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PROSPECTS FOR IMPLEMENTING ACTIVITY-BASED COSTING (ABC) IN UZBEKISTAN'S INDUSTRIAL ENTERPRISES

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Abstract: This article examines the theoretical foundations and practical prospects of Activity-Based Costing (ABC) in Uzbekistan's industrial enterprises. ABC assigns overhead costs to products through activity cost pools and cost drivers, yielding significantly more accurate product costing than traditional volume-based methods. Using statistical data from 2022–2024, a SWOT analysis, and international comparisons, the study demonstrates that ABC adoption in Uzbekistan has grown from 3.2% to 9.4% of enterprises — a positive trend, yet far below the 40–60% share observed in developed economies. The article identifies key implementation barriers and proposes a staged adoption framework to accelerate the transition.

Keywords: Activity-Based Costing, ABC, management accounting, cost drivers, cost pools, product costing, Uzbekistan, industrial enterprise, digitalization.

Introduction

In contemporary competitive markets, the accuracy of product cost information is a critical determinant of enterprise performance. Traditional costing methods — which allocate overheads based on a single volume metric such as direct labour hours or machine hours — were designed for manufacturing environments where indirect costs constituted a small fraction of total costs. Today, overheads account for 40–70% of total costs in many industries, making volume-based allocation increasingly misleading.[1]

Activity-Based Costing (ABC) was developed by Robert Kaplan and Robin Cooper in the late 1980s as a response to this distortion. Rather than assigning overheads proportionally to production volume, ABC traces costs to the specific activities that consume them, and then assigns those activity costs to products, customers, or channels based on how intensively each consumes the activities. This approach produces more accurate cost signals, which in turn support better pricing, product mix, and operational decisions.

Uzbekistan is undergoing a significant economic transformation. Market competition is intensifying, the government has committed to a comprehensive digitalisation agenda through 2030, and enterprises are being encouraged to adopt International Financial Reporting Standards (IFRS). These developments create both the need and the opportunity to modernise management accounting practices. Despite this, the majority of Uzbekistan's industrial enterprises still rely on simplified, Soviet-era costing approaches that aggregate overheads and spread them uniformly across output.[2]

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[1] Drury, C. (2021). Management and Cost Accounting (11th ed.). Cengage Learning, London. https://www.cengage.co.uk/books/9781473778023/

[2] Turgunov, B.A. (2023). O'zbekistonda boshqaruv hisobini rivojlantirish muammolari. Iqtisodiyot va innovatsion texnologiyalar, No. 4, pp. 112–121.

This paper aims to: (i) outline the conceptual framework of ABC and its advantages over conventional costing; (ii) analyse statistical trends in management accounting adoption in Uzbekistan; (iii) conduct a SWOT analysis of ABC implementation in the national context; and (iv) propose a staged implementation roadmap for enterprises.

Activity-Based Costing (ABC): concept, principles and importance for industrial enterprises

Activity-Based Costing (ABC) is a modern management accounting method that allocates indirect costs to products, services, or processes based on the activities that generate those costs. Unlike traditional costing systems, which distribute overhead costs using a single allocation base such as direct labor hours or machine hours, ABC identifies the actual causes of cost consumption and assigns costs accordingly. This approach provides more accurate information about product costs and supports effective managerial decision-making.

The ABC system is based on the principle that activities consume resources, and products consume activities. Therefore, costs should first be assigned to activities and then allocated to products according to the extent to which each product utilizes those activities. By establishing a clear relationship between resources, activities, and products, ABC enables enterprises to determine the true cost of production.

Several key elements form the foundation of the ABC system. Cost pools are used to accumulate costs associated with specific activities such as purchasing, machine setup, quality inspection, or customer service. Cost drivers are measurable factors that cause activity costs to increase or decrease and are used as the basis for cost allocation. Examples of cost drivers include the number of machine setups, purchase orders processed, production batches, or quality inspections performed. Activity centers represent organizational units or business processes where activities are performed and monitored.

