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**THE USE OF ADAPTIVE MANAGEMENT TO IMPROVE THE  
QUALITY OF LOGISTICS SERVICES**

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***Abstract***

The article suggests ways to achieve adaptive management decisions in the process of providing transport services. A mechanism for the implementation of the Transport Strategy in the subjects of the Russian Federation based on the development of programs to optimize urban passenger transport is presented. It has been proposed to use logistic tools both for the continuous improvement of transport services, identifying consumer preferences and market opportunities, and as the basis of a management strategy encouraging innovations. It is reflected that structural changes require adequate conditions in Russian economy in order to stimulate competitive development of the transport market. The innovation process is not the result of random entrepreneurial ideas; strategic planning and market-oriented management are required. Internal reserves to reduce transport and logistics costs are priorities, as they have an impact on the quality of transport services and population mobility. Improving the implementation of transport services based on logistics approaches in the management of passenger traffic is possible by optimizing internal and external reserves, ensuring the effective application of logistics technologies and introducing innovations in the system of passenger traffic management. Strategically, the development of transport services occurs in accordance with the analysis of the existing problems in the transport system and global trends in the economy, including the directions of the country's socio-economic development.

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**Keywords:** Logistics services, transport services, transport process, adaptability, quality standard, optimization.



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## **1. Introduction**

Transport activity is an indicator of general trends in the domestic and world economy, which links all other areas of human activity, which is explained by its “cross-cutting” character. The entire list of transport services provided during the organization of passenger traffic and cargo flows allows the operation of other industries. Current trends in the market of transport services demonstrate increased competition among transport organizations, the methods of price and non-price competition are used, as the struggle for the customer is growing. The increase in the level of the company’s competitive advantage and the services provided is directly attributed to the improvement of quality, the requirements for which are determined by the time of provision.

Customer loyalty as a result of the contact, prior to the process of providing a transport service, certainly has an impact on the performance and ensures the necessary quality of the service. The following components should maximally meet the needs of customers, influencing the final result: organization of vehicle maintenance, rational distribution of material flows, timely supply of components and fuel and lubricants, selection of optimal routes and schedules.

## **2. Problem Statement**

The authors set the task to find and determine trends and ways of identifying the adaptability of management decisions in the provision of logistics services and the ability to ensure the quality of transport services based on the choice of adaptive management decisions.

Modern conditions require new methods, organizational and economic management mechanisms while ensuring the coherence of actions of various actors in the market of motor transport services and improving the performance of transport enterprises. The use of an innovative approach to transport management will increase the competitive advantage of transport companies and will improve the process of providing transport services with the appropriate quality level of transport services and with minimal costs while meeting the demand for transportation and delivery to destinations. The development of public-private partnerships to solve the problems of the social transport segment makes an adaptive approach to the development of a system of incentives for attracting independent carriers and allows for the formation of inter-corporate coordination of participants in the provision of transport services in order to better serve consumers and match the interests of transport companies of various forms of ownership.

The search for new ways of passenger transport functioning in the conditions of the innovative economy determines the directions for optimizing passenger traffic and business processes to increase vehicle utilization efficiency and achieve a high level of passenger logistics services.

The relevance of the study is due to the need to find adaptive management decisions in the process of providing transport services.

## **3. Research Questions**

The basis or prerequisites for the formulation of research questions are: 1) lack of knowledge, scientific ideas and facts reflecting the potential use of adaptive solutions when providing logistics services and 2) their inconsistency in the works of different authors.

The main research questions on this topic include the following: if there are new ways to achieve adaptive management decisions, and if so, which ones.

In world practice, the service sector is developing at a high rate and becoming the branch of application of free capital, which has led to the emergence of a sufficient amount of research and scientific and practical developments in this field. The key direction in the economy is the study of the principles, methods of improving the quality of a company.

#### **4. Purpose of the Study**

The purpose of the study is to identify directions for achieving adaptability of management decisions in the process of providing logistics services.

The quality of services has the following characteristics: discrepancy between production and consumption of services; inconsistency, heterogeneity; the need to involve the consumer in the process of providing the service; the lack of an accurate forecast of the result of the service. Of course, this determines the need to find an approach to management, which will differ from the known methods in product quality management.

#### **5. Research Methods**

The issues of reforming the services sector are still relevant for the country's economy, which is explained by the increasing requirements for the quality of services that are formed in innovative technical, technological, organizational and managerial decisions. However, their introduction occurs in the conditions of turbulence of the external economic environment, which requires the adoption of adaptive management changes to this change (Prokofieva, 2010).

The lack of an efficient transport system makes it difficult for the population to move its mobility, which affects the satisfaction of the population's need for quality transport services and, as a result, the development of regional labor markets and the region's economy. The main problems hindering the development of the transport industry in Russia are the low level of availability and quality of transport services, the inadequate level of transport security, and the adverse impact of transport on the environment (Zakharova, Popova, & Stepanova, 2014).

