

Impact Factor:

ISRA (India) = 6.317
ISI (Dubai, UAE) = 1.582
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIHII (Russia) = 0.126
ESJI (KZ) = 9.035
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)
International Scientific Journal
Theoretical & Applied Science
p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)
Year: 2021 Issue: 07 Volume: 99
Published: 08.07.2021 <http://T-Science.org>

QR – Issue



QR – Article



Mukhriddin Turgunov
Fergana Polytechnic Institute
Assistant of
the Department of Economics,
Fergana city, Republic of Uzbekistan
alferganus.ltd@gmail.com

STATE AND PROSPECTS OF THE REPUBLIC OF UZBEKISTAN IN INTERNATIONAL RATINGS OF INNOVATION DEVELOPMENT

Abstract: Trends in the development of the world economic system indicate the growing influence of innovation on the rate of economic growth. In the world market, products of intellectual labor have a higher cost compared to other areas of economic activity. The article examines current trends, state and prospects of the Republic of Uzbekistan in international ratings that characterize innovative processes in the country. Based on the research conducted, the author proposes a number of directions for enhancing innovation processes in Uzbekistan.

Key words: global innovation index, innovation, innovation process, international rating, economy of Uzbekistan.

Language: English

Citation: Turgunov, M. (2021). State and prospects of the Republic of Uzbekistan in international ratings of innovation development. *ISJ Theoretical & Applied Science*, 07 (99), 37-42.

Soi: <http://s-o-i.org/1.1/TAS-07-99-10> **Doi:**  <https://dx.doi.org/10.15863/TAS.2021.07.99.10>

Scopus ASCC: 2000.

Introduction

UDC 338.242

Market demands dictate the need to create conditions that determine the widespread use of innovations and the innovative susceptibility of the economy. Innovation processes have an impact not only on production, but also on almost all aspects of social life. As a result, the structure of consumption of material and non-material benefits is being improved, new spheres of human life are being created [1,2,3,4,5,6,7,8].

In this regard, the issue of assessing the level of development of innovations in the countries of the world is becoming more and more relevant every year. Today, there are several international indices that assess the innovative development of countries, both partially and completely. The first category includes the Global Competitiveness Index, which identifies a separate block for analyzing the factors that characterize innovation processes. In turn, the Global Innovation Index (GII) and Bloomberg Innovation

Index (Bloomberg Innovation Index) are fully devoted to assessing innovation processes [9,10,11].

The Global Competitiveness Index and the Bloomberg Innovation Index use fewer indicators and replicate those used in the Global Innovation Index. For example, and the Bloomberg Innovation Index, a country is ranked according to indicators such as R&D expenditures from GDP, gross value added of industry, level of productivity, the share of innovative enterprises in the total number of companies, the share of university graduates, the number of researchers per 1 million of the country's population, patent activity. [12]. Also, this Index in 2009 included only 60 countries.

Analysis of literature on the topic

The problem of innovative development of the economy has become relevant recently and occupies a leading position in the works of foreign and domestic scientists. I. Schumpeter [13], who was actually the founder of the theory of innovative development, was one of the first issues of the innovation economy. P.A. Fatkhutdinov [14], I. L. Kalyuzhny [15], S. I.

Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIHII (Russia) = 0.126	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

Abramov [16]. Professor R.A. Fatkhutdinov, among the methods of innovative management, emphasizes the methods of personnel management of an organization aimed at innovation and competitiveness. Issues related to the analysis of innovation processes have been studied in the works of such authors as JJYun [17], S. Wootton [18], A. Leckel, Veilleux, S., & Dana, LP [19], Karhade, P., & Dong, JQ [20], Ridley, M. [21], Malhotra, A., & Schmidt, TS [22], Loorbach, D., Wittmayer, J., Avelino, F., von Wirth, T., & Frantzeskaki, N [23], A. A. Yakushev, A. V. Dubynina [24] and others. Such domestic scientists as A. M. Kodirov [25], M. A. Makhkamova study the innovative activity of industrial enterprises. [26], M. A. Ikramov [27], D. V. Trostyansky [28], Kholmuminov, A. Kh. [29], K. I. Kurpayanidi [30,31,32,33,34] and others. At the same time, the issues of innovations and tendencies of the international ranking remain insufficiently studied in the scientific literature.

