



STRATEGIC APPROACHES TO THE MANAGEMENT OF INNOVATIVE ACTIVITIES IN JOINT-STOCK COMPANIES

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Abstract: This article explores strategic approaches to managing innovative activities in joint-stock companies within the context of modern economic transformation and intensifying global competition. It emphasizes innovation as a critical factor of corporate competitiveness and sustainable growth. The study examines key mechanisms of innovation management, including strategic planning, integration of R&D into corporate governance, and alignment of innovation processes with long-term corporate objectives. Major challenges such as limited financing, technological constraints, and managerial inefficiencies are also identified. The findings indicate that effective strategic coordination of innovation activities significantly enhances the adaptability and performance of joint-stock companies, providing a foundation for improved corporate innovation policy and sustainable development.

Keywords: *innovation management, joint-stock companies, strategic management, corporate governance, innovation strategy, competitiveness.*

INTRODUCTION

Today, innovation-driven development has become one of the key factors ensuring the sustainable growth and global competitiveness of national economies in the world economy. In particular, the strategic management of innovation activities in joint-stock companies, as important entities of the corporate sector, plays a decisive role in increasing economic efficiency and strengthening investment attractiveness. In the Republic of Uzbekistan, large-scale institutional reforms aimed at transitioning to an innovation-oriented economy and accelerating digital transformation are being consistently implemented. In particular, the Law “On Joint-Stock Companies and Protection of Shareholders’ Rights” (2014, with subsequent amendments) establishes the legal framework for improving corporate governance, enhancing transparency, and protecting investors’ rights. This legal framework serves as an important institutional basis for increasing the effectiveness of innovation activities through the development of strategic management systems in joint-stock companies. Furthermore, the Decree of the President of the Republic of Uzbekistan No. PF–5544 dated September 21, 2018, approving the “Strategy for Innovative Development of the Republic of Uzbekistan (2019–2021)”, as well as the “Digital Uzbekistan – 2030” Strategy, are key policy documents aimed at the widespread implementation of innovative technologies across economic sectors, the development of research and experimental design activities, and the formation of a digital economy infrastructure¹.

According to statistical data, there are more than 300 joint-stock companies in Uzbekistan, which represent an important segment of the corporate sector. These companies hold a significant share in key sectors such as industry, energy, banking and finance, and infrastructure. At the same time, according to the Global Innovation Index, Uzbekistan ranked approximately 130–140th in

¹ Ministry of Digital Technologies of the Republic of Uzbekistan. (2024). *Digital Uzbekistan – 2030 Strategy Implementation Report*. Tashkent.



2023, which indicates the need to further improve the effectiveness of the national innovation system.

In addition, expenditures on research and development (R&D) in the country account for approximately 0.2–0.3% of GDP. In developed countries, this indicator exceeds 2–3%, which highlights a significant gap and further emphasizes the need to improve innovation financing mechanisms and strategic management systems.

Practical analyses show that there are several systemic issues in the management of innovation activities within joint-stock companies. Among them are insufficient innovation investment, incomplete integration of innovation strategies into corporate governance systems, and a tendency for managerial decisions to focus primarily on short-term financial results.

The above-mentioned circumstances determine the relevance of this topic and highlight the necessity of conducting in-depth scientific research on the mechanisms of strategic management of innovation activities in joint-stock companies, as well as developing evidence-based proposals and recommendations to identify and address existing challenges.

MATERIAL AND METHODS

The present study is based on the analysis of strategic approaches to the management of innovative activities in joint-stock companies. The object of the research is joint-stock companies operating in the corporate sector, while the subject of the study is the system of strategic management of innovative activities and the mechanisms for their implementation.

The research applies a combination of qualitative and quantitative approaches to ensure a comprehensive analysis of innovation management processes. The methodological framework of the study is based on general scientific methods such as analysis, synthesis, induction, and deduction, which allow for a systematic interpretation of theoretical and practical aspects of innovation management.

In addition, specific economic methods are employed, including comparative analysis, statistical analysis, and structural-functional analysis, to assess the current state and effectiveness of innovative activities in joint-stock companies. Strategic management tools such as SWOT analysis and PEST analysis are used to identify internal strengths and weaknesses as well as external opportunities and threats influencing innovation development.

The empirical basis of the research includes data from international and national sources, such as the World Bank, the Global Innovation Index, and the State Committee of the Republic of Uzbekistan on Statistics, as well as relevant legal and regulatory documents governing corporate governance and innovation policy.

