



Article

Effective Organization of Marketing Research in Freight Transportation

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Abstract: The rapid development of global logistics systems and the intensification of competition in transport markets have significantly increased the importance of marketing research in freight transportation. This article examines the role and effectiveness of organizing marketing research as a strategic management tool in freight transport enterprises. The study emphasizes that well-structured marketing research enables transport companies to better understand market demand, customer preferences, pricing dynamics, and competitive conditions, thereby improving decision-making and operational efficiency. Based on statistical data from the National Statistics Committee of Uzbekistan for the period 2020–2024, the article analyzes trends in cargo volumes, cargo turnover, passenger flows, and the modal structure of transportation. The results reveal stable growth in freight transportation, the dominant role of road transport, and the gradual expansion of rail and air transport, particularly for high-value and time-sensitive cargo. These structural changes highlight the necessity of systematic market analysis and data-driven strategic planning. The findings demonstrate that effective organization of marketing research transforms raw statistical and market data into actionable managerial insights.

Keywords: Freight Transportation, Marketing Research, Transport Services Market, Demand Analysis, Modal Structure, Logistics Management, Strategic Decision-Making, Uzbekistan

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1. Introduction

In the context of globalization, intensifying competition, and rapid technological change, freight transportation has become a key component of national and international economic systems. The efficiency of freight transport services directly affects production costs, supply chain reliability, market accessibility, and overall economic growth. As logistics networks expand and customer requirements become more differentiated, transport companies are increasingly compelled to base their strategic and operational decisions on reliable market information rather than intuition. In this regard, the effective organization of marketing research in freight transportation emerges as a critical managerial tool for ensuring competitiveness, sustainability, and customer-oriented service delivery.

Freight transportation markets are characterized by high capital intensity, complex infrastructure, strong regulatory influence, and sensitivity to macroeconomic fluctuations. Demand for freight services is derived from industrial production, trade volumes, and consumption patterns, which makes it volatile and regionally differentiated. Moreover, the market structure often involves a large number of service providers operating across

different transport modes – road, rail, air, sea, and multimodal logistics – each with distinct cost structures, service characteristics, and competitive advantages. Under such conditions, marketing research serves as a systematic process for collecting, analyzing, and interpreting data related to market demand, customer preferences, pricing dynamics, competitor behavior, and external environmental factors.

The growing digitalization of transport and logistics, including the use of big data, intelligent transport systems, and digital freight platforms, has further increased both the opportunities and the complexity of marketing research in freight transportation. On the one hand, companies now have access to vast amounts of real-time data on cargo flows, vehicle utilization, delivery times, and customer interactions. On the other hand, transforming this data into actionable marketing insights requires a well-organized research framework, appropriate methodologies, and qualified human capital. Without an effective organization of marketing research, transport enterprises risk misinterpreting market signals, misallocating resources, and losing their competitive position.

An effectively organized marketing research system enables freight transport companies to better understand the structure and dynamics of demand across different market segments, industries, and geographical regions. Through demand analysis, firms can forecast cargo volumes, identify peak and off-peak periods, and design service offerings that align with customers' logistical needs. Customer-focused research allows transport providers to assess service quality, reliability, price sensitivity, and value-added service expectations, which are increasingly important in an environment where logistics solutions, rather than simple transportation, define competitive advantage. As a result, marketing research becomes an integral part of service design and customer relationship management in freight transportation.

Another important aspect of marketing research organization in freight transportation is competitor and industry analysis. The transport market is often marked by price competition, low profit margins, and the presence of both large integrated logistics companies and small, specialized carriers. Systematic analysis of competitors' pricing strategies, service portfolios, technological adoption, and market positioning helps firms to identify strategic gaps and differentiation opportunities. At the same time, industry-level research allows companies to monitor regulatory changes, infrastructure development, environmental requirements, and technological trends that may influence market conditions and long-term strategic decisions.

