## QUALITY IS A BETTER INCENTIVE THAN PRICE REDUCTION

Kurenkov, Petr V., Moscow State University of Railway Engineering, Moscow, Russia.



**REVIEW OF THE BOOK:** Sokolov, Yu. I., Lavrov, I.M. Methods of economic assessment of transport service quality of cargo owners in a multiplicity of transportation process' participants. Moscow, Zolotoe sechenie publ., 2015, 168 p.

**ABSTRACT OF THE BOOK.** The monograph provides a set of methods for economic evaluation and quality control of transport service of cargo owners. The terms and condition of the rail transportation market, the specifics of the competition in the presence of a multiplicity of actors and owners of rolling stock are shown.

**ABSTRACT OF THE REVIEW**. The author of the review insists that the value of transport service for cargo owners in modern conditions can be described at two levels. The first one is general economic (e.g. price and non-price methods of promoting sales). The second level is industrial. The fact is that rail transport is transporting products of almost all economic sectors. Therefore, insufficient transport service quality of cargo owners turns into enormous losses in the economy. Through increasing transport service quality, a significant effect shapes out both in transport sector and beyond. Nontransport effect is obtained by cargo owners (reduction of losses, delivery

acceleration, etc.), budgets (growth of tax revenues) and other entities. Thus, improving the quality of transport services, that is both scientific and practical problem, is essential to the national economy.

Consequently and see the studies on the quality of transportation services, a transport company should invest in improving quality, while having reliable tools, able to predict customer's reaction. That reaction has the most direct impact on the performance of payback of funds invested in quality improvement. Another urgent problem is evaluation of external effects arising from quality improvement. The author of the review analyzes different aspects of the topic and concludes that the reviewed monograph can be deemed to have made a valuable contribution to understanding and solving of the problems related to the transport quality improvement and its impact regarding different actors.

<u>Keywords</u>: economy, transport, transportation process, cargo owners, quality of service, quality management, assessment methods.

he value of transport service of cargo owners in modern conditions can be described at two levels. The first one is general economic. Due to the presence of market and competition manufacturers are required to implement measures to promote sales of their products, to form competitive advantages, allowing tighter binding the client and thus ensuring a successful market operation and development.

Methods which promote sales can be divided into price and non-price. With the first category everything is clear - the lower is the price, the greater is the discount, the more likely the customer will choose you. However, the price advantage is not reliable enough now: the price of procured resources increase, so increase the tariff for electricity – and cost advantage may be lost. As for nonprice methods of sales promotion, they refer primarily to exhibitions, fairs, presentations, etc. But all of them are one-time events, they give their effect, but it is short, and these measures themselves are quite expensive. The most important method of sales promotion, in our opinion, is an increase in the quality of products, bringing the properties of goods and services to a level that is fully consistent with customer's wishes. In this case, persistent consumer preferences are formed, weakly depending on the price. This means that if our products satisfy the client completely, he will not give up the consumption, even in the event of a price increase (for example, in case of rising prices for resources consumed).

The second level is industrial. The fact is that rail transport is transporting products of almost all sectors of material production, and in large volumes. Therefore, insufficient transport service quality of cargo owners turns

into enormous losses in the economy. These are physical losses in transit of goods (spillage through cracks of the body, erosion, theft, etc.), on manufacture or extraction of which a lot of money has already been spent. This is slowdown in the turnover of companies' capital because of insufficient speed, downtime due to the inconsistency of actions of transportation process participants and other reasons. This is the destruction of goods in case of accidents or a train wreck.

By an increase in the transport service quality, on the contrary, a significant effect forms both in transport sector and beyond. Non-transport effect is obtained by cargo owners (reduction of losses, delivery acceleration, etc.), budgets (growth of tax revenues) and other entities. Transport companies gain the effect from attracting additional traffic volumes, provision of high-quality transport services at a higher price, etc.

Thus, improving the quality of transport services, both scientific and practical problem, is essential to the national economy.

The scientific problem of improving the quality of transport service was set by Russian scientists a long time ago. As the pioneering works in this field it is worth mentioning the works of T.S. Khachaturov and I.V. Belov, which were published in 1957. Both publications were devoted to acceleration of goods delivery and improvement of motion speed on railways.

Without going into a detailed tour concerning the history over the scientific field, related to quality management in transport, we note that in 1970-1980 appeared masterworks of M. F. Trihunkov, V. G. Galaburda, A.D. Shishkov (MIIT), A.V. Komarov (IKTP), V.K. Besh-





keto(NIIZhT), V.L. Belozerov(LIIZhT) and other scientists. They formed an economic theory of transportation process quality with reliance on technology of transport production and access to indicators of economic efficiency.

