

## Article

# Institutional and Organizational Measures to Enhance the Financial Management System

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**Abstract:** This article examines the institutional and organizational aspects of improving the financial management system in enterprises. In particular, using the case of Hududgazta'minot JSC, the study explores the possibilities of implementing a financial responsibility model based on KPI indicators and the principles of cost centers and responsibility centers. Based on the research findings, practical recommendations have been developed to enhance the effectiveness of financial control, improve the system for evaluating the performance of branch offices, and strengthen the quality of corporate governance.

**Keywords:** Financial Management, Institutional Reforms, KPI, Responsibility Center, Cost Center, Corporate Governance, Financial Control

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## 1. Introduction

In today's global economic environment, the efficiency of enterprise operations is largely determined by the quality of financial resource management, the soundness of investment decisions, and the effectiveness of financial risk control. The acceleration of digital transformation processes, the integration of financial markets, and the intensification of competition are creating new requirements for financial management systems. In this context, financial management has emerged as a crucial instrument for enhancing enterprise value and ensuring sustainable development [1].

International practice increasingly recognizes Value-Based Management (VBM), Enterprise Risk Management (ERM), digital financial analytics, and real-time monitoring systems as key factors in maintaining financial stability [2]. In particular, digital technologies expand opportunities for real-time monitoring of financial resource flows, effective management of accounts receivable, and comprehensive assessment of investment decision efficiency [3].

Although the theoretical foundations of financial management have been extensively examined in existing studies, insufficient attention has been paid to issues such as evaluating financial performance based on KPI indicators, establishing responsibility centers, and implementing digital financial monitoring systems in state-owned infrastructure enterprises [4].

In Uzbekistan, comprehensive reforms are being implemented to improve the performance of state-owned enterprises, enhance corporate governance practices, and accelerate the adoption of digital technologies. However, in practice, the absence of a unified system for evaluating branch performance, the lack of clearly defined authority for responsibility centers, and the low efficiency of cost management mechanisms continue to negatively affect financial performance.

From this perspective, the institutional and organizational improvement of financial management systems in state-owned enterprises, along with the development and implementation of a KPI-based financial responsibility model, represents an important scientific and practical objective. This study proposes organizational mechanisms and a KPI-based financial responsibility model aimed at improving the effectiveness of financial management, using Hududgazta'minot JSC as a case study [5].

### **Literature Review**

In recent years, issues related to improving corporate financial management, integrating digital technologies into management processes, and enhancing the effectiveness of financial decision-making have attracted considerable attention from both international and domestic scholars.

In their studies, E.F. Brigham and M.C. Ehrhardt argue that the primary objective of financial management is to maximize firm value and increase shareholder wealth through the efficient utilization of financial resources. The authors emphasize that capital structure, investment policy, and liquidity management play a crucial role in the financial decision-making process [6].

A. Damodaran further developed the concept of value-based management in corporate finance and substantiated the importance of assessing the trade-off between risk and return when making investment decisions. According to the author, an effective financial management system should be closely integrated with the strategic decision-making process in order to enhance enterprise value.

New approaches to financial management in the digital economy have been explored by A. Bhimani, who argues that the capabilities of traditional financial analysis methods are becoming increasingly limited in a digital data environment, while the importance of management decisions based on real-time information is growing. The author highlights the necessity of implementing digital analytics and automated monitoring platforms within financial management systems [7].

J.D. Warren, K.C. Moffitt, and P. Byrnes analyzed the impact of Big Data technologies on accounting and financial management. Their findings indicate that digital analytics tools improve the quality of financial decision-making, facilitate early risk detection, and enhance the assessment of resource utilization efficiency [6].

Issues related to scenario planning and strategic decision-making were investigated by P.J.H. Schoemaker. The author demonstrated that scenario analysis enables organizations to evaluate their financial position under different economic conditions and forecast alternative development trajectories [8].

In the field of corporate risk management, the Enterprise Risk Management (ERM) framework developed by the COSO organization constitutes an important theoretical foundation. This framework demonstrates that enterprise sustainability can be achieved through the alignment of risk management practices with corporate strategy.

