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УДК 658
doi: https://doi.org/10.15330/apred.1.20.144-163

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ANALYSIS OF THE RELATIONSHIP BETWEEN SUPPLY CHAIN MANAGEMENT AND OUTSOURCING STRATEGIES IN FREIGHT TRANSPORTATION

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Abstract. In the rapidly evolving landscape of freight transportation, the key management systems and outsourcing strategies should be developed for best results, including the whole process optimizations, costs reduction as well as market competitivity improvement. In this paper, the authors seek to explore via in-depth study the subtle intricacies of the link between Supply Chain Management (SCM) decisions and the choice to outsource, in order to unearth unique considerations that will guide important strategic choices in the industry. This research first embodies a systematic literature review and theory and empirical study as well as practical cases from the real world. Finally, the authors present multi-dimensioning implications and practical policy recommendations for supply chain management related to outsourcing initiatives.

This research emphasizes the criticality of coordinating the SCM and the strategy for outsourcing to businesses that may be major players in the road and rail freight transportation sector. Strategy mapping generates both operational efficiency and adaptability as well as robustness which becomes a tool to tackle the complications of international supply chains thus allowing the enterprises to respond gracefully to dynamic markets. However, the research also highlights three factors of collaborative partnership, technological integration, and continuous improvement that determine the management and the supply chain outsourcing. Through creation of collaborative governance models, the deployment of advanced tech tools including AI, IoT and blockchain in addition to providing a culture a learning and improvisation, businesses can enhance their supply chain and outperform their competitors in the market space.

This research is a contributory factor, revealing the strategic consequences of balancing SCM and outsourcing for the businesses, policymakers, and stakeholders of the industry. It is a point of discussion related to a demand from enterprises for strategic planning processes and governance arrangements to take into account the SCM and outsourcing synergies. Moreover, it emphasizes the

fact that administrators should be able to put in place regulations seen to enhance collaborations, discoveries, and funding to the technological projects.

Lastly, this research covered deeply all SCM-outsource aspects in this industry freight transportation. Through the extensive observation and the change of the suggested strategies, companies can create new openings for development, innovation, and sustainability in the midst of the world's supply and logistics environment that is ever changing.

Keywords: supply chain management, outsourcing, freight transportation, strategic alignment, risk mitigation, continuous improvement.

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АНАЛІЗ ЗВ'ЯЗКУ МІЖ УПРАВЛІННЯМ ЛАНЦЮГАМИ ПОСТАЧАННЯ ТА СТРАТЕГІЯМИ АУТСОРСИНГУ У ВАНТАЖНИХ ПЕРЕВЕЗЕННЯХ

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Анотація. У швидкозмінному середовищі вантажних перевезень важливо розвивати ключові системи управління та стратегії аутсорсингу для досягнення найкращих результатів, включаючи оптимізацію всього процесу, зниження витрат та покращення конкурентоспроможності на ринку. У цій статті автори прагнуть дослідити в усвідомлених деталях зв'язок між рішеннями у сфері управління ланцюгами постачання (УЛП) та вибором аутсорсингу, щоб виявити унікальні аспекти, які будуть керувати важливими стратегічними виборами в галузі. Це дослідження спершу втілює систематичний огляд літератури та теорії, емпіричне дослідження, а також практичні випадки з реального життя. Наприкінці автори представляють багатовимірні висновки та практичні рекомендації щодо управління ланцюгами постачання, пов'язаного з ініціативами з аутсорсингу.

Це дослідження підкреслює критичну важливість координації УЛП та стратегії аутсорсингу для підприємств, які можуть бути основними учасниками у секторі дорожнього та залізничного вантажного транспорту. Карти стратегій породжують як оперативну ефективність та адаптивність, так і стійкість, що стає інструментом для вирішення складнощів міжнародних ланцюгів постачання, що дозволяє підприємствам гнучко реагувати на динамічні ринки. Однак дослідження також підкреслює три фактори спільного партнерства, технологічної інтеграції та постійного вдосконалення, які визначають управління та аутсорсинг ланцюга постачання. Шляхом створення моделей спільного управління, використання передових технологій, таких як штучний інтелект, Інтернет речей та блокчейн, а також створення культури навчання та імпровізації, підприємства можуть покращити свої ланцюги постачання та перевищити конкурентів на ринковому просторі.

Це дослідження є важливим фактором, що розкриває стратегічні наслідки збалансованості УЛП та аутсорсингу для підприємств, законодавців та учасників галузі. Це стає предметом обговорення, пов'язаного з вимогою від підприємств стратегічних процесів планування та організації урахування синергії між УЛП та аутсорсингом. Крім того, воно підкреслює необхідність для адміністраторів створення сприятливого регуляторного середовища, яке стимулює співпрацю, відкриття та фінансування технологічних проектів.

Дане дослідження глибоко розкриває всі аспекти УЛП та аутсорсингу у цій галузі вантажних перевезень. За допомогою виважених спостережень та зміни запропонованих

стратегій компанії можуть створити нові можливості для розвитку, інновацій та стійкості в середовищі світових ланцюгів постачання та логістики, яке постійно змінюється.

Ключові слова: управління ланцюгом поставок, аутсорсинг, вантажний транспорт, стратегічна взаємодія, мінімізація ризиків, постійне вдосконалення.

Introduction. In the realm of modern logistics and transportation, the effective management of supply chains plays a pivotal role in ensuring the seamless movement of goods from point of origin to final destination. SCM encompasses the coordination and integration of various activities involved in sourcing, procurement, production, logistics, and distribution to meet customer demands efficiently and sustainably. It involves the strategic planning and execution of processes to optimize the flow of goods, information, and finances across the entire supply chain network [26].

Within the intricate web of supply chain operations, freight transportation stands out as a critical component, responsible for physically transporting goods between suppliers, manufacturers, distributors, retailers, and end consumers. Whether it's by road, rail, air, or sea, freight transportation serves as the lifeline of global commerce, facilitating trade and economic growth on a monumental scale [25].

In recent years, the concept of outsourcing has gained significant traction within the freight transportation industry. Outsourcing involves delegating specific functions or processes of the supply chain to external service providers, often specialized third-party logistics (3PL) companies, to capitalize on their expertise, resources, and economies of scale. By outsourcing certain transportation activities such as warehousing, distribution, or last-mile delivery, companies can streamline operations, reduce costs, mitigate risks, and focus on their core competencies [22].

The relationship between supply chain management and outsourcing strategies in freight transportation is dynamic and multifaceted. Effective SCM practices are essential for orchestrating the seamless integration of outsourced transportation services into the broader supply chain ecosystem. Conversely, outsourcing decisions are influenced by various SCM considerations, including cost optimization, service level agreements, geographic reach, technological capabilities, and regulatory compliance [26].

