AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

PROSPECTS FOR IMPROVING THE MANAGEMENT SYSTEM FOR INNOVATIVE PROJECTS

https://doi.org/10.5281/zenodo.15676625

Karimbergan Karriev
Assistant at Tashkent State University of Economics

Abstract

In the context of the modern global economy, many changes are taking place in the Republic of Uzbekistan as a result of numerous economic reforms. Innovative projects are one of the best ways to achieve economic growth. If we look at the indicators of countries around the world in terms of the implementation of global innovative projects in their economies, we can see the following situation. For example, this indicator is 64.6% in Switzerland, 61.8% in the United States, 61.6% in Sweden, 59.2% in the United Kingdom, 55.3% in China, 38.1% in Turkey, and 34.3% in Russia. In our country, the implementation of innovative projects in the economy has been developing rapidly over the past 10 years. This article provides an analysis of the current state of implementation of innovative projects in Uzbekistan, as well as an analysis of existing problems and proposals for their solution.

Key words

IPMS, R&D, Science, Technology, Science Development Concept, Agile approach.

Аннотация

В контексте современной глобальной экономики в Республике Узбекистан происходят многочисленные изменения в результате проведения экономических реформ. Инновационные проекты являются одним из лучших способов достижения экономического роста. Если посмотреть на показатели стран мира с точки зрения реализации глобальных инновационных проектов в их экономиках, то можно увидеть следующую картину. Например, этот показатель составляет 64,6% в Швейцарии, 61,8% в США, 61,6% в Швеции, 59,2% в Великобритании, 55,3% в Китае, 38,1% в Турции и 34,3% в России. В нашей стране реализация инновационных проектов в экономике быстро развивается в течение последних 10 лет. В данной статье представлен анализ текущего состояния реализации инновационных проектов в Узбекистане, а также анализ существующих проблем и предложения по их решению.

Ключевые слова

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

СУИП, НИОКР, наука, технологии, концепция развития науки, Agile-подход.

INTRODUCTION

Today, competition in the global economy is becoming increasingly intense, and the formation and implementation of innovative ideas are of particular importance in this regard. Based on this, the application of innovative projects plays an important role in the comprehensive development of a country. Goals can be achieved quickly and effectively by improving the management system for innovative projects. In this section, we will look at the directions of the innovative project management system and classify the main types. The innovative project management system (IPMS) is a set of organisational, methodological and instrumental tools aimed at the effective planning, implementation, control and evaluation of the process of developing and introducing innovations in an organisation.

One type of targeted management of innovative activity is an innovation project, which is understood as a set of interrelated measures that ensure the creation of a new type of product and bring it to a usable state within a certain period of time. or technology. Management of innovation projects, which has no analogues. Management activity can be viewed from different perspectives:

– as a process consisting of interrelated stages that make up the management cycle;

– as a system of management functions;

– as an organisational system.

LITERATURE REVIEW

There are the following project management theories about the meaning of categories such as ‘project’, “innovative project” and ‘project management’. The concept of “project” comes from the Latin “projectus”, which means ‘thrown forward, protruding, standing out’.

In their research, Yu.I. Popov and O.V. Yakovenko provide the following definitions of a project from an economic perspective:

– an undertaking with pre-established goals, the achievement of which determines the completion of the project;

– an undertaking with specific goals, often including requirements for time, cost, and quality of the results to be achieved.

A.A. Bovin, L.E. Cherednikova and V.A. Yakimovich formulate the following definitions of a project: an activity, an event involving the implementation of a set

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

of actions to achieve certain goals, as well as a system of technical, organisational, legal and financial documents necessary for the implementation of any actions.

A.N. Tsvetkov proposes a classification of innovations and scientific and technical innovations based on various characteristics. Tsvetkov believes that innovation and innovation are different economic categories. "Innovation is a process. At the heart of this process is the practical implementation of some kind of innovation. Innovation, therefore, forms the substantive basis of innovation as a process," he writes.

I.T. Balabanova argues that innovation and innovation are the same concept, derived from the same English word, i.e. innovation, as P.N. Zavlin and A.V. Vasilyev propose a classification of innovations based on the following classification criteria: area of application, stages of scientific and technological progress, degree of intensity, pace of implementation of innovations, scale of innovations, effectiveness, and efficiency of innovations.

METHODOLOGY

This coincidence serves as an incentive for entrepreneurs to pursue new innovations, encouraging them to constantly study demand, improve the organisation of marketing activities, and apply more modern methods of financial management (reengineering, brand strategy, benchmarking, etc.). Generating profit through innovation directly corresponds to the target function of any commercial economic entity. This is the essence of the stimulating function of innovation.

The following sources of innovation are distinguished.