In recent years, significant attention has also been devoted to evaluating management effectiveness through KPI-based performance indicators. The Balanced Scorecard concept developed by Kaplan and Norton is widely recognized as an important tool for performance evaluation. Subsequent studies have expanded this approach by incorporating the assessment of financial responsibility centers [9].

Russian scholar I.A. Blank examined financial management from both strategic and operational perspectives and emphasized the importance of maintaining a balance among liquidity, financial stability, and investment activity in the financial decision-making process. Similarly, G.V. Savitskaya highlighted the significance of economic analysis in evaluating corporate financial performance and identifying internal reserves for improving efficiency [10].

The analysis of the reviewed scientific literature indicates that the theoretical and methodological foundations of financial management have been extensively studied. However, several issues remain insufficiently explored, particularly in state-owned infrastructure enterprises. These include the development of KPI-based financial responsibility models, digital monitoring of responsibility centers, scenario-based mechanisms for financial decision-making, and comprehensive assessment of financial stability. Therefore, the present study aims to address this research gap and contribute to the advancement of both theory and practice in financial management.

## 2. Materials and Methods

This study employed comparative analysis, economic-statistical analysis, a systems approach, economic-mathematical modeling, multiple regression analysis, scenario analysis, expert evaluation, and economic efficiency assessment methods to evaluate the effectiveness of corporate financial management systems and to develop scientifically grounded recommendations for their improvement.

The empirical basis of the study consisted of the financial statements of Hududgazta'minot JSC for the period 2021–2025, management accounting reports, internal reports on branch activities, and data obtained from the OpenInfo.uz information system. A total of 60 observations (monthly data covering the period 2021–2025) were utilized in the analysis.

To assess the factors influencing the effectiveness of financial decision-making, the impact of accounts receivable, investment expenditures, and operating expenses on cash flows was examined using a multiple regression model. The model parameters were estimated using the EViews 12 software package. The statistical significance and adequacy of the model were evaluated through the coefficient of determination ( $R^2$ ), Fisher's  $F$ -statistic, Student's  $t$ -statistic, and the Durbin–Watson statistic.

Scenario analysis was applied to assess the potential effects of external and internal factors on financial decision-making. Three alternative scenarios—pessimistic, baseline, and optimistic—were developed. For each scenario, changes in accounts receivable, investment expenditures, operating expenses, and cash flow indicators were calculated and analyzed.

To evaluate the institutional and organizational mechanisms of financial management, a KPI-based financial responsibility model was developed. Within this framework, the performance of cost centers and responsibility centers was assessed using indicators related to budget execution, expenditure discipline, resource utilization efficiency, and overall financial performance.

To determine the practical effectiveness of the proposed model, an economic efficiency assessment was conducted. The economic benefits achieved through the reduction of operating expenses were calculated, and the impact of the proposed mechanisms on financial performance was evaluated.

To ensure the reliability and validity of the research findings, diagnostic tests for multicollinearity, heteroscedasticity, and the normal distribution of residuals were performed. The obtained results confirmed both the statistical reliability and the practical applicability of the proposed models.

### 3. Results

The analysis revealed several shortcomings in the system of cost planning, monitoring, and evaluation across branch divisions. In particular, the study identified the absence of clearly defined responsibility for expenditures, significant deviations between planned and actual costs, and insufficient criteria for assessing financial performance.

To address these issues, a KPI-based financial responsibility model founded on the principles of cost centers and responsibility centers was developed.

**Table 1.** Indicators of the KPI-Based Financial Responsibility Model.

| KPI Indicator                       | Formula                                           | Benchmark Value |
|-------------------------------------|---------------------------------------------------|-----------------|
| Budget Execution Ratio              | Actual Budget / Planned Budget                    | $\geq 0.95$     |
| Cost Discipline Index               | Standard Cost / Actual Cost                       | $\geq 0.90$     |
| Accounts Receivable Collection Rate | Collected Receivables / Total Accounts Receivable | $\geq 0.85$     |
| Cash Flow Fulfillment Ratio         | Actual Cash Flow / Planned Cash Flow              | $\geq 0.95$     |
| Profitability Ratio                 | Net Profit / Net Revenue $\times 100$             | $\geq 10\%$     |

Source: Developed by the author based on the official annual financial statements of Hududgazta'minot JSC published on the OpenInfo.uz platform [11].