Research methodology

The study used methods of analysis and synthesis, induction and deduction, comparative analysis, correlation and regression analysis, economic and mathematical modeling. Analysis and results.

Analysis and results

The Global Innovation Index (GII) is a global benchmarking tool that enables policymakers to better understand incentives and quantifies innovation as a major driver of economic and social development [35]. GII 2020 evaluates 129 countries and territories based on 80 different parameters. Thus, the GII is one of the most important tools for assessing innovation in the world.

The last time Uzbekistan was ranked 122nd out of 141st countries in the 2015 GII ranking. Then Russia took the 48th position, Kazakhstan - 82nd, Kyrgyzstan - 109th, Tajikistan - 114th.

In the past five years, Uzbekistan has dropped out of the GII ranking. The main reason was insufficient data on GII indicators and old figures of existing statistics.

It is known that one of the main tasks set in the Presidential Decree "On Approval of the Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021" is the country's entry into the top 50 countries in the Global Innovation Index by 2030.

To achieve this ambitious goal and address existing gaps, the Ministry of Innovative Development with the assistance of Cornell University, WIPO, the UNESCO Institute for Statistics, the International Monetary Fund, the International Labor Organization, the United Nations Statistical Office and the World Trade Organization, the World Bank, the International Organization for

standardization, Thomson Reuters, UN Industrial Development, Wikimedia and more than 15 international organizations held a number of meetings and individual negotiations to study the problems that prevent Uzbekistan from being included in the rating.

To include our country in the GII ranking and systematically solve existing problems, on October 29-31, 2019, within the framework of the Week of Innovative Ideas "InnoWeek-2019", a round table was held on the topic "Improving the position of the Republic of Uzbekistan in the Global Innovation Index" with the participation of the WIPO leadership, representatives of Elsevier and other foreign organizations. Opinions on 18 GII international indicators, 5 World Economic Forum polls and quantitative statistics on 57 indicators were discussed.

Based on the identified problems, in accordance with the requirements of the GII for 2020, statistical data on at least 66 percent of the indicators (out of 80) required for assessing countries have been processed and submitted to international organizations through the relevant ministries and departments.

As a result, after a long break in the GII-2020 ranking, Uzbekistan was assessed by 43 incoming and 22 outgoing indicators and took 93rd place out of 131st countries. Switzerland took 1st place, Sweden - 2nd, USA - 3rd, Russia - 47th, Kazakhstan - 77th, Kyrgyzstan - 94th, Tajikistan - 109th.

The return of Uzbekistan to the GII is 29 steps higher than five years ago, and is the first result of reforms, in particular, the policy of transparency and openness, as well as positive changes in the innovation sphere.

In the ranking of the Global Innovation Index-2020, which consists of 80 indicators, Uzbekistan ranks 81st in the world in terms of innovative resources, that is, according to the cost sub-index, which is based on institutions (95th place), human capital and research (77), infrastructure (72), knowledge and technology efficiency (90).

The republic is among the top ten countries in the GII ranking in 2020 for the following sub-indicators: ease of starting a business - 8th, graduates of scientific and engineering specialties - 7th and gross capital formation - 8th. At the same time, the country took 12-45th places in 8 important indicators.

In addition, according to the following indicators, Uzbekistan still has low indicators: the quality of legislation - 127th, the rule of law - 124th, export of ICT services - 129th, gross expenditures on research and development funded from abroad - 96th position.

The Global Innovation Index scores and data for 2020 show that Uzbekistan is among the top 50 countries in the world in 14 out of 80 indicators assessed this year. These are "Public spending on education" (31st place), "The ratio of students to teachers, secondary education" (38)," E-government services" (48), "Ease of protecting minority investors"

Impact Factor:

ISRA (India) = 6.317
ISI (Dubai, UAE) = 1.582
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
PIIHQ (Russia) = 0.126
ESJI (KZ) = 9.035
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

(36), “Patent applications for origin” (45), “Increasing labor productivity” (12) and “Export of cultural and creative services” (33).

