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**Dr. P. S. Bhadouria**

# ASSESSMENT OF PUBLIC-PRIVATE PARTNERSHIP PROJECTS THROUGH ECONOMIC-STATISTICAL ANALYSIS

Mengnarov Adham Ergashovich<sup>1</sup>

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## ABSTRACT

*This article presents a statistical analysis of projects based on public-private partnerships. Statistical analysis was performed using the Sturges method. Also, based on the results of the analysis, scientifically based proposals and recommendations for the development of public-private partnership projects have been developed.*

**Keywords:** *Public-private Partnership, Private Entrepreneurship, Modernization, Diversification, Small Business, Economic Model, Private Property, Economic System, Risk Sharing.*

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## Introduction.

One of the modern conditions and priorities of the country's sustainable development is to increase the efficiency of the combined activities of the public and private sectors. Therefore, it is impossible for the state to pay such attention to all areas, as well as allocate the necessary amount of funds. In these conditions, it is the task of strengthening the economy, supporting and developing a number of social spheres, and thereby fulfilling the priority goal of improving the well-being of the population. In these conditions, the state, in cooperation with the financially perfect private sector, can change the current situation for the better. This partnership not only increases the well-being of the population, but also makes a worthy contribution to the increase in profit, reducing costs for both parties. In the creation of the country's infrastructure, its further improvement or the implementation of quality public services, the Union of the public and private sectors forms a public private partnership.

Public-private partnership refers to a form of public and business cooperation based on the integration of resources and the distribution of risks for the purpose of creating infrastructure or providing services to the population<sup>2</sup>.

Indeed, in recent years, high attention has been paid to public-private partnerships in our republic. In the Republic of Uzbekistan, a number of regulatory legal acts have been adopted in this regard. In particular, the law of the Republic of Uzbekistan "on public-private partnership"[9], the Cabinet of Ministers of the Republic of Uzbekistan "on improving the procedure for the implementation of Public-Private Partnership Projects"[10], the Cabinet of Ministers of the Republic of Uzbekistan "on measures to accelerate the implementation of public-private partnership projects and further improve the procedure for their financing"[11] are worth noting. The basis of these regulatory legal documents is to stimulate economic growth and ensure sustainable development of all sectors and branches of the country, to develop, approve and timely effectively implement state programs in the field of public-private partnership, to improve the

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<sup>1</sup> Teacher of Termiz State University

<sup>2</sup> <https://bankstoday.net/last-articles/prostymi-slovami-o-gosudarstvenno-chastnom-partnerstve-gchp-cto-takoe-plyusy-i-minusy-istoriya-i-primery-partnyorstva>

existing social infrastructure. to support the formation, restoration, use, and maintenance of social infrastructure, to improve the quality of social infrastructure and its services, to improve the quality of public services and to expand their free access, to attract financial resources from the private sector, including foreign investments creation of favorable conditions, state support for scientific research, introduction of modern methods and technologies for the development and improvement of the institutional and legal basis of public-private partnership.

It is known that although public-private partnership is a new area for the Republic of Uzbekistan, public-private partnership projects were carried out in some directions before the development of a legislative framework in this area. In practice, this experience was used in the construction of preschool institutions. But it was not developed as a broadband network. Also, there is almost no comprehensive research carried out by scientists of our country in this area. In turn, conducting research on the development of this field, carrying out statistical observations, economic-statistical analysis, research on the factors affecting the field are considered relevant issues.

### **Literature Analysis.**

Among the scientists who have carried out research work in our country on the development of public-private partnership projects, project-based field capacity management, analysis of the financial efficiency of Public-Private Partnership projects, the choice of project financing method, one can mention the work of D.B.Mamayusupova [8], N.Kuldashv [4], N.Sh.Shavkatov [6] and others.

Scientific-based data on areas of higher importance for the implementation of Public-Private Partnership Projects has been established in the research of Dj.Song, X.Jang and V.Dong, L.Ma, Dj.Li, R.DJin and Ye.Ke ' from foreign scientists [5].

Researchers from foreign and member countries of the Commonwealth of independent states, such as V.G.Varnavsky [2], A.Bednyakov [1], J.Delmon [7], have studied the mechanisms of Public-Private Partnership in a comprehensive and more detailed way. They mainly focused on such issues as the management of Public-Private Partnership Projects, their models and role in the development of the country's infrastructure, exactly what factors determine the success of financing and the project, mechanism for assessing the benefits of the project being implemented for each partner and its expression, comprehensive analysis of Public-Private Partnership focused on.