1. An unexpected event, which may be sudden success or unforeseen failure.
2. Discrepancy between reality as it is and its reflection in people's opinions and assessments.
3. Changes in the needs of the production process.
4. Changes in the structure of the industry or market.
5. Demographic changes.
6. Changes in perceptions and values.
7. New knowledge, scientific and non-scientific.

One of the main areas of development and stimulation of innovation activity is the creation of an innovation infrastructure. A serious task for the near future is the creation of such an infrastructure of innovation activity that allows ensuring the necessary balance of resources of innovative enterprises (Fig. 1). The program-targeted form of state regulation of innovation involves contract financing through state target programs for support of innovation.

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

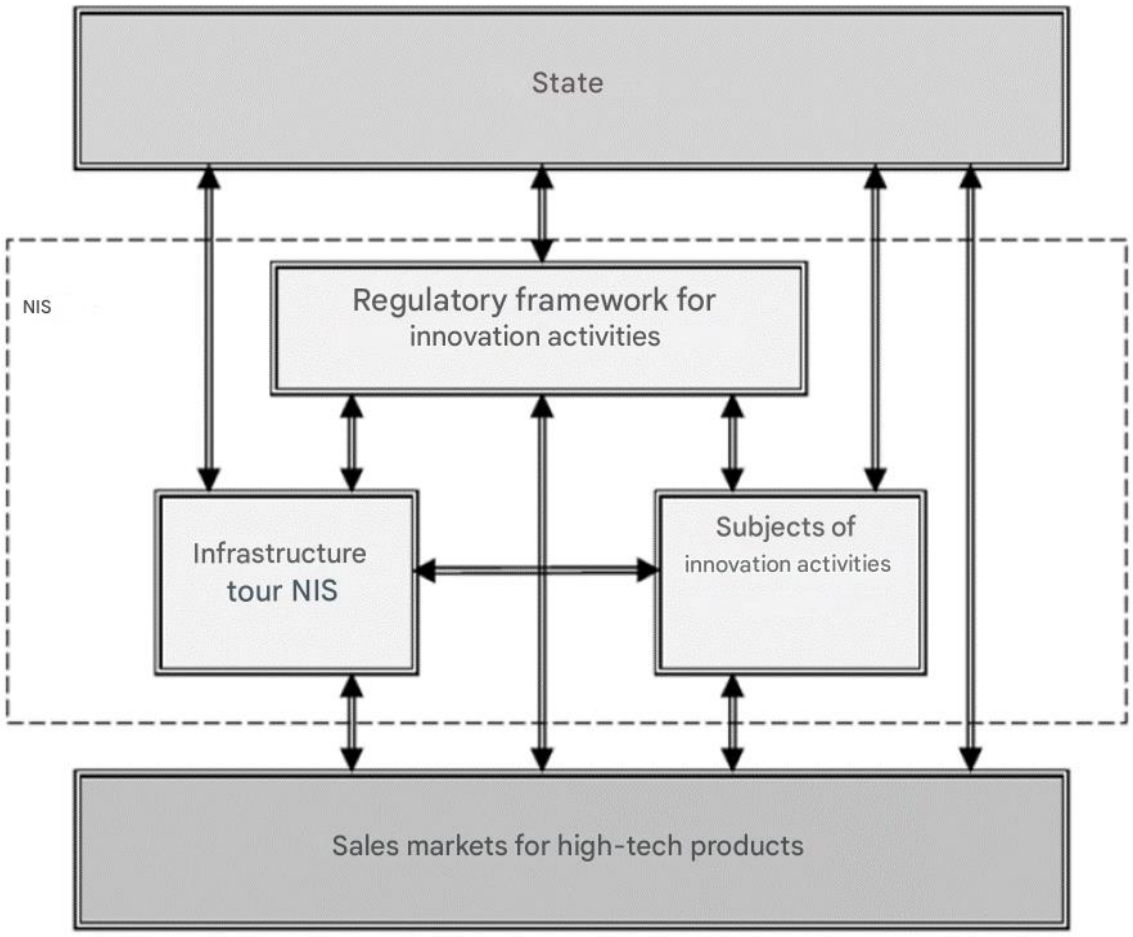

Figure 2 – the role of the state in the formation of the national innovation system

There are several approaches to managing innovative projects that can be applied in an organisation depending on its specifics, goals and context. Let's look at some of the main approaches:

1. Classic (Entrepreneurial) Approach: This approach is based on entrepreneurial initiative and creativity. It focuses on stimulating innovative ideas and projects from entrepreneurs or company management. Key aspects include identifying potential innovations, assessing their commercial value, and developing a strategy for their implementation.

