Application of project financing methods in creating regional information system of road transport

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Abstract. This paper presents an analysis of the main methods of project financing to justify the source of funds when creating a regional information system for road transport, which is a database of the organizational activities operating on the principle of an information platform. The necessity of its use as an integral part of the transport digitalization process, the impact on strategic management and the efficiency of resource use has been substantiated. The functioning of the regional information system, its capabilities and the nature of its influence on the process of strategic management of a motor transport company are described. The possibility of its creation as a regional project has been substantiated in order to obtain the possibility of using project financing as a source of investment. The advantages of using an information system have been highlighted, as well as the main ways for further scientific research in the field of its legal organization and technological use of software. The novelty of the study has been reasoned by the absence of such information systems, as well as its consideration as a regional project that contributes to increasing the competitiveness of the Russian economy through the development of transport.

Keywords: road transport, project financing, information platform

1 Introduction

The creation of a regional information system for road transport requires regulatory support from the authorities and significant financial costs. Considering this process as the implementation of a large regional project, it is necessary to justify the financing options. The main ways used in project financing are self-financing, bank financing and public-private partnership [1, 2].

Finding an acceptable source of investment will enable, first of all, to create a database of road transport enterprises based on an information platform [3, 4], as well as to optimize the formation of strategic management at these enterprises and, in particular, an effective

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resource strategy [5, 6]. In modern conditions, the incorrect definition of development priorities threatens with great financial damage to enterprises and often a loss of their market share. At the same time, the economy challenges enterprises [7, 8], stimulating the creation of modern information products that provide support in making strategic decisions and, if necessary, quickly adjust plans to account for any changes in market conditions.

The novelty of the study is in the approach to the development of this information system as a regional project with the rationale for financial support instruments. As a hypothesis, it can be indicated that the use of an information platform, which is currently gaining popularity in a number of industries, such as construction, trade and others, will help users – motor transport enterprises – to monitor the market situation and optimize management decisions in strategic planning. Since the effectiveness of management in the branches of material production is directly related to the use of resources, both tangible and intangible, which provide a competitive advantage in modern conditions, the creation of such a product is an important task.

Since most of the motor transport enterprises are small and medium-sized businesses that do not have sufficient funds for continuous market analysis, it seems right to involve the administrative resource of the authorities to help organize an information platform that will help accumulate information about all market objects, their competitive advantages, and thus to optimize the processes of their functioning. An increase in freight turnover, as a rule, indicates an increase in economic development in the state, therefore, in order to strengthen the economy in the modern period, the state support seems to be a necessary condition for improving the operation of road transport, as a lever to bring the economy to a new stage of development, or to prevent an economic crisis.

The purpose of this study is to substantiate an effective method of project financing when creating a regional road transport information system as a platform that unites the participants in this process and contributes to the efficient operation of road transport as an industry that ensures the operation of enterprises in almost all areas of activity.

Research objectives: a description of the process of functioning of the regional information system of road transport in order to identify the features of its operation in order to find the most profitable source of funding; considering this platform as a major regional project; fixing the role of authorities in this process; a study of available sources of project financing; a substantiation of the method of project financing, capable of ensuring its creation and operation to improve the efficiency of enterprises connected to this system.

2 Materials and methods

Considering transport as a means of ensuring the development of the economy, it should be noted that information platforms and systems can help identify the competitive advantages of their participants [9, 10], whose activities have recently undergone significant changes. As noted, many road transport enterprises, being small businesses, cannot even optimally organize integration offline. This happens both because of the large number of market participants, and because of the lack of financial, time and human resources. Based on the premise that transport enterprises will ensure a stable state of the economy, serving all its processes, then integration in transport [11-13] and the creation of information platforms allows one to correctly identify the competitive advantages of each participant and, therefore, to effectively allocate resources.

Thus, the regional information system allows segmenting the market using cluster analysis, identifying the potential and market rating of each participant, the level of their competitiveness in each segment. Thanks to this, it is possible to identify the competitive advantages of motor transport enterprises, conduct a survey of consumers, create their own software integrated into this system in order to monitor the state of the market and identify
the dynamics of the potential of participants. These actions require significant financial support, and regional authorities are not always ready to provide it due to the lack of such an opportunity. Therefore, considering this initiative as an investment project allows one to find a solution to this problem and apply project financing methods (Table 1).

