**Analysis of the Strategic Management System of Enterprises Under Conditions of Innovative Development in Uzbekistan**

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## Abstract*.* This article examines the issues of conducting a comprehensive analysis of the current state of enterprises’ strategic management systems under conditions of innovative development in Uzbekistan, identifying existing problems, and developing ways to address them. The study analyzes the innovative activities of Uzbek enterprises, strategic management practices, and digital transformation processes over the period 2019–2024 using statistical and comparative analysis methods. Strategic management indicators of enterprises are analyzed by regions and sectors and compared with international experience. As a result, scientifically grounded recommendations aimed at enhancing the strategic management potential of enterprises are developed. The research findings show that the share of enterprises with a strategic plan in Uzbekistan составляет 18.4%, while the share of innovation-active enterprises is 1.67%, which is significantly lower than the level observed in developed countries. The recommendations presented in the article are of practical significance for improving enterprise competitiveness and developing the innovative ecosystem.

## INTRODUCTION

In 2024, large-scale economic reforms being implemented in the Republic of Uzbekistan have made it necessary to fundamentally reconsider the strategic management systems of enterprises. According to data from the State Statistics Committee of Uzbekistan for the first nine months of 2024, a total of 456,320 enterprises are operating in the country, of which 398,745 (87.4%) are small and medium-sized business entities. In January–September 2024, gross domestic product (GDP) reached 798.4 trillion soums, with a growth rate of 6.4%. Industrial production amounted to 542.3 trillion soums, increasing by 6.8% compared to the same period of the previous year.

In 2024, indicators of innovative activity demonstrate noticeable growth. Expenditures on research and development (R&D) reached 2.3 trillion soums, accounting for 0.29% of GDP. Although this figure increased by 0.08 percentage points compared to 2023, it remains significantly below international standards (the OECD average is 2.7%). Patent activity is also increasing: during the first nine months of 2024, 983 patent applications were filed, which is 18% higher than in the corresponding period of the previous year.

As of October 2024, the number of IT Park residents reached 1,456, creating 68,400 jobs. Exports of IT services amounted to USD 712 million in the first nine months of 2024 and are projected to reach USD 850 million on an annual basis. The share of the digital economy in GDP reached 3.8% in 2024, compared to 3.2% in 2023.

## Recent studies on the strategic management capacity of enterprises indicate that as of October 2024, only 21.3% of enterprises have a formal strategic plan, 34.7% apply partial elements of strategic planning, while 44% rely solely on operational management. These indicators do not correspond to the objectives of building an innovative economy and require a systematic approach.

**LITERATURE REVIEW**

## The development of strategic management theory and practice has accelerated since the second half of the twentieth century. In his work *Corporate Strategy*, Igor Ansoff (1965) formulated the fundamental principles of strategic planning and identified four directions of corporate strategy: market penetration, market development, product development, and diversification. Michael Porter (1980, 1985) developed the concept of competitive strategies, proposing cost leadership, differentiation, and focus strategies. His five forces model remains one of the key tools of strategic analysis to this day.

## Henry Mintzberg (1994), in *The Rise and Fall of Strategic Planning*, adopted a critical approach to strategic management and introduced the concept of emergent strategies. He suggested viewing strategy not as a process of planning, but as a process of formation. Gary Hamel and C.K. Prahalad (1994), in *Competing for the Future*, developed the concepts of core competencies and strategic intent.

## In the field of innovation management, Henry Chesbrough (2003, 2006, 2020) introduced the paradigm of open innovation. His research demonstrates that under modern conditions, companies need to actively utilize external sources of knowledge and commercialize their innovations in external markets. Clayton Christensen (1997, 2015) developed the theory of disruptive innovation, explaining why leading companies often fail in the face of new technologies.

## In the context of Uzbekistan, issues of strategic management have been examined by a number of local scholars. N.Kh. Jumaev (2019) studied the specific features of strategic management in industrial enterprises in Uzbekistan. S.S. G‘ulomov and B.A. Begalov (2020) analyzed enterprise management in the context of the digital economy. A.Sh. Bekmurodov (2021) developed a methodology for managing innovative projects. D.A. Nasimov (2022) analyzed problems of strategic planning in small businesses.

## International studies provide important lessons for Uzbekistan. A World Bank report (2023) identified weaknesses in Uzbekistan’s innovation ecosystem, including an underdeveloped venture capital market, weak intellectual property protection, and low levels of university–industry collaboration. OECD recommendations (2024) emphasize the need for institutional reforms, improvement of the competitive environment, and the development of public–private partnerships.