2. Systemic approach: This approach views innovative projects as part of the overall organisational system. It takes into account the interaction and impact of innovations on other aspects of the business, such as strategy, structure, processes and organisational culture. The systemic approach allows you to assess the potential risks and opportunities associated with innovative projects and determine their impact on the business.

3. Agile approach: This approach is based on the principles of agile management. The agile approach allows you to respond quickly to changes in market requirements and conditions, as well as actively interact with the customer

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

to maximise the value of the project. Projects that focus on iterative and incremental development of a product or service.

4. Programmatic approach: This approach focuses on managing a portfolio of innovation projects as part of an organisation's strategy. It includes allocating resources, prioritising projects, coordinating and managing risks at the programme level, and monitoring and evaluating their results.

5. Open Innovation Approach: This approach involves active engagement with external stakeholders, including partners, customers, universities, and start-ups, to exchange ideas, knowledge, and resources. It helps expand the organisation's innovation base, increase access to external innovation, and create value through joint projects and partnerships.

6. Innovation project management tools play an important role in ensuring the successful completion of tasks and the achievement of goals.

7. Priority Matrix: This tool helps to determine the priorities of tasks, ideas or projects based on their importance and urgency. The priority matrix allows you to identify key areas to focus your efforts and resources.

8. Gantt Chart: This tool is a graphical representation of a schedule of tasks and their deadlines. A Gantt chart allows you to visualise the sequence and duration of tasks, as well as their dependencies on each other.

9. Network Diagram: This tool is used to visualise the connections between tasks and determine the critical path of a project. A network diagram helps to optimise the project schedule and identify potential risks and delays.

10. Agile Management Methodology: Agile is a flexible project management method that allows you to quickly respond to changes in requirements and market conditions. The Agile methodology includes tools such as Scrum, Kanban, Extreme Programming (XP), and others.

11. Project Boards: Project boards are used to visualise the status of tasks and their movement through the project. This can be a physical board on the wall with task cards or an electronic application such as Trello or Jira.

12. Communication Management Tools: These tools include email, video conferencing, chat rooms, and document sharing. They enable effective interaction and information exchange between project participants.

13. Risk Assessment Methods: These methods are used to identify, analyse, and manage risks in a project. They help identify potential threats and opportunities and develop strategies to minimise or exploit them.

14. Change Management Tools: These tools help manage changes in the project and minimise their negative impact on task completion. They include change management processes, tracking and control systems.

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

In recent years, Uzbekistan has embarked on a series of reforms aimed at stimulating private sector development, enhancing competitiveness and opening up the economy to trade and investment, including negotiations on accession to the World Trade Organisation. In line with this, the government has also given innovation a prominent place in its political programme, which is at the heart of the United Nations 2030 Agenda and the Sustainable Development Goals (SDGs): it has established a Ministry of Innovative Development, enacted new laws and introduced various mechanisms aimed at supporting the creation of start-ups and the development of entrepreneurship. To sustain long-term growth and capitalise on the momentum generated by recent reforms promoting innovative growth, Uzbekistan should encourage systematic experimentation with new ideas to diversify and modernise the economy.

In 2023, Uzbekistan plans to implement projects worth $17.34bn, of which $7.06bn is foreign direct investment. Most of the investments are directed to geology, energy and industry. In 2024, it is planned to implement projects worth $18.2bn with foreign investments worth $7.73bn.

In Uzbekistan, as in most other former Soviet republics, both basic and applied research is predominantly carried out by public research institutions, and the public sector conducts more research on a regular basis than private companies. In 2019, for example, 304 companies conducted R&D activities, of which 121 were from the private sector (40 %), 118 were state-owned enterprises2 (39 %), more precisely research institutes, i.e. structures preserved from Soviet times, and 65 were higher education institutions (21 %). In comparison, 35% of all Uzbek firms participating in the Business Environment and Enterprise Performance Survey (BEEPS) invested in R&D, which is higher than the regional average (25.1%) and the average of the group of income countries, but lower than in Tajikistan (36.7%), the Russian Federation (55%) and Turkey (65%). Uzbekistan needs not only to stimulate increased investment in R&D and better support R&D activities, but also to strengthen the role of the private sector in R&D and innovation. This can be achieved, for example, by creating working linkages between science and business, and by ensuring that public support for R&D gives added impetus to efforts to realise commercial potential across the economy (fig. 2).

