

Методика обґрунтування управлінських рішень щодо забезпечення цільового рівня результативності операційних бізнес-процесів будівельного підприємства

Предметом дослідження є сукупність теоретичних засад, методичних підходів та прикладних аспектів управління стратегічною результативністю будівельних підприємств.

Метою роботи є поглиблення теоретичних засад і розроблення практичних рекомендацій щодо управління результативністю будівельних підприємств на стратегічному рівні.

Методи дослідження. Для досягнення мети та вирішення конкретних завдань використано комплекс загальнонаукових і спеціальних методів, зокрема: діалектичний та історичний методи наукового пізнання, аналізу і синтезу (з метою дослідження генезису теорій ефективності та результативності, змістовності вимірювання та управління результативністю підприємств); метод системного аналізу (для узагальнення наукових підходів до визначення результативності, обґрунтування системології управління результативністю підприємства); морфологічно-семантичний метод (для виокремлення критеріїв результативності).

Результати роботи. Запропоновано багатокритеріальний комплекс методичних підходів до розробки та реалізації процесу управління стратегічною результативністю підприємств, спрямованого на досягнення максимально можливих результатів діяльності та гнучку адаптацію до викликів динамічного зовнішнього середовища, що передбачає ідентифікацію факторів впливу на стратегічну результативність, обґрунтування принципів та інструментарію її вимірювання, визначення діапазону покращення стратегічної результативності, прийняття управлінських рішень щодо напрямів стратегічних змін, а також формування механізму забезпечення максимально можливої стратегічної результативності та його імплементація в практичну діяльність.

Галузь застосування результатів. Методологічні розробки є удосконаленням існуючих методологій стратегічного управління, управління проектами, економічного аналізу та інвестиційного менеджменту.

Висновки. Набуло подальшого розвитку методичне забезпечення процесу вимірювання стратегічної результативності підприємств будівельної галузі на основі структурної декомпозиції відповідних показників за трьома перспективами: фінансова результативність; підприємницький потенціал та соціо-орієнтоване управління, що відображають досягнення стратегічно значимих факторів успіху (прибутковості, інноваційності, конкурентоспроможності, інвестиційної привабливості та відповідності принципам сталого розвитку і корпоративної соціальної відповідальності), виявлених шляхом постійного моніторингу кращих практик результативної діяльності, використання якого налаштовує процес управління стратегічною результативністю на адаптацію до мінливих умов функціонування підприємств.

Ключові слова: будівельне підприємство, менеджмент, стратегія, результативність, інвестиційно-будівельний проект.

Методика обоснования управленческих решений по обеспечению целевого уровня результативности операционных бизнес-процессов строительного предприятия

Предметом исследования является совокупность теоретических основ, методических подходов и прикладных аспектов управления стратегической результативности строительных предприятий.

Целью работы является углубление теоретических основ и разработка практических рекомендаций по управлению результативностью строительных предприятий на стратегическом уровне.

Методы исследования. Для достижения цели и решения конкретных задач использован комплекс общенаучных и специальных методов, в частности: диалектический и исторический методы научного познания, анализа и синтеза (с целью исследования генезиса теорий эффективности и результативности, содержательности измерения и управления результативностью предприятий); метод системного анализа (для обобщения научных подходов к определению результативности, обоснование системологии управления результативностью предприятия); морфологически–семантический метод (для выделения критериев результативности).

Результаты работы. Предложено многокритериальный комплекс методических подходов к разработке и реализации процесса управления стратегической результативности предприятий, направленного на достижение максимально возможных результатов деятельности и гибкую адаптацию к вызовам динамично внешней среды, предусматривает идентификацию факторов влияния на стратегическую результативность, обоснование принципов и инструментария ее измерения, определения диапазона улучшения стратегической результативности, принятия управленческих решений относительно направлений стратегических изменений, а также формирование механизма обеспечения максимально возможной стратегической результативности и его имплементации в практическую деятельность.

