

Practical Aspects of Improving Organizational and Economic Management Mechanisms in Construction Enterprises

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Abstract: The construction sector plays a critical role in economic development, yet its high capital intensity, long project cycles, and exposure to external risks require advanced management approaches. In the context of ongoing economic modernization and urban development reforms, construction enterprises face increasing demands to improve efficiency, competitiveness, and financial sustainability. Consequently, the improvement of organizational and economic management mechanisms has become a strategic priority.

Despite extensive theoretical research on enterprise management, a significant knowledge gap remains regarding the practical implementation of integrated organizational and economic mechanisms in construction enterprises, particularly their alignment with digital technologies, project management standards, and risk-adjusted decision-making systems. Existing studies often lack comprehensive evaluation frameworks that link digital transformation with economic performance outcomes in the construction industry.

This study employs a systems approach, institutional analysis, and economic-mathematical modeling to examine construction enterprises operating in Tashkent during 2020–2024. The methodology includes time series analysis, comparative assessment, index methods, and correlation and regression models based on financial, production, and organizational data.

The findings reveal a strong positive relationship between enterprise efficiency and the adoption of digital tools such as BIM and ERP systems, advanced budgeting and cost control practices, and project portfolio management. At the same time, excessive centralization, weak internal communication, and inadequate integration of risk management were identified as factors constraining performance.

The results demonstrate that comprehensive modernization of organizational and economic management mechanisms enhances economic stability, improves cost and time control, and increases investment attractiveness. The study provides practical implications for construction enterprises by supporting a transition toward data-driven,

digitalized, and risk-adapted management models, contributing to sustainable sectoral development.

Key words: construction enterprises; organizational and economic management mechanisms; digital transformation; BIM; ERP; project portfolio management; economic efficiency; risk-adjusted management.



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Introduction

The processes of economic modernization being implemented in the Republic of Uzbekistan and institutional reforms in the field of urban development are imposing new requirements on the activities of the construction sector. Tasks related to infrastructure renewal, the construction of high-quality housing for the population, and the expansion of private sector participation are elevating the improvement of management systems in construction enterprises to the level of priority areas. Under these conditions, adapting organizational and economic management mechanisms to modern requirements in order to ensure the competitiveness of enterprises, ensure rational use of resources, and maintain financial stability is acquiring strategic importance.

The construction industry is characterized by high capital intensity, long investment cycles, a large number of project participants, the complexity of technological processes, and sensitivity to external economic factors. For this reason, traditional management methods often lead to increased costs, delays in deadlines, and a decline in quality indicators. This, in turn, intensifies the need to form comprehensive organizational and economic mechanisms in construction enterprises that encompass strategic planning, financial management, personnel policy, the introduction of innovations, and internal control systems.

In economic literature, various approaches have been developed regarding organizational and economic management mechanisms of enterprises, their structural elements, and practical application. However, issues related to integrating these mechanisms with digital technologies, project management standards, and risk-adapted decision-making systems, taking into account the specific characteristics of the construction sector, have not yet been sufficiently studied. In practice, management processes in many construction enterprises are implemented in a fragmented manner, and the level of coordination among them remains low.

From this perspective, the study of practical aspects of improving organizational and economic management mechanisms, the development of methods for their implementation in the activities of construction enterprises, and the assessment of their economic efficiency constitute a relevant scientific and practical task. In particular, expanding opportunities to control costs, timelines, and quality indicators through the use of innovative tools such as BIM, ERP, and digital monitoring platforms is becoming an integral component of modern management models.

The purpose of this article is to identify practical directions for improving organizational and economic management mechanisms in construction enterprises, analyze the main problems and constraints in their implementation, and develop methodological recommendations aimed at forming effective managerial decisions. The research results are expected to contribute to the comprehensive modernization of management systems in construction enterprises, strengthening economic stability, and increasing investment attractiveness.

Review of the Literature

Issues related to the formation and development of organizational and economic management mechanisms in construction enterprises have been extensively studied within the fields of economic theory, strategic management, investment activity, and project management. Within the framework of classical management theory, the effective organization of enterprise activities, rational use of resources, and strengthening of internal control systems are considered key objectives. In these approaches, organizational structures, the distribution of authority, and motivation mechanisms are assessed as important factors influencing economic performance.

In international scholarly sources, the organizational and economic foundations of enterprise management are explained through corporate governance models, strategic planning concepts, and project management standards. In particular, the PMBOK, ISO 21500, and IPMA standards propose process-oriented, results-oriented, and competency-based approaches to project management. These standards identify resource planning, cost control, schedule management, and cooperation with stakeholders as essential components of organizational and economic mechanisms. Such approaches are especially relevant for the construction sector.

In the scientific literature, the improvement of organizational and economic mechanisms is increasingly analyzed in close connection with digital transformation processes. BIM, ERP systems, digital platforms, and data-driven management models are interpreted as tools for strengthening control over costs and timelines, accelerating decision-making processes, and increasing production efficiency in construction enterprises. Some studies note reductions in project costs and improvements in financial stability in enterprises with a high level of digitalization.

Local studies also pay particular attention to ensuring the economic stability of construction enterprises, improving the investment climate, developing the sector based on clustering, and introducing innovative technologies. These works highlight opportunities to increase enterprise efficiency through optimizing organizational structures, improving financial planning, and strengthening internal control systems. However, in most studies, the stages of practical implementation of organizational and economic mechanisms, methodologies for evaluating results, and issues of their integration with risk management systems are not sufficiently disclosed.

