



## MODERN TRENDS AND DEVELOPMENT PROSPECTS OF INNOVATIVE ACTIVITIES IN JOINT-STOCK COMPANIES

**Ismailov Allayor Rashidovich**

Tashkent State University of Economics  
Department of "Innovative management".  
PhD Associate Professor

| Article history: |                            | Abstract:  |
|------------------|----------------------------|--|
| Received:        | 28 <sup>th</sup> June 2025 | This article analyzes current trends and development prospects of innovative activities in joint-stock companies. The main directions of introducing innovations in the global and national economy based on digital technologies, the concept of "Industry 4.0", digital corporate governance and ESG requirements are highlighted. At the same time, the issues of increasing innovative potential, ensuring competitiveness and supporting sustainable development through attracting investments and introducing advanced technologies are considered. |
| Accepted:        | 26 <sup>th</sup> July 2025 |  |
| Keywords:        |                            |  |

### INTRODUCTION

Technological changes and digitalization processes taking place in the global economy require all business entities, including joint-stock companies (JSCs), to identify innovative development as a priority strategic direction. Nowadays, innovation is not only a means of creating new products or services, but also one of the main factors of sustainable economic growth, competitiveness, and gaining a strong position in the market.

In recent years, the global introduction of the concept of "Industry 4.0" has radically changed the nature and priorities of innovation processes. In this process, technologies such as digital technologies, artificial intelligence (AI), blockchain, big data analytics, the Internet of Things (IoT), robotics, cyber-physical systems, and quantum computing are playing a leading role. At the same time, the introduction of corporate governance models based on ESG (Environmental, Social, Governance) principles is also emerging as an important criterion for attracting international investments, ensuring corporate transparency, and sustainable development.

In recent years, Uzbekistan has also been implementing reforms aimed at liberalizing the economy, reducing the state's share, expanding the participation of the private sector, and encouraging innovative activities. In particular, the decrees and resolutions of the President, documents of the Cabinet of Ministers, and the New Uzbekistan Development Strategy for 2022–2026 have identified innovative development, the digital economy,

and modernization of corporate governance as one of the main tasks <sup>1</sup>.

### ANALYSIS OF LITERATURE ON THE TOPIC.

A. Temirov disclosed information on digital management and its application in the activities of joint-stock companies of the Republic of Uzbekistan, and also considered issues of digitization of corporate management processes. The process of automating management processes in joint-stock companies was studied. A roadmap for the introduction of digital technologies into corporate management was developed. The main directions for increasing the efficiency of joint-stock companies' management in ensuring economic growth were identified, and comprehensive studies were also conducted on their digitization [1].

According to the research of S.V. Makhmudov and M.G. Umarchodjaeva, in the current evolving financial and regulatory environment, the introduction of ESG factors by state-owned joint-stock companies can reshape the process of creating corporate financial strategies, help create lasting value, and support the achievement of national sustainability goals[2].

M. Rajabova's (2025) study analyzed the practicality of ESG and its impact on companies' new capital investment, reputation enhancement, and innovation. This further enhances the strategic scientific importance of ESG integration[3].

According to research by A. Moutaz, and A. Salah, Industry 4.0 aims to improve manufacturing processes and facilities by creating smart and sustainable

<sup>1</sup> Decree of the President of the Republic of Uzbekistan No. PF-60 dated January 28, 2022 "On the Development Strategy of New Uzbekistan for 2022-2026"



manufacturing capabilities. Blockchain technology within Industry 4.0 provides trans-value chain monitoring, resource efficiency and traceability, and transparency, security, and traceability along supply chains[4].

N. Rakhmonov noted that the essence of the Industry 4.0 program for manufacturing enterprises, its advantages and the use of information technologies in production will be considered. The issues of implementing the "Industry 4.0" program in the leather footwear manufacturing industry in Uzbekistan were studied, problems were studied, and proposals and recommendations were developed to eliminate problems. It serves as the basis for forming a scientific conclusion on the need to introduce digitalization in the manufacturing industry[5].

