METHODOLOGICAL APPROACH TO QUALITY ASSESSMENT OF TRANSPORT AND LOGISTICS SERVICES

Abstract: This scientific article is devoted to the consideration of creating of the activity of transport and logistics services’ market and development of the assessment technique applied for its quality assessment. The main aim of researching and assessing transport and logistics services is to select the indicators determining the integral assessment of the quality of the services provided by the transportation company, as well as the quality of services themselves rendered to customers. In addition, the article considers the possibilities of applying these indicators into the assessment process. The practical application of the research results, ensuring balanced potential of the transportation companies and customers will facilitate implementation of innovative measures aimed at strategic development.

Key words: transport, logistics, services market, quality, company, customer, quality integral assessment, strategic development, innovative measures, potential.

Language: English

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INTRODUCTION

The issue of improving the quality and enhancing the scope of services provided on the marketing principles by the companies operating in the transport services market represents a particular urgency since the end of the last century and nowadays. Meanwhile, it should be noted that the transport services market has been developed as a single market in our country from the beginning of the last century and is currently improving its existing tendencies.

According to the data provided by the World Bank and other international agencies, the share of the global transport services market in the world’s GDP amounts to 4.2 trillion USD or 6.8%. The advancement of the transport system is closely related to the development of national economic sectors and is characterized by the specific role of the national transport system in the international system of transport services. This peculiarity is determined by the fact that Uzbekistan is located on the cross-road – so-called communication lines connecting Europe with the center and the eastern part of Asia. This is considered to be one of the key factors in the formation and development of the transport services market in our country.

URGENCY

It should be noted that the core function of logistics and transport represents the transportation process optimization and this fact is obvious from its essence, etymologic foundation and history of occurrence. Speaking about the development of the transport and logistics services market, it is crucially important to assess its efficiency, first of all, in terms of the impact made on the national economy development. According to the results of the researches carried out at the same time in the USA, Europe and Japan, the use of logistic principles has led to the reduction of inventories by 30-70%, prime-cost - up to 30%, transport costs – up to 20%, but the labour productivity increased by 25-50%. However, it should be noted that the scientific and methodological developments in our country devoted to the consideration of the volume of transport and logistics services and their impact on the efficiency of

Impact Factor:

| Journal                  | Impact Factor |
|--------------------------|---------------|
| ISRA (India)             | 3.117         |
| ISI (Dubai, UAE)         | 0.829         |
| GIF (Australia)          | 0.564         |
| JIF                      | 1.500         |
| SIS (USA)                | 0.912         |
| PIIH (Russia)            | 0.156         |
| ESJI (KZ)                | 8.716         |
| JIF (Morocco)            | 5.667         |
| ICV (Poland)             | 6.630         |
| PIF (India)              | 1.940         |
| IBI (India)              | 4.260         |
| OAJI (USA)               | 0.350         |
Economic sectors are still inadequate. In our opinion, theoretical and methodological opportunities for optimizing the transport and logistics services market are examined from the point of view of marketing principles, and thus ensuring the quality of logistics services and achieving optimal performance in transport constitute the core issue. In the process of managing quality of transport services, the peculiarities of this type of services provide the opportunity to monitor and assess lifecycle stages of transport services and quality indicators and, if necessary, make necessary changes thereto.

**DEGREE OF THE PROBLEM STUDY**

The solution of this problem is considered to be a complicated issue due to the high level of variability and uncertainty. It should be noted that random circumstances, price levels, changes in customer peculiarities, as well as other internal and external factors make their specific impact. Scientific-theoretical and methodological issues of the transport services market development are reflected in scientific papers and researches of such economists as I.I. Dyumulen, G.L. Azoyev, A.P. Chelenkov, A.A. Vovok, V.V. Davnis, I.Tinyakova, V.A. Fursov, Ye.Budrina, I.Prokopenko, N.Yu.Ivashchenko, S.I. Gritsenko.

In addition, according to the opinion of A.A.Timonin, such functional factors as logistical support for automobile transportation services, as well as logistics itself and marketing are crucial to make an impact. From the point of view of A. Soliev, that the quality of logistics services is typically influenced by the assessment of the customer’s preferences and desires, the ideas and behaviors of consumers in the market, as well as some particular research and psychological methods. In the monograph of V.I. Gissin devoted to the logistics system quality management, the relationship between the logistics chain and the elements of the quality of motor vehicle transportation services has been studied in terms of transforming the general logistic approaches into the transportation system.

**MAIN PART OF THE RESEARCH**

The fact that transport and logistics services have intangible nature which is distinguished by the weightlessness, imperceptibility, individuality, impossibility for storage and unstable quality is reflected in the statement that they cannot be not materially evaluated as a product. Thus, the process of rendering this type of services in line with the customer service should be obvious and evaluated as the process of assessing the quality of the transport and logistics services. It should be treated as the process that affects the number and composition of customers, which, as a result, will lead to the growth of the revenues of the automobile operating company.

An analysis of various methods and techniques used for assessing methods of service quality shows that obtaining objective results on the quality of transport and logistics services rendered by a transport service company is currently considered to be one of the most problematic issues. In this regard in the article we propose the following methodology for evaluating the process of rendering transport and logistics services based on the integral indicator taking into account the impact of the internal and external factors. It should be mentioned that this proposed methodology represents the improved technique of the methodology proposed by the scientists who made researches in this field (See Figure 1).

