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Outsourcing Logistics Functions to Third-party Specialized Companies: Advantages and Risks

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Abstract

The article examines the outsourcing of logistics functions to third-party specialized organizations, focusing on its advantages and associated risks. Modern companies face the need to optimize logistics processes, making outsourcing a crucial tool for supply chain management. However, delegating these tasks to external entities not only reduces costs and provides access to advanced technologies but also introduces risks such as loss of control and potential data breaches. There is no unified stance in academic literature regarding the extent of outsourcing's impact on business performance. Some researchers confirm its positive effects on financial indicators and operational flexibility, while others highlight potential challenges and the rise of hidden costs. This study aims to systematize the advantages and risks of logistics outsourcing and identify key factors that determine its successful implementation, forming the basis for strategic recommendations. The author's contribution lies in a comprehensive analysis of the topic, considering strategic, economic, and technological aspects. The findings can be applied in both academic research and practical management decision-making. The presented material is valuable for researchers in logistics and risk management, professionals involved in supply chain organization, and business leaders considering the outsourcing of logistics functions.

Keywords: outsourcing; competitiveness; logistics; logistics provider; advantage; risk; risk management; supply chains.

1. Introduction

The modern economy imposes increasing demands on the speed, efficiency, and adaptability of business processes. In the context of intense competition and continuous market changes, companies are compelled to seek ways to optimize internal processes to maintain competitiveness.

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Outsourcing logistics processes is a managerial decision aimed at enhancing a company's flexibility, improving service quality, and adapting to evolving market conditions. Specialized providers, equipped with the necessary resources, technologies, and expertise, assume responsibility for tasks related to transportation, warehousing, cargo handling, inventory management, and customs operations.

The relevance of this study is driven by the need for an in-depth analysis of the strategic decision to transfer logistics functions to third-party specialized organizations. The central issue explored within this topic is the challenge of balancing cost reduction and business efficiency improvements with the potential risks of losing control over critical processes, which emerge when outsourcing logistics operations.

2. Materials and Methods

Research on this topic can be categorized into several areas: the impact of outsourcing on business efficiency, strategic aspects of selecting logistics providers, economic models of cooperation, and the factors determining the success of outsourcing initiatives.

Reference [2] examines the role of a strategic approach in logistics and analyzes the position of outsourcing in modern conditions. Similar issues are addressed in the work of R. Ashok and R. Rajesh [1], where the authors describe how different logistics service parameters correlate with key performance indicators. L. Wang and Ki. Reference [10] take a narrower focus on the impact of outsourcing, highlighting the specific characteristics of these processes in the digital era.

Reference [8] analyzes the segmentation of logistics service users, identifying key criteria for successful cooperation. K. Vitasek and A. Downard [9] investigate how different models of interaction between clients and providers affect the effectiveness of partnerships. Reference [3] explore logistics outsourcing in the construction industry from a strategic management perspective, identifying critical factors for process optimization.

Reference [4] discuss the concept of joint value extraction as a mechanism for strengthening trust and resilience in logistics relationships in the digital age. A study by [6] identifies determinants of outsourcing success among small and medium-sized enterprises, highlighting the importance of adapting collaboration models to specific business needs.

The Future Market Insights report [5] provides a macroeconomic assessment of the current state and future projections of the logistics outsourcing market through 2035, offering a comprehensive view of industry prospects. A more practical approach is presented in the work of [7], which reviews key aspects of logistics outsourcing, making it a valuable source for applied analysis.

A review of these sources reveals several contradictions. While most authors confirm the positive impact of outsourcing on companies' economic and operational performance, some researchers emphasize risks associated with dependence on external providers and the reduction of process control. Additionally, the adaptation of outsourcing strategies to different industries remains insufficiently explored, as most studies either take a generalized approach or focus on specific segments.

The study employs comparative analysis, content analysis, systematization, statistical data processing, and generalization methods. Additionally, a hypothetical example with calculations is used to illustrate the findings.