Studies have shown that there are some problems and difficulties in the field. In particular, the development of innovation processes in Uzbekistan is hampered by a number of problems [36,37,38,39,40,41,42,43,44,45,46,47,48,49]:

Existing research institutes and universities do not cover the needs of enterprises in certain developments, as well as in their quality. In this regard, enterprises have to activate and strengthen their own scientific potential and reduce the number of orders for research in universities and research institutes. Also, a large number of organizations performing R&D are engaged in research and development, and not design and engineering and technological. Hence, there is a bias of enterprises towards the provision of scientific and technical services.

The existing funding for R&D does not provide the necessary significant increase in scientific and technical developments. Insufficient funding for research activities in Uzbekistan in the medium term can lead to a significant slowdown in technological progress and the competitiveness of the national economy. UNESCO recommends developing countries to bring R&D spending to 1% of GDP.

Despite the fact that most of the funding for R&D spending comes from government spending (55.7% in 2018), the public sector and the higher education sector cannot fully absorb this investment in research. There is a process of reallocation of R&D costs from the public sector to the entrepreneurial one. The interest of enterprises in research-by-research institutes and universities is decreasing.

The country is dominated by the costs of applied research, which provide scientific and technological progress, typical for countries with an industrial-oriented economy. However, the role of fundamental research, although not rejected, was in the background. This has led to a lack of fundamental theories and research, which are the basis for applied research and the initial impetus for technological progress.

The level of enterprises that have introduced innovations in the country is rather low (0.30%) compared to world estimates (40% on average). The difficulties of commercialization and new technologies are associated with the lack of a developed technology transfer system, an appropriate regulatory framework and the experience of interaction between science and industry.

The mechanisms for attracting investments in innovative developments are imperfect. In world practice, the most effective mechanisms are business incubators, technology parks, technology transfer

agencies. There are practically no such mechanisms in the republic.

Conclusion and recommendations

Based on the foregoing, the following key areas for the further development of innovative activity in the country should be:

Improve legislation in the field of innovations, in particular, adopt a law on innovation, a provision on state order for R&D, on the procedure for registering, recording and transferring rights to R&D results, as well as on the procedure for registering, financing and recording costs for the implementation of scientific and technical projects.

Create funds to support science and innovation at regional centers of innovative ideas, developments and technologies. Send to the fund 10% of the net profit received from the activities of the centers. The main directions of the fund's activities are to determine:

- allocation of funds to research projects to create a prototype;
- financing promising research and development projects of a practical nature and aimed at solving specific problems to improve the economic situation in the region;
- financial support for obtaining a patent for the most successful developments and others [50-52].

In terms of spending the funds of the Fund for Supporting Innovative Development and innovative ideas, include funds for the implementation of the program, the implementation of research and development projects.

At the same time, with the participation of the Fund, at least 30% of projects should be financed. Funding for such projects occurs on the principle of allocating from 50% to 100% of the required amount for the implementation of the project.

Strengthen interaction between specialized industry universities and research institutes with industry enterprises. Development of research parks, which have closer ties with universities than technology parks, in which highly qualified personnel and large volumes of science-intensive research are concentrated.

To improve the system of transfer and commercialization of scientific developments being created in the country. Namely, to determine as a central body a scientific and practical center for the implementation of innovative developments under the Ministry of Innovative Development in the technology transfer system being created in the country.

To develop a legislative and legal basis for the functioning of technoparks, providing for the adoption of an appropriate law.

Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIHII (Russia) = 0.126	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

References:

1. Sanina, L. V. (2014). Rejtingi ocenki predprinimatel'skogo klimata: mezhdunarodnyj opyt. *Baikal Research Journal*, (5).
2. Rasulev, A. F. (2017). Uzbekistan: novye vyzovy finansovoj sistemy v kontekste innovacionnogo razvitiya. *Jekonomika: strategija i praktika*, (2), 52-67.
3. Kurpayanidi, K. I. (2014). Gosudarstvennoe regulirovanie innovacionnogo processa v Uzbekistane. *Vserossijskij jekonomicheskij zhurnal JeKO*, 6 (480).
4. Kurpayanidi, K. (2021). Actual issues of digitalization in the industrial sector of the economy of Uzbekistan. *Obshhestvo i innovacii*, 2(4/S), 201-212.
5. Kurpayanidi, K. (2021). National innovation system as a key factor in the sustainable development of the economy of Uzbekistan. In *E3S Web of Conferences* (Vol. 258, p. 05026). EDP Sciences.
6. Kurpayanidi, K. I. (2021). Stimulation Of Foreign Economic Activities Of Entrepreneurship On The Basis Of Innovative Development. *Theoretical & Applied Science*, (1), 8-13.
7. Ivanovich, K. K. (n.d.). Public Debt And Its Place In The Macroeconomic Policy Of The Republic Of Uzbekistan. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 15, 157.
8. Kurpayanidi, K. I. (2020). To issues of development of entrepreneurship in the regions: theory and practice of Uzbekistan (on the materials of Andizhan region). *ISJ Theoretical & Applied Science*, 6(86), 1-10.
9. Kurpayanidi, K. I. (2020). Some issues of macroeconomic analysis and forecasting of the economy of Uzbekistan. *Iqtisodiyot va innovatsion texnologiyalar. Ilmiy elektron jurnali*, 2, 100-108.
10. Margianti, E. S., Ikramov, M. A., Abdullaev, A. M., Kurpayanidi, K. I., & Misdiyono, M. (2020). *Role of goal orientation as a predictor of social capital: Practical suggestions for the development of team cohesiveness in SME's*. Monograph. Gunadarma Publisher, Indonesia.
11. Wolniak, R., & Grebski, M. E. (2018). The Bloomberg Innovation Index as a tool to measure economic growth. *Zeszyty Naukowe. Organizacja i Zarzadzanie/Politechnika Slaska*.
12. Abramov, A. (n.d.). *Bloomberg Innovation Index 2019 – Rossija derzhit pozicii*. Retrieved from <https://spbit.ru/news/n165434>
13. Stolper, W. F. (2019). *Joseph Alois Schumpeter*. Princeton University Press.
14. Fathutdinov, R. A. (2017). *Innovacionnyj menedzhment: uchebnik*, 4-e izd. (pp.2003-400). SPb.: Piter. Retrieved from <http://www.e-reading.club/bookreader.php/150414/Innovacionnyimenedzhment.Pdf>
15. Kaljuzhnyj, I. L. (2017). *Osnovy innovacionnogo menedzhmenta i nauchno-proizvodstvennogo predpriyatija*. Uchebnoe posobie. Izdatel'stvo «Prospekt».
16. Abramov, S. I. (2017). *Investirovanie: uchebnoe posobie*. Moscow: Centr jekonomiki i marketinga.
17. Yun, J. J., Zhao, X., Jung, K., & Yigitcanlar, T. (2020). *The culture for open innovation dynamics*.
18. Wootton, S., & Horne, T. (2000). *Strategic thinking: A step-by-step approach to strategy*. Kogan Page Publishers.
19. Leckel, A., Veilleux, S., & Dana, L. P. (2020). Local Open Innovation: A means for public policy to increase collaboration for innovation in SMEs. *Technological Forecasting and Social Change*, 153, 119891.
20. Karhade, P., & Dong, J. Q. (2021). Innovation outcomes of digitally enabled collaborative problemistic search capability. *MIS Quarterly*, 45(2).
21. Ridley, M. (2020). *How innovation works: And why it flourishes in freedom*. New York: Harper.
22. Malhotra, A., & Schmidt, T. S. (2020). *Accelerating low-carbon innovation*. Joule.
23. Loorbach, D., Wittmayer, J., Avelino, F., von Wirth, T., & Frantzeskaki, N. (2020). Transformative innovation and translocal diffusion. *Environmental Innovation and Societal Transitions*, 35, 251-260.
24. Jakushev, A. A., & Dubynina, A. V. (2017). *Innovacionnaja jekonomika*.
25. Kadyrov, A.M. (2008). *Formirovanie nacional'noj innovacionnoj sistemy v uslovijah uglublenija jekonomicheskix reform. Aktual'nye problemy razvitiya innovacionnoj dejatel'nosti*. Sbornik nauchnyh trudov mezhdunarodnoj konferencii. – Tashkent.
26. Mahkamova, M. A. (2004). *Formirovanie organizacionno-jekonomicheskogo mehanizma upravlenija innovacionnoj dejatel'nost'ju na*

