INTEGRATION OF STRATEGIC AND PROJECT MANAGEMENT AT THE ENTERPRISES OF THE TRANSPORTATION COMPLEX

The object of research is the integration processes of strategic and project management at the enterprises of the transport complex. The rapid pace of development of science and technology requires modern effective management tools in any sector of the economy, in particular, in the transport sector. The effective development of the transport industry is of fundamental importance both for the development of regions and for the country as a whole. This is due to the fact that the availability of transport facilities is an essential condition for the development of productive forces, a means of meeting the demand for freight and passenger transportation, ensuring the socio-economic unity of the state. There is a need for a strategic approach to the management of transport enterprises, the development of a unified approach to the integration of strategic and project management at transport enterprises as their long-term goals and objectives. Therefore, it acquires particular importance as a means of implementing the action program, which clarifies the goals and means of implementing the chosen path of development.

The paper proposes the construction of a conceptual model for the integration of strategic and project management at the enterprises of the transport complex, based on the implementation of the following stages:

- analysis of the stages of strategic and project management of enterprises is carried out;
- process of integration of strategic and project management at the enterprises of the transport complex is being built;
- on the basis of the developed integration process, a conceptual model for the integration of strategic and project management at the enterprises of the transport complex is being built.

As a result of this research, a conceptual model for the integration of strategic and project management at transport enterprises was developed, which combined separate approaches to management. This result made it possible to obtain an effective tool for integrated strategic and project management of transport enterprises, which will be useful in the process of forming their development strategy.

Keywords: transport complex enterprises, strategic management, project approach, project portfolio, integration process.
In [3], a systemic model of portfolio management was proposed, which, considering a portfolio as a set of projects, programs, subportfolios, as well as related operations, interprets portfolio management as a permanent (continuous) operational activity. Combining projects in a portfolio allows to get a new quality of their management, enhance the overall effect associated with the implementation of projects, and the portfolio itself becomes one of the most effective management mechanisms, in particular, strategic, organizations.

The authors of [4] proposed a concept for the formation of portfolios for the implementation of strategies in the networks of supply chain organizations. According to this concept, an approach to the classification of portfolios for the implementation of strategies in supply chain networks is presented, which provides for the allocation of such classification features as the availability of resources, the basics of structuring, the level of formation. It also proposed the conditions for the integration of organizations, which make it possible to increase the efficiency of decisions on the choice of methods, models and/or mechanisms behind the processes of forming portfolios in supply chains.

The work [5] proposes a model of a comprehensive justification of the priority of projects of a strategic portfolio of transportation systems in organizations of terminal delivery of goods by road. With the help of this model, it is possible to evaluate projects according to the parameters of strategic importance and financial efficiency.

Transport industry enterprises need to develop strategic plans for the development of their activities in order to achieve the strategic development of the transport industry as a whole, therefore, it is promising to develop effective and efficient tools for the integration of strategic and project management of transport enterprises.

3. The aim and objectives of research

The aim of research is to develop a conceptual model for the integration of strategic and project management at transport enterprises. This is aimed at ensuring an increase in the profitability of transport enterprises, will become the basis for the strategic development of the transport complex as a whole.

To achieve this aim, it is necessary to complete the following objectives:
1. Research of the stages of strategic and project management of enterprises.
2. Justify the need for the integration of strategic and project management at transport enterprises.
3. Simulate the integration of strategic and project management processes at transport enterprises into a single process.

4. Research of existing solutions to the problem

The paper [6] analyzes approaches to enterprise management, substantiates the directions of strategic management of business entities based on the use of a systematic approach. It is concluded that a systematic approach to the strategic management of an enterprise as a system allows solving systemic problems interconnectedly, which are combined into subsystems (elements) that take into account the time period of management, resource components, development prospects, risks. The application of this approach will help prevent the development of crisis phenomena in the process of enterprise operation, since the management system is aimed at predicting, responding in a timely manner and preventing such phenomena. This study can serve as a basis for the development of the conceptual foundations of the strategic management of transport enterprises.

The authors of [7] considered the strategic management of an enterprise in a market with limited resources (financial, labor, material and time), in particular, which is advisable to carry out from the standpoint of a systematic approach. Formation of a general strategy of economic activity using a systematic approach:

- allows to comprehensively solve problems in the organization;
- focuses on achieving priority goals and objectives;
- helps to optimize the use of the organization’s resources;
- provides an opportunity to coordinate the work of structural divisions of the enterprise and integrate the main directions of the organization’s economic activities – plans for the development of financial relations, marketing plans, social development plans, etc. the capabilities of the enterprise and bring them into line by developing and implementing a system of strategies within the framework of strategic management. The results of this study will be useful in the process of forming the strategic management of transport enterprises.

