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INTRODUCTION

We are happy to invite you to get acquainted with the first issue of the new scientific and practical publication "Intellectualization of Logistics and Supply Chain Management".

We strongly believe that the launch of this magazine indicates the objective need to rethink a wide range of issues related to the development of theory and practice in logistics and supply chain management, awareness of the need to unite the scientific community and logistics practitioners, dissemination of modern knowledge and best practices for innovative development of the logistics services market.

The first issue of the magazine is published at a difficult time. The global coronavirus pandemic and the deep economic crisis have significantly worsened business activity in the world. Currently, global supply chains are collapsing, international trade is declining, and competition between global and regional logistics operators is intensifying. The most common thesis is that the world will never be the same again. Industry experts predict the emergence of new, more flexible and adaptive supply chain management strategies and approaches to logistics business process management. The trend towards collaborations, cooperation and unification of services is emerging, comprehensive proposals for clients are being developed. There is increasing talk about the need to build bimodal supply chains, which involves the development of different decision-making scenarios: the traditional approach - cost-effective efficiency, low risk, high predictability; a new approach "second mode" - rapid recognition of opportunities, adaptability, willingness to solve unexpected problems and look for new opportunities.

Radical transformations of the global and national markets for logistics services require appropriate scientific support. Logistics science has a special role to play in this process. Initiating the emergence of a new journal, we decided to focus on its coverage of problematic aspects of the formation and development of logistics systems at the micro, mezo and macro levels, supply chain management, digitization of logistics, methods and tools for optimizing processes in logistics and supply chains, sociopsychology relations and network interaction of enterprises using cloud technologies, artificial intelligence, e-learning, neural business process management systems, etc.

Therefore, we invite scientists, researchers and business representatives, as well as our colleagues from abroad, to cooperate and present the results of scientific research, to discuss and debate on them, to work together to develop the scientific theory of logistics and promote mutual intellectual enrichment.

We hope that the new scientific publication will become a theoretical guide for young researchers and representatives of other fields.

HRYHORAK Mariia
Chief Editor



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APPROACHES TO THE STRATEGIC MANAGEMENT OF THE DEVELOPMENT OF MEDICAL TREATMENT FACILITIES

Hutsaliuk Oleksii, Bondar Iuliia, Boiko Olena, Bakum Iryna «Approaches to the strategic management of the development of medical treatment facilities». The article examines the main approaches to the strategic management of the development of medical treatment facilities and determines that the modern health care system needs comprehensive strategic measures that will contribute to increasing the effectiveness of the management of the strategic development of medical facilities. The market of medical

institutions is an important component in the structure of the market of medical services, evidence of this is the intensive development and expansion of not only medical, but also cosmetic services, improving their quality and level of service.

Therefore, there is an urgent need to determine the essence of managing the strategic development of medical institutions. The main achievements of foreign and domestic science in the medical field, the strategic planning of its development and the application of the principles of strategic management of medical institutions became the theoretical and methodological basis of the research. The formation and development of strategic management is an important part of corporate management not only of a manufacturing enterprise, but also of health care institutions as a whole. Without effective medical care, citizens are not interested in solving secondary problems, because the issue of preserving and maintaining health always comes first. With the spread of market development priorities, the management of medical institutions is gaining importance.

The study analyzes different approaches to strategic management, such as innovation management, resource management, implementation of digital technologies and patient orientation. Special attention is paid to practical aspects of strategy implementation, including assessment of the external and internal environment, development of strategic plans, optimization of operations and risk management. The research results are intended to suggest ways to increase the competitiveness of medical institutions and the quality of the services provided by them, which will contribute to their sustainable development in the conditions of modern challenges in the field of health care.

Keywords: strategic management, medical institutions, management of strategic development of medical institutions, principles of management, management of the health care system

Гуцалюк Олексій, Бондар Юлія, Бойко Олена, Бакум Ірина «Підходи до стратегічного управління розвитком медичних лікувальних закладів». В статті розглянуто основні підходи до стратегічного управління розвитком медичних лікувальних закладів та визначено, що сучасна система охорони здоров'я потребує комплексних стратегічних заходів, які сприятимуть підвищенню ефективності управління стратегічним розвитком медичними закладами. Ринок медичних закладів є вагомим складовим в структурі ринку медичних послуг, свідченням цього є інтенсивний розвиток та розширення не лише лікувальних, а і косметичних послуг, підвищення їх якості та рівня обслуговування. Тому, виникає нагальна потреба у визначенні сутності управління стратегічним розвитком медичних закладів. Теоретико-методологічною основою дослідження стали основні досягнення зарубіжної та вітчизняної науки в медичній галузі, стратегічне планування її розвитку та застосування принципів стратегічного управління медичними закладами. Формування та розробка стратегічного управління є вагомим частком корпоративного менеджменту не лише виробничого підприємства, а і закладів охорони здоров'я в цілому. Без ефективного медичного забезпечення громадяни не зацікавлені у вирішенні другорядних проблем, адже на першому місці завжди стоїть питання збереження та підтримання здоров'я. З поширенням ринкових пріоритетів розвитку важливого значення набуває управління медичними закладами. У рамках дослідження аналізуються різні підходи до стратегічного управління, такі як інноваційний менеджмент, управління ресурсами, впровадження цифрових технологій та орієнтація на пацієнтів. Особлива увага приділяється практичним аспектам реалізації стратегій, включаючи оцінку зовнішнього та внутрішнього середовища, розробку стратегічних планів, оптимізацію діяльності та управління ризиками. Результати дослідження мають на меті запропонувати шляхи підвищення конкурентоспроможності медичних закладів та якості наданих ними послуг, що сприятиме їхньому стійкому розвитку в умовах сучасних викликів у сфері охорони здоров'я.

Ключові слова: стратегічне управління, медичні заклади, управління стратегічним розвитком медичних закладів, принципи управління, менеджмент системи охорони здоров'я.

Introduction. Relevance of research. Strategic management of the development of medical treatment facilities is one of the key components of the effective functioning of the health care system. In modern conditions, medical institutions face a number of challenges, such as the rapid development of medical technologies, increasing requirements for the quality of medical services, limited resources, as well as the growing needs of the population for affordable and high-quality medical care. In these conditions, it becomes important to apply effective approaches to management, which allow not only to ensure the stability of the work of medical institutions, but also to ensure their sustainable development.

Approaches to the strategic management of the development of medical treatment facilities include the analysis of the external and internal environment, the definition of key goals, the development and implementation of strategic plans, as well as the evaluation of results. Such a systematic approach allows for the creation of long-term strategies that take into account the specifics of a particular institution, trends in the medical services market, as well as the interests of patients and staff.

Studying different approaches to strategic management allows you to understand which models are the most effective in a changing environment and how to optimize the work of medical institutions to achieve high quality indicators and economic sustainability.

Analysis of recent research and publications. The topic of strategic management of the development of medical treatment facilities is actively researched both in Ukraine and abroad. Dissertation works and articles in specialized publications of Ukraine, where many Ukrainian researchers publish their works in specialized publications, such as "Economics of Health Care", which examines the strategic aspects of the

development of medical institutions in the context of reforms in Ukraine.

Thus, the authors Alkemaga V., Sumets O., Kyrychenko O. of the textbook "Health Care Management" highlight the issue of reforming the health care system in Ukraine and strategies for the development of medical institutions [1]. Peculiarities of strategic management in the national health care system were studied by such scientists as Borshch V. [2], Safonov Yu. [3], Stefanyshyn L. [4].

However, a significant part of scientific achievements concerns the medical field in general, and almost no attention is paid to medical institutions and, in particular, to the definition of the essence of managing their strategic development.

The formulation of the goals of the article. The purpose of the study is to analyze and systematize approaches to strategic management of the development of medical treatment facilities to determine effective management tools that contribute to improving the quality of medical services, optimizing the use of resources, and ensuring the sustainable development of medical facilities in conditions of constant changes in the field of health care.

Presentation of the main research material. The medicine and health care management system is a powerful force for the development and positive changes of health care institutions. Strategic management is a continuously proactive process that provides enterprises with the possibility of continuous development in accordance with dynamic changes in the external environment.

The origin of the term "strategy" dates back to ancient times and is literally translated from ancient Greek as "the art of warfare." In the modern sense, strategy is understood as "the art of managing the actions of a separate team to achieve goals in the fight against the enemy" (V. Lepskyi, 2016).

According to Z. Shershneva, S. Oborska, Yu. Ratushny, "strategy is a concrete plan of management actions aimed at achieving set goals. It determines how the organization will function and develop now and in the future, as well as what business, competitive and functional measures and actions will be taken to ensure that the organization achieves the desired state" [5].

Gavrylova N. "Strategic management of enterprise development aimed at creating competitive advantages of the enterprise, establishing an effective strategic position that will ensure its future viability in conditions of rapid changes" [6].

According to N. Makhinchuk and N. Obushina, the original idea that reflects the essence of the concept of strategic management is the idea of the need to take into account the relationship and interaction of the external and internal environment when determining the goals of the management entity. That is, it is based on a relationship characterized by the "environment - subject of management" system, where the subject is subject to various external influences of direct and indirect factors (NTP, socio-cultural and political changes, influence of interest groups, etc.). Scientists also claim that strategic management is a process of choosing and implementing goals, which allows you to explore the external environment, as well as the process of forming a strategy of internal and external opportunities for the development of the state in achieving the goal. At the same time, strategic management allows you to clarify the following aspects: where you are now; where do you want to be in the future; how to ensure movement towards the desired future [5].

Today, the formation and development of strategic management is an important component of corporate management not only of production, but also of health care institutions, and it is especially important in the conditions of reforming medicine, with the aim of further social, medical, financial

and economic competitiveness. in the market of medical services.

T. Sabetska and L. Stefanyshyn claim in their research that modern scientific achievements lack a comprehensive methodological approach to the formation of a strategy for the development of a medical facility in the status of a communal non-commercial enterprise. Therefore, according to the authors, further scientific research on improving the technology of strategic planning of health care institutions, taking into account the prospects for their further development and threats to it, is necessary and extremely important [7].

According to V. Lepsky, "Strategic management of medical institutions should ensure economic, social and scientific advantage in the competitive market of medical services. Manifestations of the globalization of medical services are not yet fully present in Ukraine, but integration into the world community is the driving force behind the need for innovative tools and methods of managing medical facilities" [5].

According to scientists T. Sabetska and L. Stefanyshyn, the concept of "strategic management of health care" should be considered as a complex systemic process, based on the construction of long-term plans for the coordinated work of all its structural divisions, which is oriented towards development, increasing efficiency and achieving the social goals of the medical institution [7].

Strategic management of medical institutions is one of the most important elements of ensuring their effective functioning and long-term development. In today's health care environment, which is characterized by rapid changes in technology, legislation and funding, the provision of quality medical services depends on the institution's ability to flexibly adapt to changes and plan for the future. Strategic management covers the processes of planning, monitoring, analysis and evaluation of the institution's activities to achieve the established goals, which allows for effective

use of resources, improving the quality of medical services and ensuring sustainable development of the organization.

There are several key approaches to the strategic management of medical facilities, each of which has its own characteristics and advantages depending on the context in which the medical facility operates.

1. Traditional approach to strategic planning. This approach is based on the classic stages of strategic management: analysis of the external and internal environment, formulation of strategies, their implementation and control. The traditional approach involves using tools such as SWOT analysis to assess an organization's strengths and weaknesses, as well as identify opportunities and threats.

Assessment and analysis of the environment is an important component of the strategic management model, because a competent assessment of the business environment, the availability of doctors and medical personnel capable of professional growth, as well as the availability of infrastructure, favorable banking, tax, and economic legislation contribute to the successful implementation of the development strategy of a medical institution.

Evaluation of the main performance indicators of the activity of a medical institution can be carried out on the basis of a SWOT analysis (Table 1.)

Table 1 – SWOT analysis of a medical institution

Strengths	Weak sides
Availability of highly qualified medical personnel; Excellent facilities; Comfortable working conditions for staff and patient care; Opportunities for financial motivation of staff.	Continuous training of staff; Lack of new medical and diagnostic equipment; Low level of funding for budget health programs; High costs for training of medical staff.
External opportunities	External threats
Introduction of the latest medical services; Implementation of public-private partnership programs.	Insufficient budget funding for budget and local health and safety programs; Rapid growth of competition from private medical institutions; Irresponsible attitude of citizens to their own health.

Source: formed by the authors on the basis [7-9].

Strategic planning helps to determine the priority directions of the institution's development, in particular, improving the quality of medical services, expanding the range of services provided, and attracting new resources.

2. The competitive approach (Michael Porter) is aimed at ensuring the competitive advantages of medical institutions in difficult market conditions. In his five forces model, Michael Porter identifies the factors that affect the competitiveness of an organization: the level of competition in the industry, the threat of new players, the ability of suppliers and buyers to influence market conditions, and

the threat of service substitutes. In the conditions of growing competition among medical institutions, this approach allows for the development of strategies that contribute to attracting more patients and improving the position of the institution in the market of medical services.

3. Innovative approach and digitalization, since innovations play an important role in the development of modern medical institutions, the introduction of new technologies, such as electronic medical records, telemedicine and artificial intelligence, allow to increase the efficiency of work, improve the quality of diagnosis and

treatment, and also provide better access to medical services. An innovative approach to management also includes the adaptation of institutions to new models of patient care focused on results, such as Value-Based Healthcare, where the main criterion for success is the quality of care provided, rather than the quantity of services.

4. The balanced system of indicators by Robert Kaplan and David Norton allows for a comprehensive assessment of the activity of a medical institution in several key areas: finances, internal processes, training and development, as well as work with patients. A balanced scorecard allows not only to measure current performance, but also to forecast future development, particularly in the changing health care market.

5. Adaptive strategic management, this approach is based on flexibility and quick response to changes in the external environment. For healthcare institutions, this is extremely important, as their functioning depends on rapid adaptation to new regulatory requirements, changes in funding and technological innovations. Adaptive management involves constant monitoring of the market, review of strategic goals and quick response to new challenges.

The principles of strategic management in the practice of managing healthcare institutions are based on general management approaches adapted to the specifics of medical institutions. They are aimed at ensuring efficiency, quality of medical services, rational use of resources and sustainable development of institutions. The main principles of strategic management in this field are described in Fig. 1.

Thus, the principles of strategic management in the management of healthcare institutions provide a systematic and comprehensive approach to planning and implementation of long-term goals. They help increase the efficiency of institutions, improve the quality of medical services and ensure sustainable development in the

conditions of constant changes and challenges in the field of health care.

Safonov Yu. and Borshch V. also believe that the modern management of medical institutions should focus not only on program principles and tools of strategic management, but also pay attention to the education of strategic thinking of managers and employees [3].

Today, the management of strategic development is an integral part of health care in general and the management of strategic development of medical institutions in particular. But even the most competent strategy does not give a 100% guarantee of accurate and detailed forecasting of the planned result. Therefore, the management of the strategic development of medical institutions should be considered as a model of achieving goals at the expense of external factors and internal potential.

In medical practice, management of strategic development is both the process of providing medical services and its result. After all, the basis of strategic management of the development of medical institutions is the selection of short-term, medium-term and long-term perspective goals and tasks of development based on humane, spiritual and moral and ethical values using the best ways and the concentration of the patient, doctor and medical institution. Management of the strategic development of a medical institution should be based on goals and measures to achieve them and be limited to financial, economic, personnel and time resources.

The practical aspects of the implementation of strategic management in the field of health care cover a number of key areas and processes aimed at ensuring the effective operation of medical institutions, improving the quality of medical services and sustainable development of organizations in conditions of dynamic changes, such as [9,10,11]:

The principle of purposefulness

A key aspect of strategic management is defining clear goals and objectives to be achieved in the short- and long-term. In health care facilities, such goals may include improving the quality of health care services, reducing costs, improving accessibility, and expanding the range of services for patients. This principle requires the managers of medical institutions to set realistic, measurable and achievable goals, according to the needs of the patients and the capabilities of the institution.

The principle of the system approach

Strategic management in health care involves a comprehensive look at all aspects of the institution's activities, including medical, administrative, financial, personnel and informational components. The system approach assumes that all elements of the organization are interconnected, and changes in one area can affect others. For example, the introduction of new medical technologies may require revision of management processes or additional training of staff.

The principle of adaptability

Health care facilities operate in an ever-changing environment that includes new legislative requirements, changes in funding, new medical technologies and patient needs. The principle of adaptability involves the ability to quickly respond to external changes and adapt management strategies, while maintaining high quality of service and efficiency. It also includes flexibility in management decisions and the ability to innovate quickly.

The principle of patient orientation

In the conditions of growing competition among medical institutions and high expectations for the quality of services, strategic management should be oriented to the needs of patients. This involves creating conditions for improving the quality of service, increasing the level of patient satisfaction and ensuring the availability of medical services. Patient-centeredness also involves the implementation of personalized approaches to treatment that take into account the individual needs and characteristics of each patient.

The principle of effective use of resources

One of the key tasks of strategic management is optimizing the use of resources such as finance, human resources, medical equipment and infrastructure. The principle of efficient use of resources requires a balanced approach to management, which allows achieving maximum efficiency at minimum costs. It also includes rational budget planning, cost reduction without sacrificing the quality of healthcare services, and the introduction of new technologies that increase productivity.

The principle of innovation

Modern medicine is actively developing, and health care institutions must constantly introduce innovations into their activities. This includes the application of new medical technologies, management software, diagnostic and treatment methods, as well as the development of electronic medical records and telemedicine. Innovation also refers to management processes that allow more efficient organization of the institution's work, increase productivity and quality of service.

The principle of team approach and leadership

Strategic management of medical facilities requires effective leadership and coordinated team work. Leaders must clearly understand the organization's strategic goals and motivate staff to achieve them. This includes building a strong corporate culture, involving all employees in the decision-making process, and encouraging the development and improvement of staff skills. A team approach contributes to better communication, coordinated work and effective performance of tasks.

The principle of continuous monitoring and evaluation

An important aspect of strategic management is the constant monitoring of the results of the medical institution's activities and the evaluation of the effectiveness of the implemented strategies. This involves regular analysis of key performance indicators such as patient satisfaction, quality of service, financial performance and resource utilization. Based on the received data, the strategy is adjusted to achieve higher results.

Figure 1 – Basic principles of strategic management in the practice of managing healthcare institutions

Source: formed by the authors on the basis [2-3; 9]

1. Analysis of the external and internal environment, that is, the practical implementation of strategic management begins with an in-depth analysis of both the external and internal environment of a medical institution. For this, tools such as SWOT analysis, PEST analysis (political, economic, social and technological factors) and healthcare market analysis are used. This stage allows you to assess the situation in the health care market, understand the needs of patients and the competitive environment, which contributes to the formation of effective strategic decisions.

2. Based on the analysis, the strategic goals of the health care institution are determined. These can be specific goals, such as improving the quality of medical services, increasing the number of patients, expanding the range of services provided, introducing innovative technologies, or increasing the efficiency of resource use. It is important that these goals are clearly stated, measurable and achievable, and aligned with the organization's mission and vision.

3. After defining the goals, a strategic plan is developed, which includes specific measures to achieve them. A strategic plan usually covers the following aspects:

- Financial planning: allocation of resources, investments in equipment and infrastructure, search for funding sources.

- Personnel management: training and advanced training of medical personnel, development of leadership qualities, employee motivation.

- Implementation of new technologies: investments in digitization, telemedicine, artificial intelligence for diagnostics, electronic medical records.

- Marketing strategies: attracting new patients by improving the reputation of the institution, cooperation with other organizations and informing the public about the services provided.

4. One of the most important aspects of modern strategic management is the introduction of innovative technologies. This

includes the development of telemedicine, the implementation of electronic medical records, patient management systems and analytical platforms for data collection and processing. Such innovations make it possible to optimize the work of the institution, improve the quality of medical services, reduce the time spent on patient care, and improve management processes.

5. Strategic personnel management includes not only recruitment and retention of qualified employees, but also continuous training, professional development and teamwork development. In the field of health care, it is very important that the medical staff is highly motivated and supports a corporate culture focused on quality service provision and development. The implementation of continuous training and development programs allows to improve the qualifications of the staff, introduce new methods of treatment and improve the overall efficiency of the institution.

6. An effective marketing strategy is an integral part of strategic management. It involves increasing the public's awareness of the services provided, the reputation of the medical institution, as well as the attraction of new patients. It is important to develop communication with patients through social networks, websites and other information platforms, where you can inform about the benefits of the facility, special programs and innovative approaches to treatment.

7. One of the most important practical aspects of strategic management is constant control over the implementation of the strategic plan. For this, performance indicators (KPI) are used, which allow to assess how successfully strategic initiatives are being implemented. The main indicators can be:

- Level of patient satisfaction.
- Quality of medical services.
- Financial results.
- Staff productivity.
- Use of innovation and digital technologies.

Constant monitoring of results and their comparison with planned indicators allows management to make timely adjustments to strategic initiatives, which contributes to achieving better results.