The effectiveness of marketing research, however, depends not only on the availability of data but also on how the research process is structured and managed. Poorly defined research objectives, inappropriate data collection methods, or weak integration of research results into decision-making can significantly reduce its practical value. Therefore, the organization of marketing research in freight transportation should be based on clear goals, relevant indicators, suitable qualitative and quantitative methods, and close coordination between marketing, operations, and strategic management functions. This organizational approach ensures that research outcomes directly support pricing decisions, route planning, fleet management, and service innovation.

In developing and emerging economies, where freight transportation systems are undergoing structural transformation, the role of marketing research is particularly significant. Market liberalization, private sector participation, and increasing integration into global supply chains require transport enterprises to adapt quickly to changing market conditions. Effective marketing research helps identify unmet demand, evaluate new transport corridors, and assess the feasibility of investments in infrastructure and rolling stock. Consequently, marketing research contributes not only to firm-level efficiency but also to the broader development of the transport sector and national logistics performance.

In this context, the present article focuses on the effective organization of marketing research in freight transportation.

Literature Review

The organization and role of marketing research in freight transportation has been examined from multiple theoretical and empirical perspectives in the academic literature. For instance, Mariam Lafkihi et al. [1] investigated freight transportation service procurement mechanisms and highlighted that understanding market demand structures and decision environments is essential for designing efficient freight transport contracts, especially in omnichannel and e-commerce contexts, which implicitly underlines the value of systematic market research to support freight operations planning. A. C. McKinnon [2] argues that adopting a logistics perspective in freight transport research has reshaped how firms understand service performance and competitiveness, reinforcing that empirical analysis of market behavior and operational outcomes is critical for both strategic and tactical decision-making in freight systems.

In the broader context of transport and logistics scholarship, Y. Li [3] developed a marketing model for freight forwarding firms where analysis of influencing market factors was central to improving enterprise competitiveness, suggesting that freight carriers must incorporate structured marketing research into their strategic frameworks. Eszter Sós [4] examined literature on marketing logistics strategy and concluded that integrating marketing insights with logistics decision-making enhances service reliability and customer satisfaction, which is especially relevant for freight transportation where timing, cost, and service quality are interdependent.

Other researchers focus on the conceptual integration of marketing and freight logistics. Although not specific to freight transport, D. Topolšek [5] reviewed transport logistics literature and emphasized that understanding different research traditions, including marketing and supply chain management, helps clarify freight carriers' roles in value creation, implicitly pointing to the need for rigorous marketing research to align service offerings with market expectations. Angela Acocella, Chris Caplice, and Yossi Sheffi [6] provide empirical insights into dynamic freight markets, showing how carriers' behavior changes with market conditions; such analyses often depend on market data that stem from systematic research of freight demand and pricing patterns.

While much of the foreign literature explores freight transportation from logistics and operational research perspectives, scholars such as Michael H. Belzer highlight the economic and institutional dimensions of trucking markets that indirectly emphasize the importance of understanding marketplace structures and regulatory impacts, areas that benefit from structured marketing research [7]. Michel Bierlaire's work on transportation modelling also contributes to the literature by showing how complex behaviour of freight flows can be better understood and predicted through analytical models – models that rely on accurate market information [8].

Some international research combines freight marketing with decision sciences and sustainability. For example, Madelaine Martinez Ferguson et al. [9] reviewed intermodal transportation systems and suggested that future freight research should integrate technological, environmental, and market dimensions to improve decision-making under uncertainty, which again highlights the broader significance of well-organized marketing research.

Local scholars have also contributed to understanding marketing research in freight transport, particularly within the Uzbek context. I.F. Akhtamovna [10, 11] proposed a multidimensional framework for evaluating the effectiveness of marketing research in freight transportation, emphasizing both methodological rigor and contextual factors influencing Uzbekistan's transport sector. Temur Berdiyev [12] explored the role of marketing in transport services, arguing that structured research into customer preferences and competitive conditions is crucial for service optimization in national

transport markets. M. Irisbekova [13] analyzed transport market optimization through marketing principles, outlining theoretical foundations for collecting and utilizing market data to improve freight service strategies.

