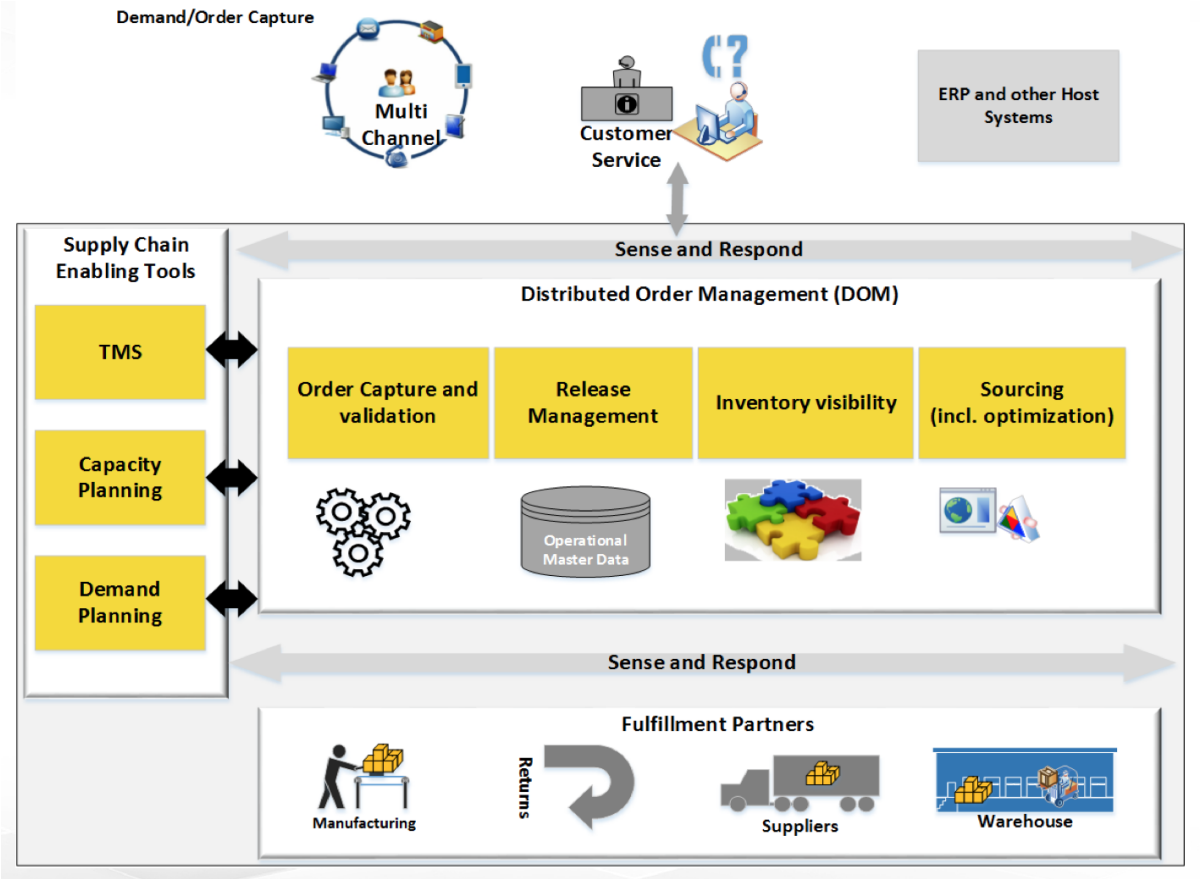

Figure 3.7 – Model of Distributed Order Management system for the «Sona-Pharm» company [based on 4]

This model shows how different parts of the supply chain must work together to deliver pharmaceutical products from suppliers to end users.

The proposed model may have certain rules that «Sona-Pharm» and its partners can use to manage this process. For example, a company may have rules that define how it should handle low-value orders. Or a company may have rules that determine which products it can ship from online or offline pharmacies.

Integration with inventory data as well as other transactions is a major part of the DOM. But currently there is a question about the necessity and feasibility of providing some information directly to external e-commerce platforms before making purchases.

In this case, the DOM will act as a real-time system so that consumers can see actual order fulfillment dates and exact shipping costs before placing an order.

Another challenge is making retail pharmacies a bit like warehouses in terms of inventory accuracy and ability to fulfill orders. While DCs have a long history of using WMS to control inventory and manage packaging and shipping processes via mobile devices, retail pharmacies may not have these capabilities.

Therefore, it is first important to establish a network strategy to determine which retail pharmacies in which regions will act as order fulfillment nodes for the DOM system. After all, it is extremely important to have an accurate idea of what each member of the supply chain can pick and deliver, so that the DOM can make optimal decisions regarding the order fulfillment process.

For an effective work of DOM system, it must have a proven track record of WMS integration capabilities with all other inventory transactions, order fulfillment, retail pharmacy systems, e-commerce software, and any product delivery software. which can be used to estimate shipping costs. Integration should also ideally be real-time based on application programming interfaces (APIs) rather than batch updates.

Inventory visibility and the formation of distribution logic are the basis of the decisions made by the DOM system. In addition, the DOM system must provide an accurate and accessible representation of inventory to each platform or sales channel, which is especially important for customer-oriented companies such as Sona-Pharm.

Implementing such a multi-channel strategy can be very difficult. Hence, this requires pre-testing to ensure that «Sona-Pharm» is meeting the needs of its customers at the relevant touchpoints.

Next, we will calculate the economic efficiency of our proposal for the «Sona-Pharm» company, which will help us make the final decision.

3.3 Economic efficiency of project proposals for the «Sona-Pharm» company

Distributed Order Management should become a key system that will improve the management of distribution of pharmaceutical products of the «Sona-Pharm» company. The main advantages of Distributed Order Management for the «Sona-Pharm» company are shown in Fig. 3.8.