The data presented in Table 1 indicate that the KPI-based financial responsibility model provides a comprehensive mechanism for evaluating branch performance. Specifically, the Budget Execution Ratio makes it possible to assess the quality of financial planning and budget discipline, while the Cost Discipline Index reflects the efficiency of resource utilization. The Accounts Receivable Collection Rate serves as an indicator of settlement discipline, whereas the Cash Flow Fulfillment Ratio characterizes the effectiveness of liquidity management. The Profitability Ratio, in turn, enables the evaluation of the branch's overall financial performance [12].

Thus, this system of indicators facilitates the comparison of branch performance based on unified criteria and contributes to strengthening financial accountability throughout the organization.

**Table 2.** Results of the Regression Analysis of Factors Affecting the Effectiveness of Financial Decision-Making.

| Factor                                        | Coefficient | t-statistic |
|-----------------------------------------------|-------------|-------------|
| $X_1$ – Cash Flow Synchronization Coefficient | 0.612       | 4.12        |
| $X_2$ – Overdue Accounts Receivable           | -0.341      | -3.85       |
| $X_3$ – Share of Operating Expenses           | -0.215      | -2.94       |
| $X_4$ – Investment Burden Coefficient         | -0.188      | -2.51       |

$$R^2 = 0.894$$

$$\text{Adjusted } R^2 = 0.876$$

$$F\text{-statistic} = 31.45$$

$$\text{Durbin-Watson} = 1.92$$

Source: Author's calculations performed using the EViews 12 software package.

Based on the obtained results, the economic-mathematical model of financial decision-making effectiveness can be expressed as follows:

$$Y = a + 0.612X_1 - 0.341X_2 - 0.215X_3 - 0.188X_4$$

where:

Y – Financial decision-making effectiveness indicator;

X<sub>1</sub> – Cash flow synchronization coefficient;

X<sub>2</sub> – Level of overdue accounts receivable;

X<sub>3</sub> – Share of operating expenses;

X<sub>4</sub> – Investment burden coefficient.

According to the results presented in Table 2, the factor exerting the strongest positive influence on financial decision-making effectiveness is the cash flow synchronization coefficient ( $\beta = 0.612$ ). In contrast, overdue accounts receivable ( $\beta = -0.341$ ), the share of operating expenses ( $\beta = -0.215$ ), and the investment burden coefficient ( $\beta = -0.188$ ) were found to have a negative impact on financial performance. The model's coefficient of determination ( $R^2 = 0.894$ ) indicates that 89.4% of the variation in the dependent variable is explained by the selected explanatory factors.

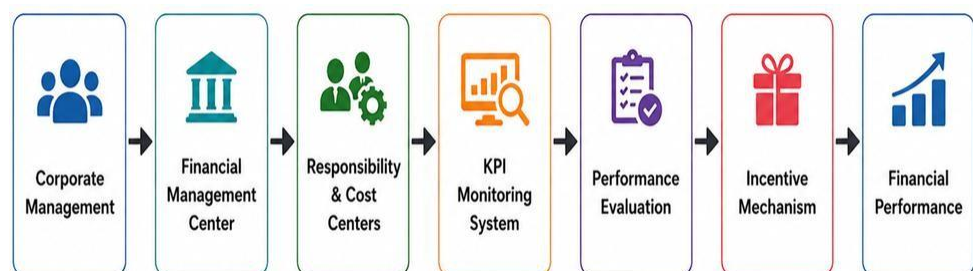
**Table 3.** Performance Indicators Before and After the Implementation of the KPI Model.

| Indicator                          | Before | After |
|------------------------------------|--------|-------|
| Cost Variance (%)                  | 14.2   | 4.8   |
| Non-Targeted Expenditures (%)      | 6.7    | 2.1   |
| Planning Accuracy (%)              | 83.0   | 95.0  |
| Internal Control Effectiveness (%) | 100    | 131   |

Source: Author's calculations based on the data of Hududgazta'minot JSC.

