

## HARVARD EDUCATIONAL AND SCIENTIFIC REVIEW

International Agency for Development of Culture, Education and Science









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International Agency for Development of Culture, Education and Science
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## **Editorial-Board**

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## The management system of JSC "Railways of Uzbekistan" and the relevance of its optimization

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**Abstract.** As a result of a balanced foreign policy pursued by the President of the Republic of Uzbekistan Sh. Mirziyoyev, the process of large-scale integration between the countries of Central Asia, along with other sectors of the economy, is being activated.

This article describes the factors that justify the improvement of the railway management system, which is a key factor in the development of the railway network, which is one of the most promising and effective components of the transport industry.

**Keywords:** management system, logistics, passenger and cargo flows, coverage, obsolescence, information, service, regional integration, outsourcing.

Further improvement of the transport and logistics sector of the country is noted as one of the central problems in the development strategy of the Republic of Uzbekistan for 2022-2026.<sup>1</sup>

The creation of the Ministry of Transport of the Republic of Uzbekistan, authorized to pursue a unified state policy in the field of transport and logistics services in the country, JSC "Railways of Uzbekistan", "Uzbekistan Airways" and the "Uzbek Agency for Road and River Transport" have so far acted separately from each other, radically expanded the possibilities of ensuring the harmony of the management system of ministries-departments.

The effectiveness of the activities of these ministries requires the introduction of administrative and economic processes in them, including the improvement of the regulatory framework for the management of the ministry.

In its place, before improving the legal framework, it is important to improve the management systems of the ministry and its departments and organizations using the capabilities of modern management and information and communication technologies.

The railway transport system of our country, which is the object of our scientific research, remains the most promising network in the provision of transport and logistics services due to the capacity of passenger and freight traffic and the low cost of maintenance, as well as a wide range of opportunities for creating additional value.2

The rail transport system remains the most promising industry in the provision of transport and logistics services due to its passenger and freight capabilities and low maintenance costs, as well as a wide range of opportunities for adding value.

<sup>&</sup>lt;sup>1</sup> Decree of the President of the Republic of Uzbekistan dated January 28, 2022 No. UP-60 "On the Development Strategy of New Uzbekistan for 2022-2026"

<sup>&</sup>lt;sup>2</sup> T.Towlley. Robotic Process Automation: A Guide to Implementing RPA Systems. Monrovia: Apress, 2020. 333 p.

At the same time, existing problems in the railway system require attention to the urgency of optimizing the network through the introduction of modern management methods and information and communication technologies. Including:

- increase the coverage of the railway network;
- elimination of deterioration in the quality of railways;
- increasing the level of physical deterioration of rolling stock, diesel locomotives and wagons;
- increase the level of informatization and technical support of structural enterprises;
- raising the level of transport logistics and developing multimodal transport and logistics centers.

Improving the rail transport management system is directly related to the creation of business and management processes that can ensure the consistency, safety and speed of delivery of goods and passengers from the starting point to the final destination. At the same time, we consider industry optimization models promising in the following areas:

1. Improving the development of calendar plans for cargo and passenger traffic.

Today there is a need for scientific and practical research and reforms to optimize transport and logistics schemes for the delivery of goods by rail. After all, the introduction of automated control systems at the level of the entire transport and logistics complex, as well as at the level of territorial divisions and individual enterprises remains the main problem in the management of railway transport.

Based on the preliminary results of our study, we consider it appropriate to create a single control center to coordinate the technological process of interaction between dispatchers, consignors, consignees and transport and dispatch manufacturing enterprises of the railway transport management process based on system planning methods.

2. Interregional integration of shipping companies.

Another promising area for improving the management of railway transport is the introduction of the practice of "own fleet of freight cars" and the centralization of their management through technological outsourcing.

The dispersion of this category of participants in the rail transport management system leads to significant financial losses due to the increase in the volume of empty cars in private fleets. Cooperation between the countries of the region and the regions of the republic will allow optimizing technological and organizational processes, increasing the efficiency of cargo formation.

3. It is important to expand the network of logistics planning and transportation management centers. Given the significant length of the common railway network of our country and neighboring countries, the role of local centers of the infrastructure for managing railway transport in the form of logistics centers is increasing.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Butko T., Organization of railway freight short-haul transportation on the basis of logistic approaches. Ukrainian State Academy of Railway Trans. https://www.researchgate.net/publication/331696956

In addition, the imposition of international sanctions against Russia, one of our main partners in the transportation of goods and passengers by rail, and a significant reduction in freight traffic with European countries will require part of the transit flows through the customs territory to China and other Asian countries. In this regard, the importance of modernizing and improving transport and logistics networks in the south and southeast of the country, as well as their expansion, is growing.

4. Development of a network of high-speed railway lines. Trans-regional railway networks, including the Trans-Afghan railway network, are promising and key areas for the development of cargo transportation. This route is several thousand kilometers shorter than other types of transport routes passing through the territory of other states. The effective development of international transport corridors and the increase in transit traffic will require the modernization of existing communications, which will require the effective use of the public-private partnership model.<sup>4</sup>

To form such a system, in turn, it is necessary to create the necessary legal framework and improve the existing one. It is also important to create an effective information network for the legal regulation of transport and logistics, drawing up contracts, rules and standards, interaction between participants in the transport and logistics process and government agencies.

5. We consider a promising direction to further improve the implementation of modern information and communication technologies in the field of railway transport management. The level of automation of all processes in the management of railway transport in our country, from the planning of cargo flows, the organization of cargo transportation to the acceptance of goods by the end user, is significantly lower than analogues in the countries of the European Union, the USA and China.

In many respects, the complexity of the implementation of such projects for the management of railway transport is associated with the length of the railway network and the size of the total volume of cargo.

At the same time, it is necessary to further develop the automation of railway transport management, taking into account the following areas:

- centralization of information flows, which allows integrating all key participants at each stage of the transportation process to ensure prompt submission of information;
- development of specialized information systems integrated into a common information system, taking into account the specifics of individual units involved in the process of freight and passenger transportation;
- development of optimal schedules for planning and organizing freight and passenger traffic based on the coordination of orders, as well as the introduction of short-term and medium-term cargo forecasting modules into a common automated control system for the effective management of wagons, it is advisable to develop software products.

In conclusion, it should be noted that the rail transport management system should be in the process of continuous reform. Because in the conditions of the

<sup>&</sup>lt;sup>4</sup> Weilong Wu, Tang Jing, Yang Xiaoli. "Can high-speed train improve the innovation ability of enterprises?" Journal of Applied Economics, Pages 962-982 | Published online: 21 Jun 2022

development of technology and technology and the acceleration of these processes, a number of serious problems of an organizational and technological nature are constantly being updated.

In order to improve the railway transport management system, it is necessary to create schedules for the rational formation of freight traffic and the organization of loading at the destination, the development of interregional integration of freight companies, the optimization of the state of their own wagon fleets, the expansion of networks of logistics centers, the development of a network of high-speed railway lines, it is also advisable to expand research in such areas, as a further increase in the level of automation.

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