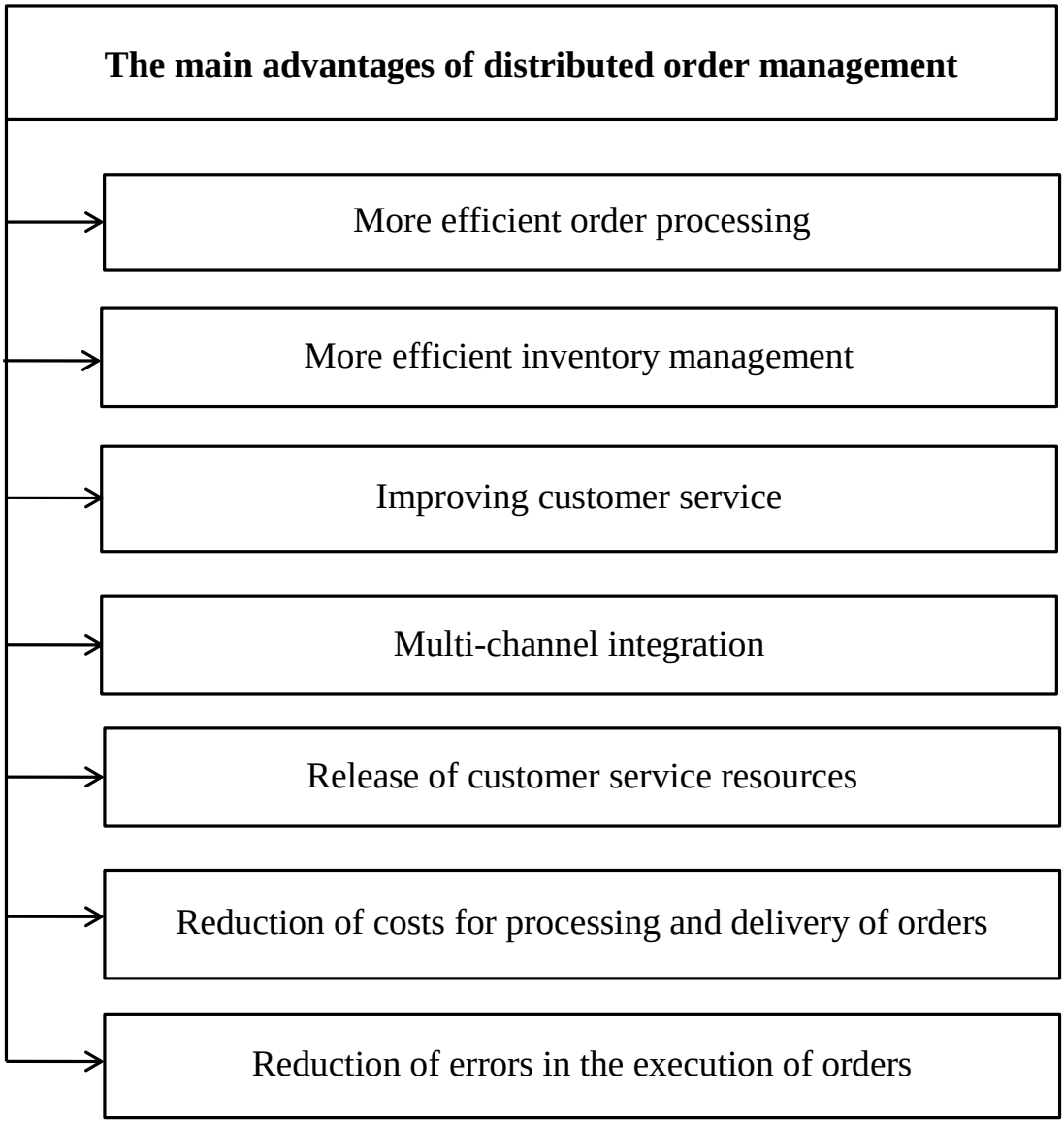

Figure 3.8 – The main advantages of distributed order management for the «Sona-Pharm» company

So, the proposed system will help the «Sona-Pharm» company:

1. Process orders more efficiently. Due to automation, the process of processing orders can be carried out faster, which will help save time and money.

2. Manage stocks more efficiently. Thanks to real-time inventory analysis, «Sona-Pharm» can make informed decisions about stock replenishment and management through various channels. At the same time, the company will be able to guarantee that they are always ready to promptly fulfill customer orders. Real-time inventory updates on all platforms will ensure the necessary inventory levels, avoiding over-sales and under-sales.

3. Improve customer service. «Sona-Pharm» can offer better service to customers by providing them with real-time updates on the status of their orders. In this way, the customer experience can improve and operational efficiency can become more optimal, striking a balance that promotes business growth.

4. Create multi-channel integration. «Sona-Pharm» customers can easily switch between online and offline channels, enjoying a unified shopping experience.

5. Free up the resources of the customer support service. Streamlined order fulfillment processes result in fewer support calls, freeing up the internal team to allocate resources to other key areas of the business.

6. Reduce processing and delivery costs. One of the direct financial benefits of implementing a distributed order management system is a significant reduction in the costs of order processing and delivery of pharmaceutical products.

7. Reduce the number of errors. The DOM system will help the «Sona-Pharm» company to reduce the number of errors by automating the process of entering and checking orders.

So, we can see that the proposed system is a very important tool that will significantly improve Sona-Pharm's distribution management. The system will make it possible to ensure the fulfillment of each order from the nearest pharmacies or warehouses with the help of intelligent optimal order routing algorithms, reducing delivery time and costs.

Now let's calculate the economic effect of implementing this system in the activities of the «Sona-Pharm» company.

Economic effect is a useful result of an economic activity, measured as the difference between monetary income from such activity and monetary costs for its implementation [36].

The best indicator of the economic effect of the project is NPV.

Net Present Value (NPV) is the sum of the discounted values of the stream of payments brought to date. The NPV indicator is the difference between all cash inflows and outflows brought to the current time (that is, the moment the investment project is evaluated) [36].

$$NPV = \sum_{i=1}^{n} \frac{CF_i}{(1+r)^i} - \sum_{i=0}^{n} \frac{IC_i}{(1+r)^i} \quad (3.1)$$

де CF – Cash Flow; r – discount rate; n – total number of periods for the entire investment period; i = 0, 1, 2, …, n – period number.

Therefore, in order to calculate the economic effect of the implementation of the system, it is necessary to determine the possible costs of its implementation and the possible increase in income (profit).

An important stage in the process of implementing the DOM system is the high-quality training of employees in the algorithms of working with the system. The ability of «Sona-Pharm» employees to work with the put into operation system and the efficiency of the entire process as a whole depend on the results of the trainings. That is, the «Sona-Pharm» company needs to train employees to work with the DOM system, and for this the company must allocate funds for this.

As for the purchase of the DOM system itself, it should be noted that it is a fairly expensive system that requires quite significant financial resources. However, in the future, it will provide a significant increase in profits for the «Sona-Pharm» company.

The generalized cost estimate for the implementation of the DOM system in the activities of the «Sona-Pharm» company is given in the Table 3.4.

Table 3.4 – Cost estimate for the implementation of Distributed Order Management in the activities of the «Sona-Pharm» company

№	Cost components	0 year (year of implementation)	1 year	2 year	3 year	4 year
1	2	3	4	5	6	7
1	Purchase of the system and necessary equipment	2500,0	-	-	-	-
2	System settings	300,0	-	-	-	-
3	Personnel training	800,0	-	-	-	-
5	Integration of Distributed Order Management with existing software	250,0	-	-	-	-
6	System maintenance	-	360,0	360,0	360,0	360,0
7	Costs of maintaining and constantly updating the system	-	375,0	375,0	375,0	375,0
8	Total	3850,0	735,0	735,0	735,0	735,0

We can consider the minimization of costs for distribution management (in the company's financial statements, these are selling expenses) as a revenue part of the implementation of the DOM system.

To begin with, we forecast the company's selling expenses for the next 5 years based on the current trend using the time series extrapolation method. We can do this with the help of formulas [36]:

$$A_n = a + b*t, \tag{3.2}$$

$$a = \frac{\sum An - b*\sum t_i}{n}, \tag{3.3}$$

$$b = \frac{n\sum An*t_i - \sum t_i * \sum A_n}{n\sum t_i^{\,2} - (\sum t_i)^{\,2}}, \tag{3.4}$$

where A_n – projected volumes of the selling expenses; *a, b* – parameters of the equation,; *t* – number of the year.

Data for predictive calculations are presented in Table 3.5. As a basis we took statistical data from Table 2.5, namely the line «Selling expenses».

Table 3.5 – Data for calculating forecasts

№	Year	t_i	A_n, UAH thousands	A_n*t_i	t_i^2
1	2	3	4	5	6
1	2019	1	38067	38067	1
2	2020	2	37516	75032	4
3	2021	3	55786	167358	9
4	2022	4	62593	250372	16
5	2023	5	71024	355120	25
6	Σ	15	264986	885949	55

Based on the calculations, we found the values of parameters a and b:

b = 9099,1;

a = 25699,9.

Having calculated these parameters, it is possible to calculate forecast selling expenses for 2024-2028 (Table 3.6). We can also calculate the projected savings from the implementation of the DOM system, which is 5% of the projected selling expenses (starting from 2025).

Table 3.6 – Projected selling expenses and projected savings from the implementation of the DOM system

№	Year	t_i	Projected selling expenses, UAH thousand	Projected savings from the implementation of the DOM system, UAH thousand
1	2	3	4	5
1	2024	6	80295	-
2	2025	7	89394	4469,7
3	2026	8	98493	4924,6
4	2027	9	107592	5379,6
5	2028	10	116691	5834,5

Now we can calculate the NPV of our project (Table 3.7). We can see, that NPV of our project is positive and equal to UAH 2.9 million. in 5 years.