The National Transport Strategy [8] aims to create an efficient transport complex of Ukraine integrated into the global transport network, meet the needs of the population in transportation and improve the business environment to ensure the competitiveness and efficiency of the national economy.

The main principles that will ensure the sustainable development of the transport industry and the creation of a free and competitive market will be [8]:
- increasing the efficiency and competitiveness of the transport industry;
- improvement of the legal mechanism of public-private partnership;
- strengthening interaction between the public and private sectors, authorities and local governments;
- carrying out the necessary reforms, in particular the introduction of decentralization, especially through coordinated public policy initiatives.

Challenges for long-term development arise from Strategy 2020 [9], the tasks of bringing the transport sector of Ukraine closer to the transport system of the European Union, as well as the challenges of the future development of Europe, should be reflected in the development of the transport sector in Ukraine.

Based on the foregoing, the activities of a transport company must be organized, focusing on the development of innovations in the transport industry as a whole. This can be achieved by improving both existing business processes and developing and implementing projects for creating a new business using project management tools [10].

The authors of works [11, 12] proposed a three-level approach to project planning in the framework of the implementation of strategic management of the development of project-oriented enterprises. The results of this study will be the basis for the development of the concept of integration of strategic and project management at the enterprises of the transport complex.

The work [13] analyzes the existing approaches to the strategic management and planning of a medical institution
in the plane of the project-oriented approach. The results of this study make it possible to analyze the existing approaches of strategic management and planning from the point of view of the integration of strategic and project management at the enterprises of the transport complex.

In work [14] it is found that the relationship of medical projects of a project-oriented medical institution with the external environment is provided through the development strategy of the medical institution. Therefore, the study proposes systemic models of strategic management of medical, namely medical, organizational and scientific projects of a project-oriented medical institution. In addition, structured models of the results of strategic analysis of relevant projects are considered, which should serve as input information at the stage of developing a strategy for the development of a medical institution. The proposed strategic management tools can become the basis for the development of methodological foundations for the integration of strategic and project management at transport enterprises.

The work [15] substantiates the need to develop hybrid methodologies for managing projects, programs and project portfolios. This is due to the fact that the life cycles of infrastructure programs have been significantly reduced, which include projects that require the use of convergence tools to form «hybrid» methodologies. In particular, this applies to projects such as «waterfall» with a rigid life cycle and Agile with a flexible life cycle methodology. The use of convergence and hybridization technologies to create and adapt a project management methodology is determined by the characteristics of the project, its complexity, scale, requirements for success criteria, and the organizational structure in which it is implemented.

The results of this study show that the processes of integrating project and strategic management into a single process are promising.

In [16], an analysis of the development trends of infrastructure program management systems was carried out, which showed that the key factors are the reliability of implementation, efficiency in creating values and environmental harmonization. At the same time, increasing the level of efficiency of infrastructure programs are strategic directions for the development of most countries of the world. Under turbulence conditions, it is important to build a hybrid multi-level methodology for managing infrastructure programs based on a convergent balanced approach. The methodology of multilevel proactive dual management of infrastructure projects based on adaptive technologies is based on three interrelated adaptive systems: planning and formation, monitoring and change management. This methodology also regulates the formation of a management process resistant to unrest, and helps prevent a significant decrease in the quality of management and the loss of controllability of project activities. The proposed methodology will be useful in the process of integrating strategic and project management in the transport complex.

The work [17] defines the role structure necessary to ensure the implementation of project management processes at the planning stage. For this, the roles of the project participants, their functions, responsibilities and authorities are described. In addition, the processes of project management are investigated and procedures are described at the stage of project planning, which also include templates for output documents of processes. An approach to the integration of project management processes at the planning stage into the company's business processes is also given. The results of this study will be useful in describing the integration processes of strategic and project management at transport enterprises.

In [18], a methodology for integrated management of deviations in projects was developed, which made it possible for the project manager to manage integrated, systematically, all the causes of deviations (risks, changes, problems, conflicts, stresses, crises) in the project at once. The results of this study provide tools for the development of processes for integrating strategic and project management, but do not take into account the strategic aspects of management, the study of which is very promising today.

The author of [19] carries out modeling of the integration of management of risks, conflicts and factors of behavioral economics associated with the stakeholders of a scientific project. As a result, a model of integrated risk and stakeholder conflict management was developed for a scientific project in a behavioral economy, which combined separate branches of knowledge of project management, conflict management, risk management, and behavioral economics. With the help of this result, it will be possible to carry out the process of integrating the strategic and project management of transport enterprises.