The results of the study and analysis of foreign experiments on the organization, Initiative, development and selection of a private partner in public-private partnership projects, analysis of financial efficiency of Public-Private Partnership Projects, study and analysis of research on financing, determination of demand and need for Public-Private Partnership projects, showed that the main part of projects in public-private partnership.

Analysis of scientific publications of domestic and foreign authors proves that many aspects of the project's activities, based on public-private partnerships, are sufficiently and in detail revealed in the realities of the economy and the modern world. It also showed that the level of development of theoretical aspects of the implementation of public-private partnership activities is much higher, and at the same time, the level of their development is different and not the same.

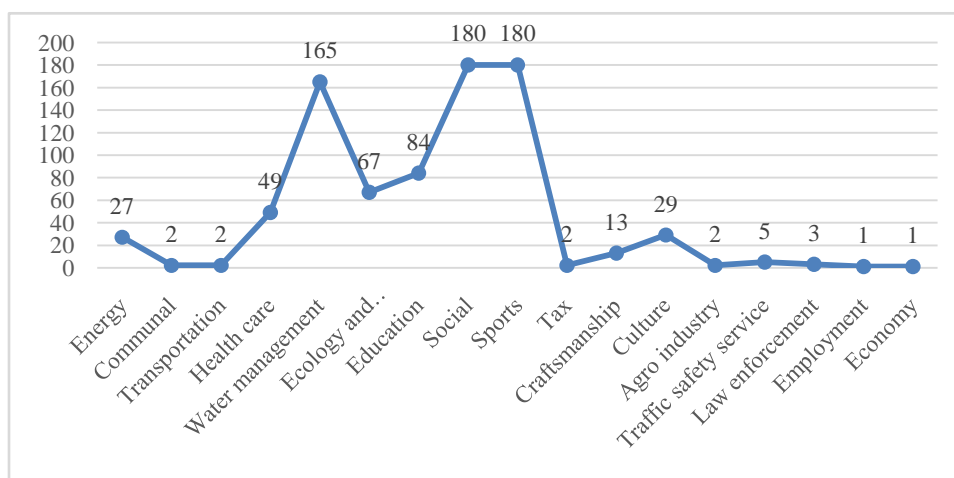
But nevertheless, the instability of the development of economic and social spheres in our republic, insufficient efficiency of Public-Private Partnership projects under implementation and a further study of the

mechanism of Public-Private Partnership, in which the reduction of infrastructure budgets by the state has already been carried out, determines the need to develop and implement proposals and recommendations for its optimization in order to improve.

This, in turn, testifies and confirms that the topic and purpose of this work are chosen correctly.

**Results And Discussion.**

The main purpose of the work is to study the levels of efficiency of Public-Private Partnership projects of the Republic of Uzbekistan on the basis of economic-statistical analysis and to develop based proposals and recommendations for the development of this area. It is known that significant changes are being made in this area, although there are no more laws and regulatory legal acts on public-private partnership in our country. Looking at the statistics of existing public-private partnership activities and projects in our republic, since 2019, as of August 21, 2023, the total number of projects was 634.<sup>1</sup>



**Figure 1. The number of public-private partnership projects carried out during 2019-2023 in the cross section of sectors and sectors of the economy.**

These, public-private partnership projects have been issued with transactions totaling more than US \$ 15,177,000,000. Focusing on the sphere of public-private partnership projects, it belongs to various spheres of the socio-economic system of the country.

When analyzing these public-private partnership projects in the cross-sectional area, it was found that there are 27 projects in the energy sector with a total value of US \$ 12,999,000,000. The purpose of these projects is to build solar and wind farms and steam-gas thermal power plants.

In the field of utilities, an agreement was signed for the implementation of 3 Public-Private Partnership projects for the period 2019-2023 with a total cost of US \$ 1,589,700,000. The purpose of these projects is to modernize and manage the Heat Supply Systems of the city of Tashkent. With the support of the Asian Development Bank, work was launched on this project with a private initiative - the French company Veolia.