The limitations of the study on the discussed topic lie in its focus on specific industries and types of companies, which restricts the generalizability of the findings. Additionally, the study primarily considers the theoretical aspects of outsourcing, while practical implementation and the impact of external factors (such as economic and political changes) are not fully addressed. Furthermore, the analysis of risks is limited by the availability of information on specific cases and insufficient consideration of the long-term effects on contractor relationships.

3. Results and Discussion

Outsourcing logistics functions is a strategic management model in which a company delegates the execution of relevant operations to a specialized external organization to optimize business processes, enhance efficiency, and reduce costs [2, 4, 9].

When considering the theoretical foundations, it should be noted that we are talking about a strategic process in which companies outsource part or all of their logistics operations to external contractors. This allows organizations to focus on their core business processes, increase efficiency, and reduce costs. The conceptual basis of logistics outsourcing is built on several key principles.

Firstly, there is economies of scale—external logistics companies generally have the ability to conduct their operations more efficiently due to larger volumes and specialization, which helps them reduce costs for transportation, storage, and inventory management.

Secondly, outsourcing contributes to increasing flexibility. Companies can adapt their logistics operations in response to changing market conditions or internal situations by using the services of third-party providers, who offer the required resources at the right moment. This enables businesses to avoid large capital investments in infrastructure and equipment, making the company more agile.

The third key aspect is specialization and expertise. Logistics companies possess deep knowledge and experience in their field, which ensures high-quality services, risk reduction, and the implementation of innovative solutions. Outsourcing allows organizations to leverage this expertise without having to hire additional resources in-house.

Another significant aspect is risk management. Outsourcing logistics helps reduce risks associated with changes in legislation, tax policies, transportation tariffs, or instability in certain geographical regions. In addition, external providers can offer solutions to mitigate risks (for example, cargo insurance, monitoring transportation routes, and other measures).

An essential factor is managing relationships with contractors. This requires careful selection of a partner with whom contracts will be signed and clear terms of cooperation defined. It is important to consider parameters such as delivery times, service quality, cost of services, and the level of transparency in the relationship between the company and the outsourcing partner.

Finally, logistics outsourcing effectively addresses issues related to technological optimization. Modern companies often use innovative information technologies for managing transportation, warehousing, and supply chains. This significantly improves the speed and transparency of operations, as well as enhances process monitoring.

According to data published by FMI, the logistics outsourcing industry was valued at $1,123.6 billion in 2024 (Fig. 1), with an expected compound annual growth rate of 4.8% from 2025 to 2035 [5].

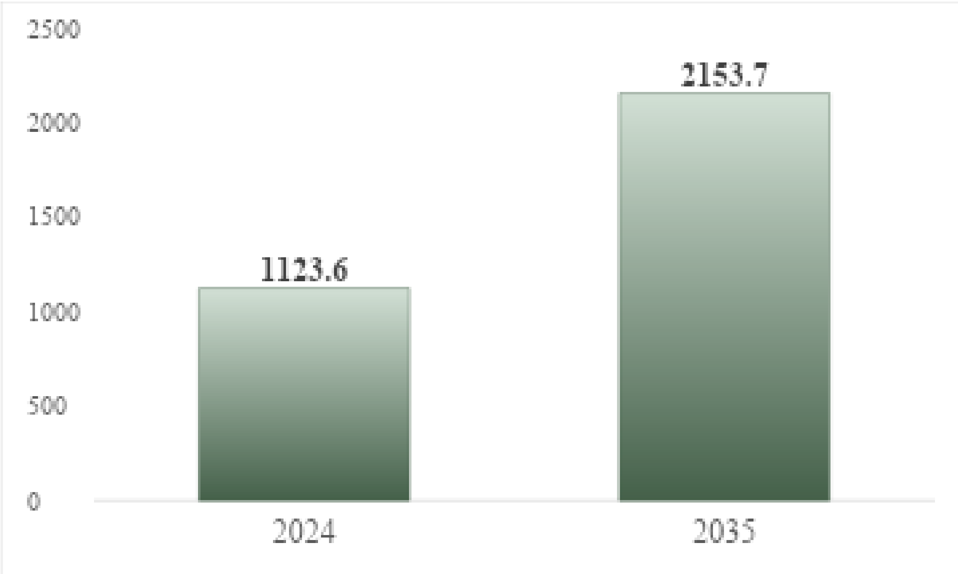

Figure 1: Projected dynamics of the logistics outsourcing market volume, billion USD (compiled by the author based on [5]).