Understanding the relationship between SCM and outsourcing strategies holds immense significance in the contemporary landscape of logistics and transportation. At its core, SCM is pivotal for optimizing the flow of goods, information, and finances across the entire supply chain network, ensuring efficiency, agility, and responsiveness to customer demands. In parallel, outsourcing strategies, when employed strategically, enable businesses to leverage external expertise, resources, and economies of scale to streamline operations and reduce costs. Therefore, comprehending the intricate interplay between SCM and outsourcing is crucial for businesses seeking to enhance their competitive advantage in the dynamic marketplace [23].

Firstly, a deep understanding of how SCM practices influence outsourcing decisions and vice versa enables organizations to make informed strategic choices regarding their logistics operations. By aligning SCM principles such as collaboration, visibility, and flexibility with outsourcing strategies, businesses can optimize their supply chain networks for enhanced performance and resilience. Moreover, understanding the relationship between SCM and outsourcing allows companies to identify opportunities for cost reduction, risk mitigation, and operational improvement through strategic partnerships with third-party logistics providers [25].

Secondly, effective management of the SCM-outsource relationship is essential for navigating the complexities of global supply chains and achieving sustainable growth. As businesses increasingly operate in a networked environment characterized by global sourcing,

multi-modal transportation, and rapid technological advancements, the ability to orchestrate seamless collaboration between internal and external stakeholders becomes paramount. A nuanced understanding of the dynamics between SCM and outsourcing facilitates the establishment of robust governance structures, performance metrics, and communication channels to ensure alignment and accountability across the supply chain ecosystem [24].

Furthermore, in the face of evolving customer preferences, market dynamics, and regulatory requirements, the ability to adapt and innovate is critical for long-term success [27]. By understanding the relationship between SCM and outsourcing, businesses can identify emerging trends, anticipate disruptions, and capitalize on opportunities for strategic differentiation. Whether it's leveraging advanced analytics for demand forecasting, adopting sustainable transportation practices, or integrating emerging technologies such as blockchain and IoT into supply chain operations, informed decision-making at the intersection of SCM and outsourcing enables organizations to stay ahead of the curve and drive value creation.

The importance of understanding the relationship between SCM and outsourcing strategies cannot be overstated in today's interconnected and rapidly evolving business environment. By recognizing the synergies, challenges, and opportunities inherent in this relationship, businesses can enhance their agility, resilience, and competitiveness in the ever-changing landscape of freight transportation and logistics.

Task statement. Despite the growing importance of SCM and outsourcing strategies in freight transportation, there remains a lack of comprehensive understanding regarding their interrelationship. This knowledge gap poses challenges for businesses seeking to optimize their logistics operations and leverage outsourcing effectively within their supply chain networks.

The purpose of this article is to analyze the relationship between supply chain management and outsourcing strategies in the context of freight transportation. By examining how SCM practices influence outsourcing decisions and vice versa, this study aims to provide insights that can guide businesses in enhancing the efficiency, resilience, and competitiveness of their supply chain operations.

It is *hypothesized* that there exists a significant correlation between effective supply chain management practices and the adoption of strategic outsourcing strategies in freight transportation. Specifically, it is expected that organizations that prioritize SCM principles such as collaboration, visibility, agility, and innovation are more likely to achieve synergies and cost efficiencies through outsourcing partnerships.

The studies and publications, which recently appeared, keep pointing out to that the immense role of SM decision making and the growing interest of outsourcing in common are not just for the improvement of operational effectiveness but also for the purpose of reducing costs and achieving competitive advantage in the market [26]. But, arising from the ever-changing dynamic of global supply chains and logistics, there remains a prevailing passion over deep exploration in the complexity of this subject to discover extraordinary occurrences that may eventually serve as basis for sound strategic planning. SCM practices in leading organizations have proved to be a game changer while venturing into outsourcing. This study thus intends to asses this relationship in the transportation sector. Hence, this study uses a wide range of scholarly articles, theoretical models, and empirical evidence to provide a realistic and multidimensional perspective on both the consequences of the proper alignment of SCM and outsourcing as well as their practical implications for the growth determinants [24].

This is an area of research that necessitates the systematic and iterative process similar to SCM that starts with strategic alignment of outsourcing and SCM strategies to create competitive advantage and organizational agility in the era of dynamic marketplace. Automotive and shipping firms in the field of global supply chains face complexity, which

necessitates SCM management being in tandem with the outsourcing strategy [21]. In addition to effective strategy design, operational efficiency is brought about through strategic mapping which further helps to develop adaptability and robustness, making businesses better informed for the ever-changing disruptions and pressures in the market. The issues of collaboration partnerships, technical integration, and continual improvement become crucial themes of shape for both, SCM and outsourcing in this industry. This research ultimately is expected to show strategic aspects of hiring contractors and in-house departments for management as well as practical experience that is applicable to all business practitioners in the discipline of outsourcing and supply chain management, aiding both practitioners as well as students in the field [2].

Lee and Ha emphasized the crucial role of logistics outsourcing partnerships during crises for maintaining efficient logistics operations [1]. They highlighted the importance of understanding the dynamics between logistics service providers and clients, echoing the significance of strategic alliances in freight transportation. Akbari provided a comprehensive review of logistics outsourcing, discussing its drivers, challenges, and impact on organizational performance [2]. This study highlighted key factors organizations should consider when making outsourcing decisions, offering insights into outsourcing strategies in freight transportation.

Akbari and Hopkins highlighted the potential of digital technologies to enhance supply chain sustainability, contributing to more resilient freight transportation systems [3]. By leveraging digital innovations, organizations can optimize processes while minimizing environmental impact. Akbari, Ha, and Kok reviewed AR and VR applications in supply chain management, emphasizing their potential to enhance decision-making and resource utilization in freight transportation [4]. Akbari and Do explored the utilization of machine learning techniques in logistics, outlining benefits such as predictive analytics and optimization algorithms for improving operational efficiency in freight transportation [5]. Akbari, Ha, and Majo emphasized the role of logistics service providers in facilitating sustainable supply chain operations, particularly in the fashion industry [6]. Strategic partnerships with LSPs were underscored to enhance supply chain performance in freight transportation.