8. The practical aspect of strategic management includes readiness to respond quickly to changes in the external environment, such as new legislative requirements, economic crises or outbreaks of epidemics. Healthcare institutions must have flexible strategies that allow them to quickly adapt to new conditions, minimizing risks for the organization and patients. For example, during the COVID-19 pandemic, many institutions were able to quickly implement new security protocols, switch to remote delivery of services and ensure

uninterrupted operations in extreme conditions.

So, the practical aspects of implementing strategic management in health care include a set of measures aimed at ensuring the effective functioning of medical institutions. They cover the analysis of the external and internal environment, definition of strategic goals, implementation of innovations, personnel management, marketing and continuous monitoring of results. Successful implementation of strategic management allows medical institutions not only to improve the quality of services, but also to ensure sustainable development in conditions of constant change.

Management of the strategic development of medical institutions can be presented as a model (Fig. 2).

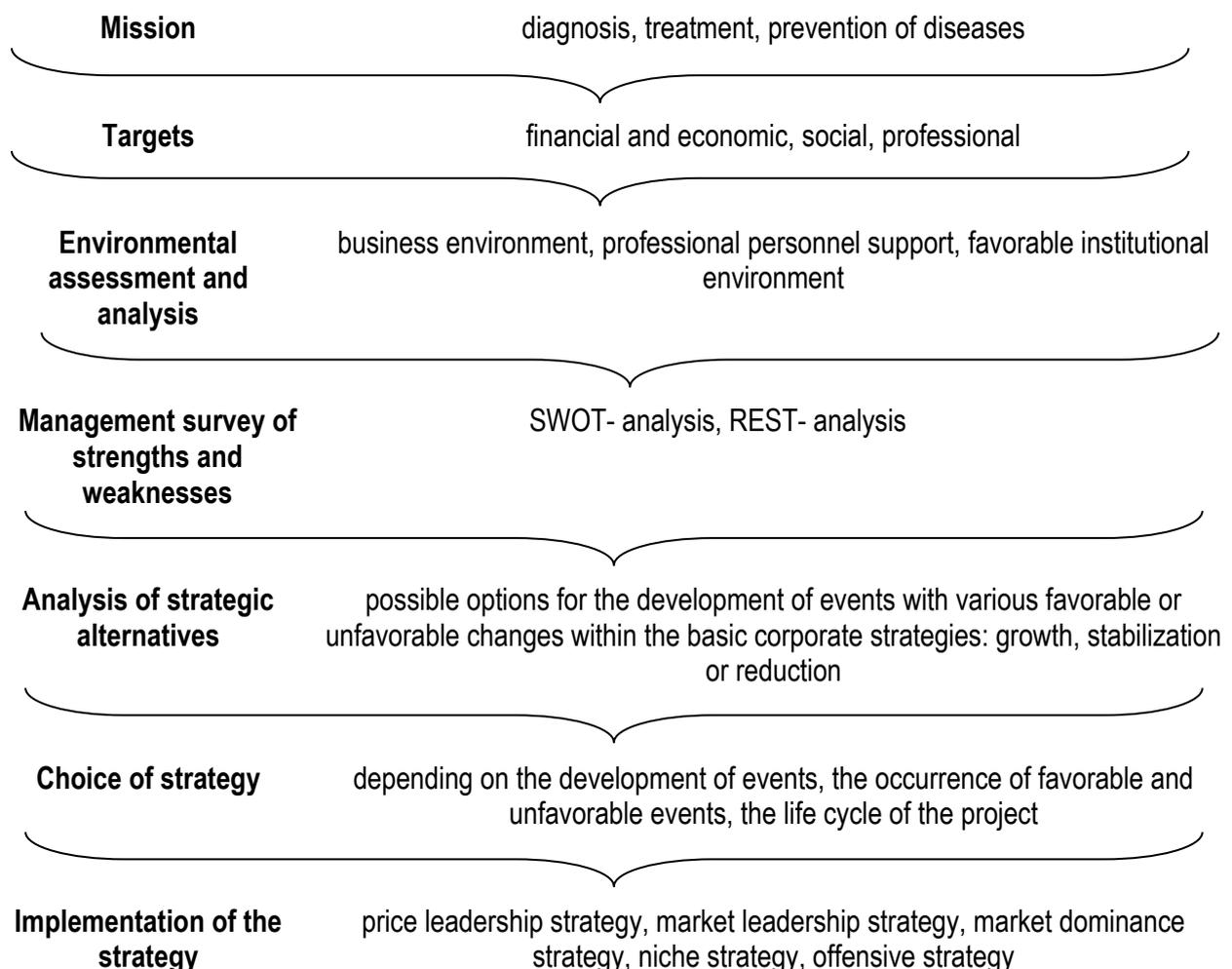


Figure 2 – Model of strategic management of medical institutions

Source: suggested by the author [12-13].

Considering the model of strategic development of treatment medical institutions, we will consider in more detail the goals of the activity of treatment medical institutions. The financial goal of a treatment medical institution, like any enterprise, is to make a profit, the social goal is to ensure the health of the population, or to maintain it at an acceptable level, and the professional goal is to satisfy the work of the medical staff as a specialist and career growth.

The implementation of the strategy should be important, because when choosing it, it is important to correctly assess the future client (patient) and his needs: the clinic is designed for an elite or ordinary client, will provide a wide range of medical services or a niche in the treatment market.

Today, in the conditions of the transformation of the domestic medical system, the autonomy of health care institutions is taking place, that is, the transition to a new status, namely the status of communal non-commercial enterprises, as well as a change in the model of health care institutions. their financial support. Along with the social mission of improving the health of citizens, medical institutions must also take care of the economic expediency and efficiency of their activities, which requires the application of new principles and approaches to management, in particular strategic planning [6].

The development of the medical care management system is associated with the introduction of advanced management technologies that can provide the necessary information to analyze the activities of medical institutions according to the following aspects: "quality of medical care", "qualified doctors", "patients" and "financing". The choice of a strategic management decision should meet medical, economic and social criteria.

It should be noted that the strategic development of medical institutions is a long-term planning process that covers all aspects of the activities of medical institutions with the aim of ensuring sustainable growth,

improving the quality of medical services and efficient use of resources. This development is aimed at adapting to external changes, implementing innovations, meeting patient needs and improving overall competitiveness in the healthcare market. Successful implementation of strategic development allows medical institutions to remain competitive, effectively respond to challenges and provide high quality medical care.

Conclusions. Thus, approaches to the strategic management of the development of medical facilities can cover several key aspects that reveal the importance and effectiveness of this management to ensure the sustainable development of the health care system:

1. The implementation of strategic management enables medical institutions to adapt to rapid changes in market conditions, in particular to new challenges in the field of health care, such as epidemics, demographic changes and technological progress. The development and implementation of clear strategic plans allows institutions not only to maintain stability, but also to achieve high indicators in the provision of medical services.

2. One of the key results of strategic management is the improvement of the quality of the provision of medical services. Thanks to the use of modern approaches, such as the model of balanced indicators (Balanced Scorecard) or the approach to management based on values (Value-Based Healthcare), medical institutions can better meet the needs of patients, increasing the quality of services and the level of patient satisfaction.

3. Strategic management allows more efficient allocation and use of financial, human and material resources of medical institutions. The use of strategic analysis tools, such as SWOT analysis, allows you to identify the strengths and weaknesses of institutions, as well as identify opportunities for optimizing resources and improving work efficiency.

4. Medical institutions are constantly faced with the need to respond to changes in legislation, financial mechanisms, demographic and epidemiological trends. Strategic management provides an opportunity to more flexibly adapt to these changes and develop appropriate action plans that allow to reduce risks and ensure stable development of the institution.

5. In today's world, innovations, in particular in the field of digital technologies, play a key role in the strategic management of medical institutions. The use of electronic medical records, telemedicine and other digital solutions contributes to increasing the efficiency of management and the quality of patient care. This makes it possible to reduce costs, improve access to medical services and increase the accuracy of diagnosis and treatment.

6. Strategic management cannot be successful without proper leadership and a favorable corporate culture in medical institutions. Leaders must not only determine the direction of development, but also

motivate the team, involve employees in the decision-making process, and stimulate the development of professional skills and competencies.

7. In the context of modern challenges, such as global environmental problems and social inequality, the strategic management of medical institutions should take into account the principles of sustainable development and social responsibility. This involves the implementation of environmentally friendly practices, the development of programs for the prevention of diseases and the support of the health of the population, especially vulnerable groups.

Thus, strategic management is an important tool that ensures the effective operation of medical treatment facilities in the conditions of modern challenges. Appropriately selected approaches and tools make it possible to achieve a balance between the efficiency of the use of resources and high quality of medical services, as well as ensure the sustainable development of institutions in the long term.

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FORMATION OF A MODERN MANAGEMENT MODEL AS A GUARANTEE OF ADAPTATION OF UKRAINIAN BUSINESS TO THE CONDITIONS OF GLOBALIZATION

Ganna Gurina, Oksana Kyrylenko, Valentina Novak, Kateryna Razumova, Maksym Lukianenko.
"Formation of a modern management model as a guarantee of the adaptation of Ukrainian business to the conditions of globalization". The article examines the peculiarities of the formation of the modern management model in Ukraine, considers the peculiarities of the national business culture and the characteristic features of modern management, defines the basis of modern concepts that should be the basis of the Ukrainian management model. The main directions of further management development in the 21st century to ensure the competitiveness of Ukrainian business and its adaptation to the conditions of globalization are scientifically based. The basic principles of building the Ukrainian management model, which are in line with global development trends, are proposed and substantiated. It was concluded that a balanced approach to the formation of the management team, taking into account the peculiarities of the Ukrainian mentality and the situation in which Ukraine found itself, is one of the most important strategic tasks for society in today's conditions. The transition to a market economy and the position of Ukrainian business in the international community largely depend on this.

Keywords: management model, management concepts, Ukrainian business, adaptation, globalization, business development, strategic tasks, international community

Ганна Гуріна, Оксана Кириленко, Валентина Новак, Катерина Разумова, Максим Лук'яненко. «Формування сучасної моделі менеджменту як запорука адаптації українського бізнесу до умов глобалізації». У статті досліджено особливості формування сучасної моделі менеджменту в Україні, розглянуті особливості національної ділової культури та характерні риси сучасного менеджменту, визначені основні сучасні концепції, які повинні бути підґрунтям української моделі менеджменту. Науково обґрунтовані основні напрямки подальшого розвитку менеджменту у XXI столітті для забезпечення конкурентоспроможності українського бізнесу та його адаптації до умов глобалізації. Запропоновані і обґрунтовані базові принципи побудови української моделі менеджменту, що перебувають у руслі загальносвітових тенденцій розвитку. Зроблені висновки, що виважений підхід до формування управлінської команди з урахуванням особливостей українського менталітету та ситуації, в якій опинилася Україна, в умовах сьогодення є одним з найважливіших стратегічних завдань для суспільства. Від цього в значній мірі залежить і перехід до ринкової економіки, і позиція українського бізнесу в міжнародному співтоваристві.

Ключові слова: модель менеджменту, концепції менеджменту, український бізнес, адаптація, глобалізація, розвиток бізнесу, стратегічні завдання, міжнародне співтовариство.

Introduction. Ukrainian management today is still far from the parameters of globalization at all levels - from individual enterprises to society as a whole. Nevertheless, the years of market reforms have created a favorable framework for developing market-based governance principles and forming a new generation of managers with a new vision and mindset. They care about their reputation and image.

Many of them studied at prestigious universities abroad and have interned in successful companies. They have their own associations, unions, associations and even political organizations through which they aim to solve important local, regional and national problems. The state should take into account this new trend in Ukrainian life. It is the powerful intellectual abilities, high level of professional education, patriotism and a high

sense of responsibility for the country's fate - the key to the high competitiveness of Ukrainian business and its rapid adaptation to the conditions of globalization.

Analysis of the latest studies. Many scientists are devoted to optimization of development of global management at the present stage [2, 3, 4, 5].

Despite the existence of deep and solid studies of modern management models in foreign countries, questions of formation of Ukrainian management model are practically not worked out by economic science and require detailed study.

Purpose of the study. The article is aimed at studying the peculiarities of formation of a modern management model as a key to high competitiveness of Ukrainian business and its rapid adaptation to globalization.

Based on the main objective, the article has the following objectives:

- The features of national business culture and characteristics of modern management are considered;
- Defined the basis of modern concepts, which should be the basis of the Ukrainian management model;
- The main directions of further development of management in the 21st century to ensure competitiveness of Ukrainian business and its adaptation to the conditions of globalization are justified.

Presentation of the main material of the study. Deep, very complex, in many ways contradictory, but historically inevitable transformation of the economic environment of Ukraine caused increased interest in management. Business globalization demonstrates that its efficiency is influenced not only by hard factors such as location, climate and equipment, but also by soft factors which cannot be measured but whose influence is very significant [1].

One of these factors is the formation of work attitude and work culture. The combination of soft factors forms a culture that is inherent to the inhabitants of the country, which can be understood as a set of

behavioral models and habits developed over centuries.

Managers are primarily interested in business culture. There are almost no studies studying the specifics of the Ukrainian business culture, its strengths and weaknesses. Knowledge of the characteristics of the business culture of a country can help managers to understand the reasons and possible consequences of their own decisions, decisions of their colleagues and subordinates, decisions of management and shareholders. It is necessary to understand what features are characteristic of the Ukrainian business culture. Once you understand this, it will be easier to assess the real possibilities of implementing different management models in Ukraine [2].

There are three levels of culture in business: the first is national culture, the second is organizational culture, that is, the culture of a particular business organization, and the third is the culture of management at the lowest level. We still call it a management style. That's how managers perceive themselves in their behavior.

The national culture has a great influence on organizational culture, which in turn influences the culture of management. Only with strong leadership can a management culture determine an organizational culture, and organizational systems can change a national culture

Entrepreneurship in our country cannot develop without a contract culture, which is an important element. If the contract is concluded, it must be fulfilled. It can become part of the national culture. Currently, contract culture in our country is at a very low level [3].

In most business organizations in Ukraine, power is structured as a grape cluster. First, from top to bottom; secondly, in the form of clusters (closed groups). Although there are connections between them, for example, the transfer of information, the isolation of each group is obvious. Each organization should check whether it is worth

maintaining such a situation and whether it is effective for the entrepreneurial economy.

Participation in management is impossible without individual employees taking on specific tasks and responsibilities. This means that employees should work primarily for the benefit of the system, not for themselves. In Ukraine, however, participation in management is understood differently. A person tries to climb the career ladder to declare himself and make some proposals, but is not responsible for the implementation of the proposal or at least part of it [4].

It is very important to create an environment in the system in which irresponsible people will feel uncomfortable. Entrepreneurs, that is, people who have

created a company (and you cannot create a company if you do not take responsibility for it), know how to do it and have practical experience. Therefore, they must help their employees learn to create. Training takes place primarily in the workplace. A typical manager spends 40 percent of his time training subordinates. After all, responsibility is possible only with those who are educated, competent and not afraid to make decisions.

To answer the question of what motivates people in the Ukrainian context, it is necessary to understand what motivates the population.

The main types of motivation that are characteristic of national and cultural groups are presented in Table 1.

Table 1 – The main types of motivation that are characteristic of national and cultural groups

No	Types of motivation	Characteristics
1.	Achieving goals	Money plays an important role. They encourage a businessman to be a market leader or the first to release a new product
2.	Defensive motivation	Maximum interest in stability. Characterized by the desire of a businessman not to allow others to interfere in their business and create their own world
3.	Motivation for alignment	The approach of equalizing a socially motivated group of people who value the quality of life, but prefer not to change anything so as not to aggravate the situation, is used.
4.	Risk for the sake of improving the quality of life	The most socially motivated activity for the sake of improving the quality of life

Source: Developed by authors

Now they say that there is a Ukrainian specificity in business. This is facilitated by a new level of culture - the so-called institutional culture: business and entrepreneurship is one of the institutions of society that is engaged in creating additional consumer value, developing its culture. And in this culture there is a certain amount of internationality. Since the policy of protectionism is widespread in the world, it has to be used in the management system.

Experience shows that their way is not always the best, and the institutional culture of business, brought from the West, proves its effectiveness always, including in Ukraine.

The creation of enterprises with the participation of foreign capital shows that it is possible to instill a foreign business culture in the country [5].

However, studies show that there is a certain age limit for assimilating people into different cultures, and that after crossing this line it is much more difficult to change something.

Therefore, the current generation of businessmen should not expect significant changes in the behavior of their domestic partners. A new generation of Ukrainian entrepreneurs and managers should learn behavioral patterns from childhood.

For business, the moral environment is important, and for the company, the morality of employees. Morality is shaped by religion, and humanity has not yet invented another system. Therefore, low morality means that religious and secular education has a low impact on the education of people [6].

The hardest thing for business is to change people, not institutions, but good institutions can make people change their habits.

Knowledge about the history of national culture, its values and models of human behavior in various business situations will enable professional education and training of future managers. Without knowledge of the peculiarities of the business culture of a country, it is impossible to solve complex and complex problems at a high professional

level, especially in the systems of companies receiving foreign investment.

In today's conditions, there is a special need to develop a Ukrainian management model that can adapt to the market and cope with crisis situations.

Today, domestic business is still mostly turned inside itself, in general, not very inclined to growth and development. It copies civilized business, but not its fundamental foundations, but only external features [4].

The Ukrainian management model, in our opinion, should be built on the basis of modern management concepts, as presented in Fig. 1.

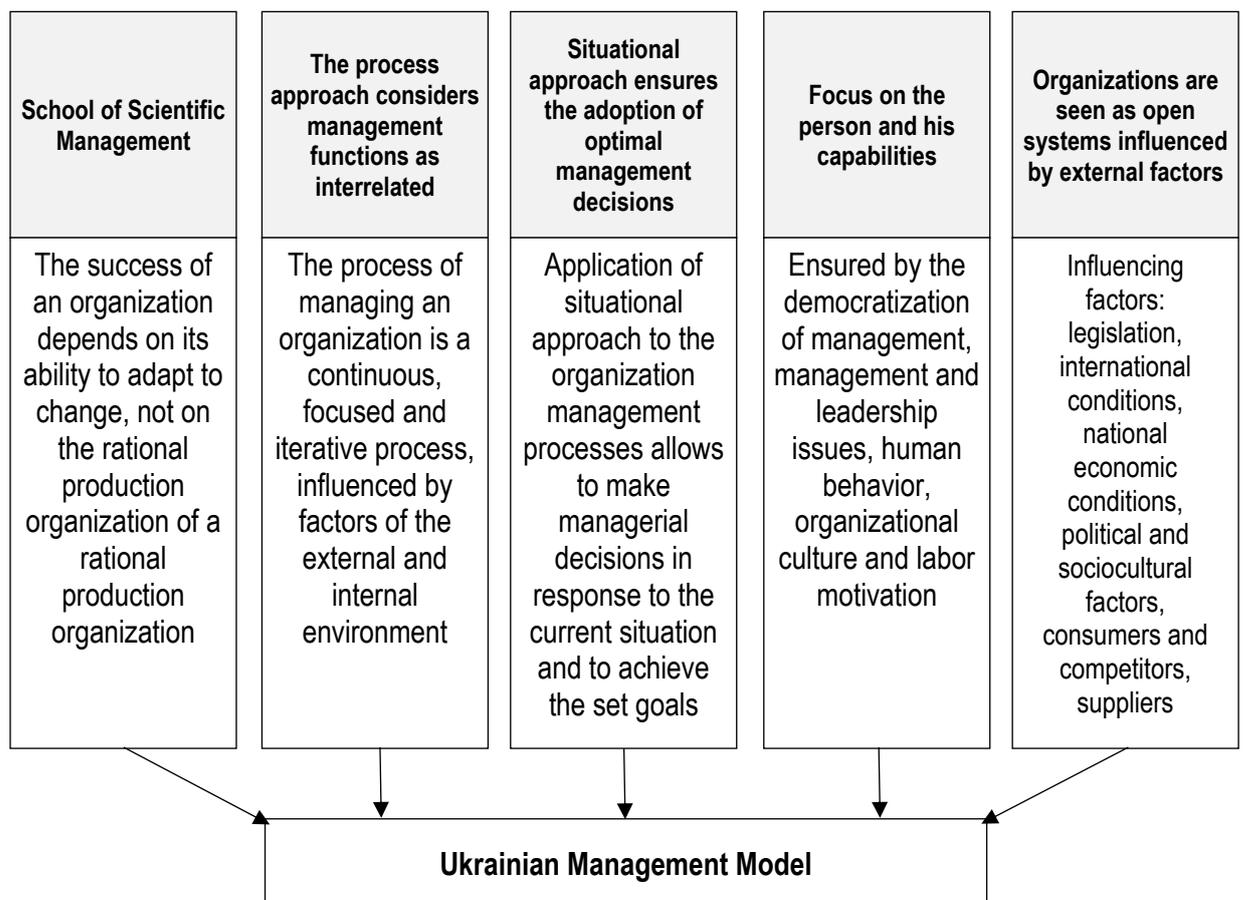


Figure 1 – Influence of modern concepts on the formation of the Ukrainian management model

Source: Developed by authors

In our opinion, these basic provisions of management will not only remain, but will also be further developed in the 21st century.