The competitive advantage of transport companies is due to the quality of logistics, due to the optimization of service and material, financial, information flows (Khairova, 2013). Therefore, when enhancing the competitive advantage of transport, it is important to improve the quality of transport services. The development of the industry is focused on meeting the needs of the population in the provision of quality transport services, which are not interested in the performance indicators of transport service providers. They focus on obtaining high-quality transport services, including their availability and price.

The Ministry of Transport of the Russian Federation is developing the Minimum Transport Standard, containing indicators of the consumption of transport services. The transport infrastructure should be developed in the regions of Russia taking into account this standard. The system of social transport standards is also required for municipalities. However, the normative values of the Minimum Transport Standard (MTS) indicators for various subjects will be different.

Availability of safe and high-quality transport services is a prerequisite for improving the quality of life of the population and economic growth, which is reflected in the Transport Strategy of the Russian Federation for the period up to 2030, where the main goals in the field of public transport are defined as ensuring the quality of transport services for the population in accordance with social standards, and reducing the negative impact of transport on the environment (Transport Strategy of the Russian Federation)

So, the quality of transport services is characterized by a set of indicators of the transport process, which determine their compliance with regulatory requirements, which allow meeting the needs of residents in accordance with the goal of services.

In order to implement quality transport services, the Transport Strategy defines the following: elements of technology, regulatory framework and methods of government regulation; parameters, quality standards, forms and methods for their provision. It is planned to increase transport mobility for the period 2010-2030 by 44%, which is associated with a reduction in the average time of transport accessibility by 5 times (Klimova & Semenova, 2015).

Russian as well as foreign researchers consider the service as a process, which is presented in Table 01.

**Table 01.** Systematization of a service definition as a process

Definition of the term “service”	Author
A service is an action or process offered by one party to another	Lavlock (2005)
A service as a type of activity is linked with the process of providing or performing this service	Sosunova & Chernova (2003)
A service is a specific product, which is a sequence of interaction processes between a producer’s system and a consumer’s system in satisfying the fundamental benefits that exist and that have a customer value only if these systems are inextricably linked	Semenov & Vasilyeva (2001)
A service has a process character and is carried out as a useful work activity determined by need; creates new consumer values based on supply and demand between the producer and the consumer of services	Chernova & Popov (2007)

Note: Source: systemized by the authors

An analysis of interpretations to the definition of “service” identified its common basis with the process, clarifying the concept of the process as a stream of controlled, regulated work carried out by structural elements of an organization aimed at a result when using resources to satisfy customers.

The process approach to adapting management decisions to reality is interesting because it not only analyzes individual management processes, but also gets a rationale for their positioning mechanism in the organization’s management, which consists of interdependencies that ensure an integrated process of effective management that is oriented to the demands of users of the organization’s services in accordance with the current economic situation and market conditions.

In practice, it is necessary to rely on a scheme that characterizes any system as flows: incoming, intermediate (internal) and outgoing material (inventory), service, financial and information flows. So, the

peculiarity of streaming processes of service organizations is the transformation of material flows into service ones (Sosunova & Chernova, 2003).

The adaptability of management decisions in the field of service are in the range: from the ordinary security of service organizations to the successful and efficient functioning; which requires the development of a strategy to ensure organizational and economic reliability and sustainability of the integrated management system in order to improve the quality of the services provided (Drucker, 2009).

One of the principles of quality management is a process approach to managing an organization. The main and most important business process in a freight forwarding company is the processing of a client's request.

Highlight the steps of the comparative assessment of processes in the scenario approach:

- Primary retrospective analysis to highlight the problems of the process and to diagnose the depth of the problems, their consequences;

- Trend analysis for positioning the current situation in the process and the choice of its real future position taking into account the patterns in the development of processes;

- Matrix analysis begins with the selection and evaluation of key indicators for the selected criteria, including indicators of the market position of transport services;

- Rating analysis based on the scoring of the results with the allocation of favorable, transitional and crisis conditions to systemize problems with the allocation of crisis periods of their occurrence.

- Scenario analysis, within the framework of which, according to the results of the rating, an opinion is given on key groups of indicators on the possibility for further development of the process.

- Predictive analysis to calculate the expected effect, drawing up a plan, i.e. purposeful implementation of the improvement process, improving the performance of the transport organization (Imai, 2004).

As a result, the process approach makes it possible to substantiate alternative decision-making options that help sustain the organization's stability in the logistics services market.

In order to implement joint actions to improve the quality of service and the level of customer satisfaction, market tools solve specific problems using their inherent techniques. Marketing and logistics will best work in a multilateral partnership, because of its consistency (Kalashnikov, Yudakov, Rakhmatullina, Sivaks, & Permyakova, 2018).