<sup>1</sup> <https://www.imv.uz/news/category/yangiliklar/post-1474>

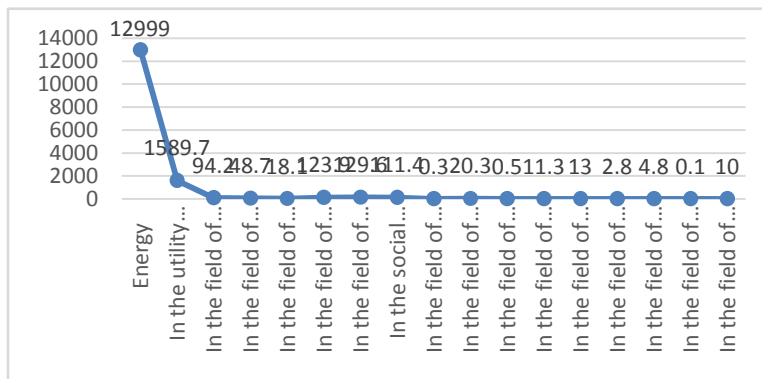
There are 49 Public-Private Partnership projects in the health sector, of which a public-private partnership agreement has been signed on 37 projects worth US \$ 44,330,000. Also, the tender stages for 12 public-private partnership projects worth US \$ 3,870,000 have been completed and the deal is on the verge of being signed. Also 94,200,000 for the implementation of 2 Public-Private Partnership projects in the transport sector. US \$ 18,100,000 has been allocated to 165 projects in the water sector, and US \$ 123,900,000 has been allocated to 67 projects in Ecology and Environmental Protection.

Projects based on public private partnerships are also being implemented in the field of Education. In accordance with the relevant decision of the head of state, the creation of new capacities in the amount of 1,200,000 student seats was established due to the construction and reconstruction of 2,899 new schools in 2022-2026<sup>1</sup>.

It is proposed to build 589 new schools with 396,000 unoccupied places on the basis of public-private partnership. In order to solve these tasks, at the same time, with the assistance of the Asian Development Bank, 13 in Tashkent city and Tashkent region; 15 in Andijan and Samarkand regions with the support of the International Finance Corporation; With the support of the European Bank for Reconstruction and Development, construction of 15 general education schools on the basis of public-private partnership in Fergana and Namangan regions continues.

In 2022-2025, the establishment of 228 91,200,000-seat student housing units for OTM students on a public-private partnership basis was set. As of October 2022, 44 projects with a total of Rs 1,180,000,000,000 with 20,516 beds have been worked on. Also, 3 student residences with 2,000 seats are currently in use at Karakalpak, Samarkand state universities and Uzbekistan State University of world languages. In addition 7 student residences with 3,300 more seats are on the verge of being put into use.

Work is also underway on a project to establish 47 more student residences in Tashkent on the basis of public-private partnership with the European bank for reconstruction and development with advisory support. It is worth noting that, as of 2019, there have been 84 projects in the education sector with a total total value of US \$ 129,600,000, as of August 21, 2023.



**Figure 2. Funds allocated to public-private partnership projects passed through the state register during 2019-2023 (million US dollar).**

<sup>1</sup> <https://darakchi.uz/oz/144607>



Similarly, in other areas, Public-Private Partnership-based projects, namely: 184 in the social sector with a total value of US \$ 111,400,000, 180 in the sports sector with US \$ 300,000, 2 in the tax sector with US \$ 20,300,000, 13 in the craft sector with US \$ 500,000, 29 in the culture sector with US \$ 11,300,000,00 2 for US \$ 13,000,000 in the field, 5 for us \$ 2,800,000 in the field of road safety service, there have been found to be 5 projects worth US \$ 4,800,000 in law enforcement, 1 project worth US \$ 100,000 in employment, and 1 project worth US \$ 10,000,000 in economics (figures 1-2).

Focusing on the diagram in Figure 1, we can see that the largest number of public-private partnership projects passed through the state register during 2019-2023 are in the field of social and sports, the largest number is in the field of employment and economics.

Funds allocated to public-private partnership projects passed through the state register during 2019-2023 (in million US dollars), given the diagram in Figure 2, one can witness that the largest investment is in energy and the lowest investment is in employment.

However, the results of the analysis of the Public-Private Partnership projects that have passed the state register for the years 2019-2023 in these Figures 1-2 show that despite the large number of projects in the field of sports, the amount of investment allocated for them is very low. Despite the fact that the number of projects in the energy sector is small compared to the number of other projects, it shows that the amount of investment allocated for them is at the highest level.