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

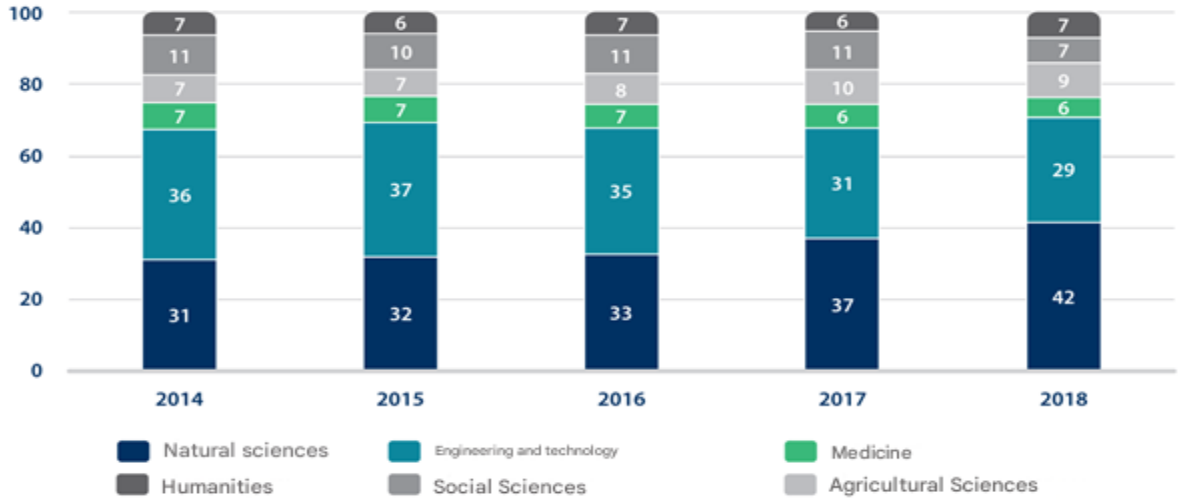

Figure 2- R&D expenditure, 2009-2018 (% of GDP)

There is scope for further diversification of R&D activities at the level of different research areas in order to maximise the potential of different sectors of the economy. For example, in 2018, 29% of gross R&D expenditure was spent on applied research, 21.5% on experimental development and 19.5% on basic research (UNESCO, 2021a). More than 70 per cent of R&D activity was in the natural sciences and engineering and technology, with the share of natural sciences rising to 40 per cent in recent years. However, agriculture, health and social sciences and humanities each accounted for less than 10% of gross R&D expenditure. Given the significant growth potential of the agricultural sector, increasing the currently too low gross expenditure on R&D in agriculture would create favourable conditions to support sustainable development (fig. 3).

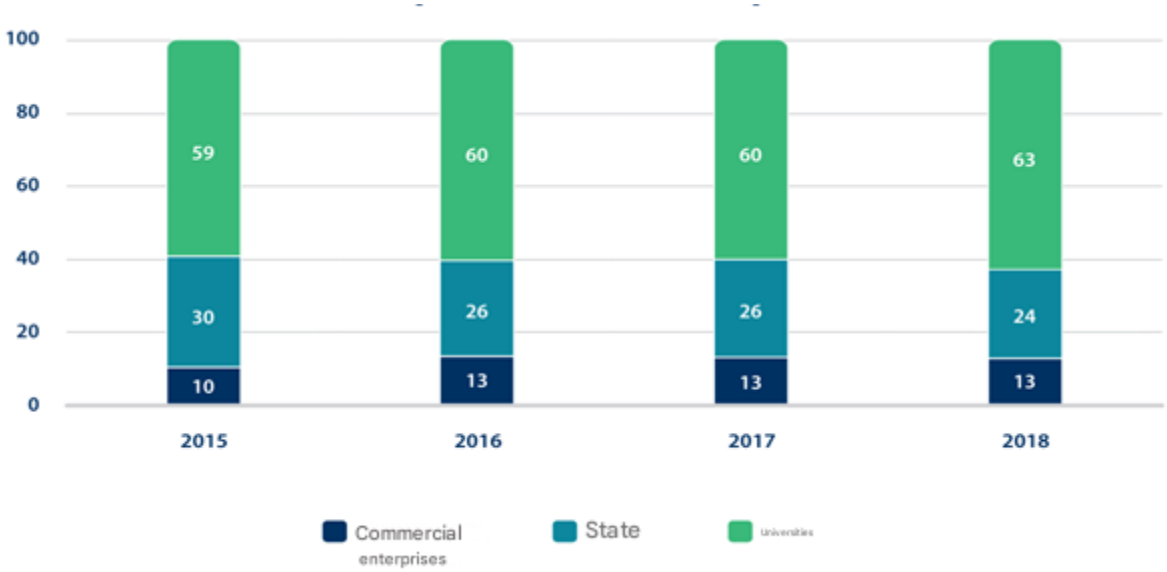

Figure 3 - researchers (in terms of full-time equivalents) by sector, 2015-2018

National innovation systems are still characterised by fragmentation and lack of synergies, and medium- and long-term policy planning is underdeveloped.