Interaction in the supply chain based on basic and innovative logistics improves along with technological and managerial methods of working with suppliers and customers. Drucker (2009) and other scientists assign an important role to competencies of managers for the successful management of innovative companies, including leadership in logistics. In the 1990s, the Kaizen Continuous Improvement Concept emerged as a key management principle, the content of which is the continuous improvement of the system based on small and systematic improvements. When a business entity is able to adapt its decisions to the current situation on the transport services market and apply tools and methods for managing material flows and creating value added in the supply chains of goods (Khairova, 2014).

Universal logistics companies are able to undertake obligations to provide not only a logistics service, but also a full range of services for the storage and insurance of goods, their purchase and transportation, possibly sorting and picking, accompanying these services with information support.

Various studies have shown that a model service company is characterized by the presence of a strategic planning system, management's desire to improve the quality of service, high standards of service, a system of control over the provision of services, a system for satisfying consumer complaints. It focuses on staff and customer satisfaction (Aaker, 2007).

## **6. Findings**

Modeling changes in economic systems using a synergistic approach and innovative logistics tools will take into account the following features: nonlinearity of changes in economic systems; the ability of the economic system to a qualitative leap; multivariate, alternative development systems; the highest level of developmental uncertainty (Khairova, 2005).

Most approaches to the development of modern economics are associated with trends in quality management expressed in the concepts of total quality management in organizations (Roberts & Dowling, 2002).

The quality of services in logistics is determined by the degree of discrepancy between the expected and actual parameters (Myles, 2005). The quality assurance standards set forth the concept of "quality of the services provided", defined as "the commonality of all features of a single product or service, which refers to the ability of a product or service to fulfill specified or implied requirements" in accordance with the ISO 8402 terminological standard of the types of products, but has a number of features that allow you to select it as an independent object of study.

## **7. Conclusion**

The innovation process is not the result of random entrepreneurial ideas; strategic planning and market-oriented management are required. A solution in innovation management can be found by adopting adaptive solutions based on new, time-appropriate methods, tools and levers offered in the framework of economic synergetics, including those based on logistics tools (Zhiang, Haibin, Bindu, Zhi, & Dan, 2005).

The essence of the concept of universal quality management is in the process of continuous improvement of activities at each level of management, in each functional area of the organization, using all available human and material resources. The mention of product quality is not accidental, since the application of the principles of logistics in production management allows you to directly implement such quality management principles as mutually beneficial relationships with suppliers, a process approach, a systems approach and customer orientation. One of the most decisive factors in the marketing of goods and services is the determination of the quality of services (Deutsch Yuval, 2005).

The quality of services is determined by the requirements of consumers. Therefore, these requirements must be clearly articulated and assessed using a system of indicators. Deviation from the planned indicators means that the service is of inadequate quality (or insufficient level). For the logistic optimization of the service it is necessary: to assess the quality of services in order to minimize the differences between the expected consumers and the actual values of indicators of the quality of services. Therefore, it becomes expedient to transfer part of the technological process or customer service

operations to outsourcing to specialized organizations in order to obtain a higher quality product or create a service of greater added value for consumers and optimize financial costs.

The most important indicator is the reliability of the services provided. Next are responsiveness, competence, understanding, tangibility. However, the ratio of individual parameters may vary in each specific situation. The main difficulty in assessing the quality of services is that most of the parameters cannot be quantified (for example, competence, mutual understanding, tangibility).

The demand for logistics and innovation in the organization and management of passenger traffic in road transport is organically linked to the increasingly complex nature of the task to streamline traffic and optimize passenger traffic, using various opportunities to improve the competitive advantage of transport companies, including through the adoption of innovative logistics solutions and intensifying automation processes in passenger management systems and ticketing, as well as and monitoring passenger traffic.

At the moment, innovative management technologies are emerging, business models are being revised, latent management reserves are not used, the best world experience is being studied and the possibility of using it in Russian conditions is defined taking into account adjustments to existing realities (Stephan, Patterson, Kelly, & Mair, 2016).

To optimize the provision of logistics services, it is necessary to assess the quality of transport services using a system of indicators ranked according to their importance to passengers and minimize negative differences between expected customers and actual values of road transport quality indicators. This requires constant monitoring of environmental factors, competitors and own resources, quality control of logistics services, and passenger satisfaction with completed orders (Helfat & Martin, 2015).

The management of the transport company should set a specific set of quality control goals for the staff, including the precise implementation of all aspects of customer orders, compliance with transportation time, continuous monitoring of meeting passengers' requirements for the logistics service system, optimization of logistics costs to maintain the required level of transport services, integration of available information technology resources and the practical implementation of advanced technology (Vadera, Mishra, & Pratt, 2013).

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