The work [20], a conceptual modeling of the integrated anti-risk conflict management of a scientific project in the conditions of behavioral economics was carried out using the «Iceberg of change management» model. As a result, a conceptual model of an integrated pro-tricky conflict management was developed for a scientific project in a behavioral economy, which combined separate branches of knowledge of project management, conflict management, risk management, and behavioral economics. With the help of this result, it will be possible to carry out the process of integrating the strategic and project management of transport enterprises.

The authors of [21] consider the application of the characteristics of strategic planning in project management. The combination of the characteristics of strategic planning, obtained with a rational approach with a different set of adaptive characteristics to create a comprehensive model, allows to get a «rational-adaptive» approach to project management. The study of project management, covered with varying degrees of «rational-adaptive» approach, positively correlates with the success of project management and the use of appropriate tools and methods. This study will be useful in the process of integrating the processes of strategic and project management at the enterprises of the transport complex.

The work [22] provides an overview of the concept of centralized management of shared services to successfully achieve their goals and achieve the expected indicators of strategic changes in management. To this end, shared service organizations were structured using information systems for common service, human resource management and engineering and project management. The project team began to manage this change management through a sophisticated, comprehensive and integrated software system. This helped to reduce costs and benefit from this specialization, which were the main goals of this change. The results of this study will be the basis for analyzing the integration processes of strategic and project management of enterprises.

The authors of the work [23] determine that some projects began to better achieve the iron triangle of costs, time and volume. But there are many projects that still do not achieve strategic advantages – especially those that
are non-monetary – desirable in most modern projects. This is because no one is specifically responsible for obtaining these benefits, which is why these projects are mostly unsuccessful. It is suggested that a more careful approach to the formation of requirements for the role of the owner of the project, who is responsible for obtaining the strategic advantages desired from each project, is proposed. This is a study of the state of affairs in the process of forming strategic directions for the development of transport enterprises.

In [24], the authors note that firms create and manage project portfolios to implement and update their strategies. Given the dominant contingency theory perspective, research has focused primarily on project portfolios and their internal management. However, a strategic view of project portfolio management requires an increased outward orientation both within the firm and outside it. The results of this study will form the basis for the formation of portfolios of projects of transport enterprises, which will allow planning strategic directions for the development of the transport industry in general.

The author in [25] found that strategic planning in project management can reduce time and cost, as well as improve quality characteristics. Strategic planning for project management excellence should take into account all aspects of the company. In particular, working relationships between employees and managers, between staff and management, the roles of different players (especially the roles of executive sponsors), corporate structure and culture. This study will be useful in the process of forming the strategic planning of the activities of transport companies.

Thus, the issue of integrating strategic and project management is especially important in conditions of turbulence and uncertainty of the environment. Therefore, there is a need to develop a conceptual model for the integration of strategic and project management at transport enterprises, adaptive to changes in the external environment.

5. Methods of research

It is assumed that the construction of a conceptual model for the integration of strategic and project management at transport enterprises is based on the following stages:
1. The analysis of the stages of strategic and project management of enterprises is carried out.
2. The process of integration of strategic and project management at the enterprises of the transport complex is under construction.
3. On the basis of the developed integration process, a conceptual model for the integration of strategic and project management at transport enterprises is being built.

Since, strategic and project management includes in detail the key concepts and considerations for adapting the processes of strategic enterprise management, as well as for the application of tools and methods in the implementation of projects. Therefore, it is necessary to integrate strategic and project management in order to more efficiently manage transport enterprises.

6. Research results

The strategy is necessary not only in order to determine the vector of development of the enterprise (company), but also to ensure its integrity. As a consequence, the strategic approach to development is widespread in many companies. Based on the fact that the modern market is characterized by a high level of uncertainty, this, in turn, encourages management personnel to develop flexible strategies for the development of companies [26, 27].

The term «strategy» has a military origin, which is translated from Greek as «lead an army». In general, it is quite logical that the development of a company and doing business is, in a sense, a war: for markets, customers or leadership, therefore, creating a strategy is an important part of deliberate business conduct [26, 28].

If we turn to the business literature, then most of the sources interpret the strategy as «a set of tactical actions for the development of the organization that help to achieve certain business goals». Also, the company’s strategy can be compared with a roadmap, which is an effective strategy of the company, that is, it is the most effective route from point A to point B. It reflects a clear choice of the organization’s goals and ways to achieve the goal (Table 1) [27, 28].