The main directions of further development of management in the XXI century should be considered as those presented in Fig. 2.

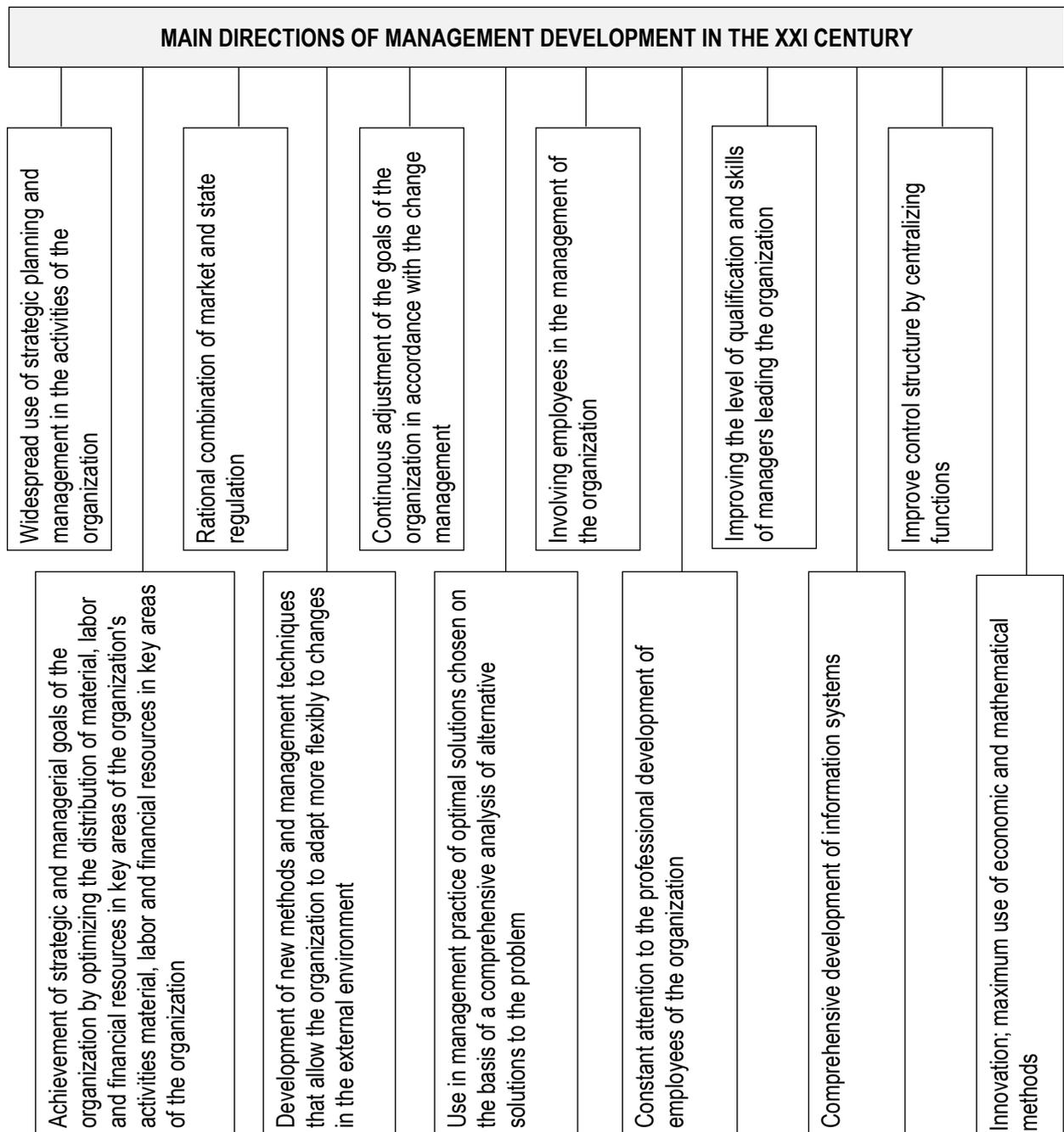


Figure 2 – Main directions of further management development in the 21st century
 Source: Developed by authors.

Throughout the history of management development, many other countries have accumulated considerable experience in the field of management theory and practice and have developed their own management models, taking into account the specific

features of their countries. After all, the competitiveness of the company at the world level is ensured primarily by the competitiveness of its products in the domestic market.

The basic principles of building the Ukrainian management model are those that

are presented in Fig. 3 and are in line with global development trends.

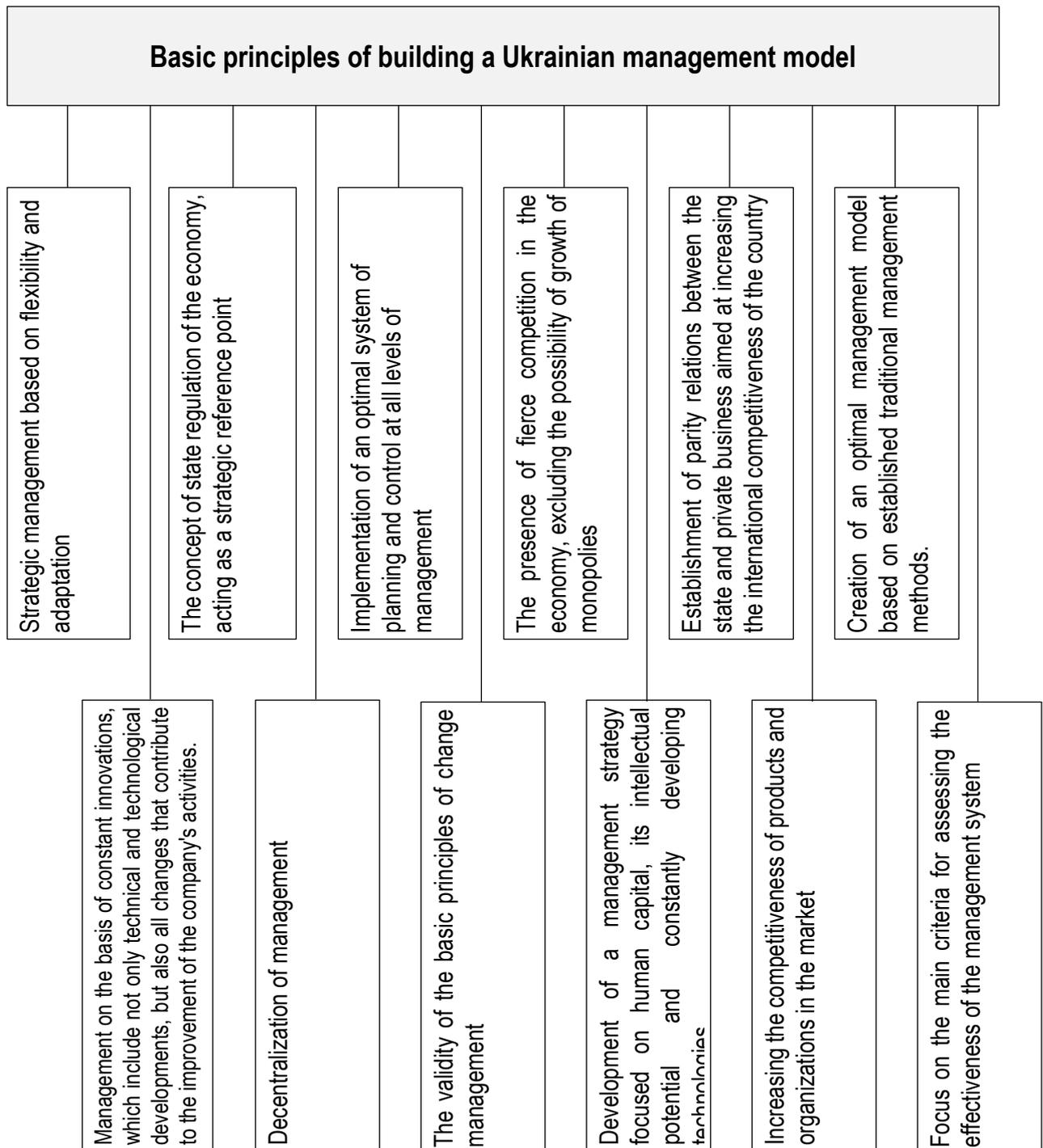


Figure 3 – Basic principles of building a Ukrainian management model

Source: Developed by authors

Conclusions. Sustainable development requires a strategic perspective, that is, business planning for the long term. In Ukraine, project management begins to enter new promising sectors and companies

specializing in project management services appear on the market.

The future effectiveness of our markets depends on intellectual capital, in particular on the quality and experience of managers of organizations, the level of their competence,

the ability to anticipate situations and correctly assess the market environment, as well as on how timely and effective management decisions are made and how they are implemented in practice.

Ukrainian management is characterized by diligence, diligence and punctuality of its employees. These natural national qualities should be encouraged in every possible way. By encouraging these qualities, the process of building a national management system can gradually move from rigid to flexible management decisions. Today, rigidity is a necessary but complex tool.

A balanced and long-term approach to the formation of the management team of Ukraine, taking into account the peculiarities of the Ukrainian mentality and the diversity and breadth of the situation in which Ukraine finds itself, is the most important strategic task for society. This largely affects not only the transition to a market economy, but also the position of Ukraine in the international community. This is a transition to modern forms and methods of management, and not blindly, but on the basis of scientifically based tools.

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INCREASING THE MANIFESTATION OF THE SUSTAINABLE DEVELOPMENT PRINCIPLES IN LOGISTICS ORGANIZATIONS

Rimantas Dapkus and Jeals Jaison. *«Increasing the Manifestation of the Sustainable Development Principles in Logistics Organizations».* The logistics sector is increasingly pressured to integrate sustainable development principles to align with their corporate goals. This paper reviews theoretical and practical frameworks of the logistics industry to examine how service providers in the sector can achieve a balanced economic, environmental, and social sustainability. Businesses are purposely created to maximize profits; however, increased awareness of corporate social responsibility and environmental sustainability has made them to look beyond that. Logistics service providers that adopt sustainable practices stand to benefit from long-term cost savings, improved brand reputation, and enhanced stakeholder relationships.

Performed research leads us to point out that IoT, big data and blockchain are a some of the digital enablers that improve sustainability. Such advancements are necessary to minimize carbon emission, enhance the transparency of supply chain, and minimize negative effects on environment. At the same time, the literature analyzes emphasizes the fact that collaboration between various actors also contributes to the creation of incentives for achieving the goal of creating sustainable logistics systems. The literature points to stakeholder theory whose focus is on the issues of transparency, cooperation, and novelty in managing supply chains. The model gives a structure for achieving business objectives of generating returns without considering environmental and social factors.

Obtained results also highlights those policies such as tax incentives given to companies that meet environmental standards weigh in greatly. Such measures have the potential to steer the logistics sector towards more sustainable operations with a corresponding competitiveness and economic growth. However, it is important to point out that more radical changes are required for reaching the desired state of sustainable development. Consequently, continuous investment in sustainable technologies, supportive government policies, and stakeholder collaboration are key to fostering a profitable logistics industry

Keywords: Logistic services, management of the supply chains, implementation of the innovations, sustainable development, competitiveness, economy grow

Рімантас Данкус та Джилс Джайсон. «Посилення прояву принципів сталого розвитку в логістичних організаціях». Логістичний сектор зазнає дедалі більшого тиску щодо інтеграції принципів сталого розвитку для узгодження з корпоративними цілями. У цьому документі розглядаються теоретичні та практичні засади логістичної галузі, щоб з'ясувати, як постачальники послуг у цьому секторі можуть досягти збалансованої економічної, екологічної та соціальної сталості. Підприємства створюються з метою максимізації прибутку, однак підвищення рівня обізнаності про корпоративну соціальну відповідальність та екологічну стійкість змусило їх вийти за рамки цієї мети. Постачальники логістичних послуг, які впроваджують сталі практики, отримують вигоду від довгострокової економії витрат, покращення репутації бренду та зміцнення відносин із зацікавленими сторонами.

Проведене дослідження дозволяє нам стверджувати, що Інтернет речей, великі дані та блокчейн є одними з цифрових інструментів, що сприяють підвищенню сталого розвитку. Такі досягнення необхідні для мінімізації викидів вуглецю, підвищення прозорості ланцюгів постачання та мінімізації негативного впливу на навколишнє середовище. Водночас в аналізі літератури підкреслюється, що співпраця між різними учасниками також сприяє створенню стимулів для досягнення мети створення сталих логістичних систем. У літературі вказується на теорію зацікавлених сторін, яка фокусується на питаннях прозорості, співпраці та новизни в управлінні ланцюгами поставок. Модель дає структуру для досягнення бізнес-цілей отримання прибутку без урахування екологічних та соціальних факторів.

Отримані результати також підкреслюють, що така політика, як податкові пільги, що надаються компаніям, які дотримуються екологічних стандартів, має велику вагу. Такі заходи мають потенціал спрямувати логістичний сектор до більш сталих операцій з відповідною конкурентоспроможністю та економічним зростанням. Однак важливо зазначити, що для досягнення бажаного стану сталого розвитку потрібні більш радикальні зміни. Отже, постійні інвестиції у сталі технології, сприятлива державна політика та співпраця із зацікавленими сторонами є ключовими факторами для створення прибуткової логістичної галузі.

Ключові слова: Логістичні послуги, управління ланцюгами поставок, впровадження інновацій, сталий розвиток, конкурентоспроможність, зростання економіки.

Introduction. In today's world, the logistics sector is facing new demands to ensure sustainable economic development. With sustainability at the heart of corporate governance, Logistics Service Providers (LSPs) are under increasing pressure to adopt practices that reduce environmental damage and increase social responsibility, while at the same time stimulating economic growth. Traditionally, the logistics sector has focused on maximising profits. However, the shift towards sustainability has led to a "triple bottom line" approach, emphasising not only economic value but also social and environmental aspects.

In the series of scientific studies there have been analyzed the complexities and challenges associated with integrating sustainable development principles into logistics operations. Notably, Koberg & Longoni (2019) established the notion of sustainable supply chain management with more focus on the part played by logistics in the improvement of environmental, social and economic sustainability. The study argues that for logistics organizations, there is the dual imperative of increasing profitability while at the same time minimizing carbon emissions, waste, and improving working conditions along the supply chain.

Jazairy & von Haartman (2020) researched the challenges that logistics service providers experience when implementing green logistics practices. The report found out that some challenges which hinder sustainability in the logistics industry are: high fixed costs, low technology advancement and a lack of governmental support. Despite these challenges, LSPs that prioritize sustainability often experience long-term cost savings, improved brand reputation, and enhanced stakeholder relationships. This suggests that the industry is slowly adopting sustainable measures, it stands to gain significantly from fully integrating these practices.

A further contribution to the existing literature is Cebir & Akkartal (2024) who identified digitalization at the heart of sustainable logistics. Technological advancements including Internet of Things, data analytics and the use of blockchain increase the supply chain visibility. These advancements have since increased operational productivity and decrease the utilization of resources (Cebir & Akkartal, 2024). The tracking of consignments in real time makes it possible for companies to reduce fuel use which is environmental sustainability. In addition, through decentralisation, supply chains can become more secure and pass less through ethnic abuses such as abuse of labour.

The study therefore seeks to assess how the logistics sector needs to improve its sustainability practices in order to be more in line with global efforts towards sustainable economic development. It lays down the basis of underlining the fact that the industry has the capacity to exert the impact of sustainability on the environment. Although companies such as DHL, UPS and others have made progress in implementing sustainability initiatives, this discussion of the various studies focuses on the global logistics sector, highlighting the need for systemic changes that can benefit both the environment and the economy.

Research Object - the manifestation of the principles of sustainable development in logistics organisations.

Aim - to investigate the application of sustainable development principles in the logistics sector and to identify opportunities to improve development practices in a way that maximises the contribution to sustainable economy growth.

Objectives:

1. To identify the current situation and the challenges faced by logistics organisations in contributing to sustainable economies.

2. To analyse the theoretical underpinning of sustainable economy growth and to explore ways to ensure that the logistics sector's services meet the requirements of sustainability.

3. Propose solutions and policy recommendations to governments, logistics companies and other stakeholders on how to improve sustainable development practices in the logistics sector so that it makes an appropriate contribution to sustainable economy growth.

Research methods: the study uses an analysis of scientific literature to identify the determinants of sustainable economy development by the influence of the logistics sector, as well as a synthesis of proposals for the modernisation of the logistics sector in line with modern economic development trends.

Sustainability of the economy growth and analysis of the challenges of the logistics sector adequate development. To foster sustainability within the logistics industry, governments should prioritize awarding contracts to companies that place a strong emphasis on sustainability (Agrawal & Singh, 2019), eco-friendly practices (Afif et al., 2022), or the "go green" initiative (Baganha, 2020). This can be achieved through coming up with tender policies which embrace logistic and production companies willing to factor in environmental issues. In this way, governments would not only provide funding to sustainable development focused

businesses but would also promote green initiatives across industries to foster systemic improvements at a global supply chain level.

Another effective policy would be tax exemptions on pollution for firms that conform to particular environmentally friendly standards. These incentives would encourage businesses to adopt new cleaner technologies and renewable energy sources that reduce their carbon emissions. Also, pollution tax reductions might spur innovation as companies seek for unique ways of addressing these standards like switching to hydrogen fuel cells, bio fuels, or electric cars among others in transportation.

Incentives such as the provision of tax incentives to production companies who adopt sustainable policies would ensure massive adoption of sustainable policies. Businesses that wish to achieve effective management systems that address issues of the environment, including pollution control, efficient use of natural resources, or adopting better energy consumption standards would secure increased returns on investment. This policy could also be extended to promote sustainability in packaging and such other concepts as green supply chain management.

Collectively, these measures would enhance sustainability of the global logistics sector. Governments, companies, and stakeholders can work together to reduce environmental harm while simultaneously maintaining economic growth, competitiveness, and social responsibility. They would also fall in line with the goals set in the United Nations Sustainable Development Agenda or more specifically the 12th goal, which calls for sustainable consumption and production (Centobelli et al., 2020).

Logistics Systems. Logistics comprise management activities that exist in the attainment, support, and movement of assets, personnel, and equipment. These processes revolve on managing and co-owns of operation in order to fulfill the needs of the buyers on time as planned (Lazar et al., 2021). Tuittu (2022) describes a logistics system

where some important activities consist of client service management, inventory tracking, transportation, order processing and procurement, warehousing, material handling and data security. Logistics is thus an important element of an organization's strategy since it affects business success. To rent an adequate competitive edge it becomes crucial to effectively manage logistics planning to offer outstanding services (Nilsson & Christopher, 2018). Moreover, there should be insight in the transportation arrangements that will benefit logistics practice and sustainability.

Another important aspect within logistics systems is the choice of the transportation model even as the right decisions have been noted to contribute to both environmental and economic sustainability (Tran et al., 2019; Ren et al., 2020). Any strategic decisions relating to routing and freight capacity have the tendency of enhancing the costs and complexity but are crucial for operations (Aloui et al., 2021). In recent years, the concept of meeting customer requirements has emerged as a significant aspect in the logistics strategies. Warehouse management and supplier evaluation also offers a remarkable opportunity to develop logistics operations that contribute to the overall improvement of competitive factors (Mota et al., 2018).

Sustainability. Sustainability is arguably one of the critical concerns of today's logistics practices based on the triple bottom line (TBL) concept that seeks to address the economic, environmental and social aspects of the systems in question (Agrawal & Singh, 2019). Sustainability efforts not only work to reduce the utilization of resources but also must comprise strategic management. Environmental and economic, sometimes referred to as eco-efficiency, and social and economic sustainability aspects such as occupational health and safety are critical initiatives in sustainable logistics (Khan et al., 2020).

Sustainability in Logistics Organizations.

Logistics has therefore become a crucial issue for giant International transport companies such as FedEx, DHL, and UPS; which provide logistics services across more than 200 economy. These firms play an important role in the development of the economy but their activities, transport and storage are responsible for approximately 5.5 percent of global carbon emissions (Herold, 2018). These logistics firms have vast networks of warehouses, other facilities, planes and trucks and significant workforce worldwide. The company noted the need for efficient shipping between different continents. For example, in 2008, DHL became the first in the industry to support an environmental initiative, reducing CO2 emissions by more than 75% compared to 2007 (Baganha, 2020). Their efforts to minimize their negative effect on the environment and implement a consistent corporate responsibility strategy are remunerated by customers and suppliers who view global logistics corporations as reliable logistics partners (Tran et al., 2019). With a turnover of 61.55 billion euros and EBIT of 3.162 billion euros in 2018, DPDHL has proven that with good marketing, a coherent and effective corporate strategy, it is possible to create added value for society and the environment while maintaining profitability (Baganha, 2020). This demonstrates the sector's commitment to managing costs and achieving profitability but at the same time having to be efficient in satisfying the clients. The environmentally efficiency in transportation and distribution tends to be few and fairly slow. The move by key players in the industry to being more sustainable faces a series of issues and needs a closer look. Therefore, these organisations experience more and more pressure to respond not only for their environmental effects but also to remain financially sustainable (Khan et al., 2020). These companies tried to develop legitimacy and avoid reputational risks and therefore current sustainability reports contain emissions data.

