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THE IMPROVEMENT OF THE LOGISTIC ACTIVITY OF AN AUTOMOBILE TRANSPORT ENTERPRISE

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The article presents an overview of the logistic activity of the automobile transport enterprise, considers the planning and organization of the transport process, suggests the main ways to improve the logistics activities of the automobile transport enterprise.

The transport is one of the most important branches of the national economy, performing the function of a peculiar circulatory system in the complex organism of the country. It not only provides for the needs of business entities and the population in transportation, but also, together with cities, forms the framework of the territory, is the largest component of the logistics infrastructure, serves as a material and technical base for the formation and development of the territorial division of labor, has a significant impact on the dynamism and efficiency of the social-economic development of individual regions and the country as a whole.

The transport economy is the artery of the enterprise, which connects the material flows. The rhythm and quality of the transport services provided determine the stability and efficiency of the enterprise as a whole.

There are different types of transport and, despite their many positive characteristics, the most convenient and convenient way of delivering goods and cargo directly to the destination remains the automobile transport.

The automobile transport is the most popular and often used form of transport in logistics systems. This is due to its advantages such as high speed of delivery, flexibility, dynamism, high availability, the possibility of delivering cargo "from door to door". The automobile transport performs more than 50% of the total volume of cargo transportation and in fact is the main carrier [1].

Since the demand for transport services corresponds to the nature of economic growth, the prospects for the development of the automobile transport will be determined by the future demand for transportation, and the successful development of the market economy is accompanied by structural changes not only in the national economy, but also in the transport system itself.

The market economy has significantly changed the conditions for the operation of the automobile transport and the nature of the demand for its services. Denationalization of automobile transport enterprises contributed to the expansion of their economic rights and opportunities, the formation of commercial structures and the development of entrepreneurial activities. The development of the transport services market has put the automobile transport enterprises in new economic conditions, characterized by a tough competitive environment. The ability of the automobile transport enterprises to survive in modern market conditions is determined by competitiveness, the level of which can not be improved without applying the latest scientific forms, methods and technologies in the production process [2].

The activity of automobile transport enterprises in market conditions differs also in that the service that, like any product, has its own quality is put first, and only the transportation, measured by such gross indicator as freight turnover or volume of transportation, was considered to be the product of the automobile transport.

The services of automobile transport enterprises include the carriage of goods, the preparation of goods for transportation, handling and handling services, storage services, freight forwarding services, the provision of vehicles for rent and other additional services.

The important aspect of the transport process is the planning of cargo transportation. Planning a production program at any enterprise is a multifaceted process, the correctness of which depends on the achievement of the stated objective.

This is due to both a reduction in the duration of commercial operations, as well as an increase in the cost of storage, the need for rapid response to changes in consumer demand. So, the cost of producing some goods is only about 10% of their value, while the cost of delivery can be up to 50%. That is why in the conditions of the intensified competition, one of the directions of attracting customers is optimization of delivery design and transportation planning.

The basis for planning the transportation are schedules and schedules of transportation, compiled on the basis of the systematization of concluded contracts, filed applications, the study of freight flows. The latter assumes the analysis of cargo transportation for a certain period of time, both on individual routes, and on the entire route network.

Economics

Timetables and graphs should ensure:

- meeting the needs of the largest number of customers;
- maximum use of the capacity of vehicles in accordance with established standards;
- minimization of time spent on transportation;
- regularity of transportation;
- effective use of vehicles;
- relationship with schedules and schedules of other types of vehicles;
- minimization of empty runs of rolling stock [3].

If we talk about the most important logistics tasks to be solved by the automobile transport enterprises, we can single out such as the definition of optimal routes for the delivery of transported goods.

The movement of vehicles occurs along the routes. The route of the movement is the way of the vehicle when performing transportation. When designing the routes, it should be borne in mind that they should ensure the lowest transportation costs. Proper routing of traffic has a significant impact on the total amount of transportation costs.

The turnover of the rolling stock is a complete cycle of movement, i.e. movement along the entire route (with a return to the starting point) with the implementation of the corresponding operations [4].