Table 3.7 – Calculation of the NPV of our project at a discount rate of 15%

№	Indicators	2024	2025	2026	2027	2028
1	2	3	4	5	6	7
1	Year number of the project	0	1	2	3	4
2	Discount factor	1,000	0,870	0,756	0,658	0,572
3	Costs for implementing the system, UAH thousand	3850,0	735,0	735,0	735,0	735,0
4	Discounted costs, UAH thousand	3850,0	639,1	555,8	483,3	420,2
5	Projected reduction of distribution costs (additional income), UAH thousand	0,0	4469,7	4924,6	5379,6	5834,5
6	Discounted income, UAH thousand	0,0	3886,7	3723,7	3537,2	3335,9
7	Effect of implementation, UAH thousand	-3850,0	3734,7	4189,6	4644,6	5099,5
8	Discounted effect, UAH thousand	-3850,0	3247,5	3168,0	3053,9	2915,7
9	NPV, UAH thousand	8535,1				

Graphical determination of the project payback period is presented in Fig. 3.9.

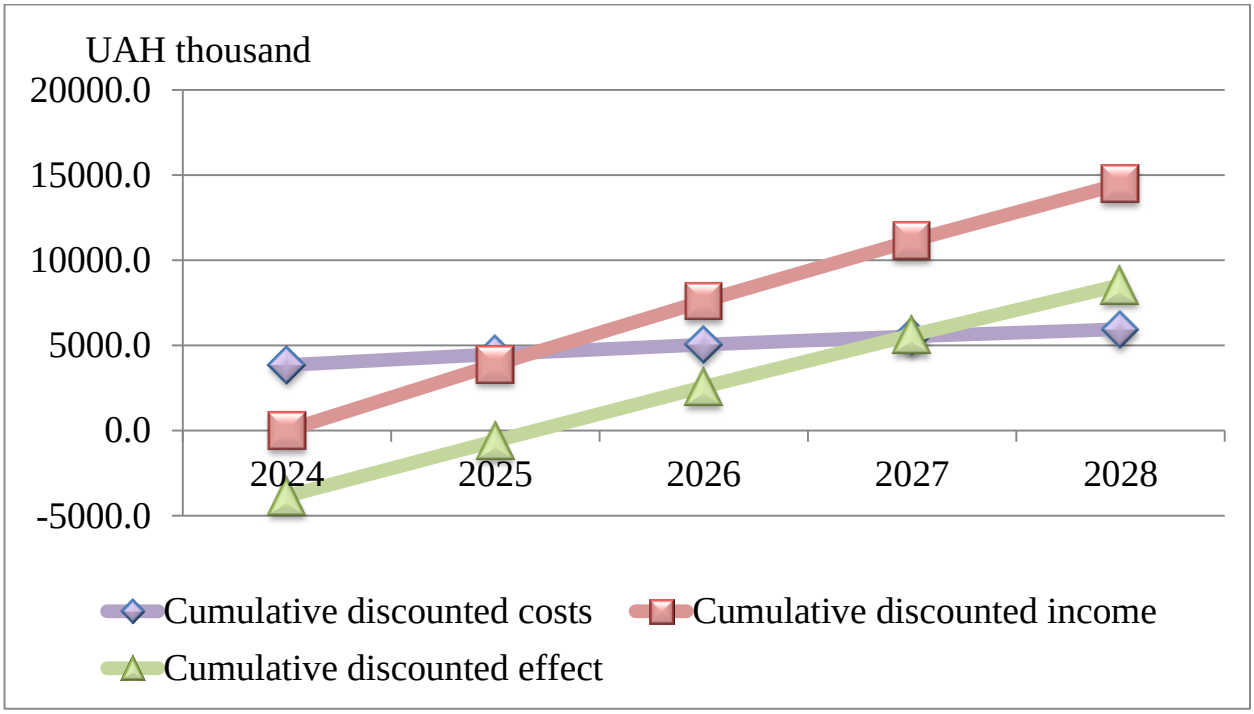

Figure 3.9 – Graphical determination of the project payback period

According to calculations, the project payback period is less than 2 years after the start of its implementation. This is a very good result.

So, we can say that distributed order management is currently the basis of effective management of distribution of pharmaceutical products. Currently, more and more companies have begun to pay attention to the use of DOM as a powerful tactical tool for effective order flow management. According to its original objectives, Sona-Pharm can achieve improved distribution cost savings, including lower unit costs. Using DOM can ensure that customers are satisfied no matter what, where and when they order. And therefore, the DOM system will help to significantly improve customer service, including on-time delivery and order fulfillment.

Chapter 3 summary

This section was devoted to the development of project proposals for improving distribution management for «Sona-Pharm» company's pharmaceutical products.

A comparative analysis of approaches to improving the management of the distribution of pharmaceutical products was carried out.

Based on the comparison, we saw that Distributed Order Management is better system suited for the «Sona-Pharm» company, taking into account the specifics of its activity and the subject of our research. Therefore, the next point of the qualification work was the development of recommendations for the implementation of Distributed Order Management system in the activities of «Sona-Pharm».

Of course, the application of optimization methods is a very complex and dynamic process that works with the realities of the distribution network and can help maintain a balance between operating costs and customer requirements. Thus, we proposed model of distributed order management for managing the distribution of

«Sona-Pharm» products. This model shows how different parts of the supply chain must work together to deliver pharmaceutical products from suppliers to end users.

Next, we calculated the economic efficiency of our proposal for the «Sona-Pharm» company. We saw that the proposed system is a very important tool that will significantly improve Sona-Pharm's distribution management. The system can make it possible to ensure the fulfillment of each order from the nearest pharmacies or warehouses with the help of intelligent optimal order routing algorithms, reducing delivery time and costs.

NPV of our project is positive and equal to UAH 8,5 million in 5 years. The project payback period is less than 2 years after the start of its implementation.

CONCLUSIONS AND RECOMMENDATIONS

In the first chapter we have studied of the essence of distribution management.

It was note that distribution management refers primarily to the process of controlling the movement of goods from the supplier or manufacturer to the point of sale. Effective distribution management is critical to customer satisfaction, profitable operations, and increased competitiveness.

Effective distribution management involves selling a company's products by ensuring adequate inventory in channels while managing promotion in those channels and their varying demands. It also involves making sure that the supply chain is efficient enough to allow the product to be sold at the right price, thus supporting the company's growth strategy and maximizing its profit.

Also we have studied the specifics of pharmaceutical products distribution management.

Pharmaceutical distributors play a key role, as their activity is quite significant in shaping the market structure and increasing the circulation of medicinal products. The main task of a pharmaceutical distributor is to coordinate the interests of manufacturers, subjects of the commercial retail sector, medical organizations and the state.

Pharmaceutical logistics is the process of managing material and accompanying financial, personnel and information flows to accelerate physical distribution and minimize total costs in the process of supply, production and sale of pharmaceutical preparations and medical equipment in order to achieve their required quality and maximum satisfaction of consumer requirements

It was note that from the moment a pharmaceutical product leaves a manufacturing plant until its delivery to a patient, Good Distribution Practice plays a vital role in a secure medicines supply chain.

In the second chapter we have studied of the state of distribution management for pharmaceutical products of the «Sona-Pharm» company.

It was noted that «Sona-Pharm» is an international company that has brought together professionals in the pharmaceutical industry. The company «Sona-Pharm» provides the needs of modern medicine and actively develops sales of drugs in such areas as reproductive medicine, oncology, neurology and endocrinology.

Own external service, drug registration department, quality control department and transparent relationships with manufacturers, distributors and medical institutions, as well as a deep understanding of market needs, legislation and national characteristics, enable the company to respond in a timely manner to constant changes and market requirements.

Analysis of the company's financial condition have shown that company is actively developing, is financially stable, despite the crisis situation in the country.

In the conditions of martial law, the conditions of activity of distributors have undergone significant changes due to the loss of infrastructure, goods and vehicles, lack of personnel; disruption of logistics, decrease in solvent demand and decrease in the number of customers; rising prices of fuel, raw materials, energy carriers. There have been certain shifts in the structure of drug consumption, a reduction in hospital purchases. The main difficulties for distributors have been the blocking and loss of warehouses due to hostilities, shortage of employees, problems with logistics, high receivables and the closure or destruction of a significant number of pharmacies.