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

Procedures for defining and developing innovation policies do not sufficiently involve the private sector and civil society, which reduces the effectiveness of policy interventions and may lead to the neglect of pressing issues and changes in the policy agenda. Policy mechanisms have not yet been able to fully address the lack of private sector absorptive capacity, which represents a barrier to innovation, as the lack of capacity leaves enterprises without the tools and capabilities needed to effectively absorb new knowledge and technologies and to test new ideas.

Further, the index value was calculated by using the arithmetic mean of the two blocks. The S&T growth index was calculated on the basis of statistical data for 2020-2024. The results obtained are summarised in the following Table 1.

Table 1 - Science and Technology Growth Index for 2019-2024 (Percentage)

Indicators	**Weights**	2020	2021	2022	2023	2024
Science and technology growth index		135,8	104,4	135,2	114,1	120,9
Available resources		146,5	97,9	132,2	83,7	111,0
Scientific organisations	35	205,4	87,3	172,3	47,4	79,7
Growth rate of R&D organisations	50	135,3	89,0	171,7	45,5	83,6
Growth rate of scientific organisations in the public sector	20	104,4	94,8	159,7	40,8	91,5
Growth rate of organisations in the business sector	30	389,7	79,6	181,8	55,0	65,3
Costs	40	122,5	106,3	114,4	111,4	145,1
Growth rate of R&D expenditure	50	120,6	107,0	112,3	113,9	139,2
Growth rate of public sector expenditure	20	106,5	108,6	113,3	138,4	126,5
Growth rate of business sector expenditure	30	136,3	103,8	118,7	89,3	167,3
Practical results achieved		**125,1**	**111,0**	**138,2**	**144,5**	**130,8**
R&D performed	**70**	**127,3**	**105,5**	**157,2**	**127,8**	**115,9**
Growth rate of R&D performed	50	125,4	105,6	151,2	125,5	116,2
Growth rate of public sector R&D performed	20	101,0	99,9	119,9	169,7	121,0
Growth rate of business sector R&D performed	30	148,1	109,1	192,1	103,5	111,8

Over the past five years, a number of measures have been taken within the framework of the Strategy for Action to promote the country's innovative

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

development, provide comprehensive support for science and research, and improve its efficiency. In particular, the Ministry of Innovative Development was established to implement a unified state policy, and the Law on Innovative Activity and the Concept of Science Development until 2030 were adopted, defining the legal framework for regulating relations in the field of innovation. If we analyse the situation in Uzbekistan, we can see that the number of specialists engaged in research is decreasing from year to year. In particular, according to the State Statistics Committee, from 2018 to 2023, the number of researchers decreased from 36.8 thousand to 30.3 thousand, or approximately by 18%. The number of innovation projects per 1 million population is analysed below (fig.4) .