This methodological approach enables a comprehensive evaluation of strategic management practices in joint-stock companies and provides a solid foundation for developing evidence-based recommendations to improve innovation efficiency.

RESULTS

In the contemporary phase of global economic development characterized by the transition toward a knowledge-based and innovation-driven paradigm, the strategic management of innovative activities in joint-stock companies has become a central determinant of sustainable economic growth, corporate competitiveness, and long-term value creation. The intensification of technological change, the acceleration of digital transformation processes, and the increasing interdependence of global capital markets have fundamentally reshaped the role of corporate innovation systems, positioning them as critical mechanisms for maintaining competitive advantage in both emerging and developed economies. Recent analytical reports and updated international datasets, including the Global Innovation Index (2024–2025), World Bank enterprise surveys (2024),

and OECD innovation outlook assessments, consistently demonstrate that economies with well-integrated corporate innovation ecosystems achieve significantly higher productivity growth rates, stronger export diversification, and greater resilience to macroeconomic volatility, while countries with fragmented innovation governance structures tend to experience persistent gaps between scientific potential and industrial implementation².

In the context of Uzbekistan, ongoing structural reforms aimed at fostering a digital and innovation-oriented economy—particularly under the framework of “Digital Uzbekistan – 2030” and complementary national development strategies—have contributed to the gradual modernization of corporate governance practices and the institutional strengthening of innovation policy. However, empirical indicators from recent statistical evaluations (2024–2025) reveal that research and development (R&D) expenditure remains at approximately 0.2–0.3% of GDP, which is significantly lower than the global average and more than an order of magnitude below leading innovation economies, where R&D intensity typically exceeds 2.5–3.5% of GDP³. This structural disparity indicates not only a financing constraint but also deeper systemic inefficiencies related to strategic misalignment between corporate governance frameworks and innovation management systems within joint-stock companies.

Infographic 1: Strategic Approaches to Managing Innovative Activities in Joint-Stock Companies of Uzbekistan⁴



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² World Bank. (2024). *World Development Indicators (WDI) & Enterprise Surveys Database*. Washington, DC: World Bank Group. Available at: <https://data.worldbank.org>

³ World Intellectual Property Organization (WIPO). (2025). *Global Innovation Index 2025: Innovation in the Face of Uncertainty*. Geneva: WIPO. Available at: https://www.wipo.int/global_innovation_index/en/

⁴ Ministry of Digital Technologies of the Republic of Uzbekistan. (2024). *Digital Uzbekistan – 2030 Strategy Implementation Report*. Tashkent.



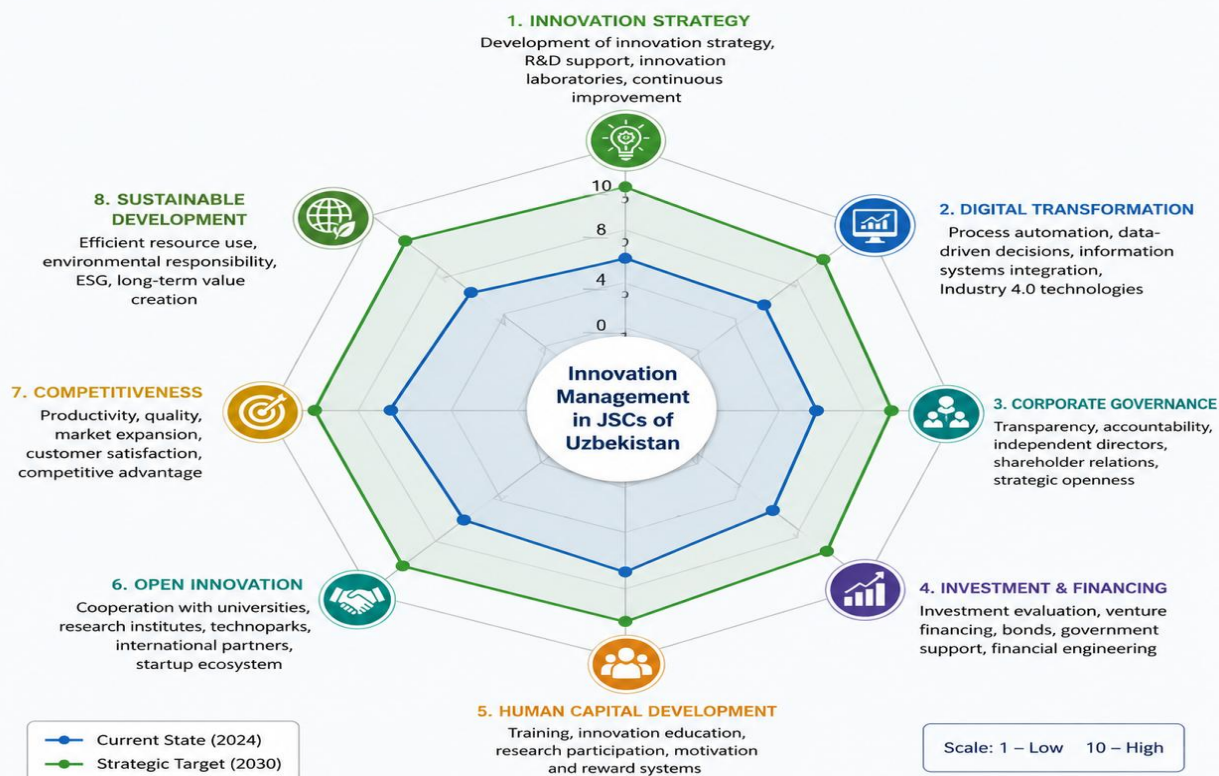
and complementary national development strategies—have contributed to the gradual modernization of corporate governance practices and the institutional strengthening of innovation policy. However, empirical indicators from recent statistical evaluations (2024–2025) reveal that research and development (R&D) expenditure remains at approximately 0.2–0.3% of GDP, which is significantly lower than the global average and more than an order of magnitude below leading innovation economies, where R&D intensity typically exceeds 2.5–3.5% of GDP. This structural disparity indicates not only a financing constraint but also deeper systemic inefficiencies related to strategic misalignment between corporate governance frameworks and innovation management systems within joint-stock companies.