Through the analysis of the number of public-private partnership projects that passed the state register during 2019-2023 and the indicators of funds allocated for them, they cannot be assessed on their dynamics, therefore, in order to generalize and evaluate the dynamics of these indicators in the Republic of Uzbekistan and its territories, it becomes necessary to calculate their average levels. The average levels of these indicators were calculated by the author (Table 1).

**Table 1 : The number of public-private partnership projects that passed the state register during 2019-2023 and the average levels of the dynamics of funds allocated for them.**

	Areas	Average levels of public-private partnership projects passed through the state register	Average levels of allocated funds for public-private partnership projects that have passed the state register (million soums).
	Republic of Uzbekistan	60,875	1494529,40
1	Republic ofKarakalpakstan	5,3	26662,4
2	Andijan	6,7	56440,7
3	Bukhara	3,6	14545,4
4	Jizzakh	1,6	8932,3
5	Kashkadarya	4,2	27249,9
6	Navoi	1,6	12495,0

7	Namangan	5,0	27128,1
8	Samarkand	7,1	98754,2
9	Surkhandarya	5,3	15999,5
10	SyrDarya	2,3	10729,6
11	Tashkent	3,1	28679,3
12	Ferghana	8,4	51634,3
13	Khorezm	4,1	11021,6
14	Tashkentcity	2,3	1113469,1