<table>
<thead>
<tr>
<th>Direction of the company’s strategy</th>
<th>Justification of direction</th>
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<tr>
<td>Prioritization</td>
<td>Entrepreneurs quite often can’t pass by a new idea and constantly discover new directions, test new products. At the same time, they do not achieve results in one area. Clear strategic management helps to prioritize the company and build the order of things that need to be paid attention.</td>
</tr>
<tr>
<td>Efficiency of business processes</td>
<td>Building a company’s business processes is one of the most important elements for its stable operation. Having a strategy helps to optimize key business processes, describe them and systematize them.</td>
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<tr>
<td>Personnel management</td>
<td>Nothing frustrates employees more than a lack of clear goals. If an employee has a long-term work plan, it is possible to build its motivation and get a loyal employee with a clear understanding of its tasks.</td>
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<tr>
<td>Sound financial management</td>
<td>When the CFO has a clear roadmap, it is easier for them to budget and manage the business.</td>
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But most importantly, for the head of a company, working on a strategy is an opportunity to look at your business «from above», analyze promising directions and understand where to go next.

Today, there are four main strategies for developing strategies on which all others are based. In most cases, the choice of the type of strategy depends on several aspects:
- what is the state of the market now;
- the product of the company;
- what is the final goal of the strategy.

Based on these aspects, it is possible to choose one of the four shown in Fig. 1 strategies [26–28]:
1. Growth strategy. This strategy is most effective when the company needs to quickly gain market share. The implementation of the growth strategy can be through the following two ways:
   - through organic growth, when the company increases sales volumes, increases the number of personnel and marketing costs;
   - through mergers and acquisitions, when instead of gaining market share, the company simply buys a competitor. This strategy works when the company attracts investments in the company and has the resources for this process.
2. Strengthening strategy. This type of strategy is relevant for companies operating in the market that has been formed. The goal of the strengthening strategy is to improve the efficiency of the existing business and reduce costs. A competitive strategy will allow the company to remain efficient and profitable for a long time.

3. Innovation strategy. An innovation strategy provides for the creation and/or development of a product or service that is not yet on the market and promoting it to the consumer. This is a rather ambitious strategy, in the implementation of which it is necessary to focus on the product and its introduction to the market. But it does not have to be a new product, it can only be a successful combination of existing services.

4. Exit strategy. An exit strategy can be implemented when the owner wants to exit the business. It may sell 100% of its company to a new owner, or arrange a merger with a competitor or larger company. The main goal of this strategy is to clean up discounts and maximize company value. For a successful sale of a company to a new owner, it is important to look at your business from the investor’s point of view and evaluate which work blocks will affect the cost reduction. This can be the departure of a key customer, lack of strategic control, inability to retain key employees, and the like.

Each of the above strategies provides for different levels of development of the company (enterprise) and its economic potential, financial capabilities, material and technical equipment, and the like. When choosing a particular development strategy, it is necessary to take into account these factors and those opportunities that the company forms in itself as a competitive feature.

The mechanism for forming a company’s development strategy consists in a sequence of actions, states, tools and rules that determine the process of achieving strategic goals. There are the following basic elements of the enterprise development strategy [28]:

- mission of the organization;
- strategic goals of the organization;
- period of the strategy;
- ways of formalizing the strategy (the strategy is given in the form of a system of tactical plans, programs, budgets);
- organizational structure of enterprise management and personnel;
- organizational culture;
- methods of resource management (methods of accounting, analysis, planning, control, regulation, budgeting, business reengineering);
- information support of the management process and technical means of management;
- set of enterprise resources and their characteristics;
- sources of financing for the activities of the enterprise;
- set of external and internal relations of the enterprise (interaction with other organizations, the financial and credit system, relations within the enterprise, associations of enterprises);
- risk factors of financial and economic activities;

- indicators and methods for assessing the effectiveness of the development strategy;
- strategic area of management;
- strategic economic center.

In order to assess and select the optimal strategy option, heuristic, formalized and specific methods for making effective decisions can be used. Based on the results of the assessment, the necessary adjustments are made to the developed strategy, after which it is accepted for implementation.

The effectiveness of the enterprise development strategy is measured by indicators of the effectiveness of the direction and use of financial, material and labor resources.

Based on the above elements of the strategy, as well as the results of a study of the principles of forming an enterprise strategy [26, 27], it is possible to identify the main stages of the process of developing a development strategy (Fig. 2).
The sequence of stages in the development strategy development process in Fig. 2 can be clarified and detailed taking into account the specifics of operating and investment activities, as well as the level of strategic thinking of its managers.