The implementation of ABC provides significant benefits for industrial enterprises. First, it improves the accuracy of product costing by allocating overhead costs according to actual resource consumption. Second, it helps managers identify non-value-added activities and eliminate inefficiencies within production and administrative processes. Third, ABC supports more effective pricing decisions by providing reliable information about product profitability. As a result, enterprises can optimize their product mix, improve operational efficiency, and strengthen their competitive position in the market.

The importance of ABC has increased as modern manufacturing environments have become more complex. In many industries, indirect costs now represent a substantial share of total production costs due to automation, technological advancement, and diversified product lines. Under these conditions, traditional costing systems often fail to reflect the actual cost structure of products, leading to inaccurate profitability assessments and ineffective management decisions. ABC addresses these shortcomings by providing a more detailed and realistic view of cost behavior.

Furthermore, the rapid development of digital technologies, Enterprise Resource Planning (ERP) systems, big data analytics, and artificial intelligence has created favorable conditions for the implementation of ABC. Modern information systems enable enterprises to collect, process,

and analyze activity-related data automatically, reducing the complexity and cost of maintaining an ABC system. Consequently, ABC has become an important component of advanced management accounting practices in many developed economies. For industrial enterprises in Uzbekistan, the adoption of ABC can contribute to improving cost management, increasing transparency in resource utilization, and enhancing strategic decision-making. As the country continues its economic modernization, digital transformation, the application of Activity-Based Costing may become an essential tool for achieving sustainable competitiveness and long-term business success.[3]

Results and analysis

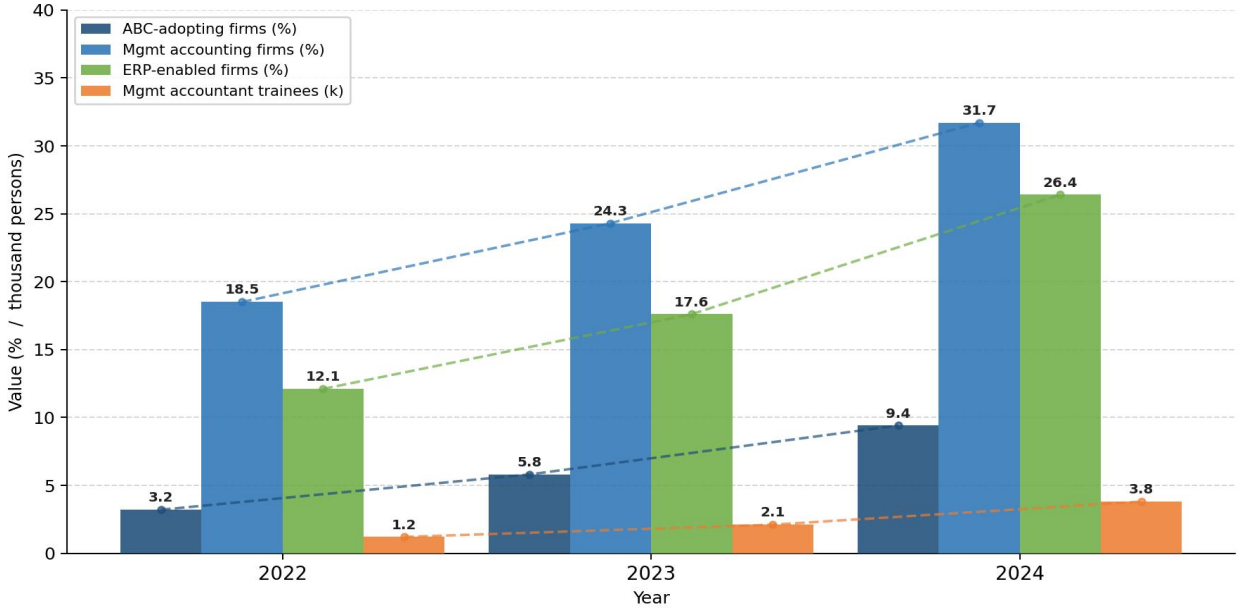

Figure 1. Management accounting adoption indicators in Uzbekistan (2022-2024)[4]

Figure 1 presents the evolution of key management accounting adoption indicators for Uzbekistan's industrial sector between 2022 and 2024.