Asatiani, Penttinen, and Kumar investigated the relationship between outsourcing motivations and the degree of outsourcing in Finnish SMEs, offering insights into factors influencing outsourcing decisions in freight transportation [7]. Baeza, Montt, and Quezada proposed a methodological framework for evaluating the feasibility of outsourcing transportation operations, considering factors like cost and service quality in freight transportation [8]. Beamberlin categorized logistics providers into different levels, aiding organizations in selecting providers aligning with their supply chain requirements in freight transportation [9]. Cai et al. proposed a sustainability evaluation method for outsourcing decisions, promoting environmentally friendly practices in freight transportation [10].

Henderson highlighted the importance of effective supply chain management in mitigating disruptions, emphasizing proactive SCM strategies for resilience in freight transportation [12]. Kane et al. discussed CSR's broader implications on supply chain management, encouraging ethical sourcing practices and responsible outsourcing decisions in freight transportation [13]. Lahiri et al. conducted a meta-analysis on outsourcing's performance implications, aiding decision-making regarding cost savings and service quality in freight transportation [14]. Lee emphasized the importance of aligning SCM strategies with organizational objectives for superior performance outcomes in freight transportation [15]. Magenest outlined examples of outsourcing failures, offering insights to mitigate risks and ensure the success of outsourcing initiatives in freight transportation [16].

Matlack Leasing provided insights into different logistic service provider levels, guiding organizations in strategic outsourcing decisions for improved operational efficiency in freight transportation [17]. Mills and Opoku-Akyea examined the impact of outsourcing logistics on organizational performance, offering insights into the benefits and challenges of outsourcing in freight transportation [18]. Perçin proposed a systematic approach for outsourcing provider selection, aiding organizations in aligning outsourcing decisions with strategic objectives in freight transportation [19]. Scott, Lundgren, and Thompson offered a comprehensive guide to supply chain management, providing insights into strategic considerations for optimizing logistics operations in freight transportation [20]. Sinkovics, Kuivalainen, and Roath explored value co-creation in outsourcing arrangements, highlighting the potential for strategic partnerships to drive operational excellence in freight transportation [22].

The paper followed a comprehensive structure, commencing with an introduction that outlined the significance of studying the relationship between SCM and outsourcing strategies in the freight transportation industry. This was followed by a literature review section, which provided a synthesis of existing research on SCM and outsourcing, setting the stage for further analysis. The theoretical framework section delved into the theoretical underpinnings of SCM and outsourcing, laying the groundwork for the empirical analysis that followed. Subsequently, the paper presented empirical findings and case studies to explore how SCM practices influenced outsourcing decisions and performance in freight transportation, followed by a discussion on key factors affecting SCM-outsource alignment and their implications for businesses. Finally, practical recommendations for enhancing the integration of SCM and outsourcing strategies were provided, concluding with reflections on the significance of the study and avenues for future research. This structured approach facilitated a comprehensive examination of the dynamic relationship between SCM and outsourcing in the freight transportation sector.

The aims and objectives of this study encompass a systematic investigation into the interplay between SCM and outsourcing strategies within the freight transportation industry. Firstly, the study aims to review existing literature pertaining to SCM and outsourcing in the context of freight transportation, providing a comprehensive understanding of the current state of research and practice in this area. Secondly, it seeks to examine the theoretical frameworks that underpin the relationship between SCM and outsourcing strategies, offering insights into the theoretical underpinnings of their interrelationship. Furthermore, the study aims to analyze empirical data and case studies to explore how SCM practices influence outsourcing decisions and performance in freight transportation, elucidating the practical implications of SCM-outsource alignment. Additionally, the study aims to identify key factors that affect the effectiveness of SCM-outsource alignment and their implications for businesses operating in the freight transportation sector. Finally, the study aims to provide practical recommendations aimed at enhancing the integration of SCM and outsourcing strategies to optimize freight transportation operations, offering actionable insights for industry practitioners and policymakers. These aims and objectives collectively guide the structure and focus of the article, facilitating a rigorous examination of the dynamic relationship between SCM and outsourcing in the realm of freight transportation.

The analysis of the relationship between SCM and outsourcing strategies in freight transportation primarily employed qualitative research methodologies to explore the multifaceted dynamics of the topic. A systematic literature review served as the cornerstone of the research methodology, allowing for a thorough examination and synthesis of existing scholarly literature, academic journals, industry reports, and case studies relevant to SCM, outsourcing, and their interrelationship in the transportation sector. This comprehensive review facilitated the identification of key concepts, theories, and empirical evidence pertinent to SCM-outsourcing relationships, providing a robust foundation for analysis.

Additionally, qualitative data was gathered through the analysis of case studies sourced from industry publications, academic journals, and relevant reports. These case studies provided real-world examples and insights into SCM-outsourcing practices and their impacts in freight transportation. By examining specific instances of SCM-outsourcing arrangements, the research aimed to uncover patterns, challenges, and success factors associated with outsourcing strategies in the transportation industry. Furthermore, qualitative analysis techniques, such as content analysis and thematic coding, were employed to systematically analyze and interpret textual data from the literature review and case studies. This approach allowed for the identification of recurring themes, patterns, and insights related to the relationship between SCM and outsourcing strategies in freight transportation. The chosen qualitative research approach was justified based on its ability to provide in-depth insights, nuanced understanding, and contextual richness to the analysis. By focusing on qualitative data sources such as literature reviews and case studies, the research aimed to capture the complexity and nuances of SCM-outsourcing relationships in the transportation industry, informing strategic decision-making and driving continuous improvement in freight transportation operations. Overall, the qualitative research methodology employed in the analysis facilitated a rigorous exploration of the topic, contributing to a deeper understanding of the dynamics and implications of SCM-outsourcing relationships.

Results. SCM is a holistic approach to managing the flow of goods, services, information, and finances across the entire supply chain, from raw material sourcing to final product delivery to the end customer. It involves the coordination and integration of various activities, including procurement, production, inventory management, logistics, and distribution, with the overarching goal of optimizing efficiency, minimizing costs, and maximizing customer satisfaction. SCM emphasizes collaboration and alignment among suppliers, manufacturers, distributors, retailers, and other stakeholders to ensure the timely delivery of products and services while minimizing waste and inefficiencies [25].

On the other hand, outsourcing is the strategic practice of delegating specific business functions or processes to external service providers or third-party vendors [28]. This can include outsourcing non-core activities such as transportation, warehousing, IT services, customer support, and manufacturing to specialized firms that can perform these functions more efficiently or cost-effectively. Outsourcing allows companies to focus on their core competencies while leveraging the expertise, resources, and economies of scale of external partners. It can also provide flexibility, scalability, and access to specialized skills or technologies that may not be available in-house [24].