From 2020 to 2024, the global logistics outsourcing industry grew at a rate of 3.7%, driven by the globalization of supply chains, the need for deeper supply chain optimization, and a focus on cost reduction [5].

Fig. 2 illustrates the key advantages of outsourcing in this field, with up to 75% of businesses reporting positive effects [7].

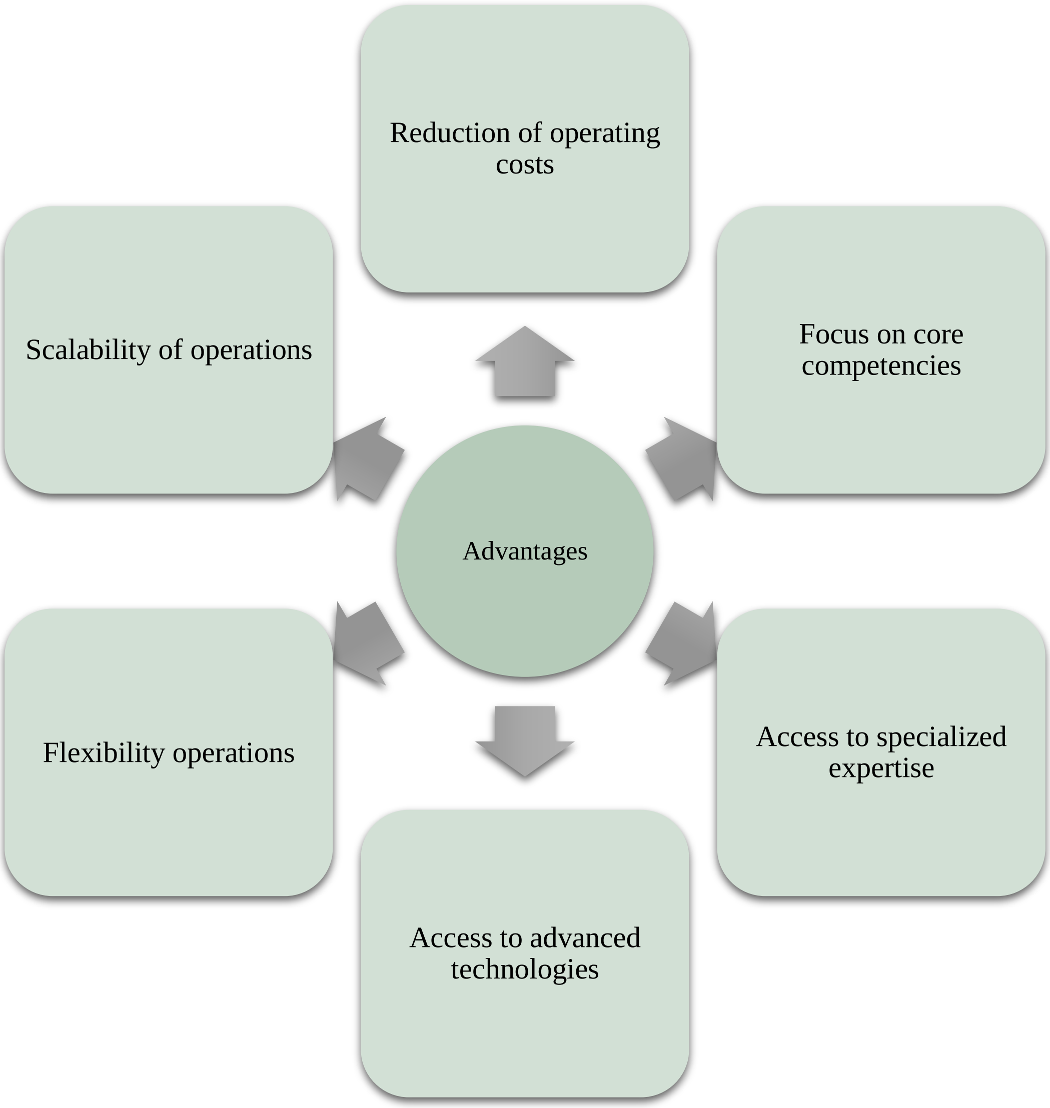

Figure 2: Systematization of the advantages of outsourcing logistics functions to third-party specialized companies (compiled by the author based on [1-3, 6, 8]).

Delegating tasks to external providers enables cost structure optimization, which is particularly important for organizations seeking to minimize expenses without compromising service quality. Cost restructuring through the delegation of transportation, warehousing, and personnel management allows for both a reduction in variable costs and a decrease in overhead expenses related to maintaining in-house infrastructure. As a result, companies can redirect freed-up resources toward the development of core business areas, improving overall financial stability.

Focusing efforts on key business areas is one of the strategic priorities of modern management. Transferring logistics operations to specialized organizations frees up managerial resources, allowing greater attention to be devoted to developing innovative products and services. This approach strengthens competitive advantages, as outsourcing is not merely a distraction but a tool for enhancing core competencies and driving strategic growth.

Another advantage lies in the access to extensive expertise and accumulated experience in supply chain management. Logistics service providers invest in high-tech equipment and information systems, ensuring the rapid integration of the latest solutions. Through collaboration with such entities, companies can leverage cutting-edge technological advancements and optimize processes, leading to improved service levels and greater operational efficiency.

In a rapidly shifting demand landscape and an unstable market environment, the ability to respond swiftly to external challenges is critically important. Outsourcing in this sector enables companies to adapt more quickly to changes; when an increase or decrease in supply volume is required, long-term investments in physical assets and workforce expansion become unnecessary. This flexibility allows for a timely response to market shifts and more efficient financial resource allocation.

Despite numerous positive effects, it is essential to consider several significant risks, which are outlined in Fig. 3.