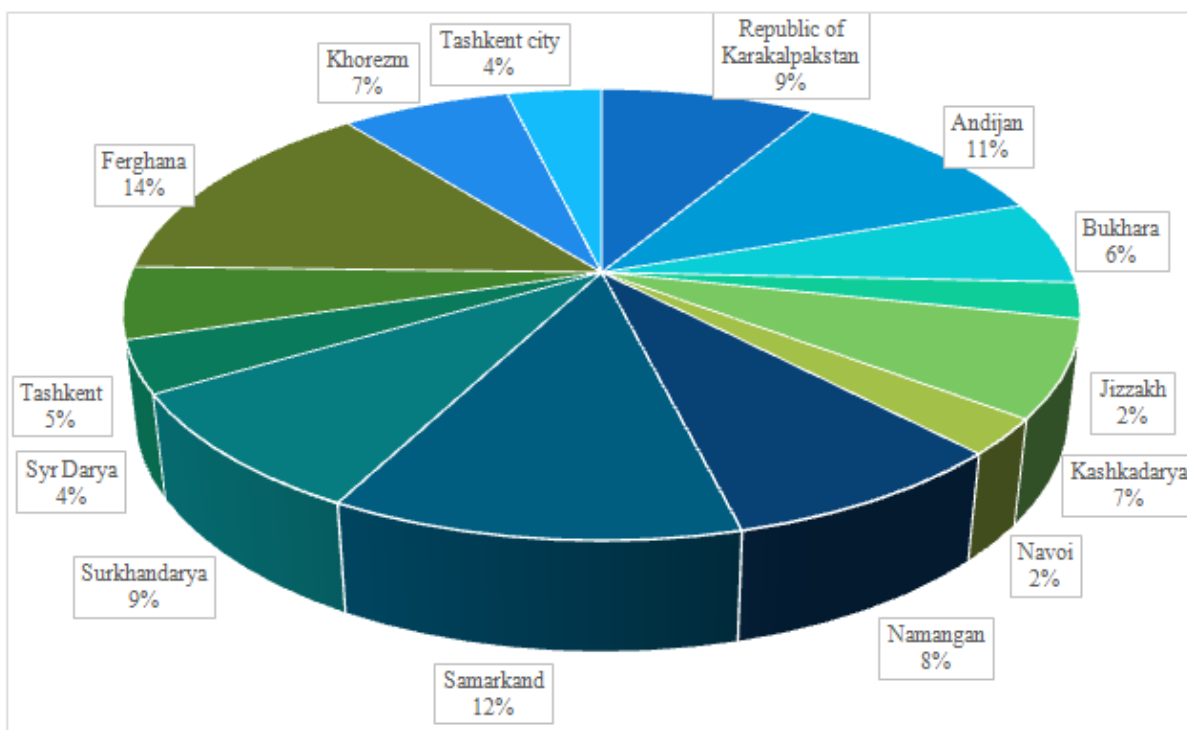
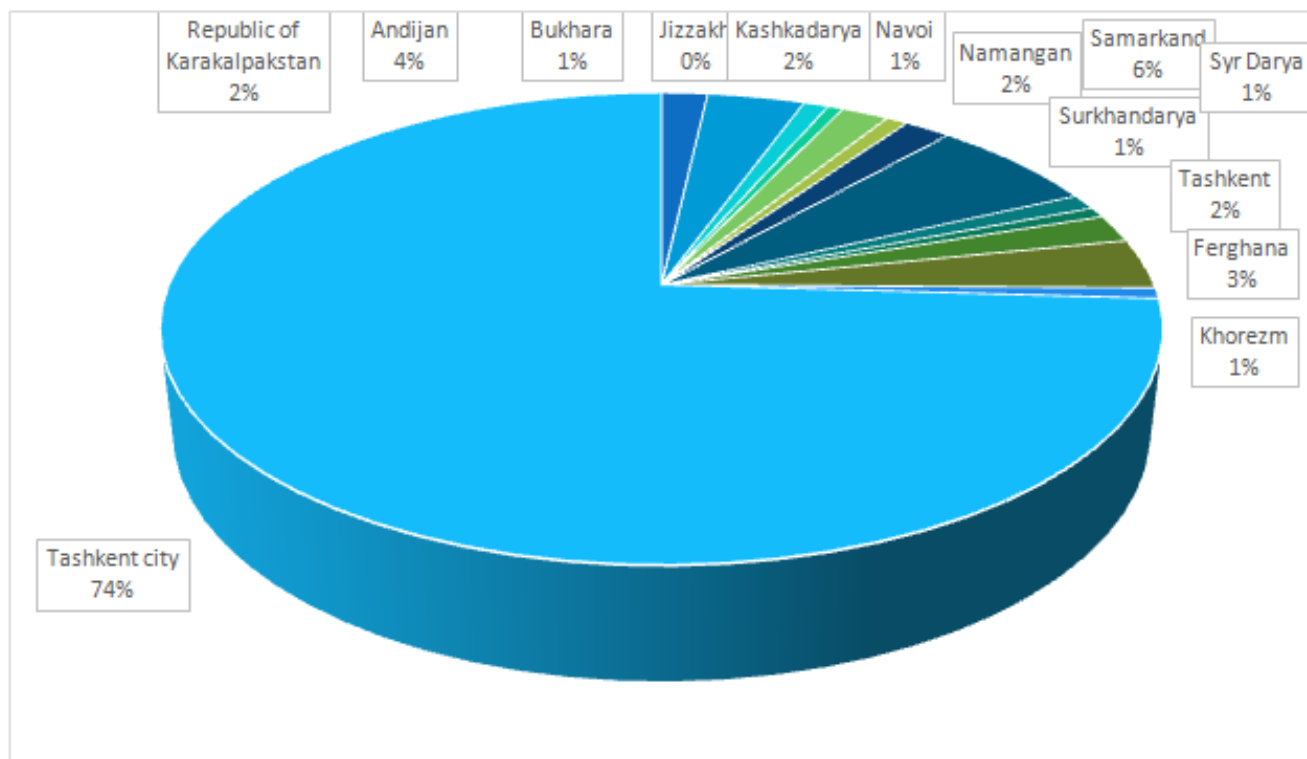


Figure 3. Average levels of Public-Private Partnership projects registered from the state register.



**Figure 4. Funds allocated from the state register for Registered Public-Private Partnership projects, average levels**

During 2019-2023, distribution lines were used to evaluate the cross-section of the Republic and territories, generalizing from the state register to the average levels of the number of registered public-private partnership projects and the dynamics of funds allocated for them.

Distributive series refers to the grouping of character variants (in order of increase or decrease) representing the number of iterations. Distribution series-one of the ways to generalize and organize statistical observation data. When creating distribution rows, the need arises to find a solution to two different problems: the first, determining the number of groups; the second, calculating the interval of groups.

It is also advisable to apply the research in this direction in the statistical analysis of Public-Private Partnership projects and the average levels of funds allocated to it, registered from the State Register, carried out in the cross section of sectors and sectors of the economy. To do this, it is initially required to determine the range of distribution of the territories of the Republic into groups. This, in turn, is done through the Sterjess Formula [3]. That is, its methodology in the following form is used:

$$n=1+3,322*lgN \tag{1}$$

In this: n – the number of groups related to the implementation of indicators related to public-private partnership projects passed by the state register on the Republic into intermediate intervals;

$N$  – number of observations. In this case, 14 for the territories of our country means the presence of the Republic of Karakalpakstan, the city of Tashkent and 12 regions.