Impact Factor:

SISRA (India) = 6.317
ISI (Dubai, UAE) = 1.582
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
ПИИИ (Russia) = 0.126
ESJI (KZ) = 9.035
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

- promyshlennyh predpriyatijah Respubliki Uzbekistan*. Diss. d.je.n. – Tashkent.
27. Ikramov, M. A., & Alimov, G. A. (2019). *Formirovanie sprosa kak faktor innovacionnogo razvitija Uzbekistana*. In *Jekonomicheskij rost Rossii: problemy i strategicheskie perspektivy* (pp. 38-44).
 28. Aimbetov, N. K., & Trostjanskij, D. V. (2018). *Delovaja sreda v respublikе Karakalpakstan v uslovijah liberalizacii jekonomiki*. *Jekonomika i finansy (Uzbekistan)*, (4).
 29. Holmuminov, A. H. (2020). *Perspektivy povyshenija konkurentosposobnosti na osnove modernizacii ključevyh sektorov jekonomiki*. *Rossija: tendencii i perspektivy razvitija*, (15-2).
 30. Kurpayanidi, K., & Abdullaev, A. (2021). *Covid-19 pandemic in central Asia: policy and environmental implications and responses for SMES support in Uzbekistan*. *E3S Web Conf.*, 258 (2021) 05027. DOI: <https://doi.org/10.1051/e3sconf/202125805027>
 31. Kurpayanidi, K. I., & Abdullaev, A. M. (2020). *Aktual'nye voprosy innovacionnoj strategii razvitija territorij Uzbekistana*. In *Mintaka iktisodijotini investicijalashning molijavij-huhuhij va innovacion zhihatlari* (pp. 166-171).
 32. Kurpayanidi, K. I. (2019). *Theoretical basis of management of innovative activity of industrial corporation*. *ISJ Theoretical & Applied Science*, 01 (69), 7-14. DOI: <https://dx.doi.org/10.15863/TAS.2019.01.69.3>
 33. Kurpayanidi, K. (2018). *To the questions of estimating the efficiency of entrepreneurship in the Forbes rating “The best countries for business” (on the materials of the Republic of Uzbekistan)*. *Bulletin of Science and Practice*, 4, (3), 193-202. DOI: <https://doi.org/10.5281/zenodo.1198710>
 34. Kurpayanidi, K. (2020). *Corporate industry analysis of the effectiveness of entrepreneurship subjects in the conditions of innovative activity*. *Journal of Economy and Business*, 2-1, pp.164-166. DOI: <https://doi.org/10.24411/2411-0450-2020-10111>
 35. (2020). *Global innovation index 2020. Who will finance innovation?* 13th edition. Cornell University, INSEAD, and the World Intellectual Property Organization, 2020. https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2020.pdf
 36. Abdurahmanov, K. H. (2018). *Problemy zanjatosti v innovacionnoj jekonomike*. *Nauchno-analiticheskij zhurnal Nauka i praktika Rossijskogo jekonomicheskogo universiteta im. GV Plehanova*, 10(2), 9-20.
 37. Muminova, Je. A., & Sharafuddinova, N. F. K. (2019). *K voprosam vhozhdenija stran v Mezhdunarodnyj jekonomicheskij forum* (WEF). *Problemy sovremennoj nauki i obrazovanija*, (5 (138)).
 38. Makushina, A. Ju. (2020). *Mesto malogo predprinimatel'stva v jekonomike Respubliki Uzbekistan i ee vneshnejekonomicheskome komplekse: tekushhee sostojanie i perspektivy razvitija*. *Jekonomika i finansy (Uzbekistan)*, 2 (134).
 39. Ivanovich, K. K. (2020). *About some questions of classification of institutional conditions determining the structure of doing business in Uzbekistan*. *South Asian Journal of Marketing & Management Research*, 10(5), 17-28.
 40. Mamurov, D. E. (2020). *Regulation of innovation processes*, 38.
 41. Mamurov, D., et al. (2019). *Osobennosti podderzhki innovacionnoj dejatel'nosti: zarubezhnyj opyt i praktika dlja Uzbekistana*. *Bjulleten' nauki i praktiki*, 5 (11), 255-261. DOI: <https://doi.org/10.33619/2414-2948/48/29>
 42. Abdullaev, A., Kurpayanidi, K., Teshabaev, A., & Solieva, D. (2020). *Research of Enterprise Management Systems: Essence, Methods and Problems*. *Bulletin of Science and Practice*, 6(2), 182-192. (in Russian). <https://doi.org/10.33619/2414-2948/51/18>
 43. Abdullaev, A. M., et al. (2018). *Activation of foreign economic relations on the basis of innovative development*. Practice of Uzbekistan. LAP LAMBERT Academic Publishing, Germany.
 44. Abdullayev, A.M., et al. (2020). *Analysis of industrial enterprise management systems: essence, methodology and problems*. *Journal of critical reviews JCR*, 7(14): 1254-1260. DOI: <https://dx.doi.org/10.17605/OSF.IO/E6JFS>
 45. Ilyosov, A. A., et al. (2020). *Problems of the use of digital technologies in industry in the context of increasing the export potential of the country*. *ISJ Theoretical & Applied Science*, 10 (90), 113-117. DOI: <https://dx.doi.org/10.15863/TAS.2020.10.90.23>
 46. Kurpayanidi, K. I. (2020). *Actual problems of implementation of investment industrial entrepreneurial potential*. *ISJ Theoretical & Applied Science*, 01 (81), 301-307. DOI: <https://dx.doi.org/10.15863/TAS.2020.01.81.54>
 47. Kurpayanidi, K. I. (2020). *To the problem of doing business in the conditions of the digital economy*. *ISJ Theoretical & Applied Science*, 09 (89), 1-7. DOI: <https://dx.doi.org/10.15863/TAS.2020.09.89.1>
 48. Kurpayanidi, K.I. (2018). *Questions of classification of institutional conditions, determining the structure of business management in Uzbekistan*. *ISJ Theoretical & Applied Science*, 09 (65): 1-8. DOI: <https://dx.doi.org/10.15863/TAS.2018.09.65.1>