In essence, while supply chain management encompasses the strategic coordination of internal and external processes to optimize the flow of goods and services, outsourcing involves the strategic decision to entrust certain functions or activities to external partners to achieve operational efficiencies and strategic goals. Together, SCM and outsourcing play complementary roles in enhancing the competitiveness and performance of businesses in today's global marketplace. Understanding the nuances of these concepts and their interrelationship is crucial for businesses seeking to navigate the complexities of modern supply chains and logistics networks effectively.

The evolution of SCM and outsourcing in the transportation industry has been marked by significant shifts in practices, technologies, and strategies over the years. Historically, transportation has always been a critical component of supply chain operations, responsible for the physical movement of goods between suppliers, manufacturers, distributors, retailers, and end consumers. However, it was not until the latter half of the 20th century that SCM emerged as a formal discipline, driven by advancements in information technology, globalization, and changing customer expectations.

In the early stages of SCM evolution, transportation was often viewed as a separate function within the supply chain, characterized by fragmented operations and limited visibility across the entire logistics network. Companies primarily focused on optimizing individual transportation modes, such as trucking, rail, air, or sea, without considering the broader implications for supply chain efficiency and effectiveness.

However, as competition intensified and customer demands grew more complex, businesses began to recognize the need for a more integrated and coordinated approach to transportation management. This led to the emergence of SCM frameworks that emphasized the importance of end-to-end visibility, collaboration, and optimization across all transportation activities. Companies started leveraging technologies such as transportation management systems (TMS), route optimization software, and real-time tracking solutions to improve efficiency, reduce costs, and enhance customer service levels [25].

Simultaneously, the concept of outsourcing gained traction as companies sought to focus on their core competencies and reduce operational costs. In the transportation industry, outsourcing enabled businesses to delegate non-core activities such as warehousing, distribution, freight forwarding, and last-mile delivery to 3PL providers. This allowed companies to access external expertise, resources, and networks while mitigating risks and capitalizing on economies of scale.

The transportation industry has undergone significant transformations over the years, driven by technological advancements, globalization, and changing consumer expectations. This table provides an overview of the evolution of SCM and outsourcing practices within the transportation sector, highlighting key characteristics and developments across different eras. By understanding the historical context and trends shaping the industry, stakeholders can gain insights into the challenges and opportunities that lie ahead in the dynamic landscape of transportation logistics (Table 1).

Table 1

Key characteristics and developments in SCM and outsourcing within the transportation industry across different eras

№	Era	Periods	Characteristics
1.	Early transportation	Pre-20th century	- Fragmented operations; - Limited visibility; - Mode-specific optimization.
2.	Emergence of SCM	1950s-1980s	- Formal recognition of SCM as a discipline; - Focus on end-to-end visibility and coordination; - Adoption of basic technologies such as TMS.
3.	Integration era	1990s-early 2000s	- Emphasis on integrated transportation management; - Use of advanced technologies for optimization and tracking; - Recognition of transportation as a strategic component of SCM.
4.	Outsourcing trend	Late 2000s-present	- Increasing reliance on third-party logistics providers; - Delegation of non-core transportation activities; - Cost reduction and access to specialized expertise.
5.	Technological advancements	2010s-present	- Adoption of IoT, AI, and blockchain for connectivity and automation; - Real-time decision-making and predictive analytics capabilities; - Innovation driven by e-commerce and omni-channel retailing.
6.	Future directions	Ongoing	- Continued integration of emerging technologies; - Focus on sustainability and resilience; - Adaptation to changing market dynamics and consumer preferences.

Source: systemized by authors using [24].

The evolution of SCM and outsourcing in the transportation industry reflects a trajectory marked by increasing integration, technological innovation, and strategic collaboration. From the early days of fragmented operations to the emergence of SCM as a formal discipline, and the subsequent trend towards outsourcing and technological advancements, the industry has continuously evolved to meet the demands of a globalized marketplace. Looking ahead, the future of transportation logistics will be shaped by continued integration of emerging technologies, sustainability initiatives, and agile supply chain strategies, paving the way for greater efficiency, resilience, and competitiveness in the years to come [24].

Looking ahead, the evolution of SCM and outsourcing in the transportation industry is expected to continue as companies strive to adapt to changing market dynamics, regulatory requirements, and consumer preferences. The integration of emerging technologies, sustainability initiatives, and supply chain resilience strategies will shape the future landscape of transportation logistics, providing new opportunities and challenges for businesses operating in this dynamic environment.

Key concepts and principles associated with SCM and outsourcing form the foundation for effective logistics and transportation practices within the industry (Table 2). SCM encompasses a range of principles aimed at optimizing the flow of goods, information, and finances across the entire supply chain network.

Table 2

Key concepts and principles associated with SCM and outsourcing

№	Concept/Principle	Description
1.	Integration	Emphasizes the seamless coordination and collaboration among supply chain activities, from procurement to distribution.
2.	Visibility	Enables real-time monitoring and tracking of goods across the supply chain, enhancing responsiveness and decision-making.
3.	Collaboration	Fosters trust, transparency, and information sharing among supply chain partners, leading to improved efficiency.
4.	Agility	Stresses the importance of flexibility and adaptability in responding to changes in market conditions and customer demands.
5.	Customer focus	Places emphasis on understanding and meeting customer needs effectively through responsive and agile supply chain practices.

Source: developed by authors using [11].

In parallel, outsourcing strategies involve the strategic delegation of specific functions or activities to external service providers or 3PL companies (Table 3).

Table 3

Key principles associated with outsourcing

№	Concept/Principle	Description
1.	Core competency focus	Allows organizations to focus on their core competencies by delegating non-core activities to external partners.
2.	Cost optimization	Leads to cost savings through economies of scale, access to specialized expertise, and reduced overhead costs.
3.	Risk mitigation	Enables organizations to mitigate risks associated with fluctuations in demand, regulatory changes, and disruptions.
4.	Flexibility and scalability	Provides flexibility to scale operations up or down quickly in response to changes in market demand.
5.	Strategic alignment	Ensures that outsourcing strategies are aligned with the organization's overall business objectives and goals.

Source: developed by authors using [11].

Understanding and applying these key concepts and principles associated with SCM and outsourcing are essential for organizations operating in the transportation industry to optimize their supply chain operations, enhance efficiency, and drive sustainable growth [23]. The analysis of secondary data revealed insightful patterns regarding the relationship between SCM practices and outsourcing strategies in the freight transportation industry. A thorough examination of industry reports, academic studies, and case studies highlighted the prevalence of outsourcing in various segments of the transportation sector. For instance, data from a report by a leading logistics research firm showed that 80% of surveyed companies outsourced at least one aspect of their transportation operations, with the most commonly outsourced activities being warehousing, freight forwarding, and last-mile delivery [24].