The third chapter was devoted to the development of project proposals for improving distribution management for «Sona-Pharm» company's pharmaceutical products.

On the basis of the conducted research, it was found that the modern pharmaceutical market of Ukraine has a system of interconnected and interdependent entities and objects for the production, distribution, consumption of pharmaceutical goods, as well as the provision of pharmaceutical services. We believe that today, building an effective distribution network is not just a competitive advantage, but the main task for any participant in the supply chain of pharmaceutical products.

A comparative analysis of approaches to improving the management of the distribution of pharmaceutical products was carried out:

1. Good distribution practice (GDP) describes the minimum standards that a wholesale distributor must meet to ensure that the quality and integrity of medicines or pharmaceutical products is maintained throughout the supply chain

2. Demand Driven Supply Networks (DDSC) is a system that uses various e-commerce offerings, technologies and processes to measure demand in real time. Unlike traditional supply chains that rely on demand forecasting and historical trends to estimate demand forecasts, DDSCs can respond almost instantaneously to changes in demand across the entire supply chain, including customers, employees and suppliers.

3. Distributed order management (DOM) provides advanced order processing and delivery logic to fulfill retail orders from the best locations, maximizing efficiency and improving customer interactions. DOM provides the ability to use inventory in multiple locations throughout the network, including central warehouses, stores, regional distribution centers, and even suppliers, to fulfill orders and meet customer requirements.

Based on the comparison, we saw that Distributed Order Management is better system suited for the «Sona-Pharm» company, taking into account the specifics of its activity and the subject of our research. Therefore, the next point of the qualification work was the development of recommendations for the implementation of Distributed Order Management system in the activities of «Sona-Pharm».

Of course, the application of optimization methods is a very complex and dynamic process that works with the realities of the distribution network and can help maintain a balance between operating costs and customer requirements. Thus, we proposed model of distributed order management for managing the distribution of «Sona-Pharm» products. This model shows how different parts of the supply chain must work together to deliver pharmaceutical products from suppliers to end users.

For an effective work of DOM system, it must have a proven track record of WMS integration capabilities with all other inventory transactions, order fulfillment, retail pharmacy systems, e-commerce software, and any product delivery software.

which can be used to estimate shipping costs. Integration should also ideally be real-time based on application programming interfaces (APIs) rather than batch updates.

Inventory visibility and the formation of distribution logic are the basis of the decisions made by the DOM system. In addition, the DOM system must provide an accurate and accessible representation of inventory to each platform or sales channel, which is especially important for customer-oriented companies such as Sona-Pharm.

Next, we calculated the economic efficiency of our proposal for the «Sona-Pharm» company. We saw that the proposed system is a very important tool that will significantly improve Sona-Pharm's distribution management. The system can make it possible to ensure the fulfillment of each order from the nearest pharmacies or warehouses with the help of intelligent optimal order routing algorithms, reducing delivery time and costs.

NPV of our project is positive and equal to UAH 8,5 million in 5 years. The project payback period is less than 2 years after the start of its implementation.

So, we can say that distributed order management is currently the basis of effective management of distribution of pharmaceutical products. Currently, more and more companies have begun to pay attention to the use of DOM as a powerful tactical tool for effective distribution management.

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Appendix A

Financial statements for 2023

Дата звіту	2024-02-15
Період	2023 рік, 12 міс
Бухгалтер	КОВТУНЕНКО СВІТЛАНА МИКОЛАЇВНА
КАТОТТГ	UA80000000000980793
Кількість працівників	36

Balance sheet (Statement of financial position)

Assets, UAH thousand

The name of the line	Line code	2022	2023
I. Необоротні активи Нематеріальні активи	1000	211.00	83.00
первісна вартість	1001	1 457.00	954.00
накопичена амортизація	1002	1 246.00	871.00
Незавершені капітальні інвестиції	1005	293.00	574.00
Основні засоби	1010	10 990.00	10 810.00
первісна вартість	1011	19 366.00	19 795.00
знос	1012	8 376.00	8 985.00
Інвестиційна нерухомість	1015	0.00	
первісна вартість	1016	0.00	
знос	1017	0.00	
Довгострокові біологічні активи	1020	0.00	
первісна вартість	1021	0.00	
накопичена амортизація	1022	0.00	
Довгострокові фінансові інвестиції: які обліковуються за методом участі в капіталі інших підприємств	1030	0.00	
інші фінансові інвестиції	1035	0.00	
Довгострокова дебіторська заборгованість	1040	0.00	
Відстрочені податкові активи	1045	0.00	
Гудвіл	1050	0.00	
Відстрочені аквізиційні витрати	1060	0.00	
Залишок коштів у централізованих страхових резервних фондах	1065	0.00	
Інші необоротні активи	1090	0.00	
Усього за розділом I	1095	11 494.00	11 467.00
II. Оборотні активи Запаси	1100	90 771.00	95 234.00
Виробничі запаси	1101	64.00	179.00
Незавершене виробництво	1102	0.00	
Готова продукція	1103	0.00	
Товари	1104	90 707.00	95 055.00
Поточні біологічні активи	1110	0.00	
Депозити перестрахування	1115	0.00	
Векселі одержані	1120	0.00	

The name of the line	Line code	2022	2023
Дебіторська заборгованість за продукцію, товари, роботи, послуги	1125	34 759.00	35 499.00
Дебіторська заборгованість за розрахунками: за виданими авансами	1130	1 761.00	2 757.00
з бюджетом	1135	2 952.00	2 331.00
у тому числі з податку на прибуток	1136	0.00	
з нарахованих доходів	1140	0.00	
із внутрішніх розрахунків	1145	0.00	
Інша поточна дебіторська заборгованість	1155	140 412.00	244 698.00
Поточні фінансові інвестиції	1160	0.00	
Г роші та їх еквіваленти	1165	56 831.00	64 475.00
Готівка	1166	0.00	
Рахунки в банках	1167	56 831.00	64 475.00
Витрати майбутніх періодів	1170	630.00	932.00
Частка перестраховика у страхових резервах	1180	0.00	
у тому числі в: резервах довгострокових зобов’язань	1181	0.00	
резервах збитків або резервах належних виплат	1182	0.00	
резервах незароблених премій	1183	0.00	
інших страхових резервах	1184	0.00	
Інші оборотні активи	1190	0.00	
Усього за розділом II	1195	328 116.00	445 926.00
III. Необоротні активи, утримувані для продажу, та групи вибуття	1200	0.00	
Баланс	1300	339 610.00	457 393.00

Liabilities, UAH thousand

The name of the line	Line code	2022	2023
I. Власний капітал Зареєстрований (пайовий) капітал	1400	508.00	508.00
Внески до незареєстрованого статутного капіталу	1401	0.00	
Капітал у дооцінках	1405	0.00	
Додатковий капітал	1410	0.00	
Емісійний дохід	1411	0.00	
Накопичені курсові різниці	1412	0.00	
Резервний капітал	1415	0.00	
Нерозподілений прибуток (непокритий збиток)	1420	260 502.00	323 868.00
Неоплачений капітал	1425	0.00	
Вилучений капітал	1430	0.00	
Інші резерви	1435	0.00	
Усього за розділом I	1495	261 010.00	324 376.00
II. Довгострокові зобов’язання і забезпечення Відстрочені податкові зобов’язання	1500	0.00	
Пенсійні зобов’язання	1505	0.00	
Довгострокові кредити банків	1510	0.00	
Інші довгострокові зобов’язання	1515	0.00	446.00