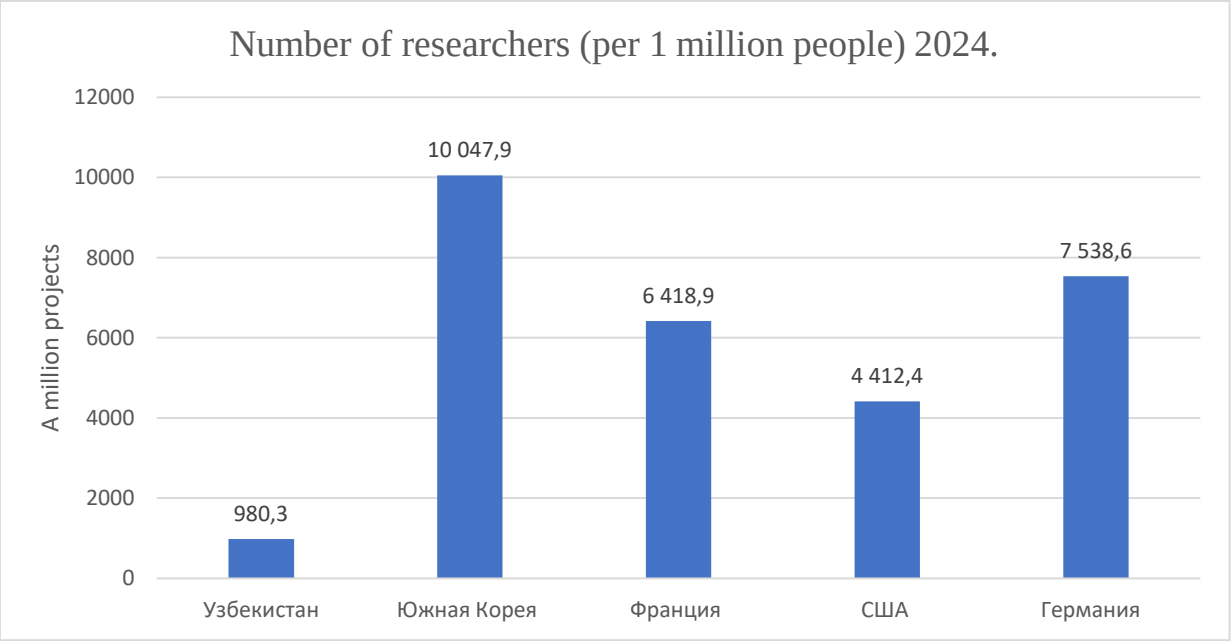

Figure 4 - number of innovation projects per capita, as of 2024.

One of the main reasons for the decline in the number of researchers in Uzbekistan is the relatively low salaries paid to them. In particular, according to the State Statistics Committee, in 2022, the average salary of employees of enterprises and organisations engaged in 'Scientific research and development' is as follows (fig. 5).

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

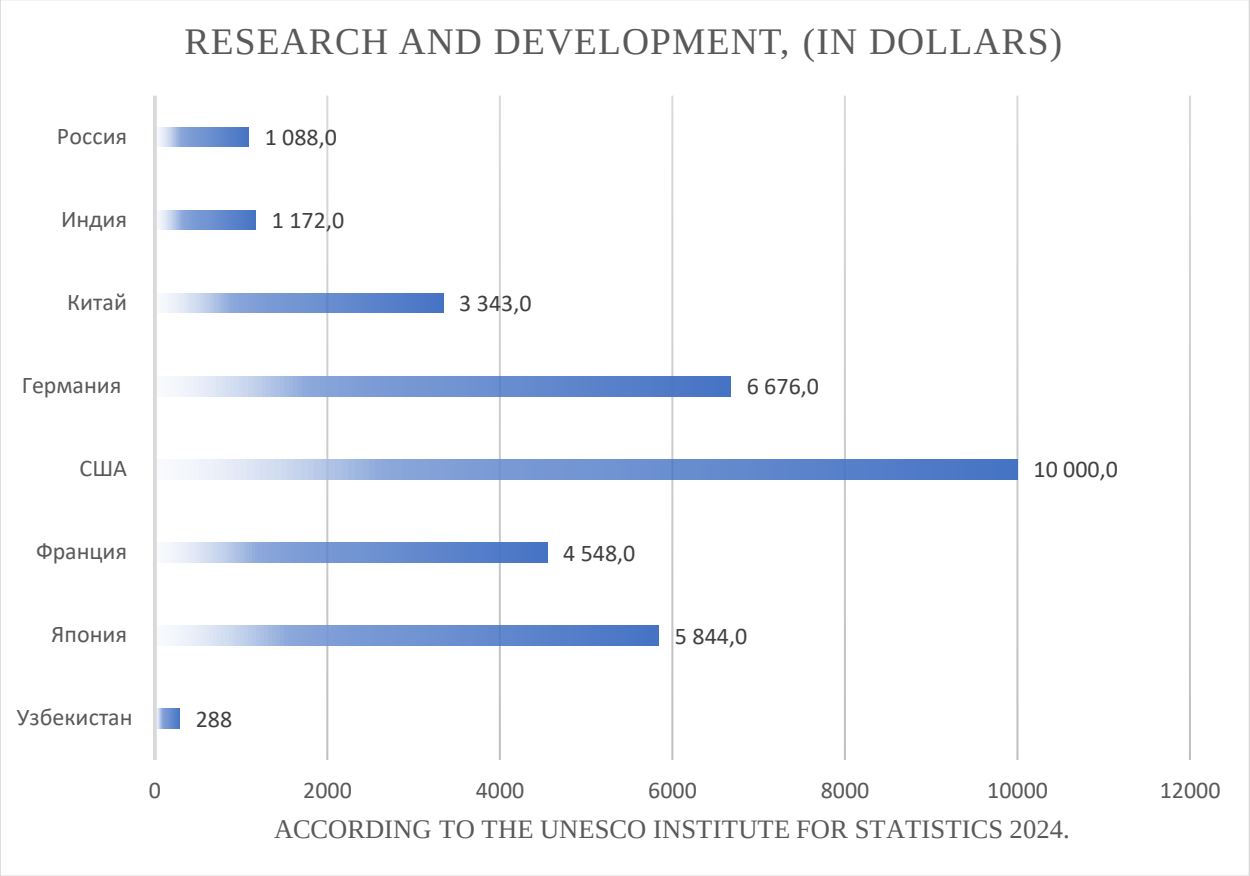

Figure 5 - average wages of employees of enterprises and organisations engaged in

If we analyse this indicator by region, we can see that in Surkhandarya, Syrdarya and Fergana regions it was 1,200-1,300 thousand soums (~ USD 112-121). One of the important factors influencing the development of innovations in the country is the financing of science. The main source of funding for science in Uzbekistan has traditionally been budgetary funds. The results of the analysis show that the share of funds allocated to R&D in terms of the ratio to GDP is as follows (Fig. 6).