Such sustainability in supply chain management indicates the use of the supply chain concept to manage the balancing material, information, and capital flows with regards to environmental, economic, and social objectives. Studies show that sustainable logistics can enhance business performance hence competitive edge. For instance, Karaman (2020) concluded that firms having sustainability awards in logistics such as DHL enjoyed positive market returns which suggest that shareholders value sustainability.

Panigrahi et al. (2019) also notes that internal operations (including communication) and external stakeholders (with subcontractors or clients and suppliers) are crucial in defining operational sustainability. Subsequent studies indicate that sustainable innovations in the logistics field like the eco-design also known as sustainable product-service system design and carbon management have the potential to enhance the performance of the logistic chain (Tran et al., 2019; DeWeerd et al., 2022). However, one of the challenges in this area is the absence of clear scientific protocols for the environmental cost estimation of logistics that hampers the sharing of costs besides hindering the promotion of sustainable processes and systems (Masih, 2024).

Finally, external pressures from stakeholders, including environmental and social concerns, which shape companies' sustainability strategies (Agyabeng-Mensah et al., 2020; Herold, 2018). As businesses increasingly prioritize sustainability, they continue to seek innovative ways to improve their environmental footprint and operational efficiency in logistics.

The Logistics Stakeholders and Sustainability Challenges. Seuring and Müller (2008) contributed to the understanding of sustainable logistics by emphasizing the importance of collaboration among stakeholders. Their work underscores the necessity of joint efforts between governments, companies, and non-governmental organizations (NGOs) to create

a regulatory framework that incentivizes sustainable practices. Governments play a crucial role in shaping industry-wide regulations and offering incentives, while NGOs can help monitor and enforce compliance with environmental and social standards. The systemic strategic alignment of strategies between conventional business tasks and those in a particular company and between those in logistics, with the goal of heightening the long-term performance of specific firms and the entire supply chain.

Therefore, a logistics business consists of a company (often called a central company) that coordinates many suppliers and clients to offer products or services of anticipated quality at the anticipated time and rapidity (Hajian, M., & Kashani, 2021; Fritz, 2022). In fact, the integration of sustainable development practices in sustainable development is often the result of the so-called "green bullwhip effect" (Tamayo et al., 2023), that is, LSPs response approaches to stakeholder pressure (causing).

Stakeholder theory implies that a corporation exists not only to make profit but it is ethically required to be responsible to its customers, employees, suppliers, and communities around it (Mahajan et al., 2023). This perspective aligns closely with sustainable development goals of the logistics sector where operations often have far-reaching social and environmental impacts. The theory can help companies navigate the complex landscape of sustainability by considering how their actions affect a wide array of interest groups rather than focusing solely on financial performance.

The theory encourages logistics firms to maintain transparent information flow with their public. This is particularly important in addressing environmental concerns. For instance, a firm that set ambitious carbon reduction goals must work closely with their suppliers and subcontractors to ensure these initiatives are feasible and effective across the entire supply chain. This is consistent with Stadtler & Lin (2019) call for collaborative

efforts which are essential for achieving sustainable outcomes in logistics.

The theory provides a framework for companies to understand the long-term benefits of sustainability initiatives. While adopting green technologies and reducing emissions may require significant upfront investment, such strategies often lead to long-term financial benefits. Organizations enjoy cost savings from improved energy efficiency and enhanced brand value (Koberg & Longoni, 2019). With more investors and clients now pressuring corporations to act sustainably, those of businesses who pursue stakeholder-centered approaches enjoy competitive advantage in the marketplace.

These responsive strategies show that stakeholders' failure to consciously energetically engage in supply chain development practices often lead to unsustainable and unethical exercises in various logistics processes (Bocken, 2020). Another important issue is the pressure exerted by the procurement department of the focal company on suppliers to prioritize low-cost, fast delivery of goods or services at the cost of social, ethical or environmental considerations (Negri et al., 2021). Another example involves shop floor employees who are barely not committed to improving logistics sustainability (Mota et al., 2018). These LSPs-particular functions and roles highlight the need for stakeholder theory to regard various forms of workers and sections (rather than a single wide class of "employees").

According to Nilsson and Christopher (2018), appropriate documentation and commitment of logistics stakeholders will prevent both internal supply chain (such as key companies or suppliers involved in the production and distribution process) and external supply chain (such as policy makers, and clients) stakeholders from unethical and unsustainable practices impacted by resolutions of SC partners). Nevertheless, this perspective has not yet been fully theorized.

Conceptual development of sustainable logistics provides an opportunity to address

this lack of knowledge (Ren et al., 2020). Accordingly, there is a need to further theorize the concept of sustainable logistics because research in the area is often overly simplistic and provides neither a representative nor a practical understanding of the subject.

Ultimately, integrating stakeholder theory into global corporate strategies present the opportunity for logistics organizations to achieve a balance between business profitability and the fulfillment of social and environmental obligations. This approach not only makes an effective contribution creating a less negative impact in the environment of logistics operations but also aligns with broader corporate goals of long-term profitability and reputation building.

The Stakeholder Theory and Global Corporate Strategy. Governments and companies can implement sustainability-focused strategies by prioritizing green initiatives in logistics and production processes. When awarding contracts, governments should favor companies that integrate environmentally sustainable practices into their operations. This can be achieved by giving preference to logistics or production companies that are committed to reducing their carbon footprint and adopting renewable energy sources. This approach not only promotes environmental responsibility but also encourages other businesses to invest in greener alternatives.

Stakeholder theory calls for companies to not only pay attention to shareholders but governments, customers and local communities in order to come up with better practices. For instance, the logistic companies can partner with the government to ensure that they are aligned with various regulatory measures such as the emissions and energy efficiency standards (Wojewnik-Filipkowska & Węgrzyn, 2019). Such partnerships may enable the delivery of sustainable technologies and encourage new development within logistics' markets. Furthermore, Stadtler & Lin (2019) the public

increasingly expect companies to operate with a high degree of environmental and social responsibility. Businesses that apply stakeholder theory in their logistics strategies have good reputations, strong customer loyalty, and differentiate themselves in a competitive market.

Programs like DHL Express Italy have shown that sustainability can be successfully implemented by modernizing infrastructure and utilizing hybrid or electric vehicles (DPDHL, 2018). Governments could thus develop tendering policies that include such approaches where the bidders are assessed on their sustainability measures which may include matters of renewable energy, energy efficient means of transport or least CO2 emissions.

Besides, governments could impose more stringent emission thresholds for example, setting conditions in relation to suppliers and subcontractors regarding environmental requirements (such as the EURO 5 emission standard engines). This would in turn force organisations to update the fleets and improve operations with supply chains having sustainable objectives and goals.

This way, authorities can make a significant contribution to effective control of the sector's overall impact on the environment by using motivation for or discouragement of those strategies by regulation. Consequently, some companies would gain competitive advantage to drive sustainability-driven operations that attract clients who value corporate responsibility. Government and company partnership through policy and stewardship strategies that create more sustainable environments will guarantee long term improvement to environmental standings of developed economies.

Conclusions and suggestions. 1. The increased consumer awareness on sustainability has cause logistics companies to meet the relevant expectations. The literature has indicated that the sector is currently unable to meet the emerging

demands in the economy, social and environmental contexts. Theoretical models assessing economic growth still fall short in revealing the logistics sector's progress toward sustainability. These propose that more enhance knowledge is required to understand how sustainable logistics contributes to economic development.

2. Even though the need for sustainable development grows, many studies highlight a disconnect between the sector's current capabilities and the broader requirements of the global economy. There is especially insufficient alignment with environmental standards and societal needs. This gap raises a need for more integrated perspective towards analyzing the role of the logistics sector in the sustainable economic growth.

3. Existing theoretical frameworks used to evaluate sustainable economic development do not accurately portray the sectors' journey toward sustainability. There is thus the need for stronger connections between economic growth indicators and the logistics industry's environmental and social impacts. A more profound theory is required to provide clarity of actual role of logistics for sustainability.

This is where corporate and governmental actions come in to play to ensure and fill this gap. The challenges call for relevant service providers to invest in

sustainability solutions, and governments to improve on the current laws and finance sustainability. A closer link between corporate initiatives in the logistics industry and political actions would lead to appropriate solutions for the further continuous improvement of people's quality of life and the globalization of the economy.

4. Moving forward, there is a need for all players in the logistics sector to start viewing sustainability from a broader perspective. Companies need to realize the importance of innovation and incorporate sustainable development as a core component of their strategic objectives. This translates to continuous investment in green technologies, improving relations with the clients and being open about their progress toward sustainability goals.

Governments must implement supportive policies and create a regulatory environment that incentivizes sustainable logistics practices. Authorities can drive the entire sector toward greener and more socially responsible operations by establishing clear sustainability standards and offering financial incentives. At the same time, the administrations should adopt adequate policies and establish a favorable environment for promoting sustainable logistics systems.

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MODERN METHODS FOR ASSESSING THE EFFICIENCY OF LOGISTICS PROCESSES IN A COMPANY

Irina Suvorova, Sergey Basanets, Oksana Pozniak, Vladimir Davydenko. "Modern Methods of Evaluating the Efficiency of Logistics Processes in a Company". The article discusses modern methods of assessing the efficiency of logistics processes, which are one of the most important components of the successful functioning of any company, especially in today's fierce competition and globalization. The article assesses the efficiency of logistics processes, which are an integral part of the company's strategic management and allow ensuring its stable development. The analysis of modern methods for assessing the efficiency of logistics processes in a company has allowed to identify three important tools, such as: data envelopment analysis (DEA),

ABC analysis and cost analysis and control method. It is proved that the DEA method can be applied to a wide range of logistics systems, regardless of their complexity and specificity. In addition, DEA allows to identify factors that limit efficiency and develops recommendations for its improvement. The value of ABC analysis is highlighted, which lies in the potential to increase sales volumes by improving the availability of goods that are most valued by customers. An assessment of the efficiency of logistics processes in a company using ABC analysis is proposed. The importance of such a method as cost analysis and control is analyzed. Thanks to a detailed analysis and control of costs, it is possible to identify bottlenecks in the logistics chain, optimize delivery routes, reduce storage costs and increase the efficiency of vehicle use. The author proposes the key stages of the logistics cost analysis based on the "Five Steps" system. It is proved that the joint use of the proposed methods creates synergy, allowing for a deeper and more accurate analysis than when each of them is applied separately. The methods we have studied complement each other, providing company managers with tools for comprehensive analysis and evaluation of logistics efficiency.

Keywords: evaluation methods, logistics processes, logistics systems, DEA method, ABC analysis, cost analysis and control method

Ірина Суворова, Сергій Басанець, Оксана Позняк, Володимир Давиденко. «Сучасні методи оцінки ефективності логістичних процесів в компанії».. В статті розглянуто сучасні методи оцінки ефективності логістичних процесів, які є однією з найважливіших складових успішного функціонування будь-якої компанії, особливо в сучасних умовах жорсткої конкуренції та глобалізації. Надана оцінка ефективності логістичних процесів, які виступають невід'ємною частиною стратегічного управління компанією і дозволяють забезпечити її стабільний розвиток. Проведений аналіз сучасних методів оцінки ефективності логістичних процесів в компанії дозволив виділити три важливі інструменти такі, як: метод аналізу обробки даних (DEA), аналіз ABC та метод аналізу і контролю витрат. Доведено, що метод DEA може бути застосований до широкого спектра логістичних систем, незалежно від їхньої складності та специфіки. Крім того, DEA дозволяє ідентифікувати фактори, які обмежують ефективність, та розробляє рекомендації щодо її підвищення. Виокремлена цінність ABC аналізу, яка полягає в потенціалі збільшення обсягів продажів завдяки покращенню доступності товарів, які найбільше цінуються клієнтами. Запропонована оцінка ефективності логістичних процесів в компанії за допомогою ABC аналізу. Проаналізована важливість такого методу, як аналіз і контроль витрат. Завдяки детальному аналізу і контролю витрат можливо виявити «вузькі місця» в логістичному ланцюгу, оптимізувати маршрути доставки, знизити витрати на зберігання та підвищити ефективність використання транспортних засобів. Запропоновано ключові етапи проведення аналізу логістичних витрат, які опираються на систему «П'ять кроків». Доведено, що спільне використання запропонованих методів створює синергію, дозволяючи отримати більш глибокий і точний аналіз, ніж при застосуванні кожного з них окремо. Досліджені нами методи доповнюють один одного, надаючи менеджерам компанії інструменти для комплексного аналізу і оцінки ефективності логістики.

Ключові слова: методи оцінки, логістичні процеси, логістичні системи, метод DEA, ABC аналіз, метод аналізу і контролю витрат.

Introduction. In today's dynamic and changing business environment, where customers demand higher and higher levels of service and competition is constantly growing, assessing the efficiency of logistics processes is becoming a strategic priority for any company. Innovative technologies, such

as artificial intelligence and the Internet of Things, open up great opportunities for logistics optimization, but at the same time complicate the process of supply chain management. Therefore, an objective assessment of the efficiency of logistics processes in a company is a key factor in

making informed management decisions. Modern methods of assessing the efficiency of logistics processes are one of the most important components of the successful functioning of any company, especially in today's fierce competition and globalization. Therefore, the relevance of this topic is due to several factors, such as growing consumer demands, complexity of supply chains, innovative technological changes, increasing competition, adaptation to market conditions, etc.

Thus, the relevance of methods for assessing the efficiency of logistics processes is that they allow companies to: improve the quality of customer service, optimize logistics costs, increase delivery speed and strengthen competitive positions in the market. Therefore, the evaluation of the efficiency of logistics processes is an integral part of the company's strategic management and helps to ensure its stable development.

Analysis of the latest research and publications. Modern research offers a wide range of methods for assessing the efficiency of logistics processes. Among the most popular are the following: Data Envelopment Analysis (DEA), it allows comparing the efficiency of different logistics units without the need to establish preliminary production functions [1]. Balance Scorecard (BSC), the proposed system provides a comprehensive assessment from different perspectives: financial, customer, internal processes, and learning and growth [2, 3]. The focus is on big data and machine learning [4, 5]. Scientific studies have examined data mining methods and their application in business intelligence, including logistics, and have investigated the "whip effect" using data mining methods to reduce it. Traditional visualization tools, such as spider charts and Z-charts, although popular, reach their limits when evaluating complex logistics systems and this stimulates the search for new, more powerful methods of analyzing multidimensional data [6].

Objectives statement. The problem of evaluating the efficiency of logistics processes is multi-dimensional. Although the ratio

between input and output resources can provide some efficiency insight, they are not able to fully reflect the complexity of logistics systems. For an adequate assessment, it is necessary to consider a wide range of indicators and their interaction. This requires the use of more sophisticated mathematical models, statistical methods, and the study of innovative approaches to assessing the efficiency of logistics processes in a company. Therefore, the problem of choosing the optimal methods for evaluating the efficiency of logistics processes in a company is extremely important and relevant.

Basic material and results. Historically, simple ratios have been widely used to assess the efficiency of logistics processes. However, as logistics systems have become more complex and the requirements for their efficiency have increased, it has become clear that this is not enough. Modern research is increasingly focused on the development of multidimensional models and tools that allow for a more accurate assessment of supply chain efficiency.

Research in the field of logistics confirms that in order to adequately assess the efficiency of supply chains, it is necessary to abandon simplified models based on individual indicators. The multifactor approach allows to take into account a variety of factors that affect the efficiency of logistics operations, such as product type, geographical features, technological characteristics, etc. This contributes to a more objective assessment and development of effective strategies for managing logistics processes [7, 8].

The data envelopment analysis (DEA) method has become an indispensable tool for assessing the effectiveness of various organizations and processes in recent decades. Its versatility and flexibility allow DEA to be applied in many industries, from manufacturing to services. Bell and Morey demonstrated how DEA can be used to compare the performance of different companies in the same industry, allowing to identify best practices and identify areas for

improvement. Barr and Seiford have shown that DEA can be an effective tool for assessing the efficiency of bank branches and other financial institutions. Ampilogov used DEA to assess the risk of bankruptcy of companies, which allows to detect financial problems at early stages.

DEA is widely used to evaluate the efficiency of internal departments of companies, optimize resources and improve overall efficiency. DEA helps to improve the BSC methodology, allowing for a more objective assessment of the achievement of strategic goals. DEA can be used to select the best alternatives in projects, evaluate the effectiveness of various approaches, and manage risks.

One of the most prominent features of the data envelopment analysis (DEA) method is the use of the concept of the "effective frontier". The idea is that the proposed method is illustrated in the form of a graph, where the X-axis represents costs and the Y-axis represents the company's performance. The efficient frontier is a line that delimits the area of possible combinations of costs and results. Companies located on this line are considered efficient because they achieve maximum results for a given cost. A special feature of DEA is its ability to evaluate the relative efficiency of facilities without the need to establish prior production functions. This means that DEA can be applied to a wide range of logistics systems, regardless of their complexity and specifics. In addition, DEA allows to identify factors that limit efficiency and develops recommendations for its improvement [6,8].

The DEA method is a powerful tool for assessing the relative efficiency of different organizational units. The origins of this method date back to the scientific works of Farrell, who introduced the concept of technical efficiency, which implies achieving maximum output at minimum cost.

First, a set of inputs (e.g., employees, equipment, materials) and outputs (products, profits, quality of services) is determined that characterize the activities of each unit. Using

mathematical programming, the so-called "efficient frontier" is built. This is a conditional line that unites the most efficient units, i.e. those that achieve maximum results at minimum costs. Each unit is compared to the efficient frontier. If the unit is on the line, it is considered efficient. If it falls below the limit, it is considered inefficient, and the degree of inefficiency is determined.

The basic DEA model developed by Charnes, Cooper, and Rhodes is often referred to as the CCR model. It is based on the assumption of constant returns to scale, i.e., an increase in all inputs by a certain number of times leads to a proportional increase in outputs. The CCR model allows you to determine whether a unit is efficient, and if not, how much it deviates from the efficient limit [8].

Another method of assessing the efficiency of logistics processes in a company is ABC analysis. ABC is an inventory management technique that determines the value of inventory based on its importance to the business. Thanks to the insights provided by this analytical approach, we can identify important opportunities to optimize inventory levels in the company [9].

ABC analysis is a powerful tool that allows supply chain management teams to reduce operating costs and free up financial resources that are frozen in current assets. However, its true value lies in the potential to increase sales by improving the availability of the products that customers value most. In other words, companies that effectively use this method can not only optimize their costs but also stimulate sales growth. However, there is a logical contradiction in the conclusion that companies that take advantage of this approach work less efficiently and effectively. On the contrary, a qualitative ABC analysis is one of the key tools for improving the efficiency of an enterprise.

The name «ABC» suggests that you have only 3 classes. But if you want, you can distinguish 10 classes. However, this can make the data a bit more difficult to interpret [9].

If we assume that category A items account for 70% of the company's profit, category B items account for 20%, and category C items account for 10%. The graph (Fig. 1) clearly shows that 70% of the items

generate only 10% of the company's profit. Often, these category C items require careful consideration due to their volatility and difficulties in properly forecasting future demand [9].

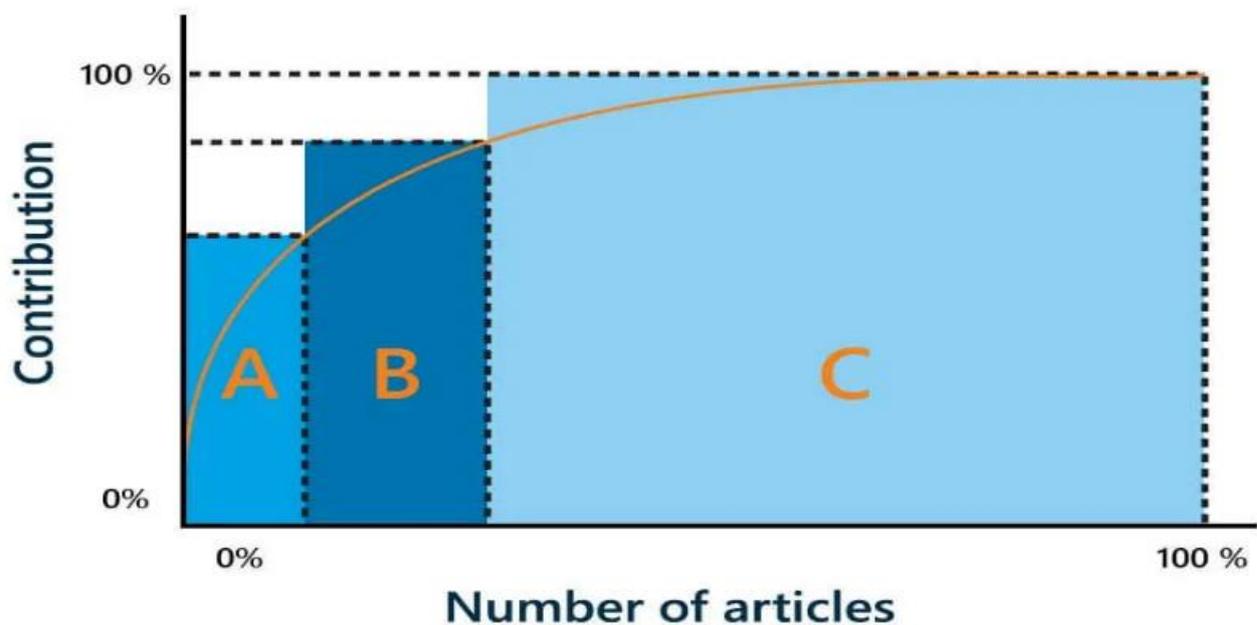


Figure 1 – Graph of the distribution of articles by ABC

ABC analysis allows to categorization of goods according to their importance to the business. However, given the critical role of category A goods, they need to be given maximum attention and resources. These are the products that provide the bulk of the company's profits and require special control over inventory and supply.