The name of the line	Line code	2022	2023
Довгострокові забезпечення	1520	0.00	
Довгострокові забезпечення витрат персоналу	1521	0.00	
Цільове фінансування	1525	0.00	
Благодійна допомога	1526	0.00	
Страхові резерви	1530	0.00	
у тому числі: резерв довгострокових зобов’язань	1531	0.00	
резерв збитків або резерв належних виплат	1532	0.00	
резерв незароблених премій	1533	0.00	
інші страхові резерви	1534	0.00	
Інвестиційні контракти	1535	0.00	
Призовий фонд	1540	0.00	
Резерв на виплату джек-поту	1545	0.00	
Усього за розділом II	1595	0.00	446.00
Ш. Поточні зобов’язання і забезпечення Короткострокові кредити банків	1600	0.00	
Векселі видані	1605	0.00	
Поточна кредиторська заборгованість за: довгостроковими зобов’язаннями	1610	440.00	148.00
товари, роботи, послуги	1615	59 999.00	92 319.00
розрахунками з бюджетом	1620	6 251.00	11 019.00
у тому числі з податку на прибуток	1621	6 251.00	11 016.00
розрахунками зі страхування	1625	0.00	
розрахунками з оплати праці	1630	0.00	85.00
за одержаними авансами	1635	0.00	50.00
за розрахунками з учасниками	1640	0.00	
із внутрішніх розрахунків	1645	0.00	
за страховою діяльністю	1650	0.00	
Поточні забезпечення	1660	2 511.00	6 638.00
Доходи майбутніх періодів	1665	0.00	
Відстрочені комісійні доходи від перестраховиків	1670	0.00	
Інші поточні зобов’язання	1690	9 399.00	22 312.00
Усього за розділом III	1695	78 600.00	132 571.00
IV. Зобов’язання, пов’язані з необоротними активами, утримуваними для продажу, та групами вибуття	1700	0.00	
V. Чиста вартість активів недержавного пенсійного фонду	1800	0.00	
Баланс	1900	339 610.00	457 393.00

Statement of Financial Results (Statement of Comprehensive Income)

Financial results, UAH thousand

The name of the line	Line code	2023	2022
Чистий дохід від реалізації продукції (товарів, робіт, послуг)	2000	612 111.00	541 074.00
Собівартість реалізованої продукції (товарів, робіт,	2050	461 467.00	410 749.00

The name of the line	Line code	2023	2022
послуг)			
Валовий: прибуток	2090	150 644.00	130 325.00
Інші операційні доходи	2120	103 190.00	181 456.00
Адміністративні витрати	2130	45 065.00	33 813.00
Витрати на збут	2150	71 024.00	62 593.00
Інші операційні витрати	2180	28 238.00	99 301.00
Фінансовий результат від операційної діяльності: прибуток	2190	109 507.00	116 074.00
Інші фінансові доходи	2220	3 559.00	714.00
Інші доходи	2240		208.00
Фінансові витрати	2250	217.00	289.00
Інші витрати	2270	55.00	208.00
Фінансовий результат до оподаткування: прибуток	2290	112 794.00	116 499.00
Витрати (дохід) з податку на прибуток	2300	-20 368.00	-20 979.00
Чистий фінансовий результат: прибуток	2350	92 426.00	95 520.00

Elements of operating costs, UAH thousand

The name of the line	Line code	2023	2022
Матеріальні затрати	2500	1 747.00	3 720.00
Витрати на оплату праці	2505	41 993.00	33 030.00
Відрахування на соціальні заходи	2510	5 611.00	4 852.00
Амортизація	2515	1 771.00	3 045.00
Інші операційні витрати	2520	93 205.00	151 060.00
Разом	2550	144 327.00	195 707.00

Appendix B

Financial statements for 2022

Дата звіту	2023-02-20
Період	2022 рік, 12 міс
Бухгалтер	КОВТУНЕНКО СВІТЛАНА МИКОЛАЇВНА
КАТОТТГ	UA80000000000980793
Кількість працівників	34

Balance sheet (Statement of financial position)

Assets, UAH thousand

The name of the line	Line code	2021	2022
I. Необоротні активи Нематеріальні активи	1000	393.00	211.00
первісна вартість	1001	1 583.00	1 457.00
накопичена амортизація	1002	1 190.00	1 246.00
Незавершені капітальні інвестиції	1005	1 791.00	293.00
Основні засоби	1010	9 975.00	10 990.00
первісна вартість	1011	17 862.00	19 366.00
знос	1012	7 887.00	8 376.00
Інвестиційна нерухомість	1015	0.00	
первісна вартість	1016	0.00	
знос	1017	0.00	
Довгострокові біологічні активи	1020	0.00	
первісна вартість	1021	0.00	
накопичена амортизація	1022	0.00	
Довгострокові фінансові інвестиції: які обліковуються за методом участі в капіталі інших підприємств	1030	0.00	
інші фінансові інвестиції	1035	208.00	
Довгострокова дебіторська заборгованість	1040	0.00	
Відстрочені податкові активи	1045	0.00	
Гудвіл	1050	0.00	
Відстрочені аквізиційні витрати	1060	0.00	
Залишок коштів у централізованих страхових резервних фондах	1065	0.00	
Інші необоротні активи	1090	0.00	
Усього за розділом I	1095	12 367.00	11 494.00
II. Оборотні активи Запаси	1100	36 595.00	90 771.00
Виробничі запаси	1101	685.00	64.00
Незавершене виробництво	1102	0.00	
Готова продукція	1103	0.00	
Товари	1104	35 910.00	90 707.00
Поточні біологічні активи	1110	0.00	
Депозити перестрахування	1115	0.00	
Векселі одержані	1120	0.00	
Дебіторська заборгованість за продукцію, товари, роботи, послуги	1125	245 609.00	34 759.00
Дебіторська заборгованість за розрахунками: за	1130	6 983.00	1 761.00

The name of the line	Line code	2021	2022
виданими авансами			
з бюджетом	1135	297.00	2 952.00
у тому числі з податку на прибуток	1136	0.00	
з нарахованих доходів	1140	0.00	
із внутрішніх розрахунків	1145	0.00	
Інша поточна дебіторська заборгованість	1155	5 809.00	140 412.00
Поточні фінансові інвестиції	1160	0.00	
Г роші та їх еквіваленти	1165	72 519.00	56 831.00
Готівка	1166	0.00	
Рахунки в банках	1167	72 519.00	56 831.00
Витрати майбутніх періодів	1170	766.00	630.00
Частка перестраховика у страхових резервах	1180	0.00	
у тому числі в: резервах довгострокових зобов’язань	1181	0.00	
резервах збитків або резервах належних виплат	1182	0.00	
резервах незароблених премій	1183	0.00	
інших страхових резервах	1184	0.00	
Інші оборотні активи	1190	0.00	
Усього за розділом II	1195	368 578.00	328 116.00
III. Необоротні активи, утримувані для продажу, та групи вибуття	1200	0.00	
Баланс	1300	380 945.00	339 610.00

Liabilities, UAH thousand

The name of the line	Line code	2021	2022
I. Власний капітал Зареєстрований (пайовий) капітал	1400	508.00	508.00
Внески до незареєстрованого статутного капіталу	1401	0.00	
Капітал у дооцінках	1405	0.00	
Додатковий капітал	1410	0.00	
Емісійний дохід	1411	0.00	
Накопичені курсові різниці	1412	0.00	
Резервний капітал	1415	0.00	
Нерозподілений прибуток (непокритий збиток)	1420	182 982.00	260 502.00
Неоплачений капітал	1425	0.00	
Вилучений капітал	1430	0.00	
Інші резерви	1435	0.00	
Усього за розділом I	1495	183 490.00	261 010.00
II. Довгострокові зобов’язання і забезпечення Відстрочені податкові зобов’язання	1500	0.00	
Пенсійні зобов’язання	1505	0.00	
Довгострокові кредити банків	1510	0.00	
Інші довгострокові зобов’язання	1515	322.00	
Довгострокові забезпечення	1520	0.00	
Довгострокові забезпечення витрат персоналу	1521	0.00	
Цільове фінансування	1525	0.00	
Благодійна допомога	1526	0.00	
Страхові резерви	1530	0.00	
у тому числі: резерв довгострокових зобов’язань	1531	0.00	
резерв збитків або резерв належних виплат	1532	0.00	