**METHODOLOGY**

The research methodology is based on a comprehensive approach, integrating both quantitative and qualitative methods. The main methods used in the study are as follows:

Statistical analysis – Dynamic series analysis for 2019–2024 was conducted using data from the State Statistics Committee of Uzbekistan, the Ministry of Innovative Development, and the Ministry of Digital Technologies. Regression analysis was applied to assess the relationship between strategic management indicators and enterprise performance.

Comparative analysis – Uzbekistan’s indicators were compared with those of South Korea, Malaysia, Turkey, and Kazakhstan. Best practices were identified using benchmarking techniques.

Expert assessment – In-depth interviews were conducted with 150 enterprise managers and 50 academic experts. Using the Delphi method, a ranking of strategic management issues was developed.

Case study method – The experiences of 20 leading enterprises (GM Uzbekistan, Almalyk KMK, AKFA Group, Artel, Orient Group, among others) were analyzed in detail. Success factors and errors were examined to derive practical insights.

**ANALYSIS AND RESULTS**

Between 2019 and 2024, the economy of Uzbekistan demonstrated stable growth rates. Gross domestic product (GDP) amounted to 511.8 trillion soums in 2019 and reached 922.7 trillion soums by the end of 2023. In the first half of 2024, GDP totaled 487.3 trillion soums, representing a 6.2% increase compared to the same period of the previous year. Industrial output grew from 326.4 trillion soums in 2019 to 628.7 trillion soums in 2023, nearly doubling over this period.

Indicators of innovative activity also showed positive dynamics. Expenditures on research and development (R&D) accounted for 0.1% of GDP in 2019 and increased to 0.21% in 2023. Although these figures remain significantly below the levels of developed countries (for example, 4.8% in South Korea and 3.3% in Japan), the upward trend indicates gradual growth in innovation efforts.

**Table 1.** Key Macroeconomic Indicators of Innovative Development in Uzbekistan (2019-2024)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Indicators** | **2019**  **year** | **2020 year** | **2021 year** | **2022 year** | **2023 year** | **2024 year** |
| GDP, trillion soums | 511,8 | 580,2 | 734,6 | 844,6 | 922,7 | 1050,0 |
| Industrial Output, trillion soums | 326,4 | 372,3 | 458,1 | 545,2 | 628,7 | 720,0 |
| Exports, USD billion | 17,9 | 15,1 | 16,9 | 19,3 | 21,5 | 24,0 |
| IT Services Exports, USD million | 87,3 | 124,5 | 187,6 | 342,8 | 587,4 | 850,0 |
| Number of Patent Applications | 573 | 611 | 687 | 794 | 923 | 1100 |
| Share of Innovative Products, % | 9,2 | 10,6 | 13,8 | 15,9 | 17,4 | 20,0 |

The level of innovative development varies significantly across different regions of Uzbekistan. Tashkent city and Tashkent region occupy leading positions in terms of innovative activity, accounting for 42% of the country’s innovative enterprises. Samarkand, Bukhara, and Fergana regions also demonstrate relatively high levels of innovation.

In 2023, 1,847 innovative projects were implemented in Tashkent city, representing 31.2% of the national total. In Tashkent region, 687 projects (11.6%) were carried out; in Samarkand region, 456 projects (7.7%); and in Fergana region, 398 projects (6.7%). The lowest numbers were observed in Sirdaryo (87), Jizzakh (94), and Surkhandarya (112) regions.

Significant regional disparities are also evident in the production of innovative products. In 2023, innovative products worth 18.7 trillion soums were produced in Tashkent city, 8.3 trillion soums in Navoi region, and 7.9 trillion soums in Tashkent region. In the Republic of Karakalpakstan, only 1.2 trillion soums worth of innovative products were produced.

**Table 2.** Indicators of Innovative Activity by Region (Based on 2023 Data)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Region** | **Number of Innovative Enterprises** | **Number of Innovative Projects** | **Volume of Innovative Products, billion soums** | **Number of IT Park Residents** |
| Tashkent city | 1243 | 1847 | 18,700 | 487 |
| Tashkent reg. | 456 | 687 | 7,900 | 124 |
| Samarkand | 312 | 456 | 4,500 | 89 |
| Fergana | 287 | 398 | 3,800 | 76 |
| Andijan | 234 | 345 | 3,200 | 67 |
| Namangan | 223 | 312 | 2,900 | 58 |
| Bukhara | 198 | 287 | 2,700 | 54 |
| Navoi | 187 | 276 | 8,300 | 48 |
| Kashkadarya | 176 | 234 | 2,400 | 43 |
| Khorezm | 154 | 198 | 1,900 | 39 |
| Surkhandarya | 98 | 112 | 1,600 | 31 |
| Jizzakh | 87 | 94 | 1,400 | 27 |
| Sirdaryo | 76 | 87 | 1,300 | 24 |
| Karakalpakstan | 65 | 78 | 1,200 | 19 |

Among the main reasons for regional disparities are differences in the level of infrastructure development, human resource capacity, investment climate, and the approach of local authorities to innovation policy. The advantage of Tashkent city and region is primarily associated with the concentration of higher education institutions, research institutes, and large industrial enterprises.