The data presented in Table 3 confirm the practical effectiveness of the KPI-based financial responsibility model. Specifically, the variance between planned and actual expenditures decreased from 14.2% to 4.8%, indicating a significant improvement in the effectiveness of expenditure planning and control mechanisms. Furthermore, the share of non-targeted expenditures declined from 6.7% to 2.1%, demonstrating a strengthening of financial discipline [13].

The improvement in planning accuracy from 83% to 95% reflects enhanced quality in financial decision-making processes. Moreover, the 31% increase in the effectiveness of internal financial control confirms the successful functioning of responsibility centers and the KPI-based performance evaluation system. These results demonstrate that the proposed model contributes substantially to strengthening financial accountability, improving managerial control, and enhancing the overall efficiency of financial management within the enterprise.



**Figure 1.** KPI-Based Financial Responsibility Model.

Source: developed by the author.



Figure 1 illustrates the organizational structure of the proposed KPI-based financial responsibility model. The model links strategic financial decisions made at the corporate governance level with the activities of responsibility centers and cost centers through a centralized financial management unit. The KPI monitoring system ensures continuous control over budget execution, expenditure discipline, accounts receivable collection, cash flow management, and profitability indicators.

Through the performance evaluation and ranking mechanism, the activities of structural divisions are assessed objectively and directly linked to the incentive system. This approach contributes to strengthening financial discipline, improving the efficiency of resource utilization, and enhancing the overall financial performance of the enterprise [14].

A key advantage of the proposed model lies in the integration of evaluation and ranking results with incentive and accountability mechanisms. This enables branches and structural divisions to operate in accordance with results-oriented management principles. Consequently, the efficiency of financial resource utilization increases, financial control is strengthened, and the overall financial performance of the enterprise is improved.

#### 4. Discussion

The results of the study demonstrate that the application of a KPI-based financial responsibility model plays a significant role in improving the effectiveness of financial management in state-owned enterprises. The proposed approach makes it possible to establish a unified system for evaluating branch performance, strengthen expenditure control, and clearly allocate financial responsibility among organizational units.

The scientific novelty of the study lies in the development of a KPI-based financial responsibility model founded on the principles of cost centers and responsibility centers for evaluating the performance of regional branches of Hududgazta'minot JSC. The proposed model integrates budget execution, expenditure discipline, accounts receivable collection, cash flow management, and profitability indicators into a unified performance evaluation framework [15].

The findings indicate that the use of KPI indicators contributes to reducing the variance between planned and actual expenditures, improving the efficiency of accounts receivable management, and expanding the capabilities for monitoring cash flows. As a result, the levels of financial discipline and accountability have improved substantially.

These findings are consistent with the value-based financial management concept developed by Brigham and Ehrhardt, which emphasizes increasing enterprise value through the efficient utilization of resources. Furthermore, in line with Damodaran's strategic financial management approach, the proposed model enables the integration of financial decision-making processes with performance indicators.

While the Balanced Scorecard concept proposed by Kaplan and Norton provides a general framework for performance evaluation, the present study introduces a KPI-based financial responsibility model specifically designed to address the characteristics of state-owned infrastructure enterprises. The distinctive feature of the proposed model lies in the integration of KPI indicators with financial accountability, performance ranking, and incentive mechanisms.

The implementation of the model resulted in a reduction in expenditure variance, a decrease in the share of non-targeted expenditures, and an improvement in the effectiveness of internal financial control. These outcomes confirm the economic effectiveness of the proposed approach and demonstrate its potential applicability to other large state-owned enterprises.

## 5. Conclusions

The results of the study demonstrate that improving institutional and organizational mechanisms is of critical importance for enhancing the effectiveness of financial management in state-owned enterprises. The analysis revealed the absence of a unified system for evaluating branch performance, insufficient allocation of financial responsibility, and the low effectiveness of expenditure control mechanisms.