Companies need to categorize their products. This is because when a company offers a large assortment, it is easy to get distracted by products that offer a very low contribution to the company's profits. The main reason is that these positions often exhibit high volatility and are therefore difficult to manage. The overall goal of ABC analysis is to logically structure the product mix and prioritize it. As a result, the company

should benefit from greater focus. By categorizing products based on their strategic importance to the business, company managers can ensure that they spend their time and invest in effective projects.

The main advantages of assessing the efficiency of logistics processes in a company using ABC analysis are shown in Fig. 2.

Thus, ABC analysis helps to determine which products in the overall assortment bring the most profit and require more attention, and which can be eliminated from the product range. First and foremost, it should be used for various optimization initiatives aimed at saving money, improving service, and increasing the company's profitability.

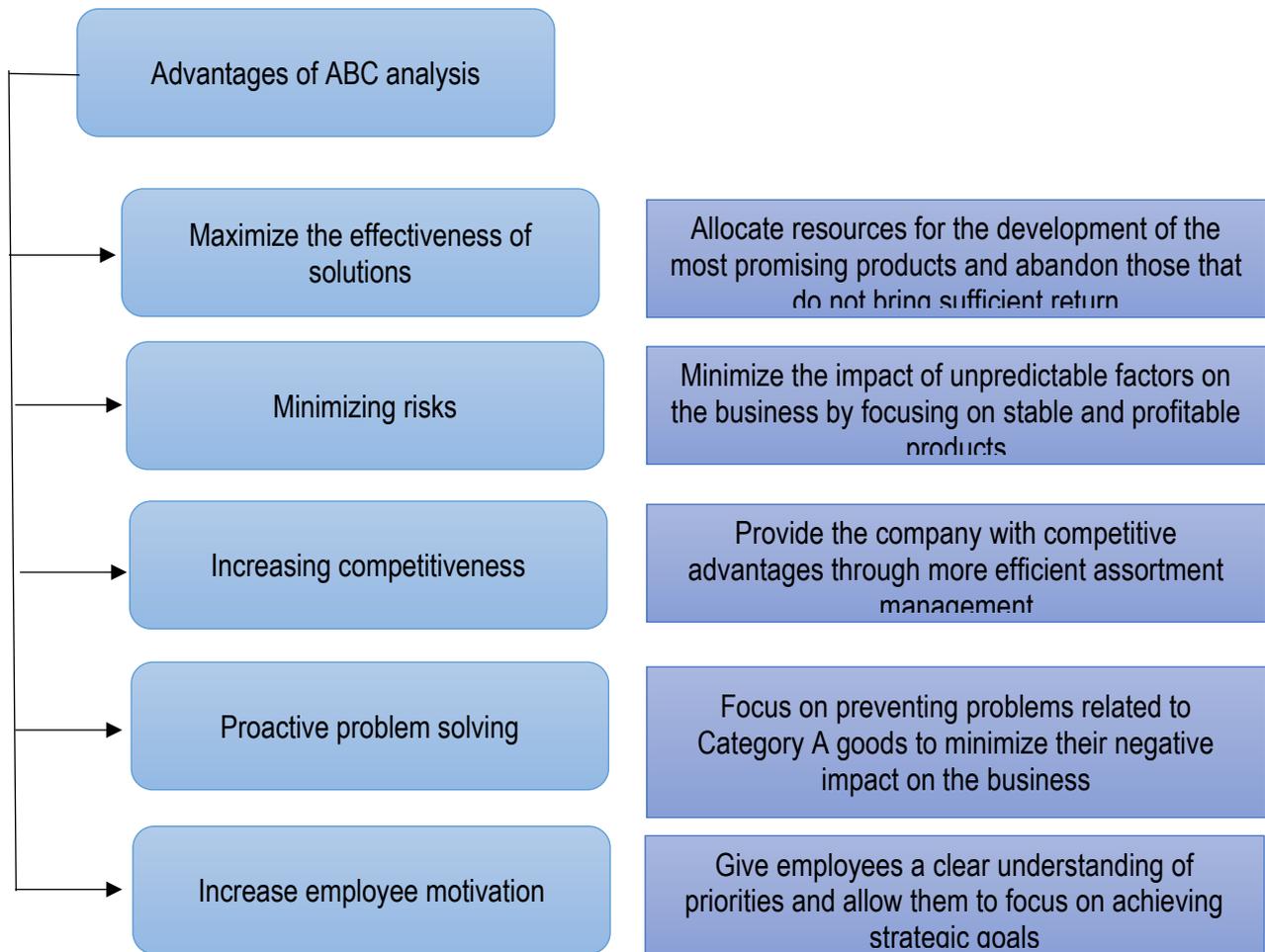


Figure 2 – Evaluating the efficiency of logistics processes in a company using ABC analysis

Thus, ABC analysis helps to determine which products in the overall assortment bring the most profit and require more attention, and which can be excluded from the product range. First of all, this should be used for various optimization initiatives aimed at saving money, improving service, and increasing the company's profitability.

Also, cost analysis and control are an important method for assessing the efficiency of logistics processes in a company. Logistics is an integral part of any business, affecting the cost of products, delivery speed and customer satisfaction. However, the effective management of logistics processes is often complicated by a large number of variable factors, such as sales growth, changing

customer requirements, geographical distribution of warehouses, etc. All this leads to an increase in logistics costs, which can reach a significant share of the company's total expenses. That is why analyzing and controlling logistics costs is one of the most important tasks for any logistics manager. A detailed analysis can help identify bottlenecks in the supply chain, optimize delivery routes, reduce storage costs, and increase the efficiency of vehicle use [10]. The key stages of the logistics cost analysis are shown in Fig. 3.

Thus, for a comprehensive analysis and control of logistics costs, we propose to use the Five Steps system:

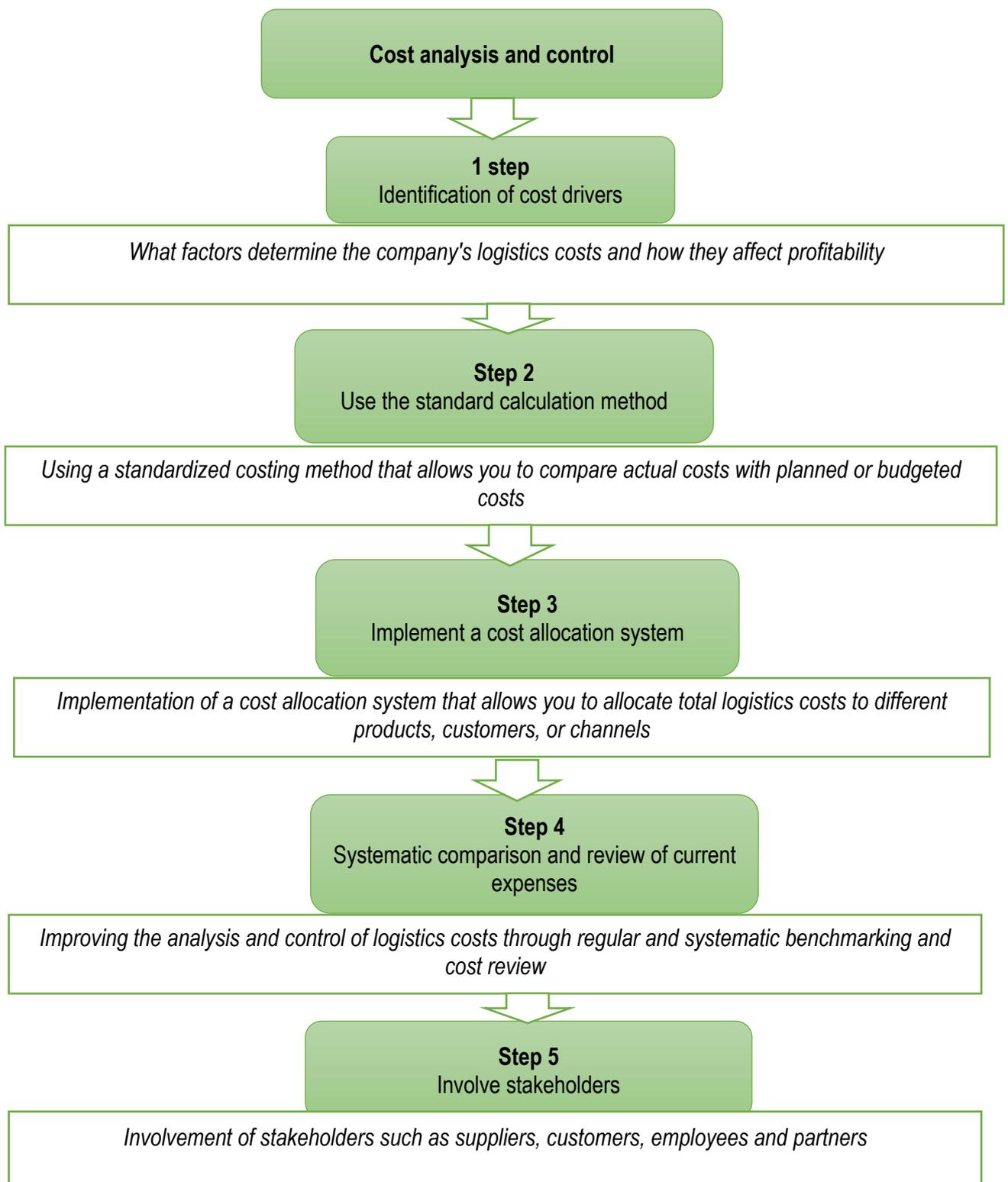


Figure 3 – Key stages of logistics cost analysis

- Identification of cost drivers. The first step to improving the analysis and control of logistics costs is to understand what factors drive the company's logistics costs and how

they affect profitability. Every company strives to achieve maximum profitability at minimum costs. Logistics, as one of the key elements of business, has a significant impact

on financial results. Understanding the factors that shape logistics costs allows a company not only to reduce costs but also to improve the quality of customer service, which is one of the most important success factors in modern business. By analyzing cost factors, we can identify hidden reserves for cost reduction, optimize logistics processes, and increase the efficiency of companies.

- Use a standardized costing method. The second step to improve the analysis and control of logistics costs is to use a standard costing method that allows you to compare actual costs with planned or budgeted costs. Standard costing is a powerful tool that allows you to turn a huge amount of logistics data into understandable and actionable information. By comparing actual costs with standard costs, companies can identify inefficiencies, evaluate the effectiveness of various logistics initiatives, and make informed decisions to improve their operations. This will help companies not only reduce costs, but also improve the quality of customer service, which is one of the most important success factors in modern business.

- Implement a cost allocation system. The third step to improving the analysis and control of logistics costs is to implement a cost allocation system that allows you to distribute total logistics costs across different products, customers, or channels. To make informed business development decisions, you need to have detailed cost information. A cost allocation system is a tool that allows you to allocate total logistics costs to individual products, customers, or distribution channels. This allows company managers to understand which business segments are the most profitable and which require additional investment. With this information, it is possible to optimize pricing, marketing campaigns, and logistics processes, which ultimately leads to increased profitability.

- Systematic comparison and review of current costs. The fourth step to improving the analysis and control of logistics costs is to regularly and systematically benchmark and

review costs. To remain competitive in the market, companies must constantly look for ways to reduce costs and increase efficiency. Regular benchmarking of logistics costs is one of the most effective ways to achieve this goal. By comparing your costs with those of your competitors, you can identify inefficiencies, evaluate the effectiveness of various logistics initiatives, and make informed management decisions.

- Stakeholder engagement. The fifth and final step to improving the analysis and control of logistics costs is to involve stakeholders, such as suppliers, customers, employees, and partners. Cooperation is the key to success in any business. Involving stakeholders in the process of optimizing logistics costs is not just a recommendation, but a necessity. Working together with suppliers, customers, and employees allows company managers to identify new opportunities to reduce costs, improve the efficiency of logistics processes, and build long-term relationships with partners. This allows not only to achieve short-term goals, but also to create a sustainable and competitive business model.

Conclusions. Efficient logistics is one of the key success factors for modern business. Therefore, evaluating the efficiency of logistics processes is an integral part of the company's strategic management and ensures its stable development.

The analysis of modern methods for assessing the efficiency of logistics processes in the company allowed us to identify three important tools, such as the data envelopment analysis (DEA) method, ABC analysis, and the cost analysis and control method. The joint use of these methods creates synergy, allowing for a deeper and more accurate analysis than when each of them is applied separately. Therefore, the methods we offer complement each other, providing company managers with tools for comprehensive analysis and evaluation of logistics efficiency.

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CONTEMPORARY TENDENCIES OF THE MODERN LOGISTICS DEVELOPMENT

Volodymyr Reznik. "Contemporary tendencies of the modern logistics development". *Logistics is an important component of any business, which covers the processes of planning, organizing, managing and controlling the movement of resources, products and information. Its main goal is to ensure the optimal and efficient use of resources, satisfy the needs of consumers and achieve competitive advantages in the market. Logistics covers various activities related to material flows - from the purchase of raw materials to the delivery of the final product to consumers. In traditional logistics systems, the use of information technology was limited, and the main focus was on mechanical inventory management and transportation. In modern approaches, automation, information technologies, and artificial intelligence play a significant role, which allows predicting changes in demand, optimizing routes, and improving inventory management. These technologies make it possible to reduce costs, increase the accuracy and efficiency of decision-making.*

Keywords: logistics, transportation, multimodal transportation, supply chain, WMS, freight-forwarding, means of transport

Володимир Резнік. «Сучасні тенденції розвитку сучасної логістики». *Логістика є важливою складовою будь-якого бізнесу, яка охоплює процеси планування, організації, управління та контролю за переміщенням ресурсів, продукції та інформації. Її основна мета полягає в забезпеченні оптимального та ефективного використання ресурсів, задоволенні потреб споживачів і досягненні конкурентних переваг на ринку. Логістика охоплює різні види діяльності, пов'язані з матеріальними потоками – від закупівлі сировини до доставки кінцевого продукту споживачам. У традиційних логістичних системах використання інформаційних технологій було обмеженим, а основна увага приділялася механічному управлінню запасами та транспортуванню. У сучасних підходах значну роль відіграють автоматизація, інформаційні технології, а також штучний інтелект, який дозволяє передбачати зміни в попиті, оптимізувати маршрути і покращувати управління запасами. Ці технології дають змогу знижувати витрати, підвищувати точність і оперативність прийняття рішень*

Ключові слова: логістика, транспортування, мультимодальні перевезення, ланцюг поставок, WMS, експедирування, транспортні засоби.

Introduction. Logistics, as a management function, has deep historical roots dating back to antiquity. Its original

purpose was to ensure the efficient delivery of goods and resources across different territories, which facilitated the development

of trade and economic ties between different cultures. Already in Ancient Egypt, Mesopotamia and the Roman Empire, logistics played an important role in ensuring the supply of materials for construction, military campaigns and expansion of territories. Transportation of goods, construction of roads and development of navigation were important elements of the logistics processes of that time.

The purpose of the article. The main aim of the article is to provide the research of the main challenges and problems of activity of Logistics development tendencies. This article will provide the accurate information on the history and contemporary tendencies of Logistics development. Also there were researched the comparison between traditional and contemporary logistics

Presentation of the main results. In the Middle Ages, with the development of feudalism and the growth of international trade, logistics increasingly focused on the transportation of goods by sea and land. Trade routes were formed between Europe, Asia and Africa, and these routes ensured the supply of such important goods as spices, silk, metalwork and other raw materials. Simultaneously with the development of transport, the first concepts of inventory management began to take shape, as growing trade required efficient storage of goods in large volumes. Since the beginning of industrialization in the 18th and 19th centuries, logistics has acquired a new dimension. The advent of steam engines, railways and steamships significantly changed the possibilities of transporting goods. Transportation costs decreased, which made it possible to reduce the cost of goods and make them more accessible over greater distances. In addition, the development of factory production led to the need for more efficient inventory management to maintain a continuous production process. During this period, logistics began to focus on improving the processes of transportation and warehousing, as well as on the development of inventory management. Logistics

processes have already begun to be considered an important part of business [1].

In the 20th century, logistics significantly changed its functions thanks to new technologies and management concepts. In the late 1940s and 1950s, scientists and businessmen began to consider logistics as a complex activity that includes not only the transportation and storage of goods, but also the management of information and finances. An important milestone was the development of inventory management theories, such as the Just-in-Time (JIT) model, which allowed to reduce inventory holding costs and minimize overproduction risks. This concept gained popularity thanks to companies such as Toyota, which used it to optimize production processes.

The 1950s also marked the beginning of the development of integrated supply chains. The growth of enterprises and the globalization of the economy required more and more complex management not only of goods, but also of information, finance and human resources. Logistics began to include not only the company's internal processes, but also external relations with suppliers and consumers [2-4].

In traditional logistics, the main emphasis was placed on the internal operations of the company, such as inventory management, transportation and storage of goods. It was focused on ensuring smooth operation within one country or region, as well as optimizing resources within the enterprise. Instead, modern logistics is focused on global supply chains, where companies interact with numerous partners around the world, which allows to gain access to new markets, reduce costs and increase efficiency [5].

In traditional logistics systems, the use of information technology was limited, and the main focus was on mechanical inventory management and transportation. In modern approaches, automation, information technologies, and artificial intelligence play a significant role, which allows predicting changes in demand, optimizing routes, and improving inventory management. These

technologies make it possible to reduce costs, increase the accuracy and efficiency of decision-making.

In traditional approaches, interaction with partners was minimal and information was exchanged directly through paper documentation or phone calls. In modern logistics, integration with partners has reached a high level thanks to the use of electronic platforms for information exchange. This allows you to receive relevant data in real time, synchronize work with suppliers and consumers, and optimize processes throughout the supply chain.

In traditional logistics, risk management was more reactive, when companies eliminated problems after they occurred. In

modern logistics, it is important to predict risks and implement proactive management. The use of big data and analytics allows you to predict potential problems (for example, delays in supplies, changes in demand, political or economic risks) and minimize them in time, which reduces the likelihood of significant losses (Table 1).

Therefore, modern logistics not only changes operational approaches, but also makes logistics processes more global, technologically advanced and integrated. It takes into account new business requirements for speed, flexibility and accuracy, which allows companies to work effectively in the conditions of globalization and a changing market environment.

Table 1 – Comparison of traditional and modern logistics

Parameters	Traditional logistics	Contemporary logistics
Focus on	Inbound operations	Global supply chains
Technologies	It narrow spreading tendency	Automation of IT systems, artificial intelligence
Cooperation with partners	Minimal integration	High integration with partners
Working with risks(mitigation)	Reactive approach	Forecasting and proactive regulation

Developed by: Volodymyr Reznik

Thus, the evolution of logistics from the initial functions of transportation to modern high-tech and global supply and value chain management systems shows how this industry has adapted to a changing world and has become an important factor in maintaining business competitiveness in the global economy. The basis of logistics is the integration of management processes with the aim of optimizing the movement of goods, services and information. This allows businesses to reduce costs, reduce production and delivery times, and improve customer service. Logistics also ensures the rationalization of stocks, transport costs, which allows to improve the overall efficiency of business [6-7].

Thus, logistics is a complex discipline that covers not only the tactical aspects of managing material flows, but also strategic

planning that contributes to the achievement of long-term business goals. Logistics engages several main areas, each of which performs specific functions aimed at optimizing the movement of goods and services within the supply chain. Transportation logistics focuses on ensuring the delivery of goods between various supply chains, including the selection of vehicles and route planning to ensure timely and cost-effective transportation. It plays a key role in maintaining the continuous movement of goods from producers to consumers.