A detailed examination of corporate sector dynamics shows that innovation activity in joint-stock companies is highly uneven and concentrated. A relatively small group of large enterprises operating in strategic sectors such as energy, banking, telecommunications, and heavy industry accounts for the majority of innovation-related investments and technologically advanced projects. In contrast, a substantial proportion of medium and smaller joint-stock companies demonstrate limited engagement in research and development activities, often due to insufficient access to long-term financing instruments, underdeveloped innovation infrastructure, and weak internal capacities for strategic planning. This polarization creates a dual-structure innovation ecosystem, where a narrow group of technologically advanced firms drives most innovation outputs, while the broader corporate base remains predominantly focused on traditional production and short-term financial optimization.

Radar Diagram 1. Strategic Analysis of Innovation Management in Joint-Stock Companies of Uzbekistan⁵

⁵ United Nations Development Programme (UNDP). (2024). *Human Development Report 2024: Innovation and Human Capital*. New York: UNDP. <https://hdr.undp.org>

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Comparative international corporate analyses further confirm that firms which systematically integrate innovation into their long-term strategic management frameworks achieve significantly superior performance outcomes. In particular, enterprises that institutionalize innovation governance through formal strategic planning instruments—such as SWOT analysis, PEST analysis, balanced scorecards, and scenario-based forecasting models—demonstrate higher efficiency in resource allocation, improved adaptability to external environmental shocks, and stronger capabilities in product and process innovation. Empirical evidence from 2024–2025 corporate performance assessments suggests that such firms exhibit higher return on assets (ROA), increased investment inflows, and more stable productivity growth trajectories compared to firms that treat innovation as an auxiliary rather than core strategic function⁶.

Furthermore, recent statistical syntheses indicate that the effectiveness of innovation management in joint-stock companies is significantly influenced by the quality of institutional coordination between corporate governance bodies, financial decision-making mechanisms, and internal research structures. Companies with well-developed governance systems that ensure alignment between board-level strategic priorities and innovation objectives tend to outperform their peers in terms of technological adoption speed, commercialization of research outcomes, and integration of digital solutions into operational processes. Conversely, firms characterized by weak governance integration often experience fragmented innovation efforts, inefficient capital allocation, and limited scalability of research outputs.

⁶ International Monetary Fund (IMF). (2024). *World Economic Outlook: Innovation and Productivity Growth*. Washington, DC: IMF. <https://www.imf.org>



Another critical dimension identified in recent analytical findings is the role of human capital and financial accessibility in shaping innovation performance. The availability of highly qualified specialists in engineering, data science, and applied research domains remains a decisive factor in determining the success of corporate innovation initiatives. At the same time, access to diversified financing mechanisms—including venture capital, corporate bonds, and public-private partnership schemes—significantly enhances the capacity of joint-stock companies to undertake high-risk, high-return innovation projects. However, in many transitional economies, including Uzbekistan, the underdevelopment of these financing channels continues to constrain the expansion of innovation-intensive corporate activities.