The name of the line	Line code	2021	2022
резерв незароблених премій	1533	0.00	
інші страхові резерви	1534	0.00	
Інвестиційні контракти	1535	0.00	
Призовий фонд	1540	0.00	
Резерв на виплату джек-поту	1545	0.00	
Усього за розділом II	1595	322.00	0.00
III. Поточні зобов’язання і забезпечення Короткострокові кредити банків	1600	0.00	
Векселі видані	1605	0.00	
Поточна кредиторська заборгованість за: довгостроковими зобов’язаннями	1610	592.00	440.00
товари, роботи, послуги	1615	177 631.00	59 999.00
розрахунками з бюджетом	1620	10 752.00	6 251.00
у тому числі з податку на прибуток	1621	9 719.00	6 251.00
розрахунками зі страхування	1625	0.00	
розрахунками з оплати праці	1630	15.00	
за одержаними авансами	1635	0.00	
за розрахунками з учасниками	1640	0.00	
із внутрішніх розрахунків	1645	0.00	
за страховою діяльністю	1650	0.00	
Поточні забезпечення	1660	1 718.00	2 511.00
Доходи майбутніх періодів	1665	0.00	
Відстрочені комісійні доходи від перестраховиків	1670	0.00	
Інші поточні зобов’язання	1690	6 425.00	9 399.00
Усього за розділом III	1695	197 133.00	78 600.00
IV. Зобов’язання, пов’язані з необоротними активами, утримуваними для продажу, та групами вибуття	1700	0.00	
V. Чиста вартість активів недержавного пенсійного фонду	1800	0.00	
Баланс	1900	380 945.00	339 610.00

Statement of Financial Results (Statement of Comprehensive Income)

Financial results, UAH thousand

The name of the line	Line code	2022	2021
Чистий дохід від реалізації продукції (товарів, робіт, послуг)	2000	541 074.00	782 832.00
Чисті зароблені страхові премії	2010		0.00
Премії підписані, валова сума	2011		0.00
Премії, передані у перестрахування	2012		0.00
Зміна резерву незароблених премій, валова сума	2013		0.00
Зміна частки перестраховиків у резерві незароблених премій	2014		0.00
Собівартість реалізованої продукції (товарів, робіт, послуг)	2050	410 749.00	549 883.00
Чисті понесені збитки за страховими виплатами	2070		0.00
Валовий: прибуток	2090	130 325.00	232 949.00
Дохід (витрати) від зміни у резервах	2105		0.00

The name of the line	Line code	2022	2021
довгострокових зобов’язань			
Дохід (витрати) від зміни інших страхових резервів	2110		0.00
Зміна інших страхових резервів, валова сума	2111		0.00
Зміна частки перестраховиків в інших страхових резервах	2112		0.00
Інші операційні доходи	2120	181 456.00	33 784.00
Дохід від зміни вартості активів, які оцінюються за справедливою вартістю	2121		0.00
Дохід від первісного визнання біологічних активів і сільськогосподарської продукції	2122		0.00
Дохід від використання коштів, вивільнених від оподаткування	2123		0.00
Адміністративні витрати	2130	33 813.00	36 424.00
Витрати на збут	2150	62 593.00	55 786.00
Інші операційні витрати	2180	99 301.00	27 490.00
Витрат від зміни вартості активів, які оцінюються за справедливою вартістю	2181		0.00
Витрат від первісного визнання біологічних активів і сільськогосподарської продукції	2182		0.00
Фінансовий результат від операційної діяльності: прибуток	2190	116 074.00	147 033.00
Дохід від участі в капіталі	2200		0.00
Інші фінансові доходи	2220	714.00	324.00
Інші доходи	2240	208.00	0.00
Дохід від благодійної допомоги	2241		0.00
Фінансові витрати	2250	289.00	529.00
Втрати від участі в капіталі	2255		0.00
Інші витрати	2270	208.00	0.00
Прибуток (збиток) від впливу інфляції на монетарні статті	2275		0.00
Фінансовий результат до оподаткування: прибуток	2290	116 499.00	146 828.00
Витрати (дохід) з податку на прибуток	2300	-20 979.00	-26 477.00
Прибуток (збиток) від припиненої діяльності після оподаткування	2305		0.00
Чистий фінансовий результат: прибуток	2350	95 520.00	120 351.00

Elements of operating costs, UAH thousand

The name of the line	Line code	2022	2021
Матеріальні затрати	2500	3 720.00	2 970.00
Витрати на оплату праці	2505	33 030.00	35 524.00
Відрахування на соціальні заходи	2510	4 852.00	4 354.00
Амортизація	2515	3 045.00	2 343.00
Інші операційні витрати	2520	151 060.00	74 509.00
Разом	2550	195 707.00	119 700.00

Appendix C

Financial statements for 2021

Дата звіту	2022-02-23
Період	2021 рік, 12 міс
Бухгалтер	КОВТУНЕНКО СВІТЛАНА МИКОЛАЇВНА
КАТОТТГ	UA80000000000980793
Кількість працівників	35

Balance sheet (Statement of financial position)

Assets, UAH thousand

The name of the line	Line code	2020	2021
I. Необоротні активи Нематеріальні активи	1000	614.00	393.00
первісна вартість	1001	1 690.00	1 583.00
накопичена амортизація	1002	1 076.00	1 190.00
Незавершені капітальні інвестиції	1005	106.00	1 791.00
Основні засоби	1010	8 995.00	9 975.00
первісна вартість	1011	15 618.00	17 862.00
знос	1012	6 623.00	7 887.00
Інвестиційна нерухомість	1015	0.00	
первісна вартість	1016	0.00	
знос	1017	0.00	
Довгострокові біологічні активи	1020	0.00	
первісна вартість	1021	0.00	
накопичена амортизація	1022	0.00	
Довгострокові фінансові інвестиції: які обліковуються за методом участі в капіталі інших підприємств	1030	0.00	
інші фінансові інвестиції	1035	208.00	208.00
Довгострокова дебіторська заборгованість	1040	0.00	
Відстрочені податкові активи	1045	0.00	
Гудвіл	1050	0.00	
Відстрочені аквізиційні витрати	1060	0.00	
Залишок коштів у централізованих страхових резервних фондах	1065	0.00	
Інші необоротні активи	1090	0.00	
Усього за розділом I	1095	9 923.00	12 367.00
II. Оборотні активи Запаси	1100	49 992.00	36 595.00
Виробничі запаси	1101	180.00	685.00
Незавершене виробництво	1102	0.00	
Готова продукція	1103	0.00	
Товари	1104	49 812.00	35 910.00
Поточні біологічні активи	1110	0.00	
Депозити перестрахування	1115	0.00	
Векселі одержані	1120	0.00	
Дебіторська заборгованість за продукцію, товари, роботи, послуги	1125	145 870.00	245 609.00
Дебіторська заборгованість за розрахунками: за	1130	3 669.00	6 983.00

The name of the line	Line code	2020	2021
виданими авансами			
з бюджетом	1135	21.00	297.00
у тому числі з податку на прибуток	1136	0.00	
з нарахованих доходів	1140	0.00	
із внутрішніх розрахунків	1145	0.00	
Інша поточна дебіторська заборгованість	1155	10 324.00	5 809.00
Поточні фінансові інвестиції	1160	0.00	
Г роші та їх еквіваленти	1165	47 862.00	72 519.00
Готівка	1166	0.00	
Рахунки в банках	1167	47 862.00	72 519.00
Витрати майбутніх періодів	1170	548.00	766.00
Частка перестраховика у страхових резервах	1180	0.00	
у тому числі в: резервах довгострокових зобов’язань	1181	0.00	
резервах збитків або резервах належних виплат	1182	0.00	
резервах незароблених премій	1183	0.00	
інших страхових резервах	1184	0.00	
Інші оборотні активи	1190	0.00	
Усього за розділом II	1195	258 286.00	368 578.00
III. Необоротні активи, утримувані для продажу, та групи вибуття	1200	0.00	
Баланс	1300	268 209.00	380 945.00