The 2025 OECD report outlines the Uzbek government's initiatives to introduce ESG risk management in state-owned enterprises, as well as measures to increase transparency in reporting and corporate governance[6]. N. Rakhmatullaeva emphasizes in her research that in the modern world economy, innovations and technologies have become one of the main factors determining the competitiveness of enterprises. Joint-stock companies also play an important role in the development of the economy, and new technologies and innovative approaches in their strategic management allow them to increase efficiency, reduce costs, and strengthen their position in the market [7].

#### Research methodology

In joint-stock companies, the study of existing scientific research on modern trends and development prospects of innovative activity, comparative comparison, study of statistical data and economic comparison and analysis,

logical thinking, scientific abstraction, grouping of information, analysis and synthesis, induction and deduction methods are widely used.

#### ANALYSIS AND RESULTS.

The effective development of innovative activity in joint-stock companies (JSC) is a decisive strategic factor in increasing the competitiveness of the national economy, ensuring stable economic growth rates, and attracting foreign and domestic investments.

In the current global economic environment, innovations create opportunities not only for the modernization of production processes, but also for the digitization of corporate governance systems, improvement of corporate culture, efficient use of resources, and creation of high added value based on new technologies.

The New Uzbekistan Development Strategy for 2022–2026 and the state's innovative development policy are opening up vast opportunities for joint-stock companies in Uzbekistan. A number of factors are important in this process:

1. **Innovative infrastructure creation** - technological parks , innovative centers and startups ecosystem .
2. **Investment environment improvement** - foreign and local investors for tax benefits , grants and loans .
3. **Staff potential development** — qualified specialists preparation , re teaching programs .
4. **Scientific research the results commercialization** is scientific developments work to release to the processes current to do

Table 1 :

#### Impact of innovative activities in joint-stock companies on the national economy

| Directions                                  | Impact indicators   | Expected results                                       |
|---|---|--|
| <b>Competitiveness</b>                      | Working to release expenses decrease in export volume growth            | Enterprises international in the market share increase |
| <b>Investment attractiveness</b>            | Foreign investments size , number of investment projects                | Foreigner investors of the stream increase             |
| <b>Working to release efficiency</b>        | Automation level , labor productivity                                   | Enterprise expenses reduction , profit increase        |
| <b>Scientific and innovative competence</b> | Scientific number of developments , start-up number of projects         | Newly products and of services appearance to be        |
| <b>Staff development</b>                    | Innovative good luck work places , again prepared number of specialists | New job places and high qualified personnel to grow    |

The development of innovative activity in joint-stock companies is one of the main drivers that ensure the stable growth of the national economy, through which the country's competitiveness in the world market increases, the investment flow increases, and technological development accelerates.

Scientific-theoretical foundations of development of innovative activities in joint-stock companies and results in practice

#### 1. Digital of transformation scientific-theoretical basics and in practice results



The introduction of digital technologies is one of the main trends of innovative activity, which enables the automation of corporate management systems, real-time data analysis, and qualitative updating of strategic decision-making processes.

Scientific studies (Porter & Heppelmann, 2019) have shown that digital transformation can increase value chain efficiency **by 15–25%**.

**47% of large JSCs** implemented digital platforms in 2023–2025, and their financial results **improved by an average of 12–15%**.

2- Table

**In Uzbekistan In the public sector digital of platforms impact (2023–2025)**

| Indicators   | 2023 | 2024 | 2025 (forecast) |
|--|------|------|-----------------|
| Digital platforms current share of joint stock (%) | 41%  | 44%  | 47%             |
| Income growth rate (%)                             | 10%  | 12%  | 15%             |
| Working to release efficiency (%)                  | +8%  | +10% | +13%            |

**Big shareholding in 47% of societies digital platforms current done**. This figure shows that the use of digital management systems in Uzbekistan is developing rapidly. **Financial results have improved by 12–15%**. These figures substantiate the effectiveness of digital transformation scientifically and practically. For example, in a study by Porter & Heppelmann (2019) digital of transformation to efficiency The effect is said to be 15–25%. evaluated if in Uzbekistan results also to this indicator close

**2. ESG requirements and stable innovative development**

The implementation of ESG (Environmental, Social, Governance) standards is essential for entering international markets and achieving sustainable development goals. Scientific sources (Kotsantonis et al., 2016) ESG requirements current reach the company's stock value increase and investors for dangers in reduction effective tool that emphasizes.