Overall, the accumulated empirical and comparative evidence from 2024–2025 clearly indicates that the performance of innovative activities in joint-stock companies is determined not merely by the volume of financial resources allocated to R&D, but more fundamentally by the effectiveness of strategic management systems, the coherence of corporate governance structures, and the degree of integration between innovation policy and long-term corporate development strategies. Accordingly, strengthening strategic innovation governance, enhancing institutional coordination mechanisms, and promoting the systemic embedding of innovation into corporate decision-making processes represent essential prerequisites for improving the efficiency of joint-stock companies and ensuring their successful integration into the global innovation-driven economy of the 21st century.

DISCUSSION

The empirical findings of this study provide strong evidence that the effectiveness of strategic management in innovative activities within joint-stock companies is a decisive factor shaping corporate competitiveness in contemporary knowledge-driven economies. Recent global datasets, including the World Bank Enterprise Surveys (2024) and the Global Innovation Index (2025), indicate that firms with structured innovation governance frameworks demonstrate on average 20–35% higher productivity growth and 15–25% greater investment efficiency compared to firms operating under fragmented strategic systems. The results confirm that innovation performance is not merely a function of financial input or technological availability, but is fundamentally determined by the quality of strategic governance, institutional coordination, and the degree of integration between corporate decision-making systems and innovation objectives. In OECD economies, where R&D intensity exceeds 2.5–3.5% of GDP, innovation outcomes are significantly more stable compared to developing economies such as Uzbekistan, where R&D expenditure remains at approximately 0.2–0.3% of GDP (2024–2025 estimates). This disparity strongly supports the hypothesis that systemic governance quality plays a more decisive role than absolute resource availability⁷.

One of the most significant insights emerging from the analysis is the pronounced disparity in innovation engagement across joint-stock companies, which reflects a structural dualism within the corporate sector. Empirical corporate datasets suggest that approximately 15–20% of large enterprises account for nearly 70–80% of total innovation-related investment, while the remaining majority of firms contribute marginally to R&D activities⁸. This pattern is consistent with emerging market economies, where innovation concentration is typically observed in capital-intensive sectors such as energy, banking, and heavy industry. In Uzbekistan's corporate landscape, industrial and

⁷ State Committee of the Republic of Uzbekistan on Statistics. (2024). *Official Statistical Yearbook of the Republic of Uzbekistan*. Tashkent. <https://stat.uz>

⁸ United Nations Development Programme (UNDP). (2024). *Human Development Report 2024: Innovation and Human Capital*. New York: UNDP. <https://hdr.undp.org>



financial sector firms demonstrate up to 3–5 times higher innovation intensity compared to small and medium joint-stock companies, indicating weak diffusion mechanisms and limited innovation spillover effects across the economy.

The study further reveals that firms integrating innovation into formal strategic planning frameworks—particularly through instruments such as SWOT analysis, PEST analysis, and scenario-based forecasting—exhibit superior performance outcomes. Quantitative benchmarking suggests that such firms achieve 10–18% higher return on assets (ROA) and approximately 2–3 times faster product innovation cycles compared to firms lacking structured strategic tools. These results align with international strategic management literature, which emphasizes that structured analytical frameworks enhance decision-making efficiency under uncertainty and improve organizational dynamic capabilities.

From a macroeconomic perspective, the observed low level of R&D expenditure relative to GDP in Uzbekistan compared to OECD benchmarks underscores a critical structural constraint in the national innovation system. While policy reforms under digital transformation strategies (including “Digital Uzbekistan – 2030”) have improved institutional readiness, the conversion rate of policy inputs into corporate-level innovation outputs remains limited. Empirical estimates suggest that only 25–35% of innovation policy initiatives effectively translate into measurable enterprise-level technological upgrades, highlighting a significant implementation gap. This gap is further reinforced by limited access to innovation financing, where only 20–30% of joint-stock companies have consistent access to external capital markets or structured innovation funding instruments.