If one imagines that this project is just being created and, like most new projects, does not have any assets and own sources, then self-financing in this case cannot be applied. The second direction, bank financing, also has a number of limitations in this case. First of all, it is used for projects that have a high profitability and are guaranteed to bring a stable and good income. Since the risks in this case are quite high due to the lack of analogues, the cost of borrowed capital will also be very high, which will not give the desired effect for the development of road transport in the region. Financing with full recourse implies an unprofitable, small project, which does not correspond to the scale of the information platform, which in the future should integrate all participants in the motor transport services market.

Public-private partnership in such circumstances is a tool that, on the one hand, will ensure the fulfillment of an important task at the regional level, and on the other hand, will attract private investment and contribute to the development of the economy [14, 15]. Analyzing the experience of creating projects using public-private partnerships, it can be noted that Omsk ranks 30th in 2022, having risen from the 36th place over the last two years. One can note the positive experience of using this type of financing in projects of the cultural and housing and communal sectors. However, in other Russian cities there is experience in applying public-private partnerships in the field of digitalization in transport – Ivanovo, Orel, as well as in public transport – Khimki and Penza.

Based on the experience of world practice, it can be noted that project financing is used in projects with a high cost: the construction of tunnels and roads, seaports and airports, bridges, subways and railways. In the future, the regional road transport information system will allow integration with large regional transport infrastructure facilities, since road transport serves all of the above directions and is a link in their work.

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<tr>
<th>Types of project financing</th>
<th>Description</th>
<th>Specifics</th>
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<tbody>
<tr>
<td>Bank</td>
<td>One or more banks may participate with recourse, partial recourse or without it, depending on the riskiness and profitability of the project</td>
<td>Lack of assets to secure the loan. Financing without recourse is used only in highly profitable projects, with full recourse – in the implementation of medium-sized, low-profit projects</td>
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<td>Corporate (self-financing)</td>
<td>Self-financing of the project by the company, a wide variety of long-term and short-term instruments from own and borrowed sources</td>
<td>Allows the use of such instruments and forms of financing as factoring, profit, inventory reduction, depreciation, sale of assets or lines of business, aid, subsidies, grants, dividend reduction, share issue, promissory note issue, investment loans, leasing</td>
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<tr>
<td>Public-private partnership</td>
<td>Public authorities attract private investors on a contractual basis with the condition of compensation for the costs incurred and the sharing of risks. Includes a large number of</td>
<td>The most common form of project financing in developed countries, including when creating socially significant projects: infrastructure, utilities, transport, etc. The duration of</td>
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3 Results

The formation of a regional information system for road transport today is a promising project that contributes to the creation of an efficient economy. The issue of its financing can be solved with the help of various forms of public-private partnership. Otherwise, it seems impossible to self-identify the key competencies of motor transport enterprises, which threatens with a biased assessment of the integrated potential and competitive rating. Under such conditions of functioning, there can be no talk on the effective implementation of the resource strategy of transport enterprises. The participation of the state in this project is a system-forming factor, which is so necessary for successful strategic management.

4 Discussion

Analyzing the presented results, it can be noted that the processes of digitalization in transport are a fait accompli. It is important to pay attention to its correct and effective organization. This will enable to develop transport and transport infrastructure, which are of great importance in ensuring economic growth, to coordinate the direction of development with state interests, and to increase the efficiency of using the resources of motor transport enterprises. The correct choice of the source and instrument of financing to support this initiative and the very approach to the formation of a regional information system in transport as a major project of regional importance will support the growing needs of the economy in transport provision.

5 Conclusion

Public-private partnership as a tool for project financing can be successfully applied in the implementation of information processes in transport. But it is important to note that the creation of information systems and platforms in transport still requires a lot of research and development, from software development to regulatory issues. In this work, attention is paid to the search for possible sources of financing for this process; however, the solution to this problem cannot be achieved by financing alone. This implies a vector for further scientific and practical developments, which will contribute not only to the development of road transport enterprises, but also to increase in the competitiveness of the Russian economy.

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forms: service contracts, management or lease agreements, concessions, concession-type agreements, full privatization projects can reach 50 years. Can be implemented in projects with low profitability.

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