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

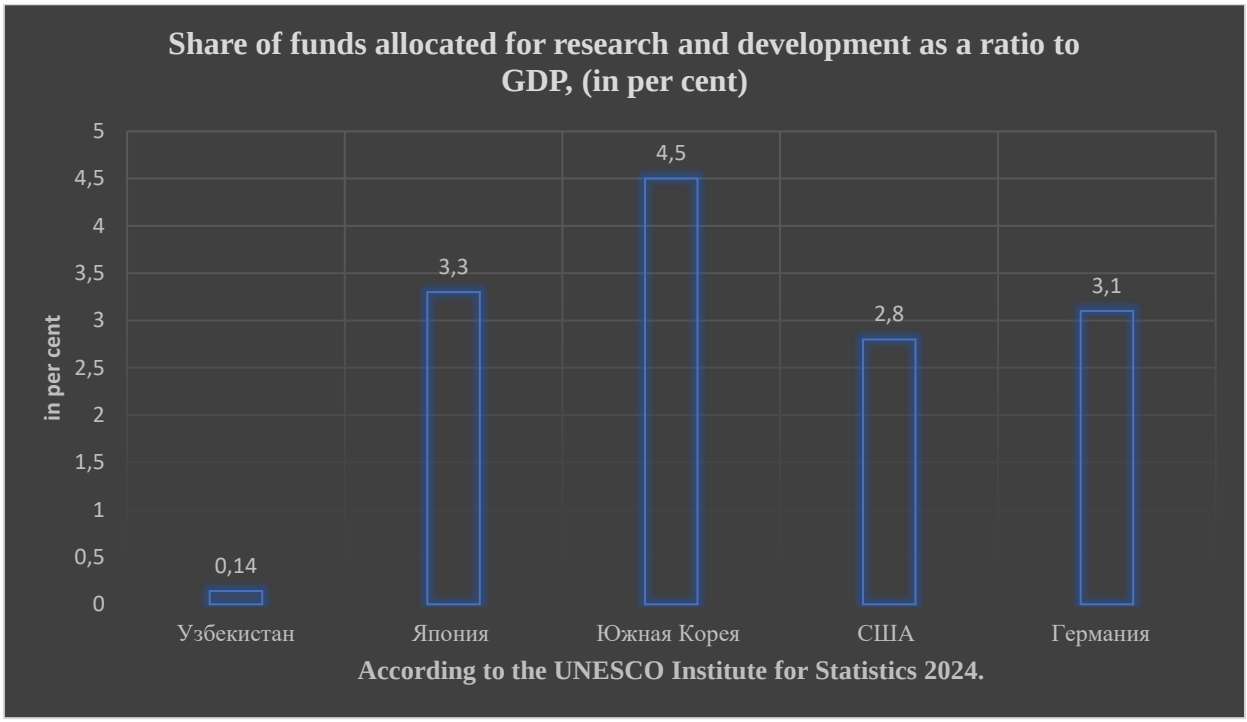

Figure 7 - Share of funds allocated to R&D as a proportion of GDP, (per cent) 2024.

In 2024, 824.7 billion soums were allocated for research and development works, of which 67% came from the state budget and extra-budgetary funds, and the remaining 33% - at the expense of own funds of enterprises and organisations, funds of customers and foreign investors. Low level of interaction between research institutes and higher educational institutions in the implementation of innovations by enterprises and organisations in Uzbekistan. In particular, if enterprises and organisations introduced 4,290 innovations in 2022, of which 65 innovations were developed jointly with research institutes and 20 innovations jointly with higher education institutions. Taking into account that the development of science and innovation will enable sustainable economic growth, the creation of new economic sectors, ensuring the country's economic security and the introduction of modern cost-effective technologies in the long term, the following is proposed to change the current situation (tab. 2).