The routing allows you to optimize cargo flows, taking into account the volume, direction and distance of traffic, the length of time, the load of different categories of traffic, the sequence of traffic, the efficiency of delivery.

The compilation of routes for the movement of vehicles is the main task of the automobile transport enterprise. The choice of the optimal option, which will give the best opportunities for increasing productivity, speed of delivery of goods and reducing the cost of transportation in specific operating conditions of rolling stock, is made with the help of computer tools. An approximate solution is obtained by drawing up cargo flows and arranging loading and unloading points on the map of the locality, focusing on the maximum reduction of zero and idle runs, reducing the idle time of the rolling stock and increasing the use of its carrying capacity.

The introduction of automated logistics systems in automobile transport enterprises will solve the problem of choosing the route and the intensity of transportation. With the help of such systems, it is possible to quickly and easily calculate optimal flights and routes based on incoming applications for the delivery of goods, an electronic map of the territory describing the transport network, delivery addresses and warehouses. In this case, the calculated routes will be optimized for such parameters as the minimum mileage of all cars and the maximum loading of each vehicle.

In the sphere of transport, the main directions for further practical application and development of logistics are related to radio frequency identification technology, the use of satellite navigation systems, the Internet network.

Radio-frequency technology for the identification of goods and carriers is known for more than thirty years, but only relatively recently, this technology has become more widely used in transport logistics. The spread of satellite technologies contributed to this.

Satellite technologies are the creation and operation of satellite communication systems, satellite radio navigation systems and dispatching systems for commercial transport management.

Satellite communication systems in conditions of long distances and low population density are of particular importance from the point of view of effective logistics. They allow obtaining objective data on the position in space and time of any transport units. When GPS or GLONASS satellite navigation systems are used, automobile transport enterprises can control the movement of their customers' cargoes at very significant distances (thousands of kilometers) and provide customers with such an opportunity, for example, on the Web site in real time [5].

Satellite monitoring systems allow to reduce transportation costs of enterprises by at least 10-15% due to almost complete suppression of left flights, theft of fuel, reduction of operating costs for the maintenance of vehicles, and the increase in the useful life of the vehicle.

In general, the main areas for improving transport facilities at enterprises are:

- mechanization and automation of transport operations in combination with their high organization;
- introduction of a unified transport technology;
- ensuring accessibility, improving the quality of automobile freight services, increasing the efficiency of automobile transport enterprises;
- Implementation of automated transport management systems;

– connecting the links of the logistics system to a single information network, which will allow tracking the movement of cargo and monitor traffic flows.

All these measures are designed to reduce the amount of transportation costs and deliver the goods just in time.

Thus, to improve the logistic activity of automobile transport enterprises, both the transportation process and the management of transport flows along the whole technological chain are needed, with coverage of the interacting links of different modes of transport. Route planning, organization of transportation up to the details of the process, clear co-ordination between transport participants, automated management system - all this is necessary for a successful road transport company to implement competent logistic policy. This fact is important, because operational logistics work depends to a large extent on the ability to flexibly and skillfully coordinate the work of many participants and, if necessary, to correct possible solutions to emerging problems in the activities of automobile transport enterprises.

REFERENCES

1. Баширзаде, Р.Р. Роль транспорта в обеспечении потоковых процессов логистических систем / Р.Р. Баширзаде, А.В. Пахомова // Логистические системы в глобальной экономике. – Красноярск : Сибирский государственный университет науки и технологий имени академика М.Ф. Решетнева, 2014. – С. 37–43.
2. Рыночная экономика в транспорте [Электронный ресурс]. – Режим доступа: www.logist.ru. – Дата доступа: 08.02.2018.
3. Планирование перевозок груза [Электронный ресурс]. – Режим доступа: <http://proshipping.narod.ru/07.html>. – Дата доступа: 08.02.2018.
4. Ванчукевич, В.Ф. Автомобильные перевозки : учеб. пособие / В.Ф. Ванчукевич, В.Н. Седюкевич, В.С. Холупов. – Минск : Дизайн ПРО, 1999. – 223 с.
5. GPS для мониторинга транспорта [Электронный ресурс]. – Режим доступа: <http://www.monitor-gps.ru/sma/>. – Дата доступа: 08.02.2018.