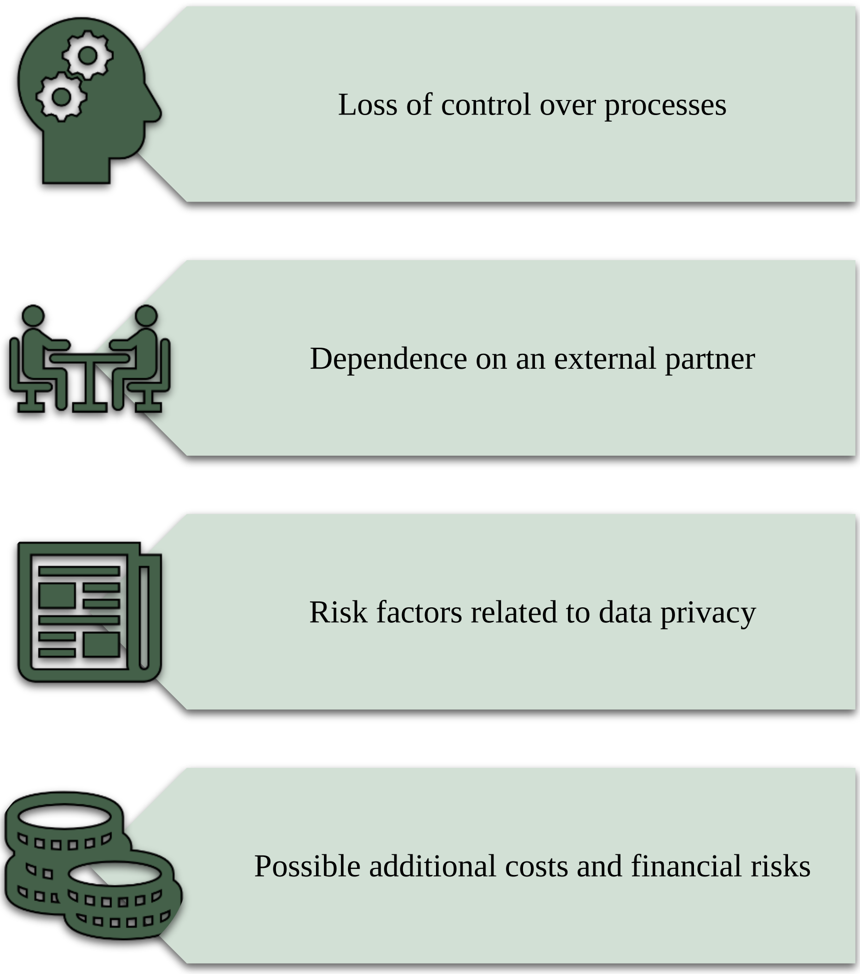

Figure 3: The main risks associated with outsourcing logistics functions to third-party specialized companies (compiled by the author based on [1, 4, 8-10]).

One of the significant drawbacks of delegating these operations to an external entity is the loss of direct control over key business processes. Reduced transparency can negatively impact the efficiency of managerial decision-making. In an outsourcing model, internal monitoring and control systems require special attention, as the absence of effective interaction mechanisms between the client and the provider often leads to quality inconsistencies and delays in fulfilling contractual obligations.

Outsourcing strategies imply close collaboration with an external specialist, which in turn introduces the risk of dependence on their stability and reliability. Any disruptions or lack of expertise on the provider's side can adversely affect the supply chain, degrade service quality, and harm the company’s reputation. In this context, careful partner selection and the development of contractual mechanisms that include guarantees for obligation fulfillment and transparency in relationships become critical.

Entrusting strategic information to external parties creates a potential threat of leaks involving trade secrets and other confidential data. Secure information exchange necessitates the implementation of robust protective measures and the development of legal frameworks that regulate the responsibilities of both parties. Neglecting data security aspects can result in the loss of competitive advantages and significant financial and reputational damage.

Despite the potential for cost reduction, outsourcing projects often carry the risk of hidden expenses. Unforeseen workload changes or poorly structured contract terms may lead to increased logistics service costs. Consequently, the initial financial savings may be offset by additional expenditures, necessitating a meticulous approach to contract formation and continuous evaluation of partnership effectiveness.

When formulating recommendations, it is important to emphasize that the decision to outsource logistics functions requires a comprehensive approach, combining economic calculations with risk analysis in management. Against the backdrop of globalization and high market uncertainty, businesses must strike a balance between immediate cost reductions and maintaining control over critical business processes. In this context, the focus of strategy should not be limited to a binary choice between "outsourcing" and "insourcing" but rather on developing flexible cooperation models that minimize outsourcing-related drawbacks while leveraging external capabilities.

At the same time, managing relationships with outsourcing partners becomes a crucial factor. Effective communication, the implementation of information systems for contract compliance monitoring, and the adoption of advanced data protection technologies are essential for successfully integrating outsourcing models. Addressing these issues holistically enables the formation of a resilient cooperation framework capable of adapting to changing market conditions.

Additionally, the specifics of industries in which outsourcing projects are implemented must be considered. For some companies, outsourcing logistics proves to be an effective optimization measure, while in other cases, a comprehensive internal process framework demands a higher level of control, making outsourcing a less viable option. Decision-making should be based on a detailed analysis of the business entity's needs, an assessment of potential benefits and risks, and a forecast of shifts in market conditions.

As a hypothetical example, consider a company engaged in the production of consumer electronics. Management is evaluating the possibility of outsourcing warehouse logistics and product transportation to a third-party provider, as maintaining an in-house logistics division has become increasingly costly.