It promotes effective data exchange between process participants, from suppliers to end users, which allows to reduce risks, increase transparency and provide continuous control over operations in real time (Table 2).

Table 2 – Types of logistics

Type of logistics	Characteristics
Transport logistics	Ensures delivery of goods between supply chains, selection of transport, routes
Warehouse management logistics	Management of storage of goods, location of warehouses, optimization of storage places
Supply management logistics	Determining the optimal level of stocks to avoid surpluses and shortages
Purchase logistics	Responsible for the purchase of raw materials and materials
Distribution logistics	Organization of product delivery to the final consumer
Information logistics	Management of information flows, ensuring communications in supply chains

Developed by: Volodymyr Reznik

The logistics supply chain is a sequence of interconnected stages that ensure the movement of goods from suppliers of raw materials to the final consumer. The process begins with the purchase of raw materials, which are supplied by various manufacturers or suppliers. After that, the raw materials are sent to enterprises for processing and production of finished products. At the production stage, raw materials are transformed into finished goods, which are subsequently transferred to warehouses for storage.

After production, finished products are moved to warehouse facilities, where stocks are managed and prepared for further transportation. Warehouses can be located near production facilities or closer to sales markets, depending on the company's logistics strategy. At this point, the products may also undergo packaging or labeling in accordance with the requirements of customers or legislation [8].

The next stage includes the transportation of products, which can be carried out by various modes of transport (road, rail, sea or air) depending on the distance and urgency of delivery. Logistics companies choose the most optimal routes, taking into account costs, delivery time and the specifics of the goods.

The final stage of the logistics chain is the distribution of products and their delivery to the final consumer. Products may pass

through several intermediaries, such as wholesalers or retail distributors, before reaching the final customer. At this stage, it is important to ensure timely delivery, as well as to satisfy all consumer requirements regarding the quality and quantity of goods.

All this requires active management of information flows at each stage to ensure accurate accounting of goods, coordination of actions between chain participants and control over the efficiency of logistics operations (Fig. 1).

A number of scientists claim that the process of strategic logistics management can be considered as a sequence of five key stages, each of which has a significant impact on the formation of an effective logistics system. The first stage, according to the researchers, is the analysis of the logistics chain, which includes a detailed study of all elements and processes related to the movement of goods. As the authors note, this stage involves evaluating suppliers, transportation routes, warehouses, and distribution channels to identify weaknesses and opportunities for improvement. The researchers indicate that a detailed analysis of the logistics chain allows to identify those aspects of logistics activities that need to be optimized to increase the overall efficiency of the system. This approach, according to scientists, makes it possible to get a complete picture of how the company's logistics

network functions, as well as to identify key areas for improvement [9].

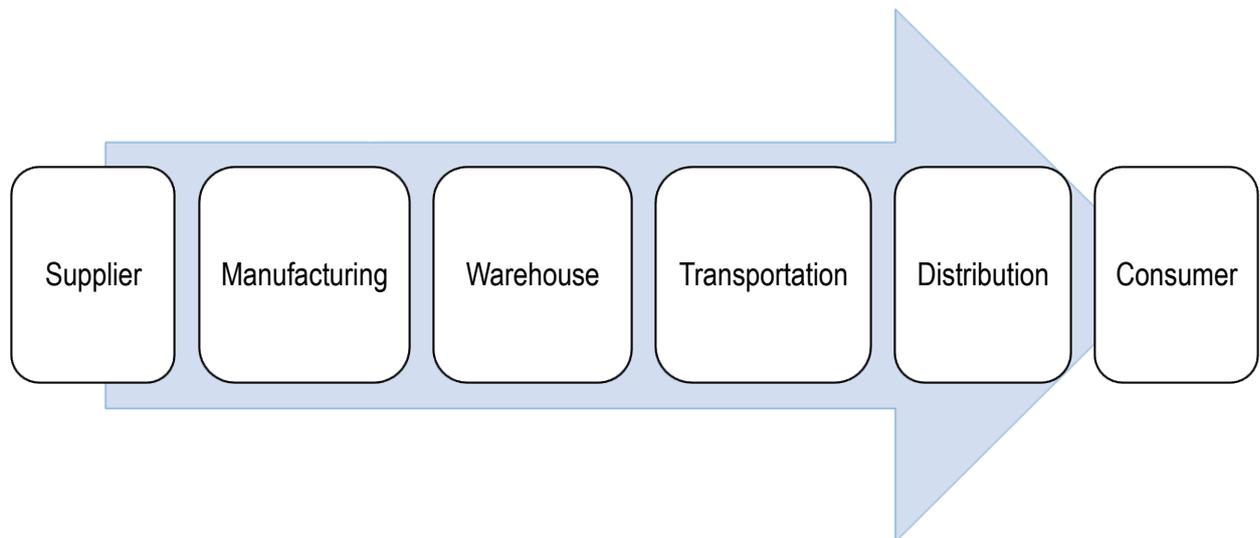


Figure 1 – Logistics supply chain

Some specialists, such as L.M. Achkasova T.O., Vodolajzka (2022), O.M. Tymoshchuk (2018) and others. emphasize that supplier relationship management (SRM) is critical to ensuring uninterrupted supply of raw materials, components or finished products. As scientists note, the use of SRM systems helps companies achieve transparency in procurement processes, reduce the risks of supply interruptions, and quickly respond to changing market needs. Researchers emphasize that SRM systems allow to analyze the performance of suppliers, estimate the cost of supply and manage risks, which contributes to the optimization of procurement processes [10-11].

Conclusions. Also, many scientists, in particular N.B. Ilchenko (2016) and others emphasize the importance of coordination between suppliers and customers. They indicate that transparent information exchange between all participants in the

supply chain is key to agreeing delivery times, order volumes and adapting to changes in demand. Some researchers believe that logistics today is a strategic tool for coordinating the interests of suppliers, companies and customers [13].

In addition, as stated by O.M. Kryvoruchko (2022), effective management of relations with suppliers and customers allows to reduce the risks arising in the process of supplying goods or services. Early detection of potential problems and joint discussion of solutions between partners, according to scientists, helps to avoid crisis situations in supply chains [14].

Therefore, the scientific community agrees that the integration of modern technologies, such as SRM and CRM, is an important factor in increasing transparency, predictability of risks and maintaining a high level of service, which is critical for achieving competitive advantages in today's market.

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THE INFLUENCE OF THE EXTERNAL AND INTERNAL ENVIRONMENT ON THE FORMATION OF STRATEGIC MANAGEMENT OF THE ENTERPRISE

Vira Dabizha, Volodymyr Voskolupov. *"The influence of the external and internal environment on the formation of strategic management of the enterprise".* The article discusses modern approaches to strategic management of enterprises in the context of globalization and economic instability. The key role of the analysis of the external and internal environment in the formation of competitive advantages and long-term development strategy, as well as the enterprise management strategy, is determined.

The importance of applying innovative and anti-crisis approaches to ensure the sustainability and flexibility of enterprises is substantiated. Recommendations are offered on how to integrate long-term goals with operational tasks and continuous monitoring of changes, which allows enterprises to respond effectively to the challenges of the modern market.

The article focuses on the need to dynamically adjust the strategy to strengthen positions in a competitive market and sustainable development in the long term. The article highlights the methods of environmental analysis, such as market research, monitoring of political, economic and social factors, as well as the importance of dynamic adjustment of strategies in accordance with changes in the external environment.

The results of the study indicate the importance of an adaptive approach to strategic management and the use of integrated models that take into account the complex environment of the enterprise.

Keywords: strategic management, external environment, internal environment, factors of influence, enterprise development, environmental analysis, economic stability, development strategy, competitiveness.

Віра Дабіжа, Володимир Восколупов. *«Вплив зовнішнього і внутрішнього середовища на формування стратегічного управління підприємством».* У статті розглянуто сучасні підходи до стратегічного управління підприємствами в умовах глобалізації та економічної нестабільності. Визначено ключову роль аналізу зовнішнього та внутрішнього середовища у формуванні конкурентних переваг і довгострокової стратегії розвитку, а також стратегії управління підприємством.

Обґрунтовано важливість застосування інноваційних та антикризових підходів для забезпечення стійкості та гнучкості підприємств. Запропоновано рекомендації щодо інтеграції довгострокових цілей із оперативними завданнями та постійного моніторингу змін, що дозволяє підприємствам ефективно реагувати на виклики сучасного ринку.

У статті звертається особлива увага на необхідності динамічного коригування стратегії задля зміцнення позицій на конкурентному ринку та сталого розвитку в довгостроковій перспективі. Висвітлено методи аналізу середовища, такі як дослідження ринку, моніторинг політичних, економічних та соціальних факторів, а також значення динамічного коригування стратегій відповідно до змін у зовнішньому середовищі.

Результати дослідження вказують на важливість адаптивного підходу до стратегічного управління та використання інтегрованих моделей, що враховують комплексне середовище діяльності підприємства.

Ключові слова: стратегічне управління, зовнішнє середовище, внутрішнє середовище, фактори впливу, розвиток підприємства, аналіз середовища, економічна стабільність, стратегія розвитку, конкурентоспроможність.

Introduction. In the modern context of globalization and digital transformation, effective strategic management has become a key factor in ensuring enterprise competitiveness and resilience. Rapid changes in the economic environment, growing uncertainty, and risks triggered by geopolitical developments, economic crises, and innovative technologies demand flexible approaches to strategy formulation. Strategic management involves analyzing and synthesizing both external and internal factors that directly influence managerial decision-making.

The impact of the external environment is reflected in economic, political, social, and technological factors, which present enterprises with both new opportunities and challenges that threaten their stability. At the same time, the internal environment determines the enterprise's ability to adapt to external conditions through the efficiency of management processes, organizational culture, and the availability of necessary resources.

The relevance of this study is driven by the need to develop strategic management tools that account for the interaction between internal and external environments in the face of increasing economic instability. This issue is particularly significant for Ukrainian enterprises, which must simultaneously cope with global trends and domestic economic difficulties.

Thus, this research will contribute to a deeper understanding of strategic management processes and the development of new approaches to achieving long-term enterprise competitiveness.

Analysis of recent research and publications. The relevance of the research topic is confirmed by the need for continuous analysis of the internal and external environments of the enterprise. In order to investigate the issue of the influence of external and internal environments on the formation of strategic management within the enterprise, we have analyzed the works of authors such as: H. Ansoff, B. Boyd, V. Baidala, T. Balanovska, S. Dolynskiy, O. Havrysh, T.

Kobeleva, Ya. Koval, V. Kotliarov, T. Kostina, O. Vitvitska, A. Zahorodnia and other leading scholars in this field.

The objective of this article is to analyze the influence of external and internal factors on the formation of strategic management in enterprises and to justify approaches for improving the effectiveness of strategic decisions. The study also addresses the integration of modern management tools and the adaptation required to navigate rapid changes in the business environment.

Presentation of the main results. In recent years, enterprise strategy has become an integral part of business management in almost all countries with market economies. The globalization of economic processes, the increase in competition among manufacturers, and the growing influence of high-tech companies have led to the widespread application of strategic thinking as the only correct approach to enterprise management in market conditions.

When developing a strategy, it is necessary to consider both external and internal factors, particularly the availability of resources, competencies, and capabilities that the enterprise has to effectively implement the chosen strategy.

The selection of optimal parameters for corporate strategy classification is determined by the purpose and objectives of the classification, the characteristics of the object of analysis, and the specific element-time situation. To determine the strategy and planning goals for the enterprise's actions in the market, it is necessary to analyze the external and internal environment.

For every business, it is important to conduct an analysis of its external environment, which includes the study of resource suppliers, the availability of sales markets, product buyers, legislation, existing technologies, competitors, and so on. To select the appropriate method of analyzing the external environment, the following should be considered:

Complexity – the number of factors to which the business must respond;

Mobility – the rate of changes and the speed at which changes occur in the corporate environment;

Uncertainty – the amount and reliability of information about specific external environment factors [3].

Developing a growth strategy is especially important for companies operating in dynamic markets with high uncertainty in external environment parameters. Resources are needed to achieve the set goals. As a result, a company's development strategy is meant to answer several questions: which areas of business are more profitable to develop, what resources are needed, and how to generate profit by developing these areas. Corporate development strategies have several unique characteristics [5]:

No special actions are taken during strategy development. Essentially, the final stage of the process is determining the directions that will ensure the company's stable growth and strengthen its positions.

Depending on the type of strategy being developed, for example, a financial strategy, it requires projects to be formed on how this strategy will be implemented. The process involves focusing on specific areas or prospects and eliminating unacceptable opportunities that are incompatible with the chosen strategy.

The need for the chosen strategy disappears the moment an event occurs in an undesirable direction for the company.

It is impossible to foresee the full range of opportunities that may arise during the development of an action plan. The information used for this may be incomplete and inaccurate.

If all information were available, the validity of the initial strategy would likely be in question. This underlines the need for feedback, which allows for timely plan revisions and important adjustments.

Strategic planning involves developing a set of strategies (or the company's financial strategy or marketing strategy) [4]. Therefore, the strategic management process entails the timely implementation of the chosen plan

and the reworking of the strategy in response to new circumstances.

Strategic planning is a logical system based on rational thinking. At the same time, planning is the art of forecasting, conducting thorough research, and making calculations that favor the best alternative [10].

Strategic management is the implementation of a concept that combines target-oriented, systemic, situational, and integral approaches to enterprise activities, enabling the establishment of development goals, comparing them with the enterprise's available capabilities, and aligning them with the latter by developing and implementing a system of strategies [10].

Researchers D. Glaydell and S. Hatten defined strategic management as a process of determining and establishing an organization's relationship with its environment, aimed at achieving selected goals and the desired state of interaction with it through resource allocation, allowing the organization and its units to operate effectively and efficiently. In particular, I. Ansoff associates strategic management with defining the goals and objectives of the enterprise and establishing a link between the enterprise and the external environment [1].

By strategic management, we mean a dynamic process based on utilizing the enterprise's potential, oriented towards achieving long-term competitive advantages in the market while timely adjusting functional goals (according to changes in the external environment) through innovation orientation, business volume growth, restructuring enterprises, or crisis management.

Thus, the goal of strategic management is to build a dynamic system that ensures the timely determination of mission, goals, and strategies, the development and execution of plan systems, thereby ensuring the company's long-term competitive advantages in the market.

Enterprise strategic management represents a concept with the following distinctive features:

1. It is based on a specific combination of management theories related to enterprise activities (including systems and situational analysis, goal-oriented and innovation approaches to management, etc.); the enterprise is viewed as an open socio-economic and material-object system. Using only one of these principles does not allow achieving the necessary results for long-term enterprise development.

2. It is focused on studying the conditions in which the enterprise operates. This enables the creation of strategic management systems that are adequate to existing conditions and will differ depending on the enterprise's characteristics and external environment.

3. It emphasizes the need to collect and use strategic information databases. The analysis, interpretation, and use of information for strategic decision-making enable defining the content and sequence of changes in the enterprise by reducing environmental uncertainty.

4. It helps predict the consequences of decisions, influencing the situation through resource allocation, establishing effective connections, and shaping strategic employee behavior.

5. It involves using specific tools and methods for enterprise development (objectives, "goal trees," strategies, "strategic sets," strategic plans, projects and programs, strategic planning and control, etc.).

6. It creates the prerequisites for forming a management system that enables the organization to operate in a strategic mode, which, in turn, ensures its long-term existence, and so on [14].

Enterprise management strategy and enterprise development strategy have different focuses and tasks, although both aim to ensure the enterprise's efficient operations and long-term competitiveness. The main goal of the enterprise management strategy is to ensure effective operations, organization, and coordination of all processes that allow achieving current and long-term goals. In particular, the main goal of

the enterprise development strategy is to ensure the company's long-term growth and development, taking into account changes in the external environment, new markets, products, or technologies.

It should be noted that the development strategy of an enterprise should be built on the principle of hierarchy. For instance, a small organization may have only one strategy, while a large company may have a developed strategy for each level of action.

An enterprise's development strategy is determined by studying the external environment and possible internal perspectives for the company's activities, taking into account unpredictable market situations. It involves setting a long-term direction for the enterprise's development in all types of production activities and occupying a corresponding or planned position in domestic and foreign markets [13].

When planning, potential strategies for developing market services at the enterprise are also considered: entering markets with new products, attracting new suppliers and consumers of products, expanding or ceasing the production and sale of previous products and services. Therefore, global business practices show that most companies that achieve significant results do so by implementing a strategic management system.

Any enterprise exists and operates within an internal and external environment. Every action at any enterprise is carried out only if the environment allows it.

The internal environment of an organization is a set of elements that make up the organization and ensure its integrity and viability as an open system. This is a complex system of elements and links between them, which is the object of management.

The external environment of an organization is a set of business entities, economic, social, and natural conditions, national and international institutional structures, and other external factors that influence the enterprise's activities.

To determine and implement the enterprise management strategy, management must have a deep understanding of both the organization's internal environment, its potential, and development trends, as well as external environment trends.

The external environment of an organization is a source of resources necessary for its existence. The external environment of an organization refers to the set of elements surrounding it and significantly influencing its activities.

External environment analysis involves analyzing its microenvironment (immediate surroundings) and macroenvironment (indirect surroundings) [2].

The macroenvironment includes factors that may not have an immediate and direct impact on the organization's effectiveness and stability but still have some (indirect) influence.

Macroenvironment analysis should include research on international factors (military conflicts, economic crises), political processes in the country, legal regulations, economic conditions, the level of scientific and technological development in society, social and cultural aspects, environmental status, etc.

Microenvironmental factors directly influence the organization's activities. The immediate environment includes consumers, suppliers, competitors, the labor market, as well as government bodies and corresponding laws that regulate organizational activities.

An analysis of the organization's internal environment helps identify the potential and resources on which the organization can rely to achieve its goals. The internal environment is analyzed in the following areas: personnel, their potential, qualifications, and interests; the organization of management and marketing; the state of core activities (production, organizational characteristics, research and development, etc.); financial condition; and organizational culture.

Table 1 – Let's examine, as an example, the need to study some of the above macroenvironment factors.

Factor	Brief description
Economic Factors	Economic factors need to be constantly monitored, as examining the state of the economy allows one to understand how resources are formed and redistributed. The most important economic indicators include GDP, inflation rate, exchange rate, interest rates, balance of payments, unemployment rate, and others. It is essential to determine what opportunities or threats the levels of these indicators may pose for the organization's development.
Political Factors	The successful operation of an organization depends on the level of political stability in the country. It is crucial to understand the intentions of the authorities regarding specific economic sectors and society as a whole. Large companies, for example, try to participate in the political process, which allows them to lobby for their interests and, to some extent, influence managerial decisions. Political factors can serve as both threats and opportunities for the organization.
Technological and Scientific Factors	Analyzing the latest scientific and technological trends enables timely technology updates or entry into new market niches that arise due to technological progress. The most dynamic fields include the rapid development of information systems and technologies, as well as telecommunications.
International Factors	Companies operating in international markets must continually analyze global market conditions, foreign trade trends, customs policies, anti-dumping measures, and other trade policies of partner countries.
Social and Demographic Factors	The study of these factors aims to assess the impact of social indicators such as the standard of living, education level, existing traditions, and societal values, as well as demographic trends. Social factors influence both other macroenvironmental factors and the internal environment of the organization.

Source: based on [6]

The analysis of the financial condition enables the identification of current and potential weaknesses of the organization compared to its competitors. Researching the internal environment aims to uncover the organization's strengths and weaknesses. Strengths serve as the foundation that the organization relies on in the competitive struggle and should strive to expand and

strengthen. Weaknesses should be a focus of management's attention to address and resolve.

The external environment is analyzed to identify threats and opportunities that should be considered when setting and achieving goals. Environmental analysis is typically entrusted to analytical and marketing departments, which are primarily responsible

for solving information-provision issues. Common methods for gathering information to monitor the external environment include desk research, involving the search for secondary information on electronic and paper media (e.g., analyzing materials published in periodicals, books, information in electronic media, and the Internet); attending professional conferences; analyzing the experience of organizational staff; and conducting market research.

According to the strategic management concept, analyzing the external and internal environments is a necessary element in determining the enterprise's mission and objectives. Strategy serves as a tool for achieving goals, and the management concept selected for successfully implementing the chosen set of strategies is essential for business functioning. It should be noted that strategic management is a modern business concept focused on setting goals and objectives, defining the direction of activity, and creating guidelines for resource allocation and actions to achieve these goals [7].

A strategy is a long-term, qualitatively defined direction for the development of an enterprise, aimed at strengthening its position, meeting customer needs, and achieving set goals. Therefore, the main task addressed by corporate strategy is to implement innovation and change within the enterprise through resource allocation, adaptation to the external environment, internal coordination, and forecasting future changes in operations [9].

Thus, an enterprise development strategy involves not only setting long-term core goals and objectives but also clearly defining a course of action and skillfully allocating resources necessary to achieve these goals. It is clear that the conditions of modern economic development in most countries are shaped by globalization and the dynamics of the external environment. Despite the volume and accessibility of information, as well as the active development of communications and

information technology, the process of forecasting the future state of the economic system depends on numerous factors that can influence its behavior. For example, the impact of a financial crisis may lead to bankruptcy and worsen the overall socio-economic situation.