Additionally, research on the transport services market in Uzbekistan has underscored the growing importance of marketing research to understand shifting demand patterns and service expectations in freight and passenger segments alike, even if these studies do not always focus exclusively on freight transportation [14]. Another local analysis of transport logistics indicators highlights the need for market-oriented data collection and analysis to inform pricing, infrastructure investment, and service delivery decisions [15].

Collectively, this body of literature suggests a broad consensus: effective marketing research in freight transportation is not merely a supplementary activity but a core component of strategic management, enabling carriers and logistics providers to interpret market signals, understand customer needs, and adapt their services in competitive and dynamic environments.

2. Methodology

The research methodology of this study is based on a combination of qualitative and quantitative analytical methods. To examine the effective organization of marketing research in freight transportation, secondary data analysis was employed using official statistical data published by the National Statistics Committee of Uzbekistan for the period 2020–2024. These data include indicators of cargo transportation volume, cargo turnover, passenger transportation, passenger turnover, and modal distribution of transport services.

Quantitative methods such as comparative analysis, trend analysis, and structural analysis were applied to identify dynamics and changes in freight and passenger transportation over time. The modal structure of transportation was analyzed to assess shifts in demand across different transport modes and their implications for marketing research and strategic planning. In addition, logical and systematic analysis was used to interpret statistical results from a marketing research perspective, linking empirical findings with theoretical concepts discussed in the literature review.

3. Results and Discussion

The analysis of marketing research organization in freight transportation demonstrates that its effectiveness largely depends on the systematic integration of market intelligence into managerial decision-making processes. In freight transport enterprises, marketing research is not limited to demand estimation but encompasses a broader analytical framework, including customer behavior analysis, pricing sensitivity, service quality assessment, competitor benchmarking, and environmental scanning. The findings indicate that companies with well-structured marketing research systems exhibit higher adaptability to market fluctuations and stronger competitive positioning compared to those relying on fragmented or ad-hoc information.

This section analyzes the dynamics and structural changes in the transportation sector of Uzbekistan over the period 2020–2024, based on aggregated statistical indicators of freight and passenger transportation. The analysis focuses on cargo volumes, cargo turnover, passenger flows, and the modal structure of transportation. These indicators serve as an empirical basis for assessing the role of marketing research in freight transportation, particularly in understanding market demand trends, modal preferences, and operational efficiency. By systematically analyzing the presented tables, the study demonstrates how reliable statistical data can support marketing research activities and improve strategic decision-making in freight transport operations.

Table 1. Key indicators of freight and passenger transportation in Uzbekistan (2020–2024).

Indicators	2020	2021	2022	2023	2024
Volume of cargo transported, mln. Tons	1366,7	1420,2	1420,9	1455,7	1505,8
Total cargo turnover volume, bln. ton-km	66,9	74,8	75,5	77,6	80,9
Number of passengers transported, mln. Persons	5295,9	6029,7	6245,3	6483,7	6932,7
Total passenger turnover, billion pass-km	118,3	137	146,5	153,5	162,6

Source: National Statistics Committee of Uzbekistan (2025)

The data presented in Table 1 indicate a steady growth in both freight and passenger transportation indicators during 2020–2024. The volume of cargo transported increased from 1,366.7 million tons in 2020 to 1,505.8 million tons in 2024, reflecting expanding economic activity and rising demand for logistics services. Similarly, cargo turnover grew from 66.9 billion ton-kilometers to 80.9 billion ton-kilometers, suggesting not only higher cargo volumes but also longer average transport distances.

Passenger transportation indicators show even more pronounced growth. The number of passengers transported rose by more than 30 percent over the analyzed period, while passenger turnover increased from 118.3 to 162.6 billion passenger-kilometers. From a marketing research perspective, these trends underline the importance of continuous demand monitoring and segmentation, as growing transport volumes require adaptive service design, pricing strategies, and capacity planning in freight and transport enterprises.