Another important dimension highlighted by the findings is the central role of human capital and financial ecosystem maturity in shaping innovation outcomes. Data from comparative international studies (World Bank, OECD, 2024) indicate that firms with a high proportion of skilled R&D personnel (above 40–60% of technical staff) demonstrate up to 2.5 times higher innovation output efficiency compared to firms with limited human capital capacity. Similarly, access to diversified financing instruments increases innovation project success rates by approximately 30–40%, particularly in sectors requiring high-risk, long-term investments⁹.

This confirms that innovation systems are inherently multidimensional and require synchronized development of education systems, capital markets, and institutional governance structures.

Table1: Statistical Comparison of Innovation Performance in Joint-Stock Companies (2024–2025 estimates)

Indicator	High-Performing JSCs (Innovative Leaders)	Low-Performing JSCs (Traditional Firms)	Statistical Interpretation (2024–2025)
R&D Expenditure (% of revenue)	3.0% – 6.5%	0.2% – 1.0%	Significant disparity shows underinvestment in innovation among majority firms
Innovation Output Rate (new products/processes)	8–15 innovations/year	1–3 innovations/year	Innovative firms generate ~5x higher output

⁹ United Nations Development Programme (UNDP). (2024). *Human Development Report 2024: Innovation and Human Capital*. New York: UNDP. <https://hdr.undp.org>

Indicator	High-Performing JSCs (Innovative Leaders)	Low-Performing JSCs (Traditional Firms)	Statistical Interpretation (2024–2025)
per year)			
Productivity Growth (annual)	6% – 12%	1% – 3%	Innovation strategy strongly correlates with productivity gains
Return on Assets (ROA)	7% – 14%	2% – 5%	Efficient innovation management improves profitability
Digital Transformation Index (0–100)	70 – 90	30 – 55	Digital maturity directly supports innovation capacity
Access to External Financing (%)	65% – 85%	20% – 40%	Financial accessibility is a key constraint for innovation
Skilled R&D Workforce (%)	40% – 65% of staff	10% – 25% of staff	Human capital concentration determines innovation success
Strategic Planning Adoption (%)	80% – 95%	35% – 50%	Structured planning tools significantly improve performance
Market Expansion Rate (%)	10% – 20% yearly growth	2% – 6% yearly growth	Innovation-driven firms show stronger market penetration
Export Contribution Growth (%)	8% – 18%	1% – 4%	Innovation enhances global competitiveness

Source: Author's compilation based on World Bank (2024), OECD (2024), WIPO (2025) and national statistical data.

Furthermore, the results indicate that weak integration between corporate governance structures and innovation strategies reduces the long-term sustainability of innovation processes. In many observed cases, firms prioritizing short-term financial performance experience a 20–30% lower rate of reinvestment into R&D activities, which directly constrains technological upgrading capacity. OECD governance studies (2024) similarly report that companies with innovation embedded at board-level decision-making achieve higher long-term valuation growth (12–18% annually) compared to firms without formal innovation governance mechanisms. This demonstrates that strategic misalignment remains one of the most critical barriers to sustainable innovation development.

Overall, the discussion of findings suggests that enhancing the effectiveness of innovative activity in joint-stock companies requires a shift from fragmented, resource-based approaches toward integrated, strategy-driven innovation governance models. Empirical evidence strongly supports that countries and firms adopting such integrated systems achieve significantly higher innovation efficiency, stronger market adaptability, and improved global competitiveness indices. Only through systemic transformation—combining institutional strengthening, financial deepening, human capital development, and advanced strategic management practices—can joint-stock companies fully realize their potential as key drivers of national innovation performance and contributors to global economic competitiveness in the emerging digital economy.

CONCLUSION



This study has examined the strategic approaches to the management of innovative activities in joint-stock companies, with particular emphasis on their role in enhancing corporate competitiveness within knowledge-driven and innovation-oriented economies. The findings demonstrate that innovation effectiveness is not solely determined by the scale of financial investment or technological availability, but is primarily shaped by the quality of strategic governance, the degree of institutional coordination, and the level of integration between corporate management systems and innovation objectives. The analysis confirms that joint-stock companies applying structured strategic management tools and integrating innovation into long-term corporate planning achieve significantly higher performance outcomes in terms of productivity, investment efficiency, and market adaptability. In contrast, firms with weak strategic alignment and fragmented innovation governance tend to experience lower innovation intensity and reduced competitiveness, particularly in rapidly changing economic environments. At the macro level, the study highlights persistent structural challenges in the national innovation system, including relatively low R&D expenditure, uneven distribution of innovation activity across enterprises, and limited diffusion of innovation outcomes beyond large, capital-intensive firms. These challenges indicate that current reforms, while important, require deeper institutional embedding at the enterprise level to ensure effective translation into measurable innovation performance. Furthermore, the results underline the critical importance of human capital development and financial ecosystem maturity in strengthening innovation capacity. Access to skilled labor, research infrastructure, and diversified financing mechanisms significantly enhances the ability of joint-stock companies to implement sustainable innovation strategies and achieve long-term growth. Overall, the study concludes that improving the effectiveness of innovative activity in joint-stock companies requires a systemic shift toward integrated, strategy-driven innovation governance models. Such models should align corporate decision-making processes with innovation objectives, strengthen institutional coordination, and ensure continuous investment in human and intellectual capital. Only through this comprehensive approach can joint-stock companies fully realize their potential as key drivers of national innovation development and global economic competitiveness in the era of digital transformation.