This is due to global development trends, the most important of which today are the gradual globalization and the specific economic conditions of each country. The acceleration of technological development, the increasing importance of human resources, and changes in other elements of modern production are interrelated issues of balanced and dynamic growth [8].

Therefore, all enterprises must adapt to these changes by improving their production programs, logistics infrastructure, trade and sales policies, and by developing appropriate future strategies.

Undoubtedly, modern enterprises are dynamic and open systems, and their activities depend on the conditions of the external environment in which they operate. Currently, the external environment of all companies demonstrates unpredictable rates of change.

The mission of any enterprise is, above all, to keep up with modern trends and continuously improve. This ensures the enterprise's competitiveness in the market. Practice shows that the most successful enterprises are those that place significant emphasis on strengthening their competitiveness [11].

Social responsibility is a positive trait of modern business. It should be acknowledged that the theory of corporate social responsibility has been studied by representatives of Ukrainian business for a long time. In the modern context, corporate social responsibility is part of the strategy [11].

The development of enterprises is an irreversible, directed, and logical process. Changes occurring under the influence of internal and external factors lead to the formation of quantitative, qualitative, and structural changes.

Conclusions. Thus, effective strategic management requires the use of various methods of analysis, including systemic, situational and targeted approaches. An analysis of the external environment helps a company identify threats and opportunities, while an internal analysis reveals the strengths and weaknesses of the business. This allows companies to respond flexibly to changes and make prompt adjustments to their strategy. Creating a sustainable strategy is possible only if long-term goals are harmonized with operational objectives and if both internal and external conditions are constantly monitored.

Strategic management should not only focus on stability but also take into account innovative and anti-crisis approaches. Implementing innovations, restructuring processes, and creating anti-crisis mechanisms allow an enterprise to remain stable in an unstable environment. Flexibility and the ability to quickly adapt to changes have become key success factors at the current stage of economic development. Thus, the enterprises strategy should provide for the possibility of its dynamic change and integration of new approaches, which will contribute to long-term development and strengthening of market positions.

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RISK MANAGEMENT IN INTERNATIONAL SUPPLY CHAINS: GEOPOLITICAL AND GEOECONOMIC DIMENSIONS

Mariia Hryhorak, Alona Dimitrova. *“Risk management in international supply chains: geopolitical and geoeconomic dimensions”.* In the current climate of global instability driven by dramatic geopolitical and geoeconomic transformations, international supply chains face numerous risks that significantly impact the continuity and efficiency of logistics processes. Threats such as military conflicts, port blockades, border instability, climate changes, and cyber threats introduce new challenges for companies, particularly Ukrainian ones, which require adaptive strategies to ensure the resilience of their supply chains.

The purpose of this study is to systematize key geopolitical and geoeconomic risks affecting international supply chains and to identify optimal approaches to managing these risks under conditions of instability, especially for Ukrainian companies facing heightened threats. The study includes an analysis of global risks based on international scientific literature, specific risks in Ukraine and their impact on import, export, and transit chains, and the development of a generalized risk management model tailored to Ukrainian enterprises.

The research identified effective risk management methods such as supply chain diversification, the creation of alternative routes, and the use of insurance mechanisms. A practical case study on risk management in the import of industrial fasteners illustrates the stages of collaboration with forwarders and carriers, partner selection, and response to disruptions, demonstrating approaches that can be used to minimize the impact of risks.

The findings provide practical recommendations for Ukrainian companies, highlighting an adaptive approach to risk management that will help them maintain competitiveness and ensure supply chain resilience in a rapidly changing global environment. Future research should focus on integrating digital technologies, such as blockchain, artificial intelligence, and big data analytics, to strengthen the resilience and flexibility of international supply chains.

Keywords: management of international supply chains, geopolitical and geoeconomic risks, risk management, transparency and sustainability of supply chains

Марія Григорак, Альона Дімітрова. «Управління ризиками в міжнародних ланцюгах постачання: геополітичний та гео економічний вимір». У сучасних умовах глобальної нестабільності, спричиненої кардинальними геополітичними та гео економічними трансформаціями, міжнародні ланцюги постачання стикаються з численними ризиками, що суттєво впливають на безперервність та ефективність логістичних процесів. Такі загрози, як військові конфлікти, блокування портів, нестабільність кордонів, кліматичні зміни та кіберзагрози, створюють нові виклики для компаній, особливо українських, що потребують адаптивних стратегій для забезпечення стійкості своїх ланцюгів постачання.

Метою дослідження є систематизація ключових геополітичних та гео економічних ризиків, що впливають на міжнародні ланцюги постачання, та визначення оптимальних підходів до управління цими ризиками в умовах нестабільності, особливо для українських компаній, які стикаються з підвищеними загрозами. Дослідження включає аналіз глобальних ризиків на основі міжнародної наукової літератури, специфічних ризиків в Україні та їхнього впливу на імпорتنі, експортні та транзитні ланцюги, а також розробку узагальненої моделі управління ризиками для українських підприємств.

У результаті дослідження було визначено ефективні методи управління ризиками, такі як диверсифікація ланцюгів постачання, створення альтернативних маршрутів і застосування страхових механізмів. Представлений практичний кейс управління ризиками при імпорті промислових кріплень, що ілюструє етапи співпраці з експедиторами та перевізниками, вибір партнерів і реагування на збої, демонструє підходи, які можуть бути використані для мінімізації впливу ризиків.

Отримані результати дозволяють сформулювати практичні рекомендації для українських компаній щодо адаптивного підходу до управління ризиками, що допоможе зберегти конкурентоспроможність та забезпечувати стійкість ланцюгів постачання в умовах мінливого глобального середовища. Майбутні дослідження доцільно зосередити на інтеграції цифрових технологій, таких як блокчейн, штучний інтелект та аналітика великих даних, для посилення стійкості міжнародних ланцюгів постачання та підвищення їхньої гнучкості.

Ключові слова: управління міжнародними ланцюгами постачання, геополітичні та гео економічні ризики, управління ризиками, прозорість і стійкість ланцюгів постачання.

Introduction. In today's conditions of globalization and rapid development of the world economy, international supply chains face an ever-increasing level of risks. Geopolitical conflicts, trade wars, economic sanctions and other external factors significantly affect the functioning of global supplies, endangering the stability and reliability of the supply of goods and services to world markets. Events in recent years, including the COVID-19 pandemic and military aggression on the territory of Ukraine, have highlighted the vulnerability of global

supply chains and the need for effective risk management.

The issue of geopolitical and geoeconomic risks, which create additional challenges for companies involved in international trade, and also require new approaches to risk analysis and management, is of particular importance. The relevance of this direction of research is due to the need for new practices and tools that will allow businesses to quickly adapt to changes in the external environment, minimizing losses and ensuring the sustainability of their supply chains.

Literature Review. In today's climate of global uncertainty, comprehensive risk management in international supply chains is a critically important task. This is why the scientific literature reflects various aspects of risk management in international supply chains, including the identification and classification of risks, as well as approaches and tools for managing and mitigating those risks. Nearly 20 years ago, renowned scholars Kleindorfer & Saad wrote about the necessity of developing proactive risk management strategies within supply chains and described the consequences of potential disruptions [1]. The need for coordination and collaboration among supply chain partners to prevent possible disruptions and mitigate potential impacts has been substantiated in numerous later publications, such as those by Manuj & Mentzer [2], Christopher M. et al. [3], and others. Several publications, including [4-6], provide critical literature reviews on risk management challenges within supply chains.

A new wave of interest in risk management for international supply chains emerged following the start of the global COVID-19 pandemic. Some authors have described this phase as an era of global uncertainty and vulnerability. One of the first attempts to assess the pandemic's impact on global supply chains is presented in work [7]. Madzik P. et al. [8] drew attention to the issue of supply chain resilience, which has since been explored in greater depth in studies [9-11].

Among the latest publications focused on risk management in international supply chains, significant attention is given to the use of digital technologies to reduce vulnerabilities and enhance resilience. Studies [12-13] examine a variety of risks that modern supply chains face, from natural disasters and geopolitical tensions to cyber threats and disruptions in global trade. Researchers have studied how technological innovations such as blockchain, the Internet of Things (IoT), artificial intelligence (AI), and predictive analytics are transforming

traditional risk management approaches, enabling real-time visibility, data-driven insights, and proactive mitigation strategies. Authors [14] have shown that big data analytics can increase transparency, improve operational efficiency, and allow the detection of hidden risks that traditional methods cannot identify.

It is also worth noting that Ukrainian scholars, such as Makarenko M. and Kovalenko I. [15], Kharsul L. and Kovalenko Y. [16], and others, have contributed to research on risk management in supply chains. T. Anufrieva's work [17] investigates the unique challenges of managing supply chains for perishable goods in the context of Ukrainian business practices, while article [18] emphasizes risk reduction in cold chain logistics. Publications [19-21] focus on identifying geopolitical and geo-economic factors affecting supply chain management. Studies [22, 23] address opportunities for increasing transparency and resilience in supply chains through the use of modern information and communication technologies and digital tools.

To conclude this literature review on risk management in international supply chains, it can be stated that the process is multifaceted and complex. The factors that comprise and intensify risks are constantly evolving under the influence of geopolitical and geo-economic factors. This necessitates a coordinated approach among supply chain partners, the development of new structures and risk management models, and the search for effective tools for mitigating or offsetting the effects of potential risks. Thus, it can be inferred that current supply chain risk analysis cannot fully address all related risks, which, in turn, are gaining influence and creating a cascading negative effect. In other words, with the rapid changes in the market, it is essential to continuously update information and study the issue of risks and their impact on business activities.

The aim of the research is to systematize key geopolitical and geoeconomic risks impacting international supply chains and to

identify optimal approaches to managing these risks under conditions of instability, particularly for Ukrainian companies facing elevated threats due to current political and economic challenges.

To achieve this objective, the following tasks were set:

- summarize global geopolitical and geoeconomic risks based on international research, identifying their main characteristics and impact on international supply chains;
- analyze specific risks in Ukraine, including military actions, blocked ports, and borders, with a focus on their impact on import, export, and transit supply chains;
- develop a generalized risk management framework for Ukrainian companies, considering all types of potential threats, and evaluate the effectiveness of proposed methods in reducing supply chain vulnerability;
- present a practical case study of risk management for the supply of imported fasteners, illustrating stages of collaboration with forwarders and carriers, partner selection, and response to disruptions, and demonstrate approaches that can be used to minimize risk impacts.

These tasks provide a comprehensive approach to studying risks in international supply chains and formulating recommendations aimed at enhancing business resilience amid global and local challenges.

Research Methodology. The following research methods were employed in preparing the article analyzing geopolitical and geoeconomic risks and their impact on international and Ukrainian supply chains:

Critical Literature Analysis Method. This involved analyzing and systematizing scientific sources, including international studies on geopolitical, geoeconomic, climate, and technological risks. Various perspectives on these risks were compared, allowing for the identification of common patterns and gaps in the existing research.

Data Generalization and Systematization Method. Data from various sources

(international and Ukrainian studies) were structured to form a generalized framework of risks and their impact on logistics processes. Using the generalization method enabled the presentation of key risk types encountered by Ukrainian companies and the proposal of corresponding risk management strategies.

Comparative Analysis Method. This method compared the impact of risks in Ukraine with similar international risks, highlighting the unique characteristics of local risks and their interaction with global threats.

Case Study Method. The case study method was applied to examine specific examples of risk management in supply chains by Ukrainian companies. This helped to practically illustrate the impact of both international and local risks on logistics and company operations, as well as methods for mitigating these risks.

Graphic Analysis Method. A risk framework was created for a visual representation of the interconnections between risks and management strategies for Ukrainian companies. The graphic method helped to clearly structure the data and demonstrate the summarized results.

These methods collectively enabled an in-depth exploration of the issue of risks in international supply chains and provided practical recommendations for their management.

Presentation of the main results. In the modern international trade system, supply chains face heightened risks associated with geopolitical and geoeconomic factors. The integration of national economies and reliance on global supplies increase their vulnerability to political and economic conflicts. Geopolitical risks, particularly military conflicts and political instability, such as the war between Russia and Ukraine, disrupt the supply of energy resources, food, and raw materials [21].

Geoeconomic risks, including economic sanctions and trade restrictions, also reshape supply chain structures, as seen during the trade war between the United States and

China. For Ukrainian companies, these risks are intensified by export restrictions, currency fluctuations, and new EU trade quotas. In response, companies must adapt their strategies to increase resilience and reduce dependence on unstable external markets [25].

Analysis of global supply chains indicates a growing impact of geopolitical and geoeconomic risks on the stability of the global economy and the continuity of trade relations. Foreign studies highlight the complex nature of these risks, encompassing both traditional geopolitical conflicts and new economic restrictions and challenges arising from global changes in foreign economic policies. According to research by Heckmann et al. [27], military actions can cause supply disruptions, block strategic trade routes, and negatively impact the entire supply chain. For example, conflicts in the Middle East and the war in Ukraine have significantly reduced the availability of oil and gas, which are critical for many industries. These conflicts have also led to logistical delays, increased insurance costs, and disrupted transport routes.

Geoeconomic risks are reflected in changes to countries' trade policies, an increase in economic sanctions, and the implementation of protectionist measures aimed at safeguarding national markets. The trade war between the U.S. and China has become one of the most prominent examples of these risks, leading to widespread reevaluation of existing supply chains. This results in increased customs processing costs, product quotas, and restrictions on the export of high-tech products, which complicate international trade and restrict access to strategically important resources.

In addition, currency fluctuations significantly impact global companies,

especially when planning long-term contracts. Exchange rate instability can cause price volatility, affecting companies' competitiveness in external markets. Lastly, the COVID-19 pandemic and the subsequent post-pandemic crisis have greatly exacerbated logistical risks. Due to port shutdowns and route blockages, many companies were forced to redirect supplies or even localize production to reduce logistics costs.

According to recent studies and statistical data from international organizations, short-term critical economic and geopolitical risks for the global economy include inflation, economic recession, interstate armed conflicts, and geoeconomic confrontation. However, in the long term, the primary risks shift toward climate and technological threats, such as extreme weather events, critical changes in ecosystems, resource scarcity, and the adverse effects of technological advancements, particularly artificial intelligence and cybersecurity (see Fig. 1). This shift is associated with trends in globalization, technological progress, and growing dependence on natural resources, which lead to changes in the global risk landscape.

This research illustrates the key risks that may impact international supply chains and global operations in the short term (2 years) and the long term (10 years). The difference between short- and long-term risks lies in the fact that, in the short term, sudden threats dominate, such as disinformation, cybersecurity issues, and economic fluctuations, which quickly affect supply chains. In contrast, long-term risks reflect cumulative effects, including climate change and resource scarcity, which are structural in nature and require strategic preparation to ensure resilience in the future.

Short term (2 years)		Long term (10 years)	
1st	Misinformation and disinformation	1st	Extreme weather events
2nd	Extreme weather events	2nd	Critical change to Earth systems
3rd	Societal polarization	3rd	Biodiversity loss and ecosystem collapse
4th	Cyber insecurity	4th	Natural resource shortages
5th	Interstate armed conflict	5th	Misinformation and disinformation
6th	Lack of economic opportunity	6th	Adverse outcomes of AI technologies
7th	Inflation	7th	Involuntary migration
8th	Involuntary migration	8th	Cyber insecurity
9th	Economic downturn	9th	Societal polarization
10th	Polution	10th	Polution
11th	Critical change to Earth systems	11th	Lack of economic opportunity
12th	Technological power concentration	12th	Technological power concentration
13th	Natural resource shortages	13th	Concentration of strategic resource
14th	Geoeconomic confrontation	14th	Censorship and surveillance
15th	Erosion of human rights	15th	Interstate armed conflict

Figure 1 – Global Risks Ranked by Probable Impact (Severity) over 2-Year and 10-Year Periods
 Source: [25]

The impact of geopolitical and geoeconomic risks on international supply chains (SC) is among the most significant and unpredictable, as these risks directly influence the stability and availability of supply channels and resources in the global economy. In the context of globalization, international SCs are particularly vulnerable to geopolitical crises, armed conflicts, trade sanctions, and other forms of geoeconomic confrontation (Table 1). Geopolitical and geoeconomic risks, as indicated in the previous figure, are important factors influencing international supply chains in both the short and long term. Short-term risks, such as armed conflicts and economic sanctions, create sudden supply disruptions, reducing the reliability of supply chains. Meanwhile, in the long term, factors like resource depletion and increasing protectionism gradually undermine the stability of global supply chains, necessitating diversification and adaptation to new conditions.

Cyber threats have become one of the key challenges to business security due to their potential to cause strategic-level damage. Vulnerability to cyberattacks from hostile states or organizations can disrupt company operations, lead to the leakage of critical data, and even pose a threat to national security. Addressing this risk is essential for maintaining operational stability and safeguarding reputation, as the damage from cyber incidents can have long-term effects, impacting financial performance and customer trust.

Today, cyber threats have gained particular importance due to the increasing digitalization and dependence on global supply chains. The growing number of connected devices and systems, including critical infrastructure, creates additional opportunities for cyberattacks, which can have a cascading effect. Disruption in the operations of even a single company can trigger chain reactions affecting other businesses and government structures.

Table 1 – Impact of Geopolitical and Geoeconomic Risks on International Supply Chains

Risk Category	Risk Impact Description	Risk Management Methods	Recovery Speed
1. Geopolitical	Interstate conflicts, territorial disputes, military actions: cause logistical delays, loss of goods, increased transportation costs, and instability.	Diversification of routes and suppliers, geopolitical monitoring and forecasting, contingency supply plans.	From several months to a year, depending on the scale of the crisis and the company's emergency preparedness.
1.1. Sanctions Policy	Embargoes, trade sanctions: limit access to certain markets, restrict trade of strategic goods, and force companies to adjust routes and supply sources.	Market and supply source diversification, adaptation of supply chains to new conditions, search for alternative markets.	Recovery speed depends on the business's ability to shift to new markets and the availability of alternatives.
2. Geoeconomic	Changes in economic policy (trade wars, currency manipulation, tariff adjustments): complicate trade conditions, affect the cost and availability of goods.	Reducing dependence on specific markets, adapting to currency fluctuations, seeking alternative sources of raw materials and markets.	From several months to several years in case of significant changes in global markets.
2.1. Investment Risks	Decreased investment appeal, trade barriers: reduce economic growth and foreign investment flows.	Development of strategies to attract investment in stable sectors, focus on localization of production.	Depends on the presence of long-term investment programs, potentially lasting a year or more.
2.2. Infrastructure Risks	Military conflicts in transportation hubs (ports, corridors): complicate or completely halt logistics processes due to infrastructure damage.	Localizing warehouses, creating backup routes, and alternative supply chains.	Depending on infrastructure damage, recovery may take from several months to years.
2.3. Cyber Threats	Use of foreign equipment and software in corporate networks can provide hostile countries with access to confidential data, posing threats to both commercial and national security.	Reducing dependence on foreign-made components and software from potentially threatening countries is recommended. Cybersecurity measures such as network and software audits, multi-factor authentication, mandatory data encryption, and regular threat monitoring are crucial.	Recovery depends on business continuity plans and the effectiveness of measures like data backups, well-defined incident response protocols, and access to reliable tools for operational recovery.

This makes cybersecurity not only a matter of technological resilience but also a crucial condition for economic and national stability.

Preventing this risk requires implementing comprehensive cybersecurity

measures. These include using nationally certified technologies, multi-level authentication, regular threat monitoring, and planning backup strategies for rapid operational recovery following incidents. Government initiatives and international

standards also play an essential role, enhancing business security and data protection at a global level.

Thus, geopolitical and geoeconomic risks are among the most serious for international supply chains, and their impact necessitates complex strategies, including supplier

diversification, production localization, and global market monitoring.

Let us examine in more detail the characteristics of risks to international supply chains in Ukraine, summarized in Figure 2.