Область применения результатов. Методологические разработки являются усовершенствованием существующих методологий стратегического управления, управления проектами, экономического анализа и инвестиционного менеджмента.

Выводы. Получило дальнейшее развитие методическое обеспечение процесса измерения стратегической результативности предприятий строительной отрасли на основе структурной декомпозиции соответствующих показателей по трем перспективам: финансовая результативность; предпринимательский потенциал и социо–ориентированное управление, отражающие достижения стратегически значимых факторов успеха (доходности, инновационности, конкурентоспособности, инвестиционной привлекательности и соответствия принципам устойчивого развития и корпоративной социальной ответственности), выявленных путем постоянного мониторинга лучших практик результативной деятельности, использование которого настраивает процесс управления стратегической результативностью на адаптацию к меняющимся условиям функционирования предприятий.

Ключевые слова: строительное предприятие, менеджмент, стратегия, результативность, инвестиционно–строительный проект.

KUCHERENKO O.I.
KUSHNIR I.I.
RYZHA KOV D.A.

Methods of substantiation of management decisions to ensure the target level of efficiency of operational business processes of the construction company

The subject of the study is a set of theoretical principles, methodological approaches and applied aspects of strategic performance management of construction companies.

The aim of the work is to deepen the theoretical foundations and develop practical recommendations for managing the performance of construction companies at the strategic level.

Research methods. To achieve the goal and solve specific problems used a set of general and special methods, including: dialectical and historical methods of scientific knowledge, analysis and synthesis (to study the genesis of theories of efficiency and effectiveness, content measurement and performance management); method of system analysis (for generalization of scientific approaches to determining the effectiveness, substantiation of the system of enterprise performance management); morphological and semantic method (to identify performance criteria).

Results of work. *A multi-criteria set of methodological approaches to the development and implementation of the process of strategic performance management, aimed at achieving the maximum possible results and flexible adaptation to the challenges of a dynamic environment, which identifies factors influencing strategic performance, substantiation of principles and tools for measuring, determining the range strategic effectiveness, management decisions on areas of strategic change, as well as the formation of a mechanism to ensure the maximum possible strategic effectiveness and its implementation in practice.*

Field of application of results. *Methodological developments are an improvement of existing methodologies of strategic management, project management, economic analysis and investment management.*

Conclusions. *The methodological support of the process of measuring the strategic effectiveness of construction companies on the basis of structural decomposition of the relevant indicators according to three perspectives has been further developed: financial efficiency; entrepreneurial potential and socio-oriented management, reflecting the achievement of strategically important success factors (profitability, innovation, competitiveness, investment attractiveness and compliance with the principles of sustainable development and corporate social responsibility), identified by continuous monitoring of best management practices, the use of which effectiveness in adapting to changing operating conditions of enterprises.*

Key words: *construction enterprise, management, strategy, efficiency, investment and construction project.*

Formulation of the problem. The primary task of business entities in modern business conditions is to maintain stability and survival in a competitive and highly turbulent global environment. The open and dynamic nature of enterprises, the contradictory goals of their individual subsystems determine the constant need for change, which directly affects the ability to survive. Demands for change are generated both inside the company in the form of needs and expectations of employees, and in the external environment in the form of increasing competition, technological innovation, changes in legislation, pressure from political and social factors and more. A number of companies implement such changes after these requirements have the effect of deteriorating their performance, while others seek to anticipate the risks of such pressure and make the necessary changes as a precaution.

This poses three main tasks for the management of enterprises: first, the satisfaction of consumer and social interests, secondly, managing the processes of formation and maintenance of sustainable competitive advantages and, thirdly, maintaining investor confidence. To solve these problems, there is a need to manage performance at different levels of management and create appropriate tools.

The aim of the article is to deepen the theoretical foundations and develop practical recommendations for managing the performance of construction companies at the strategic level.

To achieve this goal, the following tasks were set and solved:

- to reveal the theoretical basis for the formation of modern theory of effectiveness;
- to diagnose the financial aspects of ensuring the effectiveness of enterprises in the sectoral context;
- to adapt the process of strategic performance management in accordance with the conditions of operation of construction companies.