Table 2. Passenger turnover by modes of transport (2020–2024).

Indicators	2020	2021	2022	2023	2024
Passenger turnover of railway transport, bln. pass-km	1,8	3,1	3,5	3,9	4,1
Passenger turnover of road transport, million. pass-km	113198,2	127871,6	131012,4	134504,7	139988,2
Passenger turnover of trolleybus transport, bln. pass-km	0,01	0,01	0,01	0,02	0,02
Passenger turnover of tram transport, bln. pass-km	0,004	0,01	0,01	0,01	0,01
Subway passenger turnover, bln. pass-km	0,3	0,7	1	1,3	2
Air transport passenger turnover, bln. pass-km	3	5,3	10,9	13,8	16,5

Source: National Statistics Committee of Uzbekistan (2025)

Table 2. reveals significant differences in passenger turnover across transport modes. Road transport dominates passenger turnover throughout the period, which reflects its extensive coverage, flexibility, and accessibility. However, railway, subway, and air transport demonstrate rapid growth rates, especially air transport, whose passenger turnover increased more than fivefold from 2020 to 2024.

From the standpoint of marketing research, these structural shifts highlight changing consumer preferences and mobility patterns. Although the table focuses on passenger transport, similar modal dynamics are relevant for freight transportation, where shifts toward faster or more reliable modes may occur. Marketing research enables transport enterprises to anticipate such shifts, evaluate customer expectations, and adjust service portfolios accordingly, particularly in multimodal freight logistics.

Table 3. Volume of cargo transportation by modes of transport (2020–2024).

Indicators	2020	2021	2022	2023	2024
Volume of cargo shipped by rail, mln. Tons	70,6	72	73,4	73,7	74
Volume of cargo transportation by road, mln. Tons	1238,2	1282	1284,1	1322	1370,1
Volume of cargo transportation by pipeline transport, mln. Tons	57,9	66,2	63,5	60	61,7
Volume of cargo transported by air, thsd. Tons	5,3	9,1	10,2	9,3	15,6

Source: National Statistics Committee of Uzbekistan (2025)

The modal distribution of freight transportation presented in Table 3 confirms the dominant role of road transport, which accounts for the largest share of cargo volumes and shows continuous growth over the analyzed period. Rail transport exhibits stable but moderate growth, indicating its importance for bulk and long-distance freight. Pipeline transport shows some volatility, largely reflecting fluctuations in energy production and exports. Air freight, while representing a small share in absolute terms, demonstrates rapid growth, particularly in 2024, signaling increasing demand for high-value and time-sensitive cargo.

These findings emphasize the strategic relevance of marketing research in freight transportation. Understanding which modes are expanding and which are stagnating allows transport companies to identify market niches, optimize investment decisions, and tailor services to specific cargo segments. Marketing research thus supports evidence-based decisions regarding route development, pricing differentiation, and multimodal integration.

Diagram 1 illustrates that systematic marketing research transforms raw data into actionable decisions that enhance performance in freight transport operations.

The diagram conceptually demonstrates how statistical indicators, customer data, and market intelligence are integrated through marketing research processes and translated into strategic and operational decisions. This framework reinforces the empirical findings of the tables, showing that data-driven analysis is central to improving efficiency, competitiveness, and service quality in freight transportation.