AMERICAN JOURNAL OF SOCIAL SCIENCE
ISSN: 2996-5306 (online) | ResearchBib (IF) = 9.674 IMPACT FACTOR
Volume-3| Issue-6| 2025 Published: |30-06-2025|

Table 2 - targets and indicators of the Science Development Concept until 2030

№	Targets	Unit of measurement	Indicators							
			2025	2026	2027	2028	2029	2030	2035	2050
1.	Share of funds allocated to science in relation to gross domestic product	Percentage	0,2	0,5	0,8	1,0	1,1	1,2	1,6	2
2.	Share of funds allocated by the private sector for research and development in the total funding of science	Percentage	8	12	15	17	18	20	25	30
3.	Share of Uzbekistan in the total number of articles published in international scientific journals indexed in the international scientific database 'Web of Science'	Percentage	0,008	0,017	0,025	0,036	0,042	0,05	0,1	0,2
4.	Number of foreign citations per article published by Uzbek scientists in international scientific journals indexed in the international scientific database 'Web of Science' Number of foreign citations per article published by Uzbek scientists in international scientific journals indexed in the international scientific database 'Web of Science'	Pieces	0,5	0,7	1	1,2	1,3	1,5	2,5	3
5.	Number of articles published by 100 Uzbek scientists in international scientific journals indexed in the international scientific database 'Web of Science'	Pieces	-	3	4	4	5	6	8	10
6.	Average age of applicants	Age	51	49	47	46	46	45	43	39
7.	Share of applicants under the age of 39 in the total number of applicants	Percentage	46,2	47	48	49	50	52	56	61
8.	Share of highly qualified researchers (candidates of sciences, doctors of philosophy, doctors of sciences) in the total number of applicants under the age of 39	Percentage	11	13	15	17	19	20	25	30
9.	Share of applicants under the age of 39 in the total number of applicants sent to the Ministry of Labour and Social Protection of the Republic of Uzbekistan.	Percentage	30	35	40	44	47	50	60	70

Table continues

1	2	3	4	5	6	7	8	9	10	11
10.	Share of innovative products (goods, works and services) in the total volume of sold products (goods, works and services) in the sphere of research and development	Percentage	1,1	3	5	7	9	10	15	20
11.	Inventive activity coefficient (number of patent applications for domestic inventions filed in the country, for every 10 thousand population)	Unit	0,14	0,35	0,5	0,7	1,0	1,2	1,5	2
12.	Share of the cost of machinery and equipment with a useful life of up to 5 years in the total cost of available machinery and equipment in research and development organisations	Percentage	12	15	20	24	27	30	40	50
13.	Share of expenditures on technical	Percentage	7	11	15	17	21	25	35	65
14.	Share of innovative products (goods, works and services) in the total volume of sold products (goods, works and services) in the sphere of research and development	Percentage	54	52	50	48	45	40	30	15
15.	Inventive activity coefficient (number of patent applications for domestic inventions filed in the country, for every 10 thousand population)	Percentage	5	6	7	8	9	10	12	15

CONCLUSION

In order to improve the market economy of Uzbekistan. accompanies changes in the entrepreneurial business activities of the company. The rapid development of technology, the struggle for customers and quality of goods and services, the intensification of competition lead, in the end, to the fact that enterprises need to

reconsider a number of issues on training and development of their business strategy. In carrying out tasks, each functional unit adopts approaches according to its professional characteristics and the motivation of the head of the unit. Every company operating in this sector has a competitive strategy that is formulated in advance or spontaneously depending on market conditions. This strategy can be formed systematically or arise spontaneously in connection with the activities of different divisions of the organisation. Competitive strategy of the company is an effective tool for the development of the company in conditions when the company's resources are limited and competition in the market is tough. Competitive strategy is based on the formation of a strategic goal and means of action to achieve it, allowing to establish a long-term competitive advantage and sustainably improve competitiveness.

LIST OF SOURCES USED

1. Azoev G.L., Chelenkov A.P. Competitive advantages of the firm. - Moscow: 'Typography 'NEWS", 2010. - 176 c.

2. Ansoff I. Strategic Management. Classic edition. / Per. from Engl. ed. by A.N. Petrov - SPb.: Peter, 2009. - 344 c.

3. Arenkov I. A. Marketing research of commodity markets: a textbook / I. A. Arenkov, Y. Y. Salikhova ; under the scientific editorship of G. L. Bagiev ; Ministry of Education and Science of the Russian Federation, St. Petersburg. Federation, St. Petersburg State University of Economics, Institute of Master's Degree, Department of Marketing. - St. Petersburg : Publishing house of St. Petersburg State University of Economics, 2013. - 75 c.

4. Arenkov I.A., Naumov V.N., Seredokho V.A., Yuldasheva O.U. Marketing and consumer value management: Textbook for MBA programme students. - SPb.: Izd-vo 'AMROS', 2013. - 656 c.

5. Bagiev G.L. et al. Marketing Textbook for universities / G.L. Bagiev, V.M. Tarasevich, X. Ann; Edited by G.L. Bagiev. - 2nd edition, revision and additions. - M.: ZAO Izd vo 'Ekonomika', 2011. - 718 c.