Since 1990-ies, after the transition of the country to a market economy, the role of product quality has increased significantly. The higher development was achieved by the system of indicators of transport service quality, focused, first of all, on the client's interests.

In particular, a greater importance was gained by assessment of the quality's impact on demand for transportation, claimed by cargo owners. After all, investing in improving quality, a transport company must have tools to predict customer's reaction, values of additional demand that will be presented. This is the most direct impact on the performance of payback of funds invested in quality improvement. Soviet transport science assessed the effectiveness of quality improvement primarily based on comparison of rail transport costs values, before and after growth of indicators, complying with the new level. This approach cannot be considered objective, it does not take into account changes in income of the transport company (in other words – client's reaction to quality change).

Another problem that was put by the practice is separation of freight car operators, carriers and infrastructure owners. Previously, there were two interacting parties of transportation process – railway and cargo owner. At default of a given level of quality railway indemnified the cargo owner for the damage.

Currently, regulatory framework is required, which will create a basis of interaction between transportation process participants in a new format. To do this, it is necessary to clearly define a possible influence of an operator, a carrier and an infrastructure owner on provision of quality in its various manifestations.

Another urgent problem is evaluation of external effects arising from quality improvement. If previously there was a clear division between transport and non-transport effect, now an «intermediate» link appeared when one of the transportation process participants invested in improving the quality (for example, an infrastructure owner had built the second track and eliminated a «bottleneck» that led to an increase in traffic), and the effect will be divided between all three transportation participants. For this fact there is no established term, but you should still be able to figure out a received profit and take it into account for each of interacting process' participants.

A significant contribution to understanding the above problems makes the monograph under review.

The authors investigated in detail freight transportation market, noted that it is currently in a state of active transformation: ongoing structural changes in rail transport, main pipelines and roads are under construction, the scope of the use of motor vehicles increases.

Problems, formulated by the authors, are specific to transportation market (presence of territorial and structural imbalances in the railway transport development, insufficient quality level and insufficient availability of transportation services, etc.) lead the reader to recognize the relevance of problems of quality management in transport sector, which are considered in the second and subsequent chapters of the monograph.

In the second chapter, the authors systematized and streamlined economic theory in the sphere of transport

service quality, presented a system of quality indicators, stated shortcomings typical, in the authors' opinion, of existing quality management systems in transportation market

However, the first and second chapters of the monograph, are rich in substantial digital and theoretical material, as well as numerous references to the works of predecessors, are more of an introductory nature. The most interesting material, from our point of view, starts with the third chapter. Here is an analysis of the dynamics of the transport service quality level in relation to a wide range of indicators collected in the framework of the project "Quality Index", implemented by the journal "RZD"-Partner" and the newspaper "Gudok" with participation of scientific community, including the authors of the book under review.

The authors show a kind of «selection» of transport service quality indicators. The method of complex assessment based on the survey of cargo owners successfully complements existing techniques, which focus on the railway statistical reporting.

A pattern obtained by the authors by means of calculation – a negative correlation between the values of quality indicators and their significance for clients (the lower is the index, the more important it is for the consumer) is interesting and requires a special attention.

The fourth chapter contains a very important and topical issue of provision of transport service quality under the division of functions of a rolling stock operator, a carrier and an infrastructure owner. The authors came to a conclusion, on the basis of system analysis and modeling of economic processes in transport sphere, about a leading role of an infrastructure owner in provision of transportation quality.

Another also important issue, disclosed by the authors in the fifth chapter, is the dependence of transport demand on the level of rendered transport services quality and customer's satisfaction with railway tariffs level. The authors proposed a method of estimating the elasticity of demand for transportation with its projection on the transport service quality. The issue had repeatedly been raised by scientists of the industry, but remained unresolved due to a complexity of calculations and a lack of baseline data. The attempt was successful this time.

Another comparison, made by the authors, is of interest, which concerns the impact of price and non-price factors on the demand, and their conclusions that in the current environment of quality improvement twice as intensely stimulates demand than a similar (percentage wise) reduction in the price.

The monograph ends with a method of estimating the cost-effectiveness of transport service quality improvement of cargo owners. The introduction of the index of non-price elasticity of demand in this technique has allowed, in contrast to the traditional approach based on cost savings, offer new and original approach, focused on the forecast of transport company revenues while increasing quality.

Thus, the analysis of the monograph of Yu. I. So-kolov and I. M. Lavrov leads to the conclusion that this edition is a worthy continuation and development of the research of the economic school of MIIT, contains a number of original scientific principles, embodied in techniques and tested on real data.

Information about the author:

**Kurenkov, Petr V.** – D.Sc. (Economics), professor of Moscow State University of Railway Engineering, Moscow, Russia, petrkurenkov@mail.ru.

Review received 1.06.2015, accepted 26.06.2015.