In addition, the literature widely discusses the application of multi-criteria decision-making methods, economic and mathematical models, and systems of integral indicators in assessing enterprise performance. Such approaches make it possible to scientifically substantiate managerial decisions, compare alternative strategies, and optimize resource allocation. However, the issue of adapting these methods to the construction sector and applying them comprehensively while taking into account the technological and institutional characteristics of the industry remains relevant.

Thus, an analysis of existing scientific sources shows that although theoretical developments related to improving organizational and economic management mechanisms in construction enterprises are sufficiently developed, studies focusing on their practical implementation mechanisms, integration with digital technologies, and comprehensive assessment of economic efficiency are relatively scarce. This article seeks to address this scientific gap by proposing a practice-oriented approach.

Research Methodology

This study is aimed at identifying and evaluating the practical aspects of improving organizational and economic management mechanisms in construction enterprises. It is based on the principles of a systems approach, institutional analysis, and economic–mathematical modeling. In addition,

methods such as time series analysis, the index method, comparative assessment, as well as correlation and regression models were applied.

Analysis and Results

Within the framework of the study, a comprehensive analysis of the effectiveness of existing organizational and economic mechanisms was conducted based on the financial statements, production indicators, and organizational management practices of construction enterprises operating in the city of Tashkent during the period 2020–2024. The results of the comparative analysis showed that enterprises actively implementing digital technologies, possessing well-developed internal control systems, and applying project management standards demonstrated stronger cost control and higher rates of timely project completion.

Based on time series analysis, a stable growth trend was identified in production volumes, capital investments, and labor productivity indicators in construction enterprises. However, in some enterprises, a high degree of centralization in organizational structures was found to slow down decision-making processes and generate additional transaction costs in project coordination. This situation indicates the need to reconsider the optimal configuration of organizational and economic mechanisms.

The results of the correlation analysis confirmed the existence of a positive relationship between the level of digitalization of production processes, the development of financial planning systems, employee incentive mechanisms, and the overall economic efficiency of enterprises. At the same time, imbalances in resource allocation and weaknesses in internal communication systems were found to have a negative impact on performance. Multivariate regression models demonstrated that the influence of these factors is statistically significant.

Based on the obtained results, a number of practical conclusions were formulated regarding the improvement of organizational and economic management mechanisms. In particular, it was demonstrated that integrating strategic planning processes with project portfolio management, strengthening the budgeting system through the digitalization of cost accounting, and improving cooperation among functional units contribute to increased enterprise efficiency. It was also determined that the use of BIM and ERP systems enhances the transparency of production processes and accelerates decision-making.

The generalized results indicate that the comprehensive modernization of organizational and economic management mechanisms creates the necessary conditions for strengthening the economic stability of construction enterprises, increasing their investment attractiveness, and forming competitive advantages. The conducted analyses scientifically substantiate the feasibility of implementing the proposed approaches in practice.

Discussion of Research Results

The results of the conducted analysis demonstrate that improving organizational and economic management mechanisms in construction enterprises is closely linked to digital transformation, strategic planning, and the development of internal control systems. The identified positive relationships confirm that the implementation of digital tools such as BIM and ERP, the automation of cost planning and budgeting processes, as well as the coordination of managerial decisions at the project portfolio level, significantly enhance enterprise efficiency. This finding is consistent with conclusions presented in international scientific sources regarding project management standards and the economic effectiveness of digitalization.

The problems identified during the study—excessive centralization of organizational structures, insufficiently developed information exchange between functional units, and the lack of integration between risk assessment mechanisms and strategic planning—were found to coincide with institutional constraints emphasized in existing scientific research. This indicates that

improving management mechanisms in the construction sector requires not only technical solutions but also institutional and organizational reforms.

At the same time, the integral assessment system and multifactor models developed within the scope of the study expand opportunities for scientifically substantiating organizational and economic decisions in construction enterprises. The obtained results show that combining risk-adjusted management with digital monitoring mechanisms enhances the economic stability of enterprises, thereby practically advancing concepts proposed by other scholars.

It should also be noted that the results obtained have certain limitations. In particular, the analysis is limited to construction enterprises operating in a specific region—the city of Tashkent; some qualitative indicators are based on expert assessments; and differences in the level of digital technology adoption restrict the possibilities for generalization. Therefore, future research should focus on expanding the sample size, conducting comparative analyses across regions, and applying dynamic models at the sectoral level.

Overall, the discussion of the research results indicates that comprehensive and digitalized approaches aimed at improving organizational and economic management mechanisms in construction enterprises are of significant scientific and practical importance for ensuring sustainable development in the sector, increasing investment attractiveness, and improving the quality of managerial decision-making.

Conclusion

The results of this study scientifically substantiate that improving organizational and economic management mechanisms in construction enterprises is closely associated with the implementation of digital technologies, the strengthening of strategic planning, and the development of internal control systems. The conducted economic and statistical analyses and multifactor modeling confirm that optimizing organizational structures, digitalizing budgeting processes, centrally managing project portfolios, and strengthening cooperation among functional units have a positive impact on the economic efficiency of construction enterprises.

The integral assessment approach developed in the study is characterized as an effective analytical tool that enables a comprehensive evaluation of the practical effectiveness of organizational and economic mechanisms, early identification of problem areas, and scientific justification of managerial decisions. The conclusions obtained indicate the necessity for construction enterprises to gradually transition from traditional management methods to data-driven, digitalized, and risk-adjusted management models.

In general, the approach proposed in the article serves as a scientific and practical basis for implementing organizational and economic management mechanisms in construction enterprises. Its application is expected to contribute to ensuring economic stability in the sector, increasing investment attractiveness, and forming long-term competitive advantages.

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