The implementation of the strategy should be considered successfully completed if all the main strategic goals of the enterprise development are achieved within the approved budgets for the implementation of the strategies.

Based on the considered process of developing an enterprise development strategy (Fig. 2), one can proceed to building a process for integrating strategic and project management at transport enterprises.

One of the essential problems of strategic enterprise management is the weak or no connection at all between projects, programs and project portfolios and the strategic plan. It often turns out that well-planned projects, programs and project portfolios are not tied to the enterprise strategy. The reason for this is that during the planning process they are not sufficiently developed from a conceptual point of view. They are also unjustified in terms of the cost of the life cycle of the program or have serious deviations between the strategic plan and the implementation of the project, program or portfolio of projects [10].

The problem of modern companies that carry out strategic planning is that the developed strategic plan is not being implemented in reality. This is due to insufficient specification of plans (lack of goals, results, indicators of the effectiveness of achieving goals) and the lack of a well-developed mechanism for implementing and monitoring the implementation of actions that are planned.

In order to prevent such problems in a transport company, a full cycle of integration of strategic and project management should be carried out (Fig. 3).

In the process of strategic planning, at the first stage, the transport company must determine:
- vision, future and mission of the enterprise;
- goals and objectives of the enterprise;
- strategies and action plans, which will disclose in detail what must be done in order to achieve the goals and objectives in a certain period of time. This action plan, together with performance indicators, provide a sustainable link between operational and long-term budget expenditures, between the goals and resources of the transport company. The second stage of the cycle is the preparation of projects, programs and project portfolios. In addition, the transport company determines the performance indicators by which the results of the work performed will be measured.

At the stage of execution, the implementation of the planned activities and the achievement of the set goals take place.

In the process of evaluating and monitoring the performance indicators of projects, programs and project portfolios, the ratio of results and costs for their achievement is measured, and the reasons for deviations are identified. Also, development trends are identified and, taking into account what has been achieved, development directions for the future are built, thus again returning to the process of strategic planning.

According to the process shown in Fig. 3, it is possible to build a conceptual model for the integration of strategic and project management at transport enterprises (Fig. 4).
So, when performing the above stages of the process of integrating strategic and project management at the enterprises of the transport complex, heads of enterprises should closely interact with project managers, in particular:
- involvement of middle managers in planning a strategy for a set of projects, programs and portfolios of projects for the development of the transport complex;
- ensuring constant control by the top management of the enterprise of the stage of implementation of projects, programs and project portfolios that are planned.

Thanks to this, it is possible to achieve the necessary logical relationship between strategy and projects, programs and project portfolios implemented.

7. SWOT analysis of research results

Strengths. A conceptual model for the integration of strategic and project management at the enterprises of the transport complex has been developed, which makes it possible to develop a strategy for a transport enterprise taking into account a single integrated strategic, process, project, program and portfolio management.

The use of the principles of integration of strategic and project management at the enterprises of the transport complex makes it possible to determine the strategy of these enterprises in order to increase the efficiency of their management in the planning and implementation process.

Weaknesses. At this stage of the study, there is no unified approach to the integration of strategic and project management at transport enterprises, which would comprehensively characterize the effectiveness of their management. Under certain conditions, this can make it difficult to implement the strategies of each individual transport company and the industry as a whole.

Opportunities. The proposed conceptual model for the integration of strategic and project management at transport enterprises allows the following:
- to carry out the formation of management processes, projects, programs and project portfolios at the stage of strategic planning of the activities of transport enterprises;
- to determine the strategic directions for the development of transport enterprises, which will become the basis for the development of a unified approach to the integration of strategic and project management.

Threats. Achievement of efficiency of management of transport complex enterprises is possible on condition of integration of strategic and project management.

8. Conclusions

1. Within the framework of the study, the analysis of the stages of strategic and project management of enterprises has been carried out. This analysis allows to quickly analyze the directions of development of transport enterprises at the stage of forming a strategy for its development.

2. The necessity of integration of strategic and project management at the enterprises of the transport complex has been substantiated. This will make it possible to comprehensively plan the strategic directions of the activities of transport enterprises.

3. The modeling of the integration of the processes of strategic and project management at the enterprises of the transport complex into a single process has been carried out. As a result, a conceptual model for the integration of strategic and project management at transport enterprises has been developed, which combined separate approaches to management. This result made it possible to obtain an effective tool for integrated strategic and project management of transport enterprises, which will be useful in the process of forming their development strategy.

References


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