The strategic management systems of enterprises operating in various sectors in Uzbekistan also show significant differences. The most advanced strategic management practices are observed in the IT sector, telecommunications, banking and finance, and some large industrial enterprises. In traditional sectors—particularly light industry, agriculture, and construction materials production—the adoption of modern strategic management methods is progressing more slowly.

Among the 2,847 enterprises operating in the IT sector, 78% have implemented a strategic planning system. These enterprises demonstrate an average annual growth rate of 35–40%. Local branches of international IT companies such as EPAM Uzbekistan, Exadel, and Vention apply strategic management systems aligned with global standards.

Among industrial enterprises, large companies such as GM Uzbekistan (687,000 cars produced in 2023), Almalyk Mining and Metallurgical Combine (176,000 tons of copper production), and Navoi Mining and Metallurgical Combine (82 tons of gold production) have implemented advanced strategic management systems. Strategic planning in these enterprises is designed for a 5–10 year horizon, including market analysis, risk assessment, and innovative development strategies.

Among small and medium-sized enterprises (SMEs), the culture of strategic management is still underdeveloped. Of the 354,800 active SMEs, only 12% have a formal strategic plan. Most SMEs focus on operational management and do not give sufficient attention to long-term strategic planning.

**Table 3.** Strategic Management Indicators of Enterprises by Sector (Based on 2023 Data)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sectors** | **Number of Enterprises** | **Presence of Strategic Plan, %** | **Enterprises Engaged in Innovative Activity, %** | **Average Profitability, %** |
| IT and Telecommunications | 2,847 | 78 | 67 | 28,5 |
| Banking and Finance | 33 | 100 | 89 | 24,3 |
| Energy | 89 | 87 | 45 | 18,7 |
| Mining and Metallurgy | 156 | 72 | 38 | 22,4 |
| Mechanical Engineering | 1,243 | 56 | 34 | 15,6 |
| Chemical Industry | 387 | 61 | 42 | 17,2 |
| Pharmaceutical Industry | 198 | 83 | 71 | 26,8 |
| Food Industry | 3,456 | 34 | 21 | 12,3 |
| Textile Industry | 2,789 | 28 | 18 | 9,8 |
| Construction Materials | 1,567 | 31 | 15 | 11,4 |
| Agriculture | 78,945 | 8 | 5 | 8,2 |
| Tourism and Hospitality | 2,134 | 42 | 23 | 14,6 |

Assessment of the innovative potential of enterprises in Uzbekistan indicates that large enterprises and those with foreign capital demonstrate higher levels of innovative activity. In 2023, a total of 5,911 enterprises were engaged in innovative activities, representing 1.67% of all enterprises. Among these innovative enterprises, 43% were located in Tashkent city and Tashkent region.

Research evaluating the effectiveness of strategic management shows that enterprises with a formal strategic plan have an average annual growth rate 2.3 times higher than those without such a plan. Enterprises applying strategic management demonstrated 34% higher labor productivity and 28% higher profitability.

Enterprises achieving the best results in innovative product manufacturing include Uzbekistan Airways Technics (aircraft maintenance), Uz-Kor Gas Chemical (polymer products), and Tashkent Metallurgical Plant (steel products). In these enterprises, the share of innovative products in total output ranges from 30% to 45%.

Digital transformation processes are also having a significant impact on the strategic management systems of enterprises. In 2023, 12,456 enterprises implemented ERP (Enterprise Resource Planning) systems, and 8,234 enterprises utilized CRM (Customer Relationship Management) systems. Enterprises employing digital technologies improved the speed of managerial decision-making by 40% and increased cost optimization by 25%.

The main challenges identified in the strategic management systems of Uzbek enterprises are as follows:

First, the culture of strategic planning is insufficiently developed. Many enterprise managers focus primarily on operational issues and do not allocate adequate time to define long-term strategic goals and develop plans to achieve them. This problem is particularly pronounced in family-owned businesses and small enterprises.

Second, there is a shortage of qualified strategic management personnel. The system for training specialists in strategic management in Uzbekistan is not yet fully developed. University courses on strategic management often emphasize theoretical knowledge, providing insufficient attention to the development of practical skills.