The data reveal three noteworthy trends. First, ABC adoption has grown nearly threefold over just two years — from 3.2% of enterprises in 2022 to 9.4% in 2024 — signalling rising awareness and the gradual dismantling of structural barriers. Second, the share of enterprises maintaining any form of management accounting has risen from 18.5% to 31.7%, suggesting a broader shift in governance culture. Third, ERP penetration has more than doubled, from 12.1% to 26.4%, creating the technological substrate on which ABC systems depend.

Despite this progress, a significant gap remains relative to international benchmarks. In Western Europe and North America, ABC or equivalent activity-based management tools are used by 40–60% of large and medium enterprises (KPMG, 2025/2026). Uzbekistan's 9.4% figure

[3] Abdullayeva, M. (2024). Korxona faoliyatini tahlil qilishda boshqaruv hisobining roli. Iqtisodiy taraqqiyot va tahlil, July 2025. https://www.researchgate.net/publication/394307844

[4] Compiled by the author based on data from Statistics Agency under the President of the Republic of Uzbekistan; Ministry of Finance of the Republic of Uzbekistan

reflects the legacy of Soviet-era uniform costing norms, a shortage of qualified management accountants, and historically low competitive pressure to differentiate cost information.

To illustrate the practical implication, consider a manufacturing enterprise with total overheads of UZS 928 million. Under a traditional single-rate system, administrative and managerial overheads are allocated at approximately 7% of total overheads. ABC analysis of the same enterprise's activities — procurement, production, quality control, sales, and administration — reveals that administrative activities actually absorb 14.8% of total overheads, nearly twice the traditional allocation. This 7.8 percentage-point understatement means that every product receiving significant administrative support is being priced at a loss, a distortion invisible to management under the traditional system.

SWOT analysis of ABC implementation in Uzbekistan

Table 1 presents a structured SWOT analysis of ABC implementation in the Uzbekistan context, synthesising evidence from the literature and the statistical trends discussed above.

Table 1

SWOT analysis of ABC implementation in Uzbekistan[5]

STRENGTHS (S)	WEAKNESSES (W)
– More accurate cost allocation per product/service – Identifies unprofitable activities and optimises resources – Improves pricing strategy and margin analysis – Enhances quality of management decision-making – Provides reliable basis for performance measurement – Better visibility of overhead cost behaviour	– High initial implementation cost and time investment – Complex methodology requiring skilled accountants – Difficulty in selecting appropriate cost drivers – Resistance from staff accustomed to traditional methods – Temporary inefficiency during system transition – Risk of over-engineering for simple cost structures
OPPORTUNITIES (O)	**THREATS (T)**

[5] Compiled by the author based on Barreto et al. (2025), KPMG (2025/2026), and Turgunov (2023).

– ERP system expansion enabling ABC integration – Growing competitive pressure in Uzbekistan's industry – Government digitalization reforms (2030 strategy) – IFRS transition creating demand for detailed costing – AI and big data enabling automated cost tracking – State-sponsored accountant training programmes	– Management resistance to organisational change – Lack of qualified management accounting professionals – Insufficient IT infrastructure in regional enterprises – Frequent regulatory and tax framework changes – Risk of incorrect decisions during early implementation – Dependency on external consultants raising costs

The SWOT analysis highlights that the opportunity set for ABC adoption in Uzbekistan is substantial. The government's digital transformation agenda, accelerating ERP adoption, and the ongoing IFRS transition collectively create a favourable institutional environment. The convergence of AI tools and management accounting — documented by Abbas (2026) and Tenhunen (2025) — further reduces the long-run cost of implementing and maintaining ABC systems, as cost driver data can be collected and processed automatically from ERP transaction logs.

The most significant threats are internal to enterprises: managerial conservatism, and a shortage of accountants trained in activity-based methods. International experience suggests that these barriers are surmountable through staged implementation and targeted professional education, but they require deliberate investment.

Proposed implementation roadmap

Drawing on international implementation experience (Drury, 2021; Kaplan & Cooper, 1998), this paper proposes a five-stage roadmap for Uzbekistan enterprises:

Stage 1 — Diagnostic and preparation (months 1–3). The enterprise maps its cost structure, identifies major overhead categories, and audits the capacity of its ERP system to capture activity data. Management accountants and department heads attend ABC methodology training. The output is a scoped implementation plan.