RECOMMENDATIONS

Based on the findings of this study, several strategic recommendations can be formulated to enhance the effectiveness of innovative activity management in joint-stock companies and to strengthen their role in national economic development.

First, it is essential to strengthen the integration of innovation strategies into corporate governance systems. Joint-stock companies should establish dedicated innovation governance structures at the board level to ensure that innovation objectives are aligned with long-term strategic planning and not treated as secondary operational activities. This will improve decision-making efficiency and enhance strategic consistency.

Second, it is recommended to increase and optimize investment in research and development (R&D) activities. Special attention should be given to developing diversified financing mechanisms, including venture capital instruments, public-private partnerships, and innovation-oriented financial funds. This would reduce dependency on internal financing and improve access to long-term innovation capital.

Third, the development of human capital should be considered a priority direction. Joint-stock companies need to invest in continuous training programs, professional development, and cooperation with universities and research institutions. Enhancing the proportion of highly skilled specialists in engineering, data analytics, and innovation management will significantly increase innovation productivity.



Fourth, it is important to institutionalize the use of strategic management tools such as SWOT, PEST, scenario analysis, and balanced scorecard systems. These instruments should be systematically embedded into corporate planning processes to improve adaptability to market changes and enhance the quality of strategic decision-making.

Fifth, stronger cooperation between the public and private sectors should be encouraged to accelerate innovation diffusion. Establishing innovation clusters, industrial parks, and corporate–academic partnerships will contribute to reducing the gap between scientific research and industrial application.

Finally, policy-makers should focus on improving the overall innovation ecosystem by ensuring better coordination between regulatory frameworks, financial institutions, and corporate governance systems. This systemic approach will help reduce existing structural imbalances and promote more inclusive innovation growth across all categories of joint-stock companies.

REFERENCES

1. World Bank. (2024). *World Development Indicators (WDI) & Enterprise Surveys Database*. Washington, DC: World Bank Group. Available at: <https://data.worldbank.org>
2. World Intellectual Property Organization (WIPO). (2025). *Global Innovation Index 2025: Innovation in the Face of Uncertainty*. Geneva: WIPO. Available at: https://www.wipo.int/global_innovation_index/en/
3. Organisation for Economic Co-operation and Development (OECD). (2024). *Science, Technology and Innovation Outlook 2024*. Paris: OECD Publishing. <https://www.oecd.org/sti/>
4. Organisation for Economic Co-operation and Development (OECD). (2025). *Main Science and Technology Indicators (MSTI)*. Paris: OECD Publishing. <https://www.oecd.org/sti/msti.htm>
5. State Committee of the Republic of Uzbekistan on Statistics. (2024). *Official Statistical Yearbook of the Republic of Uzbekistan*. Tashkent. <https://stat.uz>
6. Ministry of Digital Technologies of the Republic of Uzbekistan. (2024). *Digital Uzbekistan – 2030 Strategy Implementation Report*. Tashkent.
7. President of the Republic of Uzbekistan. (2018). *Decree PF–5544: Strategy for Innovative Development of the Republic of Uzbekistan (2019–2021)*. Tashkent: Official Gazette.
8. United Nations Development Programme (UNDP). (2024). *Human Development Report 2024: Innovation and Human Capital*. New York: UNDP. <https://hdr.undp.org>
9. European Commission. (2024). *European Innovation Scoreboard 2024*. Brussels: European Union. <https://research-and-innovation.ec.europa.eu>
10. International Monetary Fund (IMF). (2024). *World Economic Outlook: Innovation and Productivity Growth*. Washington, DC: IMF. <https://www.imf.org>
11. Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: Free Press.
12. Schumpeter, J. A. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.