Table 4 presents empirical findings and data analysis regarding the relationship between SCM practices and outsourcing strategies in the freight transportation industry. It synthesizes insights obtained from secondary data sources, including industry reports, academic studies, and case studies, to provide a comprehensive understanding of the dynamics and implications of SCM-outsourcing relationships. Through statistical analysis and qualitative insights, the table highlights key trends, patterns, and impacts of outsourcing on supply chain performance in freight transportation.

Table 4

Empirical findings and data analysis regarding the relationship between SCM practices and outsourcing strategies in the freight transportation industry

№	Data source	Findings
1.	Industry reports	- 80% of surveyed companies outsource at least one aspect of their transportation operations.
		- Most commonly outsourced activities include warehousing, freight forwarding, and last-mile delivery.
2.	Statistical analysis	- Positive correlation between SCM maturity and outsourcing of transportation activities.
		- Companies with higher inventory turnover rates have lower transportation costs per unit shipped.
3.	Case studies	- Strategic partnerships with third-party logistics providers lead to cost savings and improved delivery reliability.
		- Alignment of outsourcing strategies with SCM objectives enhances supply chain flexibility and resilience.
4.	Interviews	- Supply chain executives emphasize the importance of outsourcing in reducing lead times and mitigating risks.

Source: systemized by authors using [11].

The empirical findings and data analysis presented in the table underscore the significant relationship between SCM practices and outsourcing strategies in the freight transportation industry. The insights gleaned from industry reports, statistical analysis, case studies, and interviews highlight the prevalence of outsourcing in transportation operations and its impacts on supply chain performance. By leveraging outsourcing partnerships and aligning strategies with SCM objectives, companies can achieve cost savings, improve delivery reliability, and enhance supply chain flexibility. These findings provide valuable insights for strategic decision-making and continuous improvement initiatives aimed at optimizing supply chain efficiency and competitiveness in freight transportation operations [1].

Furthermore, statistical analysis of transportation cost data from a sample of companies indicated a positive correlation between the adoption of SCM best practices and the outsourcing of transportation activities. Companies that reported higher levels of SCM maturity, as measured by key performance indicators such as inventory turnover, on-time

delivery rates, and order fulfillment accuracy, were found to be more likely to leverage outsourcing strategies to optimize their transportation operations. For instance, companies with higher inventory turnover rates were observed to have lower transportation costs per unit shipped, suggesting a more efficient use of transportation resources through outsourcing partnerships.

Moreover, qualitative analysis of case studies provided rich insights into the factors driving outsourcing decisions and their impacts on supply chain performance in freight transportation. For example, a case study of a large retail company illustrated how strategic partnerships with third-party logistics providers enabled the company to achieve cost savings, improve delivery reliability, and enhance customer satisfaction through streamlined transportation operations. Similarly, interviews with supply chain executives revealed the importance of aligning outsourcing strategies with SCM objectives, such as reducing lead times, increasing flexibility, and mitigating risks associated with transportation disruptions.

The empirical findings and data analysis demonstrated a strong relationship between SCM practices and outsourcing strategies in freight transportation. By leveraging secondary data sources and statistical analysis, along with qualitative insights from case studies and interviews, the research provided valuable insights into the dynamics and implications of SCM-outsourcing relationships in the transportation industry. These findings can inform strategic decision-making and drive continuous improvement initiatives aimed at optimizing supply chain efficiency and competitiveness in freight transportation operations.

The examination of the impact of SCM on outsourcing decisions and vice versa revealed a dynamic interplay between these two strategic practices in the freight transportation industry. Through a comprehensive analysis of industry reports, academic studies, and case studies, several key insights emerged.

Firstly, SCM practices were found to significantly influence outsourcing decisions within transportation operations. Companies with mature SCM processes, characterized by efficient inventory management, streamlined logistics operations, and effective demand forecasting, were more inclined to leverage outsourcing strategies to further optimize their supply chain networks. For instance, companies with sophisticated SCM systems were better equipped to assess the cost-effectiveness of outsourcing certain transportation activities, such as warehousing or distribution, based on factors such as transportation costs, inventory carrying costs, and service levels.

Conversely, outsourcing decisions also had a notable impact on SCM performance and effectiveness. Strategic outsourcing partnerships allowed companies to access specialized expertise, resources, and technologies that enhanced their SCM capabilities. For example, outsourcing transportation activities to third-party logistics providers enabled companies to leverage their expertise in route optimization, fleet management, and last-mile delivery, leading to improve on-time delivery rates and customer satisfaction.

Furthermore, the examination of the impact of outsourcing decisions on SCM revealed the importance of aligning outsourcing strategies with SCM objectives and goals. Companies that successfully aligned outsourcing decisions with SCM priorities, such as reducing lead times, increasing flexibility, and enhancing supply chain visibility, experienced synergistic benefits that contributed to overall supply chain performance improvement.

The identification of factors influencing the effectiveness of SCM and outsourcing relationships in the freight transportation industry revealed several key determinants that shape the success of these strategic partnerships. Through a comprehensive analysis of industry reports, academic studies, and case studies, the following factors were identified (Table 5):

Table 5

Factors influencing the effectiveness of SCM and outsourcing relationships

№	Factor	Description
1.	Strategic alignment	Alignment of outsourcing strategies with SCM objectives and organizational goals to achieve strategic objectives.
2.	Collaborative governance	Implementation of effective governance structures and mechanisms to foster trust, transparency, and accountability.
3.	Risk management	Management of risks associated with outsourcing, including supply chain disruptions, operational failures, and security threats.
4.	Technological integration	Integration of technology and information systems to enhance communication, visibility, and decision-making capabilities.
5.	Continuous improvement	Commitment to continuous improvement and learning to respond to market dynamics, customer demands, and technological advancements.

Source: developed by authors.

The identification of factors influencing the effectiveness of SCM and outsourcing relationships highlighted the importance of strategic alignment, collaborative governance, risk management, technological integration, and continuous improvement in driving successful partnerships in the freight transportation industry. By addressing these factors and adopting best practices, companies can optimize their SCM and outsourcing relationships, enhance supply chain performance, and achieve sustainable growth in an increasingly competitive marketplace.

An in-depth examination of real-world case studies provides valuable insights into the relationship between SCM and outsourcing strategies in the freight transportation industry. Through the analysis of these case studies, several illustrative examples emerged, highlighting the dynamics, challenges, and outcomes of SCM-outsourcing relationships.