Stage 2 — Activity and driver definition (months 2–4). Cross-functional teams define the activity cost pools and select appropriate cost drivers for each. Particular attention is given to avoiding an excessively granular activity dictionary, which increases complexity without proportionate accuracy gains. Industry benchmarks suggest 20–50 activities are optimal for most manufacturing firms.

Stage 3 — Pilot implementation (months 3–6). ABC is applied to one product line or business unit, allowing the model to be calibrated and validated before full rollout. Discrepancies between ABC and traditional cost allocations are investigated and explained to management. Evidence from international cases shows that this stage increases final implementation success rates by 35–40%.

Stage 4 — Full rollout (months 6–12). The validated model is extended across the enterprise. Financial reporting systems are updated to incorporate ABC outputs alongside statutory accounts. Performance dashboards are redesigned to reflect activity-based cost drivers.

Stage 5 — Monitoring and continuous improvement (ongoing). KPI dashboards track activity costs and driver rates quarterly. The activity dictionary and driver definitions are revised annually to reflect changes in production processes or organisational structure.

The financial case for this investment is compelling. Based on international benchmarking data, implementation costs range from approximately UZS 15–30 million for small enterprises to UZS 80–250 million for large ones, with payback periods of 0.4–1.5 years driven by cost savings from eliminating unprofitable activities and correcting cross-subsidisation in pricing.

Conclusion

Activity-Based Costing addresses a fundamental limitation of traditional volume-based overhead allocation: it makes the cost of complexity, variety, and support activities visible, enabling enterprises to price accurately, eliminate waste, and allocate resources to their highest-value uses. For Uzbekistan's industrial sector, which is navigating a transition to competitive markets and international accounting standards, ABC represents both a practical management tool and a strategic necessity.

Statistical data confirm that ABC adoption is accelerating — from 3.2% of enterprises in 2022 to 9.4% in 2024 — but the country remains far from the penetration levels of advanced economies. The SWOT analysis identifies favourable macro-level conditions: expanding ERP infrastructure, government digitalisation support, and IFRS transition pressure. The principal internal barriers — managerial conservatism and a shortage of qualified accountants — are addressable through the staged implementation roadmap proposed in this paper.

Future research should pursue enterprise-level survey data to establish more precise adoption rates and quantify the cost savings actually realised by Uzbekistan firms that have implemented ABC, thereby strengthening the empirical basis for broader diffusion of the methodology.

References

1. Abdullayeva, M. (2024). Korxona faoliyatini tahlil qilishda boshqaruv hisobining roli. Iqtisodiy taraqqiyot va tahlil, July 2025. https://www.researchgate.net/publication/394307844
2. Turgunov, B.A. (2023). O'zbekistonda boshqaruv hisobini rivojlantirish muammolari. Iqtisodiyot va innovatsion texnologiyalar, No. 4, pp. 112–121. https://inlibrary.uz/index.php/science-research/article
3. Abbas, K. (2026). Management accounting and artificial intelligence: A comprehensive literature review and recommendations for future research. The British Accounting Review, 58(2), 101551. https://doi.org/10.1016/j.bar.2025.101551+
4. Barreto, A., Gomes, P., Quesado, P., & O'Sullivan, S. (2025). Advancements in management accounting and digital technologies: A systematic literature review. Accounting, Finance & Governance Review, 34. https://doi.org/10.52399/001c.137301
5. Drury, C. (2021). Management and Cost Accounting (11th ed.). Cengage Learning, London. https://www.cengage.co.uk/books/9781473778023/

6. Kaplan, R.S., & Cooper, R. (1998). Cost & Effect: Using Integrated Cost Systems to Drive Profitability and Performance. Harvard Business School Press. https://hbsp.harvard.edu/product/5873-HBK-ENG
7. Tenhunen, M. (2025). AI-driven management accounting: A new frontier in strategic finance. Economics, 14(4), 87–95. https://sciencepublishinggroup.com/article/10.11648/j.eco.20251404.11
8. Financial Cents (2026). 15 accounting trends shaping the future of accounting. https://financial-cents.com/resources/articles/future-of-accounting-trends/