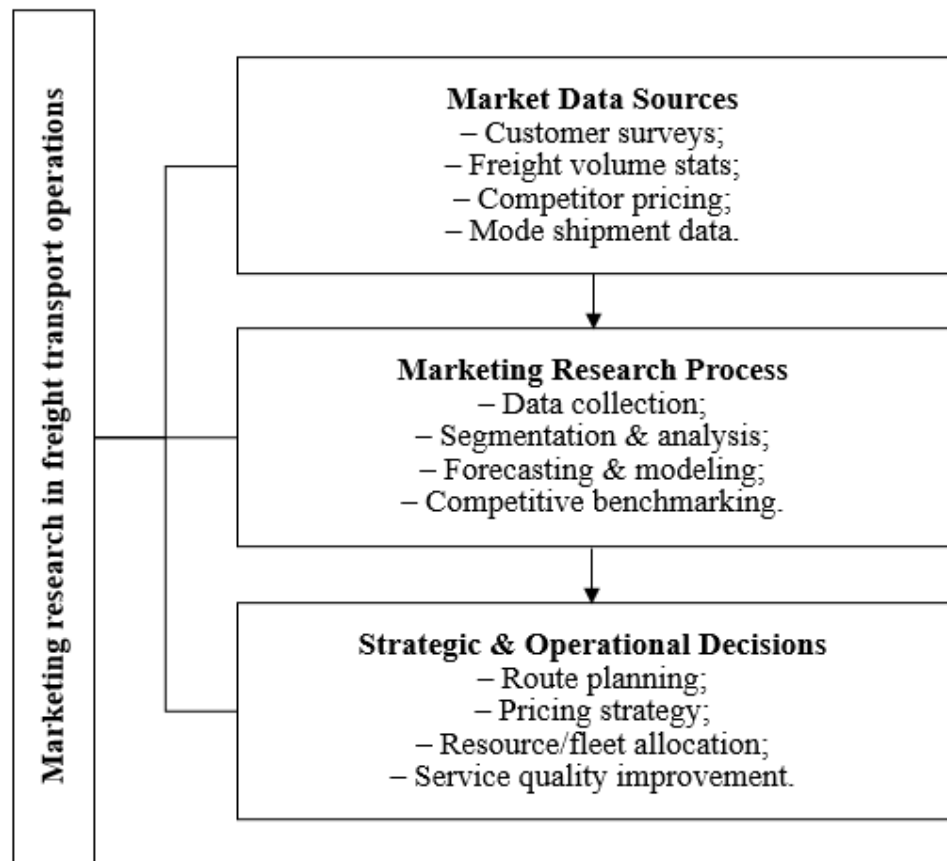


Figure 1. Marketing research in freight transport operations.

In summary, the analysis of freight and passenger transportation indicators for 2020–2024 reveals stable growth, increasing transport intensity, and noticeable structural shifts across transport modes in Uzbekistan. The empirical evidence demonstrates that road transport remains dominant in freight movement, while rail and air transport show gradual and, in some cases, accelerated growth. These trends underline the necessity of effectively organized marketing research to interpret market dynamics, forecast demand, and support strategic planning in freight transportation.

The presented tables confirm that marketing research plays a crucial role in transforming statistical data into managerial insights. By systematically analyzing cargo volumes, turnover indicators, and modal structures, freight transport enterprises can enhance decision-making related to capacity utilization, pricing strategies, and service diversification. Consequently, effective organization of marketing research contributes to improved operational performance, stronger market orientation, and sustainable development of freight transportation systems.

4. Conclusion

The study demonstrates that the effective organization of marketing research plays a crucial role in enhancing the performance and competitiveness of freight transportation enterprises. The analysis of transportation indicators for 2020–2024 confirms stable growth in freight volumes and cargo turnover in Uzbekistan, alongside notable structural shifts in the modal composition of transport services. Road transport continues to dominate freight movement, while rail and air transport show gradual expansion, particularly in segments requiring speed and reliability.

The empirical results highlight that marketing research serves as a vital mechanism for transforming statistical and market data into informed managerial decisions. By systematically analyzing demand trends, customer behavior, and modal preferences, transport enterprises can optimize capacity utilization, improve pricing strategies, and develop customer-oriented service offerings. Moreover, the integration of marketing research into strategic planning enhances the ability of firms to respond to market volatility and competitive pressures.

Overall, the findings confirm that marketing research should not be treated as a supplementary activity but as a core strategic function within freight transportation management. Effective organization of marketing research contributes to improved operational efficiency, stronger market orientation, and sustainable development of the freight transportation sector, particularly in developing and emerging economies undergoing structural transformation.

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