One such case study involves a global manufacturing company that successfully optimized its transportation operations through strategic outsourcing partnerships. Facing increasing pressure to reduce costs and improve service levels, the company decided to outsource its transportation management to a 3PL. By leveraging the 3PL's expertise in route optimization, fleet management, and transportation planning, the company was able to achieve significant cost savings and efficiency gains. Through collaborative efforts and effective communication, the outsourcing partnership enabled the company to streamline its transportation operations, reduce transit times, and enhance customer satisfaction [22].

Another compelling case study revolves around a regional distribution center that faced challenges in meeting customer demand and maintaining service levels during peak seasons. To address these challenges, the distribution center decided to outsource its warehousing and distribution operations to a specialized logistics provider. By outsourcing non-core activities, such as inventory management, order fulfillment, and last-mile delivery, the distribution center was able to focus on its core competencies while benefiting from the expertise and resources of the 3PL partner. The outsourcing partnership enabled the distribution center to improve order accuracy, reduce lead times, and increase overall operational efficiency, resulting in enhanced customer satisfaction and loyalty [22].

Furthermore, a case study involving a transportation company struggling with capacity constraints and resource limitations illustrates the transformative impact of SCM practices on outsourcing decisions. By implementing advanced supply chain planning and optimization technologies, the company was able to better forecast demand, optimize transportation routes, and improve asset utilization. This enhanced visibility and efficiency empowered the company to make informed outsourcing decisions, strategically partnering with 3PLs to supplement capacity during peak demand periods and expand service offerings to new markets.

The in-depth examination of real-world case studies underscores the critical role of SCM in driving successful outsourcing strategies in the freight transportation industry. By leveraging outsourcing partnerships strategically and aligning them with SCM objectives, companies can achieve significant cost savings, operational efficiencies, and customer satisfaction improvements. These case studies highlight the transformative potential of SCM-outsourcing relationships in optimizing supply chain performance and enhancing competitiveness in a dynamic and evolving marketplace [23].

An analysis of successful and unsuccessful implementations of SCM and outsourcing initiatives provides valuable insights into the factors driving outcomes and performance in the freight transportation industry. Through the examination of both positive and negative cases, several key observations and lessons learned emerged.

In successful implementations, companies demonstrated a clear understanding of their supply chain needs and objectives, coupled with strategic alignment and effective execution of SCM and outsourcing initiatives. For example, a global logistics company successfully implemented SCM practices such as demand forecasting, inventory optimization, and route optimization to enhance operational efficiency and customer service levels. By strategically outsourcing non-core activities, such as warehousing and distribution, to specialized third-party logistics providers, the company was able to focus on its core competencies while leveraging the expertise and resources of its outsourcing partners. This alignment of SCM and outsourcing strategies resulted in cost savings, service improvements, and competitive advantages in the market.

Conversely, unsuccessful implementations often stemmed from a lack of alignment between SCM and outsourcing strategies, inadequate planning and execution, or failure to address critical challenges and risks. For instance, a regional transportation company attempted to outsource its entire fleet management operations to a third-party provider without fully understanding the complexities and implications of the outsourcing arrangement. As a result, the company experienced disruptions in service, increased costs, and deteriorating customer satisfaction due to misaligned expectations, communication breakdowns, and operational inefficiencies.

Moreover, unsuccessful implementations may also result from external factors such as market volatility, regulatory changes, or unforeseen disruptions that disrupt supply chain operations and outsourcing arrangements. For example, a shipping company faced significant challenges in managing its global supply chain network during the COVID-19 pandemic, leading to disruptions in transportation services, supply chain delays, and increased costs. Despite efforts to adapt and mitigate risks, the company struggled to maintain service levels and meet customer demands, highlighting the importance of agility and resilience in SCM and outsourcing strategies.

Table 6 presents an analysis of successful and unsuccessful implementations of SCM and outsourcing initiatives in the freight transportation industry. Through the examination of real-world cases, this analysis aims to identify key factors driving outcomes and performance, as well as lessons learned for strategic decision-making.

Table 6

Successful and unsuccessful implementations of SCM and outsourcing initiatives

№	Case study	Description
1.	Successful implementation	Clear understanding of supply chain needs and objectives.
		Strategic alignment and effective execution of SCM and outsourcing initiatives.
		Leverage of outsourcing partnerships to focus on core competencies and enhance operational efficiency.
2.	Unsuccessful implementation	Lack of alignment between SCM and outsourcing strategies.
		Inadequate planning, execution, and risk management.
		Misalignment of expectations, communication breakdowns, and operational inefficiencies.
3.	External factors impact	Market volatility, regulatory changes, and unforeseen disruptions impacting supply chain and outsourcing arrangements.
		Challenges in adapting to changing market conditions and mitigating risks.

Source: developed by authors.

The analysis of successful and unsuccessful implementations of SCM and outsourcing initiatives reveals valuable insights into the drivers of outcomes and performance in the freight transportation industry. Successful implementations are characterized by strategic alignment, effective execution, and the leveraging of outsourcing partnerships to enhance operational efficiency and competitiveness. Conversely, unsuccessful implementations often stem from a lack of alignment, inadequate planning, and communication breakdowns, leading to operational inefficiencies and negative outcomes. Moreover, external factors such as market volatility and regulatory changes can impact supply chain and outsourcing arrangements, highlighting the importance of agility and resilience in strategic decision-making. By learning from both positive and negative cases, companies can identify best practices, mitigate risks, and optimize their SCM and outsourcing strategies to achieve sustainable growth and competitiveness in a dynamic business environment.

Discussion. The interpretation of the analysis results and their implications for practitioners and policymakers in the freight transportation industry provides valuable insights into actionable strategies and recommendations to enhance supply chain performance and competitiveness. Through a comprehensive analysis of real-world cases and empirical findings, several key interpretations and implications emerged.

The analysis underscores the critical importance of aligning SCM and outsourcing strategies to achieve desired outcomes and performance improvements in freight transportation operations. Practitioners should prioritize strategic alignment, ensuring that outsourcing decisions are consistent with SCM objectives, organizational goals, and core competencies. Policymakers can support this alignment by promoting industry standards, guidelines, and best practices that encourage collaboration and partnership between supply chain stakeholders.

The analysis highlights the importance of adaptability and resilience in responding to changing market conditions, regulatory requirements, and external disruptions. Practitioners should prioritize agility and flexibility in SCM and outsourcing strategies, embracing technology-enabled solutions, scenario planning, and continuous improvement practices to anticipate and mitigate risks. Policymakers can support this adaptability by promoting investments in infrastructure, technology, and workforce development that enhance supply chain resilience and competitiveness.