Liabilities, UAH thousand

The name of the line	Line code	2020	2021
I. Власний капітал Зареєстрований (пайовий) капітал	1400	508.00	508.00
Внески до незареєстрованого статутного капіталу	1401	0.00	
Капітал у дооцінках	1405	0.00	
Додатковий капітал	1410	0.00	
Емісійний дохід	1411	0.00	
Накопичені курсові різниці	1412	0.00	
Резервний капітал	1415	0.00	
Нерозподілений прибуток (непокритий збиток)	1420	122 631.00	182 982.00
Неоплачений капітал	1425	0.00	
Вилучений капітал	1430	0.00	
Інші резерви	1435	0.00	
Усього за розділом I	1495	123 139.00	183 490.00
II. Довгострокові зобов’язання і забезпечення Відстрочені податкові зобов’ язання	1500	0.00	
Пенсійні зобов’язання	1505	0.00	
Довгострокові кредити банків	1510	454.00	
Інші довгострокові зобов’язання	1515	922.00	322.00
Довгострокові забезпечення	1520	0.00	
Довгострокові забезпечення витрат персоналу	1521	0.00	
Цільове фінансування	1525	0.00	
Благодійна допомога	1526	0.00	
Страхові резерви	1530	0.00	

The name of the line	Line code	2020	2021
у тому числі: резерв довгострокових зобов’язань	1531	0.00	
резерв збитків або резерв належних виплат	1532	0.00	
резерв незароблених премій	1533	0.00	
інші страхові резерви	1534	0.00	
Інвестиційні контракти	1535	0.00	
Призовий фонд	1540	0.00	
Резерв на виплату джек-поту	1545	0.00	
Усього за розділом II	1595	1 376.00	322.00
III. Поточні зобов’язання і забезпечення Короткострокові кредити банків	1600	0.00	
Векселі видані	1605	0.00	
Поточна кредиторська заборгованість за: довгостроковими зобов’язаннями	1610	1 026.00	592.00
товари, роботи, послуги	1615	135 198.00	177 631.00
розрахунками з бюджетом	1620	5 533.00	10 752.00
у тому числі з податку на прибуток	1621	4 016.00	9 719.00
розрахунками зі страхування	1625	0.00	
розрахунками з оплати праці	1630	17.00	15.00
за одержаними авансами	1635	0.00	
за розрахунками з учасниками	1640	0.00	
із внутрішніх розрахунків	1645	0.00	
за страховою діяльністю	1650	0.00	
Поточні забезпечення	1660	1 733.00	1 718.00
Доходи майбутніх періодів	1665	0.00	
Відстрочені комісійні доходи від перестраховиків	1670	0.00	
Інші поточні зобов’язання	1690	187.00	6 425.00
Усього за розділом III	1695	143 694.00	197 133.00
IV. Зобов’язання, пов’язані з необоротними активами, утримуваними для продажу, та групами вибуття	1700	0.00	
V. Чиста вартість активів недержавного пенсійного фонду	1800	0.00	
Баланс	1900	268 209.00	380 945.00

Statement of Financial Results (Statement of Comprehensive Income)

Financial results, UAH thousand

The name of the line	Line code	2021	2020
Чистий дохід від реалізації продукції (товарів, робіт, послуг)	2000	782 832.00	478 695.00
Чисті зароблені страхові премії	2010		0.00
Премії підписані, валова сума	2011		0.00
Премії, передані у перестрахування	2012		0.00
Зміна резерву незароблених премій, валова сума	2013		0.00
Зміна частки перестраховиків у резерві незароблених премій	2014		0.00
Собівартість реалізованої продукції (товарів, робіт, послуг)	2050	549 883.00	331 616.00
Чисті понесені збитки за страховими виплатами	2070		0.00

The name of the line	Line code	2021	2020
Валовий: прибуток	2090	232 949.00	147 079.00
Дохід (витрати) від зміни у резервах довгострокових зобов’язань	2105		0.00
Дохід (витрати) від зміни інших страхових резервів	2110		0.00
Зміна інших страхових резервів, валова сума	2111		0.00
Зміна частки перестраховиків в інших страхових резервах	2112		0.00
Інші операційні доходи	2120	33 784.00	55 477.00
Дохід від зміни вартості активів, які оцінюються за справедливою вартістю	2121		0.00
Дохід від первісного визнання біологічних активів і сільськогосподарської продукції	2122		0.00
Дохід від використання коштів, вивільнених від оподаткування	2123		0.00
Адміністративні витрати	2130	36 424.00	33 873.00
Витрати на збут	2150	55 786.00	37 516.00
Інші операційні витрати	2180	27 490.00	42 027.00
Витрат від зміни вартості активів, які оцінюються за справедливою вартістю	2181		0.00
Витрат від первісного визнання біологічних активів і сільськогосподарської продукції	2182		0.00
Фінансовий результат від операційної діяльності: прибуток	2190	147 033.00	89 140.00
Дохід від участі в капіталі	2200		0.00
Інші фінансові доходи	2220	324.00	298.00
Інші доходи	2240		0.00
Дохід від благодійної допомоги	2241		0.00
Фінансові витрати	2250	529.00	855.00
Втрати від участі в капіталі	2255		0.00
Інші витрати	2270		0.00
Прибуток (збиток) від впливу інфляції на монетарні статті	2275		0.00
Фінансовий результат до оподаткування: прибуток	2290	146 828.00	88 583.00
Витрати (дохід) з податку на прибуток	2300	-26 477.00	-15 996.00
Прибуток (збиток) від припиненої діяльності після оподаткування	2305		0.00
Чистий фінансовий результат: прибуток	2350	120 351.00	72 587.00

Elements of operating costs, UAH thousand

The name of the line	Line code	2021	2020
Матеріальні затрати	2500	2 970.00	2 164.00
Витрати на оплату праці	2505	35 524.00	33 810.00
Відрахування на соціальні заходи	2510	4 354.00	4 007.00
Амортизація	2515	2 343.00	2 388.00
Інші операційні витрати	2520	74 509.00	71 047.00
Разом	2550	119 700.00	113 416.00

Appendix D

Financial statements for 2020

Дата звіту	2021-05-11
Період	2020 рік, 12 міс

Balance sheet (Statement of financial position)

Assets, UAH thousand

The name of the line	Line code	2019	2020
I. Необоротні активи Нематеріальні активи	1000	454.00	614.00
первісна вартість	1001	1 632.00	1 690.00
накопичена амортизація	1002	1 178.00	1 076.00
Незавершені капітальні інвестиції	1005	350.00	106.00
Основні засоби	1010	10 722.00	8 995.00
первісна вартість	1011	16 142.00	15 618.00
знос	1012	5 420.00	6 623.00
Інвестиційна нерухомість	1015	0.00	0.00
первісна вартість	1016	0.00	0.00
знос	1017	0.00	0.00
Довгострокові біологічні активи	1020	0.00	0.00
первісна вартість	1021	0.00	0.00
накопичена амортизація	1022	0.00	0.00
Довгострокові фінансові інвестиції: які обліковуються за методом участі в капіталі інших підприємств	1030	208.00	0.00
інші фінансові інвестиції	1035	0.00	208.00
Довгострокова дебіторська заборгованість	1040	0.00	0.00
Відстрочені податкові активи	1045	0.00	0.00
Гудвіл	1050	0.00	0.00
Відстрочені аквізиційні витрати	1060	0.00	0.00
Залишок коштів у централізованих страхових резервних фондах	1065	0.00	0.00
Інші необоротні активи	1090	0.00	0.00
Усього за розділом I	1095	11 734.00	9 923.00
II. Оборотні активи Запаси	1100	42 961.00	49 992.00
Виробничі запаси	1101	444.00	180.00
Незавершене виробництво	1102	0.00	0.00
Готова продукція	1103	0.00	0.00
Товари	1104	42 517.00	49 812.00
Поточні біологічні активи	1110	0.00	0.00
Депозити перестрахування	1115	0.00	0.00
Векселі одержані	1120	0.00	0.00
Дебіторська заборгованість за продукцію, товари, роботи, послуги	1125	120 341.00	145 870.00
Дебіторська заборгованість за розрахунками: за виданими авансами	1130	1 543.00	3 669.00
з бюджетом	1135	734.00	21.00
у тому числі з податку на прибуток	1136	0.00	0.00