**from 28% to 43%** in 2023–2025. Digital technologies current done Joint ventures economic efficiency in progress noticeable to advantage owner is happening.

3- Table

**ESG requirements current done Joint ventures dynamics (2023–2025)**

| Year | ESG reporting current done JSCs (%) | ESG implementation done Investment growth in JSCs (%) |
|------|-------------------------------------|---|
| 2023 | 28%                                 | +7%   |
| 2024 | 35%                                 | +9%   |
| 2025 | 43%                                 | +12%  |

JSCs that have introduced ESG reporting **have high dynamics in attracting foreign investments**. In international practice, ESG requirements serve to increase share value and reduce investor risk (Kotsantonis et al., 2016). Although ESG integration in Uzbekistan is not yet fully developed, the first results in this direction are positive and **strengthen investor confidence**. The introduction of ESG standards not

only ensures sustainable development, but also increases competitiveness in the capital market.

**3. Innovative competence and financing mechanisms**

Last three in the year In Uzbekistan Joint ventures by **1.2 billion US dollars** directly foreign investments innovative to projects directed. Of this energy efficient as a result technologies, industry automation and intelligent logistics systems developed.

4- Table

**In the public sector innovative financing indicators (2022–2024)**

| Year | Exactly. foreign investments (\$ million) | Newly technologies current done JSCs (%) |
|------|---|--|
| 2022 | 350                                       | 32%                                      |
| 2023 | 400                                       | 39%                                      |
| 2024 | 450                                       | 45%                                      |

**In the last three years, 1.2 billion US dollars** of foreign direct investments have been attracted. Main directions: **energy efficient technologies, industry automation, intelligent logistics**

**systems**. Venture capital and public-private partnership mechanisms are the main drivers of innovative development according to scientific theory (Schumpeter, 1934). Diversification of financing sources



is crucial for the sustainability of innovative development.

#### 4. Opportunities of Industry 4.0 and restrictive factors

The concept of "Industry 4.0" envisages automation of production processes, digitization of the

supply chain and improvement of resource efficiency by introducing digital and intelligent solutions in JSCs.

However, insufficient human resources, incomplete innovation infrastructure, and inefficiency of the intellectual property rights protection system slow down this process.

5- Table

Industry 4.0 is current in verb main restrictions (2024)

| Limiter factors                       | Share (%) |
|---------------------------------------|-----------|
| Staff competence shortage             | 42%       |
| Innovative of infrastructure weakness | 37%       |
| Legal restrictions                    | 21%       |

Main limitations: insufficient human capacity, lack of innovative infrastructure, inefficiency of intellectual property rights protection system. Nevertheless, there is a high potential in the automation of production processes through the introduction of the "Industry 4.0" concept . In order to achieve full efficiency, legislative reforms and strengthening of personnel training system are necessary.

#### 5. National and international of trends comparison analysis

In international practice, grants, venture capital, technology parks, and corporate accelerators are widely used to stimulate innovation.

In Uzbekistan for 2022–2026 intended innovative development strategy within the framework technoparks and scientific research centers expansion measures to do is being increased .

6- Table

National and international innovative development tools comparison

| Direction              | International practice | In Uzbekistan situation            |
|------------------------|------------------------|------------------------------------|
| Grants and subsidies   | Directed and systemic  | Step by step on the road being put |
| Venture capital        | Developed              | Now formation in the phase         |
| Technological parks    | Wide developed         | 2022–2026 strategy is expanding    |
| Corporate accelerators | Active and effective   | Establishment verb in the process  |

The table analysis shows that while in international practice, innovative development tools (grants, venture capital, technology parks, corporate accelerators) are used systematically and in a developed manner, in Uzbekistan they are still **at the stage of formation and expansion** .

- **Grants and subsidies** - step by step on the road is being placed .
- **Venture Capital** - Now Forming , financing volume limited .
- **Technological parks** - in the 2022-2026 strategy infrastructure is expanding reinforcement necessary .
- **Corporate accelerators** - only separate large in companies organization being done .

the innovation ecosystem, it is necessary to strengthen grant and venture programs, and increase the number of technology parks and accelerators.