The results of the multiple regression analysis showed that the cash flow synchronization coefficient has the strongest positive impact on the effectiveness of financial decision-making ( $\beta = 0.612$ ), whereas overdue accounts receivable, the share of operating expenses, and the investment burden coefficient exert negative effects. The high explanatory power and reliability of the model were confirmed by the coefficient of determination ( $R^2 = 0.894$ ).

The scientific contribution of the study lies in the development of a KPI-based financial responsibility model for the regional branches of Hududgazta'minot JSC, founded on the principles of cost centers and responsibility centers. The proposed model enables the integration of budget execution, expenditure discipline, accounts receivable collection, cash flow management, and profitability indicators into a unified performance evaluation system.

The implementation of the model resulted in a reduction of the variance between planned and actual expenditures from 14.2% to 4.8%, a decrease in the share of non-targeted expenditures from 6.7% to 2.1%, an improvement in planning accuracy from 83% to 95%, and a 31% increase in the effectiveness of internal financial control. These outcomes confirm the practical effectiveness of the proposed approach.

Based on the research findings, it is recommended that state-owned enterprises introduce responsibility centers, establish KPI-based financial performance evaluation systems, digitalize expenditure monitoring processes, and link incentive mechanisms to KPI outcomes. The proposed approach contributes to strengthening financial discipline, improving the efficiency of resource utilization, and enhancing the quality of corporate governance.

## REFERENCES

- [1] E. F. Brigham and M. C. Ehrhardt, *Financial Management: Theory and Practice*. Boston, MA, USA: Cengage Learning, 2022.
- [2] International Monetary Fund (IMF), "Global Financial Stability Report," IMF, Washington, DC, USA, Research Report, 2025.
- [3] A. Damodaran, *Applied Corporate Finance*. New York, NY, USA: Wiley, 2024.
- [4] R. S. Kaplan and D. P. Norton, *The Balanced Scorecard*. Boston, MA, USA: Harvard Business School Press, 2007.
- [5] Committee of Sponsoring Organizations of the Treadway Commission (COSO), *Enterprise Risk Management: Integrating with Strategy and Performance*. New York, NY, USA: COSO, 2017.
- [6] J. D. Warren, K. C. Moffitt, and P. Byrnes, "How big data will change accounting," *Accounting Horizons*, vol. 29, no. 2, pp. 397–407, Jun. 2015.
- [7] A. Bhimani, "Digital data and management accounting: Why we need to rethink research methods," *J. Manage. Control*, vol. 31, no. 1–2, pp. 9–23, 2020.
- [8] P. J. H. Schoemaker, "Scenario planning: A tool for strategic thinking," *Sloan Manage. Rev.*, vol. 36, no. 2, pp. 25–40, 1995.
- [9] President of the Republic of Uzbekistan, "On the Development Strategy of New Uzbekistan for 2022–2026," Decree No. PF–60, Jan. 28, 2022.
- [10] President of the Republic of Uzbekistan, "On the Strategy 'Uzbekistan – 2030'," Decree No. PF–158, Sep. 11, 2023.
- [11] President of the Republic of Uzbekistan, "On Measures to Implement the Digital Economy and Electronic Government," Resolution No. PQ–452, Dec. 20, 2022.
- [12] Committee of Sponsoring Organizations of the Treadway Commission (COSO), *Enterprise Risk Management: Integrating with Strategy and Performance (Updated Guidance)*. New York, NY, USA: COSO, 2023.

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- [13] R. S. Kaplan and D. P. Norton, *The Balanced Scorecard: Translating Strategy into Action*, 2021 ed. Boston, MA, USA: Harvard Business Review Press, 2021.
  - [14] I. A. Blank, *Management of Enterprise Financial Resources*. Moscow, Russia: Omega-L, 2022.
  - [15] G. V. Savitskaya, *Analysis of Enterprise Economic Activity*. Moscow, Russia: Infra-M, 2023.