The name of the line	Line code	2019	2020
з нарахованих доходів	1140	0.00	0.00
із внутрішніх розрахунків	1145	0.00	0.00
Інша поточна дебіторська заборгованість	1155	8 816.00	10 324.00
Поточні фінансові інвестиції	1160	0.00	0.00
Г роші та їх еквіваленти	1165	6 837.00	47 862.00
Готівка	1166	0.00	0.00
Рахунки в банках	1167	6 837.00	47 862.00
Витрати майбутніх періодів	1170	537.00	548.00
Частка перестраховика у страхових резервах	1180	0.00	0.00
у тому числі в: резервах довгострокових зобов'язань	1181	0.00	0.00
резервах збитків або резервах належних виплат	1182	0.00	0.00
резервах незароблених премій	1183	0.00	0.00
інших страхових резервах	1184	0.00	0.00
Інші оборотні активи	1190	8.00	0.00
Усього за розділом II	1195	181 777.00	258 286.00
III. Необоротні активи, утримувані для продажу, та групи вибуття	1200	0.00	0.00
Баланс	1300	193 511.00	268 209.00

Liabilities, UAH thousand

The name of the line	Line code	2019	2020
I. Власний капітал Зареєстрований (пайовий) капітал	1400	508.00	508.00
Внески до незареєстрованого статутного капіталу	1401	0.00	0.00
Капітал у дооцінках	1405	0.00	0.00
Додатковий капітал	1410	0.00	0.00
Емісійний дохід	1411	0.00	0.00
Накопичені курсові різниці	1412	0.00	0.00
Резервний капітал	1415	0.00	0.00
Нерозподілений прибуток (непокритий збиток)	1420	68 044.00	122 631.00
Неоплачений капітал	1425	0.00	0.00
Вилучений капітал	1430	0.00	0.00
Інші резерви	1435	0.00	0.00
Усього за розділом I	1495	68 552.00	123 139.00
II. Довгострокові зобов'язання і забезпечення Відстрочені податкові зобов' язання	1500	0.00	0.00
Пенсійні зобов'язання	1505	0.00	0.00
Довгострокові кредити банків	1510	905.00	454.00
Інші довгострокові зобов'язання	1515	1 485.00	922.00
Довгострокові забезпечення	1520	0.00	0.00
Довгострокові забезпечення витрат персоналу	1521	0.00	0.00
Цільове фінансування	1525	0.00	0.00
Благодійна допомога	1526	0.00	0.00
Страхові резерви	1530	0.00	0.00
у тому числі: резерв довгострокових зобов'язань	1531	0.00	0.00
резерв збитків або резерв належних виплат	1532	0.00	0.00
резерв незароблених премій	1533	0.00	0.00

The name of the line	Line code	2019	2020
інші страхові резерви	1534	0.00	0.00
Інвестиційні контракти	1535	0.00	0.00
Призовий фонд	1540	0.00	0.00
Резерв на виплату джек-поту	1545	0.00	0.00
Усього за розділом II	1595	2 390.00	1 376.00
III. Поточні зобов’язання і забезпечення Короткострокові кредити банків	1600	0.00	0.00
Векселі видані	1605	0.00	0.00
Поточна кредиторська заборгованість за: довгостроковими зобов’язаннями	1610	1 120.00	1 026.00
товари, роботи, послуги	1615	111 272.00	135 198.00
розрахунками з бюджетом	1620	182.00	5 533.00
у тому числі з податку на прибуток	1621	182.00	4 016.00
розрахунками зі страхування	1625	0.00	0.00
розрахунками з оплати праці	1630	0.00	17.00
за одержаними авансами	1635	2 391.00	0.00
за розрахунками з учасниками	1640	0.00	0.00
із внутрішніх розрахунків	1645	0.00	0.00
за страховою діяльністю	1650	0.00	0.00
Поточні забезпечення	1660	1 750.00	1 733.00
Доходи майбутніх періодів	1665	0.00	0.00
Відстрочені комісійні доходи від перестраховиків	1670	0.00	0.00
Інші поточні зобов’язання	1690	5 854.00	187.00
Усього за розділом III	1695	122 569.00	143 694.00
IV. Зобов’язання, пов’язані з необоротними активами, утримуваними для продажу, та групами вибуття	1700	0.00	0.00
V. Чиста вартість активів недержавного пенсійного фонду	1800	0.00	0.00
Баланс	1900	193 511.00	268 209.00

Statement of Financial Results (Statement of Comprehensive Income)

Financial results, UAH thousand

The name of the line	Line code	2020	2019
Чистий дохід від реалізації продукції (товарів, робіт, послуг)	2000	478 695.00	449 053.00
Чисті зароблені страхові премії	2010	0.00	0.00
Премії підписані, валова сума	2011	0.00	0.00
Премії, передані у перестрахування	2012	0.00	0.00
Зміна резерву незароблених премій, валова сума	2013	0.00	0.00
Зміна частки перестраховиків у резерві незароблених премій	2014	0.00	0.00
Собівартість реалізованої продукції (товарів, робіт, послуг)	2050	331 616.00	330 196.00
Чисті понесені збитки за страховими виплатами	2070	0.00	0.00
Валовий: прибуток	2090	147 079.00	118 857.00
збиток	2095	0.00	0.00
Дохід (витрати) від зміни у резервах	2105	0.00	0.00

The name of the line	Line code	2020	2019
довгострокових зобов’язань			
Дохід (витрати) від зміни інших страхових резервів	2110	0.00	0.00
Зміна інших страхових резервів, валова сума	2111	0.00	0.00
Зміна частки перестраховиків в інших страхових резервах	2112	0.00	0.00
Інші операційні доходи	2120	55 477.00	49 057.00
Дохід від зміни вартості активів, які оцінюються за справедливою вартістю	2121	0.00	0.00
Дохід від первісного визнання біологічних активів і сільськогосподарської продукції	2122	0.00	0.00
Дохід від використання коштів, вивільнених від оподаткування	2123	0.00	0.00
Адміністративні витрати	2130	33 873.00	31 886.00
Витрати на збут	2150	37 516.00	38 067.00
Інші операційні витрати	2180	42 027.00	52 357.00
Витрат від зміни вартості активів, які оцінюються за справедливою вартістю	2181	0.00	0.00
Витрат від первісного визнання біологічних активів і сільськогосподарської продукції	2182	0.00	0.00
Фінансовий результат від операційної діяльності: прибуток	2190	89 140.00	45 604.00
збиток	2195	0.00	0.00
Дохід від участі в капіталі	2200	0.00	0.00
Інші фінансові доходи	2220	298.00	422.00
Інші доходи	2240	0.00	0.00
Дохід від благодійної допомоги	2241	0.00	0.00
Фінансові витрати	2250	855.00	980.00
Втрати від участі в капіталі	2255	0.00	0.00
Інші витрати	2270	0.00	4.00
Прибуток (збиток) від впливу інфляції на монетарні статті	2275	0.00	0.00
Фінансовий результат до оподаткування: прибуток	2290	88 583.00	45 042.00
збиток	2295	0.00	0.00
Витрати (дохід) з податку на прибуток	2300	-15 996.00	-8 256.00
Прибуток (збиток) від припиненої діяльності після оподаткування	2305	0.00	0.00
Чистий фінансовий результат: прибуток	2350	72 587.00	36 786.00
збиток	2355	0.00	0.00

Elements of operating costs, UAH thousand

The name of the line	Line code	2020	2019
Матеріальні затрати	2500	2 164.00	3 835.00
Витрати на оплату праці	2505	33 810.00	32 611.00
Відрахування на соціальні заходи	2510	4 007.00	3 644.00
Амортизація	2515	2 388.00	2 414.00
Інші операційні витрати	2520	71 047.00	79 806.00
Разом	2550	113 416.00	122 310.00