Initial data: The company currently operates its own warehouse and transport fleet. Annual logistics expenses include:

- Warehouse maintenance (rent, utilities, equipment, personnel) — $5 million
- Transportation (fuel, maintenance, drivers, insurance) — $3 million
- Administrative costs (logistics management, IT systems) — $1 million
- Total costs: $9 million per year

A logistics provider offers comprehensive services, including warehousing, order processing, and transportation, for $7.5 million annually. The cost savings from outsourcing would be:

$9 million – $7.5 million = $1.5 million per year.

Additional factors: The provider offers scalability, allowing services to be adjusted up or down without requiring additional capital investments from the company, along with reduced management workload.

Potential risks: Possible delivery delays, dependency on the provider, and the risk of losing control over supply chains.

Decision: The company opts for outsourcing, as the projected savings of $1.5 million per year, combined with access to professional logistics solutions, outweigh the potential risks. However, to mitigate threats, a detailed contract is established, including clearly defined service level agreements (SLAs) and mechanisms for monitoring performance obligations.

4. Conclusions

The study of the strategic aspects of logistics outsourcing reveals the inherent duality of this managerial approach.

On one hand, external partnerships enable significant reductions in operational costs, allowing businesses to concentrate resources on core activities, leverage specialized expertise, and adapt quickly to fluctuations in market demand. On the other hand, the loss of direct control, dependence on provider reliability, risks of confidential information leaks, and potential unforeseen costs necessitate the development of a comprehensive strategy for managing partnerships and implementing control mechanisms.

Therefore, decision-making in this area should be based on a multidimensional analysis that accounts for economic efficiency as well as managerial and informational risks. Strategic choices in outsourcing logistics functions are among the key factors determining a company's ability to adapt to modern business challenges and strengthen its competitive position.

References

[1]. Ashok R. Relationship among various performance measures and outsourcing services in the third-party logistics industry / R. Ashok, R. Rajesh // International Journal of Innovative Technology and Exploring Engineering. – 2020. – Vol. 9. – No. 3. – Pp. 917-923.

[2]. Cho Ya. Effects of logistics strategy and outsourcing level on corporate performance: targeted at logistics companies / Ya. Cho // The Korean Academic Association of Business Administration. – 2023. – Vol. 36. – No. 11. – Pp. 1851-1872.

[3]. Haglund P. Organizing construction logistics outsourcing: a logistics strategy perspective / P. Haglund, M. Janné // Construction Innovation. – 2023. – Vol. 24. – No. 7. – Pp. 223-238.

[4]. Happonen A. Gainsharing in logistics outsourcing: trust leads to success in the digital era / A. Happonen, V. Siljander // International Journal of Collaborative Enterprise. – 2020. – Vol. 6. – No. 2. – P. 150.

[5]. Logistics Outsourcing Market Analysis – Growth & Forecast 2025-2035 // URL: https://www.futuremarketinsights.com/reports/global-logistics-outsourcing-market (date of request: 03/06/2025).

[6]. Luke R. Determinants of logistics outsourcing performance among small and medium enterprises / R. Luke, G. Prinsloo, J. Mageto // International Journal of Logistics Systems and Management. – 2020. – Vol. 35. – No. 4. – P. 541.

[7]. O'Byrne R. What is Outsourcing in Logistics? / R. O'Byrne // URL: https://www.logisticsbureau.com/what-is-outsourcing/ (date of request: 03/11/2025).

[8]. Oeser G. Segmenting logistics service users based on their provider selection criteria to succeed in outsourcing / G. Oeser // International Journal of Retail & Distribution Management. – 2020. – Vol. 48. – No. 9. – Pp. 963-984.

[9]. Vitasek K. Choosing the right sourcing model for thirdparty logistics outsourcing agreements / K. Vitasek, A. Downard // Journal of Supply Chain Management, Logistics and Procurement. – 2024. – Vol. 7. – No. 1. – P. 47.

[10]. Wang L. Research on the impact of logistics outsourcing cooperation in China’s internet e-commerce on logistics achievements / L. Wang, Ki.H. Bae // Korean Logistics Research Association. – 2023. – Vol. 33. – No. 5. – Pp. 41-49.