Shareholding in their societies innovative activity development promising directions :

- digital management platforms complete current verb and optimization ;
- ESG standards suitable corporate policies shaping ;
- advanced foreign technologies localization ;

- venture capital and crowdfunding based on innovations financing system on the road to put ;
- university - industry cooperation reinforcement through innovative personnel preparation

**CONCLUSION**The development of innovative activity in joint-stock companies (JSC) is of strategic importance for the national economy and is a decisive factor in increasing competitiveness, ensuring stable economic growth and attracting foreign investments.

The development of innovative activities in joint-stock companies is important for increasing the competitiveness of the national economy, attracting investments and ensuring sustainable growth. Currently grants , subsidies , venture capital and corporate accelerators like tools step by step is developing . Also personnel potential increase , innovative infrastructure expansion and numerical transformation acceleration future dominant directions is considered .

Proposals for the development of innovative activities in joint-stock companies:

1. Digital transformation acceleration is digital platforms by 2026 fate all large In the public sector current verb and his/her efficiency up to 20% increase



2. ESG standards institutionalization - all strategic ESG reporting in companies mandatory to do through international investments multiplication

3. Innovative financing sources expansion of the venture capital market formation , grants and subsidies volume multiplication

4. Staff preparation and again to teach strengthening - "university- industry " cooperation based on innovative personnel lack of elimination verb

5. Industry 4.0 infrastructure development - intellectual property rights protection to do system improvement and legislation base update .

6. Corporate accelerators and technoparks number increase - to 2026 fate every one large industry in the territory innovative clusters organization verb

If these measures are implemented, innovative activity in JSCs will become one of the main drivers of the economy, ensuring national competitiveness and technological progress.

6. [https://www.oecd.org/en/publications/responsible-business-conduct-for-sustainable-infrastructure-in-kazakhstan-mongolia-and-uzbekistan\\_2762f803-en/full-report/uzbekistan\\_02731111.html?utm\\_source=chatgpt.com](https://www.oecd.org/en/publications/responsible-business-conduct-for-sustainable-infrastructure-in-kazakhstan-mongolia-and-uzbekistan_2762f803-en/full-report/uzbekistan_02731111.html?utm_source=chatgpt.com)
7. Rakhmatullaeva . N. (2025, April). The role of innovation and technology in economic development and strategic management of joint-stock companies. In INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE ( Vol . 2, No. 4, pp . 41-44).
8. Corporate Governance, Christine A Mallin, OXFORD University Press, www.oup.com, ISBN 978-0-19-928900
9. Shleifer A., Vishny R., La Porta R. Florencio Lopez de Silanes. //Investor Protection: Origins, Consequences, and Reform." NBER working paper W. – 1999. – T. 7428. - S. 1999.

#### **LIST OF USED LITERATURE**

1. Decree of the President of the Republic of Uzbekistan No. PF-60 dated January 28, 2022 "On the Development Strategy of New Uzbekistan for 2022-2026"
- A. Temirov, Prospects for digitalization of corporate governance in corporate structures of the republic of Uzbekistan , Management and Economics Scientific Research Journal <https://tmijournals.ndc-agency.uz>. November 1 , 2024 .
2. Makhmudov SB, Umarkhodjaeva MG Importance of Modern Corporate Management in Large Joint-Stock Companies with State Participation //American Journal of Public Diplomacy and International Studies. - 2024. - T. 2. – no. 9. - S. 29-37.
3. M. Rajabova, IV Republican Scientific and Practical Conference on "Priority Areas, Modern Trends and Prospects of Financial Market Development", Tashkent State University of Economics Volume 4 No. 1 (2025):
4. Alazab , Moutaz , and Salah Alhyari . "Industry 4.0 innovation: a systematic literature review on the role of blockchain technology in creating smart and sustainable manufacturing facilities." *Information* 15.2 (2024): 78.
5. Rakhmonov N. PROSPECTS FOR THE DEVELOPMENT OF INDUSTRIAL 4.0 PROGRAM IN UZBEKISTAN (ON THE EXAMPLE OF A LEATHER SHOE MANUFACTURING ENTERPRISE) //Economics and Innovative Technologies. - 2022. - T. 10. – no. 6. - S. 120-129.