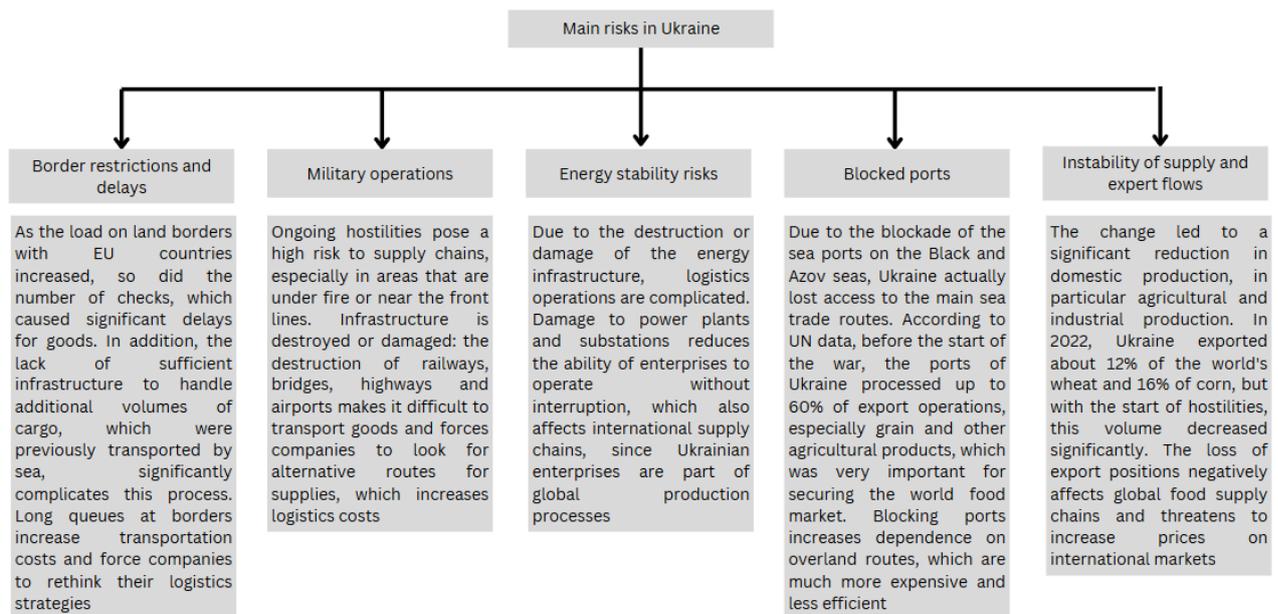


Figure 2 – Classification of Major Risks in Ukraine
 Source: (summarized by [20; 25-26])

The military actions in Ukraine constitute one of the largest conflicts since World War II. Unlike global geopolitical risks, which often involve general economic confrontation or trade restrictions, the situation in Ukraine is unique due to active combat on the country's territory. For instance, in other regions facing trade or geopolitical confrontations, infrastructure usually remains intact, allowing for relatively stable logistics. In Ukraine, however, physical risks have a more pronounced and lasting impact due to widespread destruction of infrastructure, closed airspace, blockades of seaports, and restrictions at border crossings.

Military actions and associated risks in Ukraine have drastically altered the geography of import, export, and transit supply chains (see Table 2). Port blockades, instability of transport routes, difficulties in

accessing traditional logistical corridors, and the need for new logistical strategies have significantly impacted international trade and transport infrastructure.

The risks associated with the armed conflict in Ukraine are more concentrated and have a direct impact on the country's logistical infrastructure. Unlike international risks, which generally manifest as trade restrictions or currency fluctuations, the risks in Ukraine involve physical destruction of transport and energy infrastructure, leading to a more prolonged and profound impact on supply chains. International risks are mostly tied to sanctions and trade barriers, while Ukraine's challenges include port blockades, damage to rail and road networks, making the impact immediate and more difficult to overcome.

Table 2 – Impact of Risks in Ukraine on the Geography of Import, Export, and Transit Supply Chains

Category	Impact Description	Main Routes and Changes	Key Issues and Consequences
Geography of Import Chains	Changes in sources of energy supplies, medical products, and raw materials.	Key energy suppliers are now EU countries (Poland, Germany, Lithuania); reorientation to land corridors via Ukraine's western border.	Increased dependence on European suppliers, rising logistics costs.
Geography of Export Chains	Restrictions on maritime exports due to port blockades, especially affecting grain, a major Ukrainian export.	Shift to land export routes (rail and road) through the western border. Primary transit countries are Poland, Romania, and Hungary.	High transport costs, delays due to limited capacity.
Transit Supply Chains	Ukraine lost its role as a key transit corridor between Europe and Asia due to port blockades and armed conflict.	Alternative routes now run through Poland, Turkey, and the Trans-Caspian corridor (Kazakhstan, Azerbaijan, Turkey).	Decline in Ukraine's transit potential, need for investment in alternative routes, high costs of new routes.

Source: (summarized by [19-22])

Changes in the geography of import, export, and transit routes pose a significant challenge for supply chains. In Ukraine, it is essential to develop infrastructure on the western border, strengthen rail and road connections, and explore new logistics strategies. International companies and governments involved in supply processes must also adapt to these new realities, investing in the development of transport infrastructure and the search for secure

routes, particularly through Central Asia and the Middle East.

Consider the generalized framework (Figure 3), which outlines the primary risks faced by Ukrainian companies in international supply chains and the corresponding risk management strategies.

This framework enables Ukrainian companies to respond effectively to a wide range of risks related to international supply chains and to minimize their impact on operational activities.

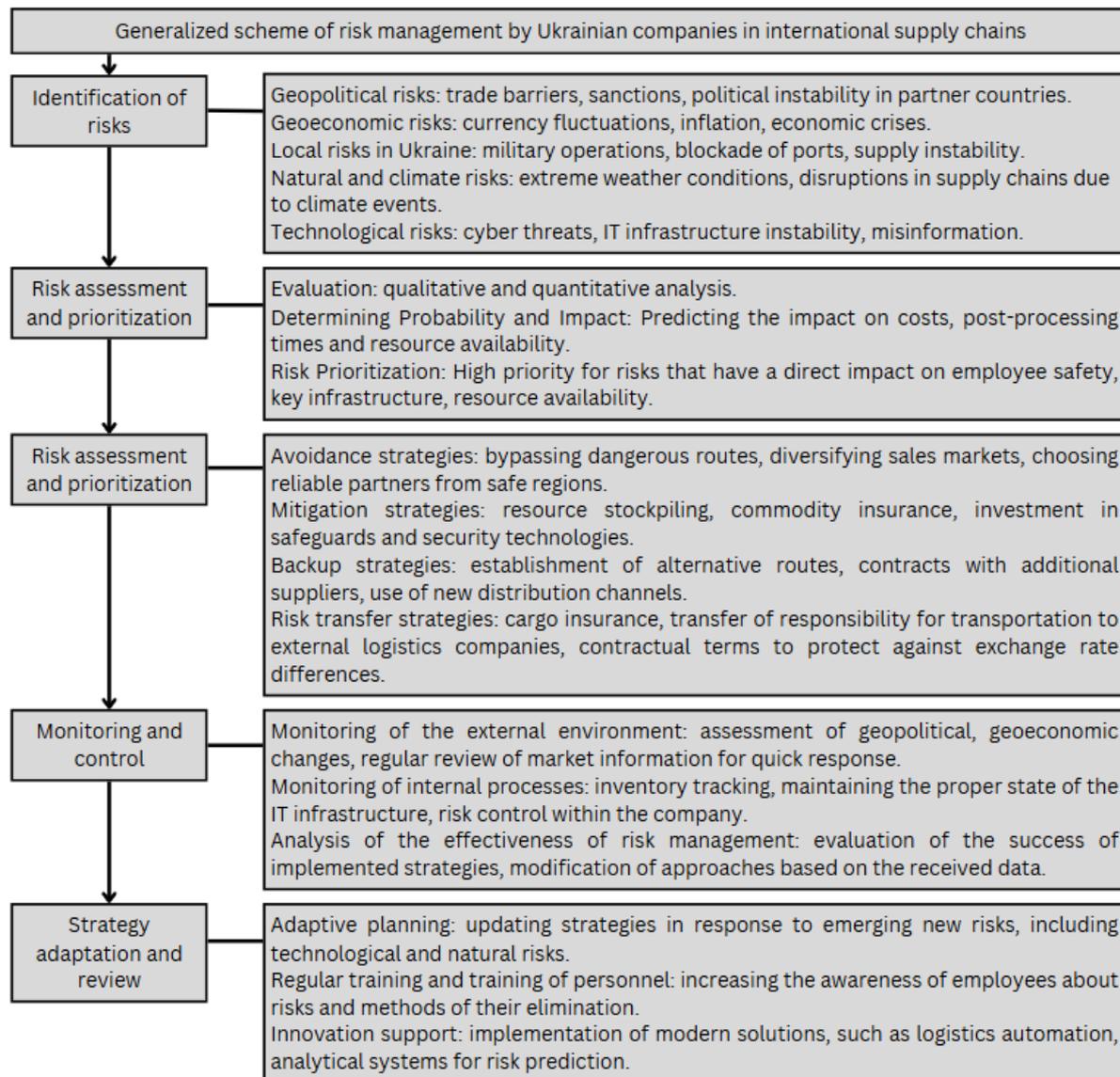


Figure 3 – Generalized Risk Management Framework for Ukrainian Companies in International Supply Chains

Case Study. Let's examine the improvement of risk management systems using the example of "Soldi & Co." This company is a production and commercial enterprise specializing in the supply of fasteners, construction chemicals of its own production, and products from well-known global manufacturers, making it one of the largest importers of fasteners. Since the company's activities are directly tied to the need for transporting goods from Asia and Europe, it faces supply chain risks.

Through analyzing "Soldi & Co." operations, we identified that the main supply chain risks for fasteners include: military actions in Ukraine (prolonged conflict creates instability in the business environment, affecting legislation and business conditions), border delays (queues at customs checkpoints, changes in customs procedures, and closures of certain crossing points), and increased supply costs (border blockades, fuel shortages, and military actions lead to higher transportation costs). Many of these risks can be mitigated through proper planning of

transportation. Therefore, considering the number of risks involved in planning and executing product transportation, particularly from Europe, we will look at optimizing the tender procedure for selecting freight forwarders.

The first and crucial step in optimizing the tender procedure for selecting forwarders is defining the key criteria (see Fig. 4) on which the selection is based. The main criteria to be considered are price, reliability, speed, and reputation. These indicators are essential in ensuring the efficiency of logistical operations, minimizing risks, and guaranteeing the stability of supplies.

Selecting forwarders based on these criteria is critical to optimizing the company's entire logistics network. Balancing price, reliability, speed, and reputation not only helps reduce costs but also enhances

operational efficiency, minimizes supply disruption risks, and improves end-customer satisfaction.

The process of selecting reliable freight forwarding companies is vital to the effective organization of logistics in any business, particularly for "Soldi & Co." Developing this process should consider a range of factors, including both finding new potential partners and assessing the risks of working with them. Since many forwarders actively market their services through advertising and other channels, it is important to ensure a systematic approach to their selection and verification. It's also worth considering collaboration with companies with whom logistics projects have previously been successful, while continually assessing risks to ensure consistent quality and reliability.

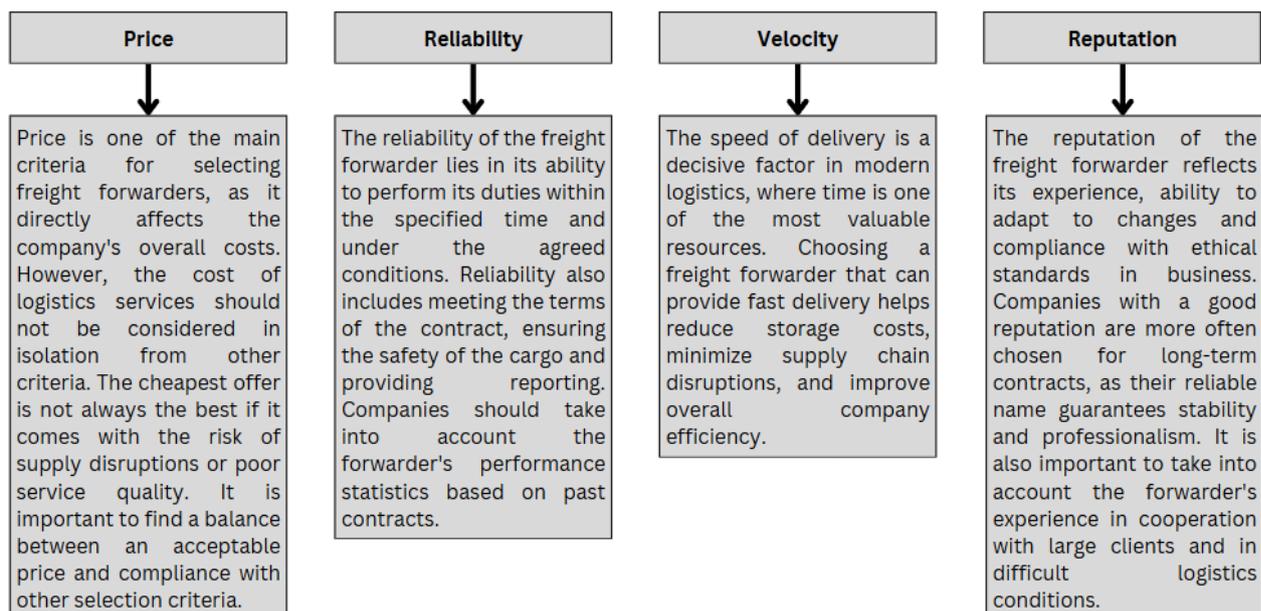


Figure 4 – Key Criteria for Selecting Freight Forwarders for Transportation Planning by "Soldi & Co."

Finding Potential Forwarders. The process of searching for new forwarders relies on multiple channels and tools. First, significant attention should be given to recommendations from partners and other companies with whom there are established business relations. This allows for initial evaluations of forwarders' service quality

based on real feedback. Additionally, companies can utilize promotional offers from freight forwarding firms received through various channels (email, phone calls, online advertising). However, these sources require thorough preliminary vetting.

Another important step in finding potential forwarders is market research

through tenders. Conducting open tenders allows new participants to be involved and increases competition among forwarders, which positively influences the selection of the best cooperation terms.

Risk Assessment in Collaboration. Assessing risks when working with new or existing forwarders is a key step to minimizing potential losses and ensuring the continuity of logistics operations. One of the initial steps in risk assessment is verifying the legal status of forwarding companies. The legal department of "Soldi & Co." conducts integrity checks, including an analysis of court cases, financial reporting reviews, and verification of compliance with applicable laws. This process should also cover examining the presence of necessary licenses and certifications that confirm the right to carry out forwarding activities.

In addition to legal verification, the company should consider past collaboration performance. It is important to analyze whether forwarders met their obligations in the past and if there were any delays in delivery or cargo damages. Assessing a company's financial stability is also essential to minimize risks of contract non-fulfillment due to bankruptcy or other financial issues.

Additional Measures to Reduce Collaboration Risks. Beyond legal checks, the company can apply additional mechanisms to minimize logistics-related risks. One such tool is cargo insurance, which provides financial protection against cargo damage or loss during transportation. Insurance also mitigates risks in the event of unforeseen circumstances, such as delays due to weather conditions or force majeure.

An important aspect of risk management is monitoring contract performance during collaboration. The company should implement systems for ongoing oversight of the forwarder's fulfillment of obligations, enabling early detection and resolution of potential issues.

Effective logistics management requires not only careful selection of forwarders but also continuous monitoring of service quality.

Implementing a quality control system is a key step in ensuring the stable and reliable operation of forwarding companies in long-term partnerships. This requires using a system of Key Performance Indicators (KPIs) and regularly assessing service compliance with established standards.

Key Performance Indicators (KPIs) are the main tools for quantifying forwarders' performance. They allow objective measurement of results achieved and comparison with expected standards. Important KPIs for controlling forwarders' service quality include [6]:

- **On-time Delivery Rate:** this indicator measures the percentage of deliveries completed on time according to agreements and contracts. It is a crucial metric affecting customer satisfaction and the stability of logistics processes.
- **Damage Rate:** this KPI monitors the frequency of cargo damage during transportation. A high damage rate indicates the need to reassess the collaboration with the forwarder or improve transport conditions.
- **Cost per Delivery:** an important metric that assesses cost efficiency per delivery by comparing actual costs with planned ones. This helps the company control expenses and adjust financial plans.
- **Communication & Reporting Efficiency:** this indicator evaluates how promptly and effectively the forwarder provides delivery reports and communicates with the company in cases of delays or issues.
- **Contract Compliance:** a KPI that measures the forwarder's adherence to contract terms, including timelines, service standards, and contractual transportation volumes.

To ensure long-term quality control, it is necessary to implement regular evaluations of forwarder performance. This assessment should occur quarterly or annually, depending on the intensity of collaboration. Evaluations should be based on data derived from KPI analysis and include qualitative

aspects, such as client feedback and internal audits.

Implementing a quality control system for services is also an essential stage in collaborating with forwarding companies. Various quality control models can be implemented for managing forwarders. Among the most effective systems are the Balanced Scorecard (assesses forwarders based on financial indicators, customer satisfaction, internal processes, and partnership development), Six Sigma (enables systematic improvement of forwarders' service quality by analyzing reasons for delays or cargo damage), and ISO

9001 (certification confirms that quality management processes meet international standards).

A quality control system not only enhances logistics processes but also plays a crucial role in strategic risk management. Continuous monitoring of key indicators enables quick identification and timely response to issues, reducing risks for the company. Moreover, regular evaluations help maintain high forwarder productivity levels and ensure that their services meet the company's requirements. (Table 3)

Table 3 – Use of Various Tools to Improve the Collaboration Process with Freight Forwarding Companies

Type of Tool	Description	Application Example
Insurance Instruments	An effective mechanism for minimizing financial losses in case of cargo damage, delivery delays, or force majeure events. Cargo insurance helps reduce risks associated with logistical issues and guarantees compensation for losses due to unforeseen events.	Cargo Insurance: company can enter agreements with insurance companies to cover risks of cargo damage or loss during transit. This can be a contract condition with freight forwarders who bear responsibility for insurance compliance. Freight Forwarder Liability Insurance: Company may require forwarders to provide proof of professional liability insurance to cover risks in case of contract violations.
Reserve Funds	Created to ensure the company's financial stability during crisis periods. These funds can be used to cover unforeseen costs related to delivery delays or increased logistics costs. Such funds allow "Soldi & Co." to maintain liquidity and support stable operations even amid economic or political instability.	Crisis Expense Fund: The company can establish an internal reserve fund designed to cover unexpected expenses arising from delays or additional costs for alternative routes. For example, in case of unpredictable fuel cost increases or route blockages, the reserve fund can help stabilize financial operations. Compensation Fund: If a forwarder fails to meet obligations, this fund can be used to compensate clients for delays or undelivered goods, minimizing negative reputational impact.
Information Technology	Enables real-time monitoring and prompt response to potential risks. Use of cargo tracking systems, data processing automation, and crisis prediction tools improves logistics management efficiency. IT solutions also enhance communication with forwarders and allow quick plan adjustments in case of unforeseen circumstances.	Logistics Management IT Platforms: Specialized IT solutions automate route planning, risk assessment, and interactions with forwarders. These systems help optimize delivery costs and improve delivery time predictions. Big Data Analysis: Using information technology for collecting and analyzing large data volumes can help predict potential risks such as delays due to weather, economic changes, or other logistics-impacting factors.

Improving the collaboration process with forwarding companies at "Soldi & Co." entails a comprehensive approach to risk management, including the use of insurance tools, reserve funds, and information technologies for crisis management.

Thus, the use of insurance tools, reserve funds, and modern information technologies provides a comprehensive approach to crisis management, enhancing "Soldi & Co." resilience to external risks and supporting the stability of logistics operations.

Conclusions and Further Research Prospects. In the current global landscape marked by instability, this study systematically examines key geopolitical and geoeconomic risks impacting international supply chains, with a focus on defining effective risk management approaches. The research specifically addresses challenges faced by Ukrainian companies, which contend with heightened threats due to ongoing political and economic disruptions.

Determined through a synthesis of international research, the primary geopolitical and geoeconomic risks impacting global supply chains are categorized and assessed for their direct and indirect effects on operational stability. This systematic evaluation allows a clearer understanding of critical vulnerabilities, enabling companies to proactively adapt to fluctuating global conditions and thereby strengthen overall supply chain resilience.

Justified by a targeted analysis, specific risks affecting Ukrainian supply chains—such as military conflicts, port blockades, and border instabilities—are identified as significant disruptors to import, export, and transit processes. Addressing these challenges within the Ukrainian context allows for the development of tailored risk management strategies, facilitating supply chain continuity despite high-risk regional conditions.

Developed as a comprehensive framework, the proposed risk management strategy for Ukrainian companies

incorporates key mitigation tactics, including supply chain diversification, alternative route creation, and the application of insurance mechanisms. This framework's design allows for adaptive responses to both immediate and systemic threats, enhancing the resilience of supply chains against external disruptions and operational instabilities.

Recommended as part of this study, the practical case study involving the import of industrial fasteners provides a concrete example of adaptive risk management. By detailing processes such as partner selection, contingency planning, and response to disruptions, this case allows Ukrainian companies to adopt proven strategies, thereby reducing the impact of interruptions on supply chain effectiveness and stability.

In conclusion, this research provides empirically grounded recommendations for Ukrainian companies seeking to minimize the adverse effects of both external and internal risks on their supply chains. By adopting a proactive, adaptive risk management approach, Ukrainian enterprises can maintain competitive resilience and supply chain stability, despite ongoing global and regional uncertainties. The findings underscore the necessity of continuous risk assessment and strategic flexibility as key components for navigating the complex dynamics of international supply chains.

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