Presenting main material. Theoretical and methodological basis for determining the essence of the effectiveness of the enterprise was the study of the genesis of theories of efficiency and economic efficiency. Based on the analysis of theoretical and applied work on performance, the author found that the conceptual and categorical apparatus of enterprise performance is not yet established, in particular, there is a synonymization of different content terms of efficiency and effectiveness. Systematization of scientific approaches to the definition of these key categories and analysis of the relationship between them make it possible to separate them meaningfully. According to the results of research on the evolution of performance theory, seven main approaches to the disclosure of its content with the definition of their compliance with scientific schools, namely: cost (Austrian school), target (marginalism), process (school of administrative management), coherent (resource theory and institutionalism), con-

sumer-oriented (neo-institutionalism, Stockholm school), cognitive (neoclassical American school of competitiveness theory) and synergistic (modern neo-economic theory). It is established that in the process of development of the theory of efficiency these scientific approaches were transformed from fundamental, aimed at revealing the essence of effectiveness, into synthetic, focused on finding the content of the term and mechanisms for its achievement. The formation of a synergistic approach allows us to consider the effectiveness of the enterprise through a system of values that meet the needs of social development, and define it as a combined ability of the enterprise to perform the functions of goal setting and goal-setting on the basis of economy and factor conditionality.

As practice shows, the issues of scientific substantiation [1–8] and creation of an original, adapted to domestic conditions of management strategic management system taking into account the state and trends of the environment of investment and construction projects, as well as the strategic potential of construction companies remain unresolved.

Systematization of scientific views on the essence of effectiveness has enabled the further development and expansion of classification features of this category. Based on the need to ensure the results of activities to the established organizational goals by management levels, the typology of species was supplemented by the division of performance into strategic, operational and current.

The paper substantiates the importance of understanding strategic effectiveness as the ability of the enterprise to ensure the maximum level of consistency of the results of its activities with their targets on the key factors of success of the strategy. It is proposed to measure strategic effectiveness on the basis of a methodological approach that allows to establish and compare its target and actual values, identify the range of improvement and form a mechanism for achieving better performance.

It is established that the tools for measuring performance have been transformed from the traditional analysis of financial statements to the use of multiple criteria for achieving value for stakeholders, which form a certain system of performance indicators. Based on the results of the analysis of measurement systems and models, they are classified according to their content-evolutionary feature into: traditional systems of indicators with divi-

sion into logical-deductive and empirical-inductive; innovative «performance measurement models» with a division into models with vertical-hierarchical structure, models with value / process-oriented structure, models of business excellence, models with balanced / tabular structure, and stable and resource-efficient systems for measuring business performance. Based on in-depth analysis, the main characteristics of the studied performance measurement systems are determined by criteria: depth of detail and breadth of coverage of all areas of the enterprise, clarity and ease of implementation and application, implementation in the process of strategic planning, balance, stakeholder focus, dynamic adaptability, –consecutive relationships, target consistency. It is proved that such characteristics are relevant to modern challenges of the operating environment, and can be used as a kind of standards in the development of a methodological approach to measuring strategic performance.

However, the most significant sources and nature of such signals can be identified. Factors that must be considered when determining the strengths and weaknesses of the enterprise, its capabilities and threats are determined as follows (Table) [3].

Thus, SWOT-analysis is a general picture of the internal situation and is of great importance for the development of optimal strategy. The strengths of the company form the foundation for developing a strategy for its development. No less important is the procedure for identifying the weaknesses of the enterprise – these are areas of special attention. The strengths of the enterprise are its features that allow to determine and form competitive advantages. Weaknesses of the enterprise are those indicators that determine its competitive vulnerability [3–4]. The process of transformation of Ukraine's economy over the past two decades has exacerbated the problem of ensuring the competitive advantages of construction companies. This circumstance is since the process of attracting investment resources necessary for the innovative development of construction companies which was not provided. Obviously, compared to enterprises in other industries of the country, construction companies are less attractive to investors for a number of reasons:

- for a construction company is characterized by larger capital investments with a longer payback period;
- a feature of the organization of a construction company is a high level of knowledge-intensive products

Matrix of SWOT-analysis of researched enterprises

Potential internal strengths	Potential internal weaknesses
Full competence in key areas	Lack of a clear strategic direction of development
Adequate financial resources	Obsolete fixed assets
Good impression of the company from buyers	Insufficient profitability
Recognized market leader	Lack of competent and far-sighted management
Well-thought-out strategies in functional areas	Lack of some experience and competence
Possibilities of using scale effect	Weak implementation of the strategy
Protection against competitive pressure	Many internal operational problems
Own technology	Lag of research and development
Cost advantage	The range is too narrow
Better advertising	Low market reputation
Product improvement	Weak distribution network
Good management	Insufficient experience in marketing
Great production capacity	Higher unit costs than competitors
Excellent technological skills	Other
Other	
Potential external opportunities	Potential external threats
Ability to serve additional groups of consumers or penetrate new markets or market segments	Entering the market of foreign competitors with lower costs
Ability to expand the product range to meet customer demand in a wider range	Growth in sales of substitute products
Ability to transfer experience and technological know-how to a new product or business	Slowing market growth
Back and forth integration	Adverse change in foreign exchange rates and foreign government policies in foreign trade
Overcoming trade barriers in attractive foreign markets	Expensive legal requirements
Weakening the position of competing firms	High dependence on declining demand and the stage of the business development life cycle
The possibility of rapid development due to the sharp increase in market demand	The growth of market power of consumers or suppliers
The emergence of new technologies	Changing needs and tastes of buyers
Other	Adverse demographic change, more

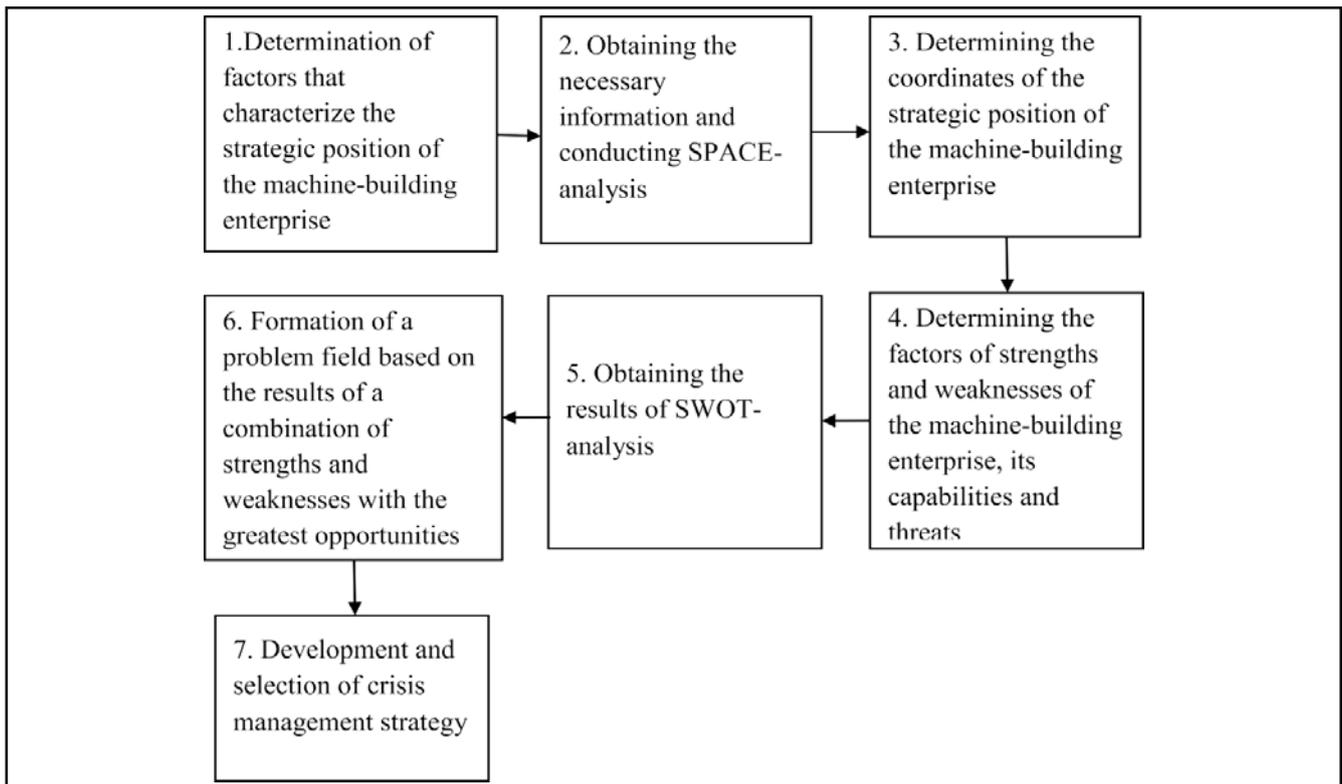
and long cycles of its production and sale which significantly slows down the turnover of current assets.

