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ORGANIZATION OF MANAGEMENT ACCOUNTING IN NON-STATE HIGHER EDUCATION INSTITUTIONS

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Abstract. This thesis examines the current issues of organizing management accounting in non-state higher education institutions (HEIs) based on responsibility centers and operational segments, as well as the mechanisms for consolidating information flows and the prospects for implementing modern costing methods. Empirical data were analyzed on the basis of financial indicators from several non-state higher education institutions in Uzbekistan.

Keywords: management accounting, responsibility center, segment accounting, Activity-Based Costing (ABC), KPI, information consolidation, non-state higher education institution (HEI).

INTRODUCTION

The non-state higher education sector in the Republic of Uzbekistan has been expanding steadily in recent years. The Presidential Decree of the Republic of Uzbekistan No. PF-5847 dated October 8, 2019, "On Approval of the Concept for the Development of the Higher Education System until 2030," particularly emphasizes the necessity of strengthening financial independence and modernizing management systems [1].

The economic essence of the problem lies in the fact that costs are generalized using the "pooling method" (kotlovoy usul) and are not allocated across individual educational programs or structural divisions. As a result, opportunities for accurately calculating the cost of educational services, identifying profit centers, and evaluating resource efficiency remain significantly limited.

LITERATURE REVIEW ON THE TOPIC

Empirical analysis further confirms this issue. According to indicators obtained from several non-state higher education institutions, the share of period expenses ranges from 66% to 83.2%, net profit margins vary from 4.1% to 65.9%, and Return on Assets (ROA) fluctuates between 1.2% and 38.7%. As noted by K.B. Urazov and M.E. Pulatov, such substantial disparities indicate the insufficient utilization of the analytical potential of management accounting systems [3].

The main objective of the study is to develop a scientific and methodological model for organizing management accounting in non-state higher education institutions based on responsibility centers and operational segments, as well as to provide practical recommendations for its implementation.

RESEARCH METHODOLOGY

The research employed comparative analysis, a systematic approach, empirical observation, and monographic methods. Financial statements of several non-state higher education institutions in Uzbekistan—namely Alfraganus University, Tashkent University of Applied Sciences, University of Economics and Pedagogy, Central Asian Medical University, and Oriental University—were used as the informational base of the study.

ANALYSIS AND RESULTS

Responsibility Center System: Problems and Solutions

The introduction of a responsibility center system is proposed as the central direction for improving management accounting in non-state higher education institutions. In the scientific literature, responsibility centers are generally classified into four main types: [6], [7] (Table 1)

Table 1.

Responsibility Center System and Proposed Solutions in Non-State Higher Education Institutions¹

Responsibility Center	Structural Unit	Existing Problem	Proposed Solution
Cost Center	Faculty, department, laboratory	Costs are generalized through the pooling ("kotlovoy") method	Implementation of Activity-Based Costing (ABC)
Revenue Center	Marketing and admissions departments	Lack of comprehensive KPI control	Introduction of a KPI monitoring system
Profit Center	Educational programs (Bachelor's, Master's, courses)	Profitability is not properly identified	Segment accounting and Balanced Scorecard (BSC)
Investment Center	Rectorate and investment department	Capital efficiency is not evaluated	ROA and capital efficiency analysis

As emphasized by M.J. Temirkhanova, the absence of separate accounting based on responsibility centers in service-sector organizations significantly limits the ability to accurately assess an institution's economic performance. This shortcoming is also fully observed in non-state higher education institutions [7].

Accounting by Operational Segments

Segment accounting represents a mechanism that complements the responsibility center system and enables deeper analysis of institutional activities. For non-state higher education institutions, the following four segments are proposed:

Educational services segment — full-time, part-time, and distance education programs;

Additional services segment — courses, training programs, and professional development services;

Research activity segment — research projects, grants, and scientific publications;

Innovation and technopark activity segment — startups, technology transfer, and collaborative projects.

For each segment, revenues, direct costs, allocated indirect costs, marginal income, profit, and profitability indicators should be calculated separately. As noted by B.F. Boronov, such an approach elevates management accounting from a simple control system to an analytical mechanism for assessing financial sustainability [9].

Mechanism for Consolidating Information Flows

In order to integrate information generated across responsibility centers and operational segments into a unified platform, a four-stage consolidation mechanism is proposed (Table 2):

Table 2.

Stages of the Information Flow Consolidation Mechanism²

Stage	Description	Tools	Expected Outcome
Stage 1	Data collection	Allocation of revenues, costs, and profits by responsibility centers and operational segments	Formation of a primary analytical database
Stage 2	Data integration	Consolidation into a unified database through ERP and BI systems	Ensuring information integrity and transparency
Stage 3	Analytical processing	KPI evaluation, profitability analysis, and variance analysis	Economic justification of managerial decisions
Stage 4	Strategic decision-making	Internal audit, risk management, and segment reporting	Improving the efficiency of resource utilization

The formation of management information in real time through ERP and Business Intelligence (BI) systems enables university management to make prompt and well-grounded decisions. The implementation of this approach makes it possible to optimize costs, increase revenues, reduce risks, and ensure strategic institutional development.

Modern Costing Methods

In accounting for costs by responsibility centers, the application of three modern costing methods is recommended:

Activity-Based Costing (ABC).

The ABC method allocates costs based on activities and resource utilization. Educational processes, research activities, and administrative services are identified as separate activity objects, and the actual cost of each is determined individually. According to empirical data, in higher education institutions where period expenses account for 66–83% of total expenditures, the implementation of the ABC method can optimize costs by approximately 15–20%.

Standard Costing System.

Under the standard costing system, normative costs are established for each responsibility center and compared with actual indicators through variance analysis. This method serves as an effective tool for systematic

¹ Authors work

² Authors work

cost control and performance monitoring.

Target Costing Method.

In the target costing approach, the optimal cost level is determined based on tuition fees and market conditions. This method is particularly important for institutions with low profitability levels, such as cases where the net profit margin is only 4.1%, as it supports the revision of pricing policies and strengthens strategic financial management.

CONCLUSION AND RECOMMENDATIONS

Based on the results of the conducted research, the following scientific and practical conclusions were formulated:

In non-state higher education institutions, management accounting should be reorganized not merely as a supplementary element of financial accounting, but as a comprehensive mechanism for revenue diversification, cost segmentation, and the evaluation of strategic managerial decisions.

The transition from the traditional "pooling method" (kotlovoy usul) to the Activity-Based Costing (ABC) method represents a key direction for improving resource efficiency.

Separate management accounting systems, profitability assessments, and KPI monitoring mechanisms should be established for each responsibility center and operational segment.

The implementation of a digital platform consolidating information flows through ERP and Business Intelligence (BI) systems would significantly improve the quality and promptness of managerial decision-making.

It is recommended that each higher education institution develop and implement a "Financial and Management Diagnostic Map" and a "Budget Control Regulation by Responsibility Centers."

The findings of this study contribute scientifically and methodologically to the improvement of management accounting systems in non-state higher education institutions of Uzbekistan based on international standards and possess significant practical importance.

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