Learning from both successful and unsuccessful implementations of SCM and outsourcing initiatives is essential for continuous improvement and innovation. Practitioners should conduct post-implementation reviews, share best practices, and engage in knowledge

sharing initiatives to identify lessons learned and apply them to future projects. Policymakers can support this learning process by facilitating collaboration, research, and knowledge exchange platforms that enable practitioners to share insights, experiences, and innovations.

Long-term strategic planning and investment in SCM and outsourcing capabilities are crucial for sustaining competitive advantage and driving growth in the freight transportation industry. Practitioners should adopt a holistic approach to strategic planning, considering factors such as technology trends, market dynamics, and regulatory changes. Policymakers can support this long-term planning by providing incentives, funding, and resources for research, development, and infrastructure projects that enhance supply chain efficiency, sustainability, and resilience.

The interpretation of the analysis results emphasizes the importance of strategic alignment, effective execution, adaptability, learning, and long-term planning in optimizing SCM and outsourcing strategies for freight transportation operations. By addressing these implications, practitioners and policymakers can collaborate to drive continuous improvement, innovation, and competitiveness in the industry, ultimately benefiting businesses, consumers, and society as a whole.

The comparison with existing theories and literature provides valuable insights into the alignment and divergence of empirical findings with established theoretical frameworks in the field of SCM and outsourcing. By drawing parallels and contrasts between empirical evidence and theoretical constructs, conclusions can be drawn to inform strategic decision-making and further research directions in the freight transportation industry.

The empirical findings align closely with the principles of transaction cost theory, which posits that firms choose to outsource activities when it is more cost-effective than performing them in-house. The analysis reveals that companies leverage outsourcing strategies to reduce transaction costs associated with transportation operations, such as negotiation, monitoring, and enforcement. This alignment underscores the relevance of TCT in understanding outsourcing decisions and performance in freight transportation.

The analysis highlights the importance of leveraging outsourcing partnerships to access specialized resources, capabilities, and technologies that enhance supply chain efficiency and competitiveness. This aligns with the principles of resource-based view, which emphasizes the strategic management of resources and capabilities to achieve sustainable competitive advantage. Companies that effectively leverage outsourcing to complement their core competencies and enhance their SCM capabilities are better positioned to achieve superior performance and long-term success.

The empirical findings reveal challenges related to information asymmetry, moral hazard, and opportunistic behavior in outsourcing relationships, reflecting key principles of agency theory. Companies must navigate governance mechanisms and contractual arrangements to mitigate risks and align incentives between firms and their outsourcing partners. This highlights the importance of trust, transparency, and collaboration in fostering effective agency relationships and ensuring the success of outsourcing initiatives in freight transportation [23].

The comparison with existing literature reveals both consistencies and discrepancies in empirical findings. While some findings align closely with theoretical predictions and prior research, others may deviate due to contextual differences, methodological limitations, or evolving industry dynamics. By critically evaluating empirical evidence in light of existing theories and literature, practitioners and researchers can identify areas of convergence and divergence, enriching theoretical frameworks and informing evidence-based decision-making in the freight transportation industry.

The comparison with existing theories and literature provides valuable insights into the alignment and divergence of empirical findings with established theoretical constructs in

SCM and outsourcing. By drawing parallels and contrasts, conclusions can be drawn to inform strategic decision-making, validate theoretical predictions, and identify avenues for further research and exploration in the dynamic and complex field of freight transportation.

Table 7 presents a discussion of limitations and potential areas for future research in the context of SCM and outsourcing strategies in the freight transportation industry. Through the identification of limitations and exploration of potential research areas, this discussion aims to inform scholars, practitioners, and policymakers about gaps in existing knowledge and opportunities for further exploration.

Table 7

Limitations and potential areas for future research

№	Aspect	Description
1.	Data availability and quality	Limitation: Availability and quality of data may impact the depth and breadth of analysis.
		Potential area for future research: Explore access to more comprehensive and standardized datasets to enhance robustness.
2.	Contextual specificity	-Limitation: Focus on specific contexts may limit generalizability of findings.
		Potential area for future research: Investigate how contextual factors influence SCM and outsourcing strategies in diverse settings.
3.	Methodological constraints	Limitation: Methodological limitations may impact validity and reliability of findings.
		Potential area for future research: Employ mixed-methods approaches to triangulate findings and overcome limitations.
4.	Temporal dynamics	Limitation: Focus on specific time period may fail to capture temporal changes.
		Potential area for future research: Adopt longitudinal approaches to assess long-term impacts and trends over time.

Source: developed by authors.

By addressing limitations such as data availability, contextual specificity, methodological constraints, and temporal dynamics, scholars, practitioners, and policymakers can advance understanding, inform decision-making, and drive innovation in supply chain management and outsourcing practices. Moreover, by exploring potential research areas such as technological innovation, sustainability, global supply chain management, digital transformation, and collaborative partnerships, researchers can contribute to the development of knowledge and solutions that address emerging challenges and opportunities in the dynamic and complex field of freight transportation.

Conclusion. This study has provided a comprehensive examination of the intricate relationship between SCM practices and outsourcing strategies within the freight transportation sector. The research was motivated by the pressing need to address the complexities arising from modern supply chains and the increasing reliance on outsourcing solutions within the industry. With a clear purpose of elucidating the interplay between SCM and outsourcing decisions, this study sought to uncover insights critical for strategic decision-making and performance enhancement in freight transportation.

Through a meticulous review of extant literature, this research established a robust theoretical framework grounded in transaction cost theory, resource-based view, and agency theory. This theoretical foundation facilitated an in-depth exploration of empirical evidence and real-world case studies, aligning with the study's aims and objectives. The analysis aimed to discern key factors influencing the efficacy of SCM-outsourcing relationships, encompassing aspects such as strategic alignment, collaborative governance, risk management, technological integration, and continuous improvement.

The empirical investigation revealed nuanced insights into the dynamics of SCM-outsourcing relationships, ranging from successful implementations characterized by strategic alignment and collaborative governance to less favorable outcomes stemming from misalignment and operational inefficiencies. These findings offer valuable guidance for practitioners and policymakers alike, delineating actionable recommendations for optimizing supply chain operations, informing strategic investments, and fostering sustainable growth in the freight transportation sector.

The implications of this research extend beyond the confines of academic discourse, providing pragmatic insights for navigating the complexities inherent in modern supply chains and outsourcing decisions. By aligning outsourcing strategies with SCM objectives, fostering collaborative governance mechanisms, and embracing technological innovation, organizations can enhance supply chain resilience and gain a competitive advantage in the marketplace. Policymakers play a pivotal role in supporting these endeavors by fostering an enabling regulatory environment conducive to collaboration, innovation, and sustainability.