Analysis of the factors that determine changes in the external environment showed that the external environment affects the activities of construction companies. This suggests the need for constant monitoring of changes in the external environment, determining its impact on the financial condition of enterprises and timely adjustment of development strategies. Particular attention should be paid to factors such as demand, government activities, the financial market and the foreign economic environment. Changes in these parameters should be considered when developing effective crisis strategies [5].

Positive or negative changes in the above environmental factors cause additional opportunities or threats to construction companies. Rational use of opportunities can significantly improve the

financial condition and strengthen the competitive position of domestic construction companies in the market while ignoring the threats can lead to a crisis in the enterprise. Based on the conducted research the following stages of monitoring of external and internal environment of the construction enterprises are offered (figure).

It should be noted that the monitoring of the internal and external environment allows to diagnose early signals of the beginning of the crisis in the processes of functioning and development of construction enterprises. Therefore, we can conclude that the integrated use of SPACE-analysis and SWOT-analysis for monitoring allows to determine the market position of construction companies in a competitive environment and assess its competitive advantages, strengths and weaknesses, opportunities and threats.



Stages of monitoring the external and internal environment of construction companies

Monitoring the key factors of SWOT-analysis allows to develop effective anti-crisis management strategies that support the constant readiness of construction companies for the crisis and adjust them to changes in the external and internal environment. Thus, an improved approach to monitoring the internal and external environment of enterprises on the basis of integrated use of SPACE-analysis and SWOT-analysis allows to identify the manifestations of crisis situations and adjust development strategies.

The cost of the construction object is directly related to the applied technologies of construction organization and technical solutions. As mentioned earlier, innovative technologies can reduce the cost of production and, consequently, the final cost of construction products. The possibility of implementing and applying innovations in the construction industry depends on the existing external and internal environment. In the first section, the author proposes a classification of factors influencing the formation of the innovative potential of the construction company.

Conclusions

It is proposed to form the structure of measuring the level of strategic effectiveness on the basis of hierarchical cascading of performance indicators. It

is argued that the projection of measurement perspectives should be based on the principle of synergistic use of methodological tools of continuous improvement systems, integrated models of life cycle measurement of performance and intensified model of corporate social responsibility, which reflects the modern three-pronged ideology of sustainable development and resource efficiency.

According to the results of systemology of the process of strategic performance management as a complex adaptive social system, such inherent system-adaptive components as: ontological – internal culture, organizational structure, decision-making model; teleological – objects of the environment for which goals are set; genetic – time factor: adaptability and constant improvement to the transformational conditions of the enterprise; functional – a specific methodology, which in combination allows to take into account the peculiarities of the environment.