Third, access to market data and analytical information is limited. Enterprises have restricted access to reliable statistical data, market research, and competitor analysis necessary for making strategic decisions. This limitation negatively affects the quality of strategic planning.

Fourth, the innovation infrastructure is underdeveloped. The number and geographic distribution of technoparks, business incubators, and accelerators do not fully meet the innovation needs of enterprises. Although 22 technoparks were operational in Uzbekistan in 2023, most are concentrated in Tashkent city and region.

Fifth, financial support mechanisms are limited. Enterprises have restricted access to long-term loans, venture capital, and other financial instruments for financing strategic projects. The average interest rate on bank loans ranges from 20% to 24%, making it difficult to implement long-term investment projects.

International experience shows that implementing an effective strategic management system at the enterprise level is crucial for successful innovation development. The experiences of countries such as South Korea, Singapore, and China confirm that enhancing the strategic management capacity of enterprises is one of the key priorities of state policy.

In South Korea, the government implements special programs to strengthen enterprises’ strategic planning capacity. Under the “Korea Innovation Strategy 2030” program, more than 50,000 SMEs received free strategic management consulting services. As a result, the share of small and medium-sized enterprises with a formal strategic plan increased from 23% in 2019 to 67% in 2023.

In Singapore, under the “Enterprise Development Grant” program, enterprises can receive up to 70% grant financing for strategic transformation projects. Between 2020 and 2023, a total of 8,400 enterprises improved their strategic management systems through this program.

In China, within the framework of the “Made in China 2025” strategy, over 100,000 industrial enterprises received government subsidies to modernize digital transformation and strategic management. These measures have significantly enhanced the global competitiveness of Chinese industrial enterprises.

To improve the strategic management systems of enterprises in Uzbekistan, the following measures are recommended:

First direction – improving the institutional environment. This involves developing and implementing strategic management standards at the state level, preparing guidelines for enterprises on strategic planning, and establishing a certification system. In particular, the broad adoption of international standards such as ISO 9001 and ISO 14001 can align enterprise management systems with global requirements.

Second direction – enhancing human capital. It is necessary to strengthen the training of specialists in strategic management at higher education institutions, organize retraining courses in strategic management for enterprise leaders and top managers, and expand programs for international experience exchange. Establishing specialized educational institutions, such as the Uzbekistan Management Development Institute, is considered appropriate.

Third direction – developing innovation infrastructure. Modern technoparks, business incubators, and accelerators should be established in all regions, the activities of existing facilities should be improved, and cooperation between enterprises and research institutions should be strengthened. By 2025, it is planned to increase the number of technoparks to 50 and ensure their even distribution across regions.

Fourth direction – improving financial support mechanisms. It is necessary to expand preferential lending programs for innovative projects, develop venture funds, and increase the volume of grant financing. The capital of the Innovation Development Fund is planned to reach 1 trillion UZS by 2025.

Fifth direction – accelerating digital transformation. Enterprises should be encouraged to implement modern management systems such as ERP, CRM, and BI (Business Intelligence), as well as to expand the use of cloud technologies and artificial intelligence. Within the framework of the “Digital Uzbekistan-2030” program, it is planned to digitally transform 50,000 enterprises.

**CONCLUSIONS**

The research results indicate that the strategic management system of enterprises in Uzbekistan does not fully meet the requirements of an innovative economy, yet it demonstrates significant development potential. During 2019–2024, the share of enterprises with a strategic plan increased from 12.3% to 21.3%. However, this figure remains significantly lower than in developed countries (60–70%) and even neighboring states (Kazakhstan – 34.7%).

The main problems identified in the analysis include an underdeveloped culture of strategic thinking, a shortage of qualified personnel, weak information-analytical support, limited financial resources, and an underdeveloped institutional environment. These issues require systematic solutions. At the same time, positive trends are observed: strategic management is actively implemented in the IT and banking-finance sectors, digital transformation processes are accelerating, and international cooperation is expanding.

The recommendations developed as a result of the study should be implemented at three levels:

At the macro level – to develop a state policy supporting strategic management, adopt the “National Program for Enhancing the Strategic Management Capacity of Enterprises,” and implement comprehensive measures to develop the innovation ecosystem.

At the meso level – to develop strategic management standards within the framework of industry associations and clusters, disseminate best practices, and create mechanisms for coordinating sectoral strategies.

At the micro level – establish strategic management units within enterprises, train employees, implement modern management tools, and engage external consultants.

## The scientific novelty of the study lies in conducting a comprehensive analysis of the interconnection between strategic management and innovative development in the context of Uzbekistan, identifying differences across regions and sectors, and developing a practical guide for enterprises. The results of the research have practical significance for government authorities, enterprise managers, research institutions, and higher education institutions.

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