![Figure 1. Model for integral assessment of the transport and logistics services](image)

\[
Q_{\text{АОСasses}}\leq Q_{\text{cust}}\leq 1 \quad (1)
\]

1 Developed by the author
where:

\[ Q_{\text{AOC}} = \text{assessing the quality of the performance of the automobile operating company; } \]
\[ Q_{\text{cust}} = \text{assessment degree of services by customers; } \]

conventional values:

\[ I_{ij} = \text{integral assessment of the quality of transport and logistics services; } \]
\[ Q_{\text{AOC}} = \text{quality degree of the company performance; } \]
\[ Q_{\text{cust}} = \text{quality degree of services rendered to customers; } \]
\[ q_{\text{loc1}}, q_{\text{loc2}}, q_{\text{locn}} = \text{degree of indicators of the certain transport operating company; } \]
\[ q_{\text{cust1}}, q_{\text{cust2}}, q_{\text{custn}} = \text{degree of the indicators of certain transport and logistics services assessed by customers. } \]

The purpose and essence of this method is to ensure the balance of the transport operating company and customer capacity and to balance local capacities, in particular, the introduction of innovative activities aimed at strategic development, as well as the process of ensuring the required quality indicators.

The assessment of the integral indicators of transport and logistics services on the basis of this method specified above can be summarized as follows:

\[ I_{ij} = Q_{\text{AOC}} k_{1i} + Q_{\text{cust}} k_{2j} \] (2)

here \( Q_{\text{AOC}}, Q_{\text{cust}} \) – relevant assessment of internal and external factors; \( k_{1i}, k_{2j} \) – relevant coefficients significance of the company’s performance and services rendered.

To achieve significance of the method it is compulsory to accomplish condition of \( Q_{\text{AOC}} + Q_{\text{cust}} = 1 \).

Using the coefficients it is possible to assess the company’s performance, in particular, internal indicators:

\[ Q_{\text{AOC}} = \sum_{i=1}^{n} G_{ij} * k_{ij} \] (3)

here \( Q_{\text{AOC}} \) – integral assessment of internal indicators of the company’s performance;

\( n \) – number of assessing parameters in the structure of internal indicators;

\( G_{ij} \) – correction factor complied with the assessment criterion;

\( k_{ij} \) – assessment criterion determined with the help of the expert method, can be between 0-1 series.

In the similar way it is possible to assess external indicators of the transport and logistics services:

\[ Q_{\text{cust}} = \sum_{i=1}^{m} S_{ij} * k_{ij} \] (4)

here \( Q_{\text{cust}} \) – integral assessment of the indicators assigned by customers to transport and logistics services; \( m \) – assessing parameters in the structure of external indicators;

\( S_{ij} \) – correction factor complied with the assessment criterion;

\( k_{ij} \) – assessment criterion.

The following factors make an impact on the process of rendering transport and logistics services:

- type and technical condition of the movement structure;
- inventory and logistics management;
- human resources;
- information provision;
- supply of fuel and lubricants, as well as spare parts;
- maintenance operations and repair works;
- external environment;
- economic factors;
- organizational factors and others.

Analysis of the market processes and application of logistics approach for the assessment can be considered as the type of integral model for the quality of the services rendered by the transport and logistics companies. Herewith it is necessary to take into account interrelations between market entities, trend for their change and various factors.

**RESEARCH RESULTS**

Market of transport and logistics services implies relations between its participants and their mutual cooperation. To achieve success under conditions of the competition, satisfaction of the customers’ preferences and desires to the maximum extent is considered to be one of top-target priorities. In this regard the company should develop the strategy for its performance as well. Thus, under the influence of internal and external factors the methodology for assessing the quality of transport and logistics services which reflects the company’s potential and customers’ needs has been elaborated with the account of these facts. This proposed methodology enables to optimize the balance of the integral indicators for the transportation services quality.

In should be noted that the criteria are systematized, parameters of internal and external indicators are selected, and the assessment based on the developed methodology is performed in the process of assessing the efficiency of transport and logistics services.

In the process of access to international markets, on the basis of the application of the innovative technologies, efficiency of the transportation companies will be evaluated with the aim of enhancing the competitiveness of transport services and effectiveness of these transport operating companies. The result of implementing the model for integral model to assess the quality of the services
rendered by the transport logistics companies will make an impact on the increase of the revenue of the transport operating companies in future.

CONCLUSION

The findings of the research justify the necessity ensuring interrelation between the sale of transport and logistics services and conducting marketing research. Herein it is crucial for the managers of the sector not to know a great variety of indicators, but rather have an adequately defined and well-structured information standard.

The methodology of assessing the quality of the services rendered by transport and logistics companies on the basis of the integral indicators with the account of internal and external factors will facilitate provision of balance of the transport operating company and customers, implementation of innovation measures directed to the strategic development of the local capacities, ensuring efficient management of the process of providing quality indicators required for rendering services. The advanced research methods such as qualitative and quantitative analysis used in the process of studying current market trends enhance the opportunity of developing relevant proposals and recommendations.

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