References

1. Ryzhakova, G. (2013). Alternative analytical tools for ensuring the economic security of public investment in construction projects. Management of complex systems development. no. 16, 203 – 208.
2. Іu. Chupryna, V. Pokolenko, M. Horbach, O. Bolebrukh, D. Hrabchak. – Model of strategic analysis of

formation and administration of investment activity of stockholder construction company. Scientific Journal of Astana IT University, Volume 3, September 2020, pp 51–62 DOI: 10.37943/AITU.2020.19.30.005

3. Stetsenko, S., Hryhorovskiy, P. Ye., Menejlyuk, O. I., Khyzhniak, V. O., & Ryzhakova, G. M. Multiple criteria models for proving investment and construction project efficiency. Organizational and technological model engineering in the construction industry: collective monograph – Lviv–Torun Liha–Pres. SENSE.

4. Belenkova, O.Yu., & Shaotsin, G. (2016). System of management of efficiency of reconstruction of housing stock on the basis of economic development. Standardization of engineering construction. 1, 356–357.

5. Kulikov, P., Ryzhakova, G., Honcharenko, T., Ryzhakov, D., Malykhina, O. Olap-tools for the formation of connected and diversified production and project management systems International Journal of Advanced Trends in Computer Science and Engineering, 2020, 9(5), pp. 8670–8676.

6. D. Chernyshev, I. Ivakhnenko, G. Ryzhakova, K. Predun, «Implementation of principles of biosphere compatibility in the practice of ecological construction in Ukraine» in International Journal of Engineering & Technology, UAE: Science Publishing Corporation, 2018– Vol 10, No 3.2: Special Issue 2, pp. 584–586.

7. Honcharenko, T., Ryzhakova, G., Borodavka, Y. Method for representing spatial information of topological relations based on a multidimensional data model ARPJ Journal of Engineering and Applied Sciences, 2021, 16(7), стр. 802–809.

8. G. Ryzhakova, D. Ryzhakov, S. Petrukha, T., Ishchenko, T., Honcharenko, «The innovative technology for modeling management business process of the enterprise», in International Journal of Recent Technology and Engineering (IJRTE), Volume–8 Issue–4, November 2019, pp. 4024–4033. [Online]. Available: <https://www.ijrte.org/wp-content/uploads/papers/v8i4/D8356118419.pdf>

Дані про авторів

Кучеренко Олександр Іванович,

здобувач кафедри менеджменту в будівництві, Київський національний університет будівництва і архітектури
e-mail: taqm@ukr.net

Кушнір Ілля Ігорович,

здобувач кафедри менеджменту в будівництві, Київський національний університет будівництва і архітектури
e-mail: kmb_knuba@ukr.net

Рижаків Дмитро Андрійович,

доктор економічних наук, доцент, професор кафедри менеджменту в будівництві, Київський національний університет будівництва і архітектури
e-mail: ryzhakov da@knuba.edu.ua

Данные об авторах

Кучеренко Александр Иванович,

соискатель кафедры менеджмента в строительстве, Киевский национальный университет строительства и архитектуры
e-mail: taqm@ukr.net

Кушнир Илья Игоревич,

соискатель кафедры менеджмента в строительстве, Киевский национальный университет строительства и архитектуры
e-mail: kmb_knuba@ukr.net

Рыжаків Дмитрий Андреевич,

доктор экономических наук, доцент, профессор кафедры менеджмента в строительстве, Киевский национальный университет строительства и архитектуры
e-mail: ryzhakov da@knuba.edu.ua

Data about the authors

Oleksandr Kucherenko,

applicant for the Department of Management in Construction, Kyiv National University of Construction and Architecture
e-mail: taqm@ukr.net

Ilya Kushnir,

applicant for the Department of Management in Construction, Kyiv National University of Construction and Architecture
e-mail: kmb_knuba@ukr.net

Dmitro Ryzhakov,

Doctor of Economics, Associate Professor, Professor of Management in Construction, Kyiv National University of Construction and Architecture
e-mail: ryzhakov da@knuba.edu.ua