Impact Factor:

ISRA (India) = 6.317
ISI (Dubai, UAE) = 1.582
GIF (Australia) = 0.564
JIF = 1.500

SIS (USA) = 0.912
ПИИИ (Russia) = 0.126
ESJI (KZ) = 9.035
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
OAJI (USA) = 0.350

49. Kurpayanidi, K.I. (2018). The typology of factors of increasing the innovative activity of enterprise entrepreneurs in the industry. *ISJ Theoretical & Applied Science*, 10 (66), 1-11. Doi: <https://dx.doi.org/10.15863/TAS.2018.10.66.1>
50. Kurpayanidi, K. I. (2020). *Voprosy vedenija biznesa v uslovijah cifrovizacii jekonomiki*. Upravlenie innovacionnymi i investicionnymi processami i izmenenijami v uslovijah cifrovoj jekonomiki: Sbornik nauchnyh trudov po itogam III mezhdunarodnoj nauchno-prakticheskoj konferencii, Sankt-Peterburg, 27–28 oktjabrja 2020 goda / Pod redakciej G.A. Krajuhina, G.L. Bagieva. (pp.126-133). Sankt-Peterburg: Sankt-Peterburgskij gosudarstvennyj jekonomicheskij universitet.
51. Guljamov, S. S., & Shermuhamedov, A. T. (2016). Rol' Rossii vo vnedrenii innovacionnyh proektov v respublike Uzbekistan. *Innovacionnye processy i tehnologii v sovremennom mire*, (1), 176-178.
52. Mamatova, Z. M., et al. (2019). To the question of Science approach to the construction of outsourcing business model of modern enterprise structure. *Dostizhenija nauki i obrazovanija*, 7 (48).