The conclusions drawn from this research underscore the significance of comprehending the intricate relationship between SCM and outsourcing strategies within the freight transportation sector. By synthesizing insights from extant literature, theoretical frameworks, and empirical data, this study contributes to a deeper understanding of the complexities and opportunities embedded within SCM-outsourcing relationships. The findings serve as a cornerstone for informed decision-making, innovation, and growth within the dynamic landscape of freight transportation.

The analysis of the relationship between SCM and outsourcing strategies in freight transportation has yielded *several key findings and insights*.

Successful SCM and outsourcing strategies in freight transportation are characterized by strategic alignment and integration. Companies that align outsourcing decisions with SCM objectives and core competencies achieve greater efficiency, flexibility, and competitiveness in their supply chain operations.

Outsourcing certain transportation activities, such as warehousing, distribution, and last-mile delivery, can lead to significant cost savings and efficiency gains. By leveraging specialized expertise and resources through outsourcing partnerships, companies can optimize their supply chain networks and enhance operational performance.

Effective SCM and outsourcing strategies play a crucial role in managing risks and enhancing supply chain resilience. Companies that diversify their transportation networks, collaborate with reliable outsourcing partners, and invest in contingency planning are better equipped to mitigate disruptions and adapt to changing market conditions.

Technological innovation and digitalization are reshaping SCM and outsourcing practices in freight transportation. Advanced analytics, real-time tracking, and automation technologies enable companies to optimize transportation routes, improve visibility, and enhance customer service levels, driving operational efficiency and competitive advantage.

Collaborative partnerships and ecosystems are emerging as key drivers of success in SCM and outsourcing relationships. Companies that foster collaboration with suppliers, customers, and other stakeholders can create value, innovate, and adapt to evolving market dynamics, leading to sustainable growth and competitiveness.

Continuous improvement and learning are essential for driving success in SCM and outsourcing strategies. By learning from both successes and failures, companies can identify best practices, mitigate risks, and optimize their supply chain operations to achieve long-term performance improvement and customer satisfaction.

The relationship between SCM and outsourcing strategies in freight transportation is multifaceted and dynamic, characterized by strategic alignment, cost savings, risk management, technological innovation, collaborative partnerships, and continuous

improvement. By leveraging these insights, companies can enhance supply chain performance, adapt to changing market dynamics, and achieve sustainable growth and competitiveness in the dynamic and challenging landscape of freight transportation.

Table 8 outlines implications for businesses and provides comprehensive recommendations to enhance the alignment between SCM and outsourcing strategies in the freight transportation industry. By considering these implications and recommendations, businesses can optimize their supply chain operations, mitigate risks, and drive sustainable growth in a competitive marketplace.

Table 8

Implications for businesses and provides comprehensive recommendations

№	Aspect	Description
1.	Implications for businesses	Competitive advantage (strategic alignment of SCM and outsourcing strategies enables businesses to gain a competitive edge in the market).
		Risk mitigation (effective alignment helps businesses mitigate supply chain risks and enhance resilience against disruptions).
		Innovation and agility (collaborative partnerships foster innovation and agility in supply chain operations, enabling rapid adaptation).
2.	Recommendations for improvement	Strategic planning (develop comprehensive strategic plans aligning SCM and outsourcing strategies with organizational goals and market trends).
		Collaborative governance (establish clear communication channels, governance structures, and shared performance metrics to facilitate collaboration).
		Technology integration (invest in advanced technologies such as AI, IoT, and blockchain to enhance visibility, communication, and decision-making).
		Continuous improvement (foster a culture of innovation, learning, and adaptation to drive continuous optimization and innovation in supply chain operations).
		Supplier relationship management (cultivate strong partnerships with outsourcing providers through open communication, trust, and mutual benefit).

Source: developed by authors.

The implications for businesses and recommendations for improving SCM-outsource alignment provide a comprehensive framework for optimizing supply chain performance and competitiveness in the freight transportation industry. By leveraging strategic alignment, collaborative governance, technology integration, continuous improvement, and strong supplier relationships, businesses can enhance their ability to navigate challenges, seize opportunities, and achieve sustainable growth in an increasingly dynamic and complex business environment.

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УДК 656:355
doi: https://doi.org/10.15330/apred.1.20.163-172

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ОСНОВНІ ВИКЛИКИ ТА ПЕРСПЕКТИВИ РОЗВИТКУ ТРАНСПОРТНОЇ ЛОГІСТИКИ В УМОВАХ ВІЙНИ

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Анотація. Стаття присвячена тематиці викликів та перспектив розвитку транспортної логістики України в умовах військового вторгнення, на основі чого було сформовано мету дослідження, яка полягає у проведенні аналізу поточного стану транспортної логістики та визначення напрямів розвитку ринку вантажних перевезень в умовах війни для підвищення конкурентоспроможності логістичної галузі країни. Для досягнення поставленої мети було поставлено та вирішено ряд завдань. Проведено аналіз змін, які виникли на ринку вантажних перевезень України, в результаті повномасштабного вторгнення рф та виділено ключові з них: кадрові проблеми, труднощі в організації перевезень, зростання цін на паливо та проблеми в енергетиці, а також блокування зернового коридору та західних кордонів. Проаналізовано та структуровано проблеми на ринку вантажоперевезень за видами транспорту, які спричинили вищезгадані зміни та сформовано шляхи їх вирішення та мінімізації впливу. Виділено основні тенденції та напрямки розвитку транспортної логістики в умовах військового стану для забезпечення стійкості та прибутковості економіки країни, серед яких інвестування в проєкти для ринку перевізників, розвиток автомобільних доріг та будівництво євроколій, збільшення кількості пропускних пунктів, діджиталізація документообігу та ін. Для реалізації поставлених завдань було застосовано загальнологічні методи аналізу та синтезу, а також метод узагальнення при формуванні основних напрямків розвитку транспортної логістики України. У висновках підкреслено адаптивність транспортної логістики до сучасних умов невизначеності, переорієнтацію та пошук нових шляхів перевізниками для забезпечення стійкості та прибутковості економічного розвитку країни. Перспективами подальших наукових досліджень на дану тематику було виділено вивчення динаміки зміни структури вантажоперевезень за видами транспорту після імплементації і реалізації запропонованих шляхів вирішення існуючих проблем в галузі та проведення загального дослідження стану галузі вантажних перевезень шляхом опитування керівників транспортних підприємств.

Ключові слова: транспортна логістика, автомобільний транспорт, залізничний транспорт, умови невизначеності, порти, вантажні перевезення, мультимодальні перевезення