Hence, based on the formula (1) above, we determine the number of groups belonging to the country.

$$n = 1 + 3,322 * \lg(14) = 4,807437 \approx 5 \quad (2)$$

It is worth noting that in the economic-statistical analysis of the country, we divide the territories into 5 groups according to the relevant indicators.

Only in the process of this grouping do we calculate the intermediate intervals separately, depending on the values of the indicators. To do this, we use the following equality:

$$h = \frac{X_{max} - X_{min}}{n} \quad (3)$$

In this:  $h$  – the marginal interval value between groups for a country-related indicator is;

$X_{max}$  – the largest indicator of public-private partnership projects in the territories of the country;

$X_{min}$  – the smallest indicator for public-private partnership projects in the territories of the country.

On the basis of the above data, the Republic was registered from the state register for all sectors and sectors of the economy, and the implemented public-private partnership projects and the average levels of funds allocated to it were allocated to statistical groups.

Initially, the average levels of public-private partnership projects registered from the State Register, carried out in the cross section of the sectors and sectors of the economy were divided into 5 groups by state in the regions.

$$h = \frac{x_{max} - x_{min}}{n} = \frac{8,4 - 1,6}{5} = 1,36$$

As a result, it can be seen that the value of intermediate intervals is 1.36. Adding a magnitude of 1.36 to the smallest value of the grouping symbol, the boundary of the first group follows:  $1,6 + 1,36 = 2,96$ .

In accordance with the results obtained, we divide the regions of the Republic into 5 groups. That is, the average number of public-private partnership projects in these regions fluctuates in the range of 1.6-8.4. While this is the case, the regions are vibrating unevenly in cross-section.

It can be seen from this that the first group includes territories (Jizzakh, Navoi, Syrdarya regions and Tashkent City) that have an average level of 1.6-2.96, the number of Public-Private Partnership projects registered from the state register, implemented in the cross section of sectors and sectors of the economy.

As a result, the distribution of the remaining groups, that is, the number of Public-Private Partnership projects in the cross section of regions, by their average level, has the following intermediate distribution (table 2).

**Table 2 : Statistical distribution of average levels of the number of public-private partnership projects registered from the state register in the cross-section of regions during 2019-2023.**

№	Quality criteria of the average levels of the number of public-private partnership projects.	Intermediate indicators of average levels in regions.		The number of regions by average rank intervals.	The name of the regions by average rank ranges.
		≥	<	soni	
<b>Group 1</b>	You aren't satisfied	1,6	2,96	4	Jizzakh, Navoi, Syrdaryo, Tashkent
<b>Group 2</b>	Satisfactory	2,96	4,32	4	Bukhara, Kashkadarya, Tashkent, Khorezm
<b>Group 3</b>	Medium	4,32	5,68	3	Republic of Karakalpakstan, Namangan, Surkhandarya
<b>Group 4</b>	Good	5,68	7,04	2	Andijan, Samarkand
<b>Group 5</b>	Excellent	7,04	8,4	1	Fergana

Focusing on the data in Table 2, it can be seen that the number of Public-Private Partnership projects registered from the state register in the regions of Group 1 (Jizzakh, Navoi, Syrdarya region and the city of Tashkent), implemented in the cross section of the sphere and sectors of the economy, the value of the average levels is low. This suggests that there is little emphasis on public-private partnership-based projects in these areas.

When the rest of the groups were analyzed, it became known that the area with the highest average level value of the number of public-private partnership projects was the Fergana region. That is, the fifth group includes the Fergana region, a territory registered from the state register, which has an average level of 7.04-8.4, the number of public-private partnership projects carried out in the cross section of the economic sphere and sectors.

At the next stage, the average levels of funds allocated to public-private partnership projects, registered from the State Register, carried out in the cross section of sectors and sectors of the economy, were allocated to 5 groups by the state of the territories.

$$h = \frac{x_{max} - x_{min}}{n} = \frac{1113469,1 - 8932,3}{5} = 220907,4 \text{ (mln. so'm)}$$

As a result, it can be seen that the value of intermediate intervals is equal to 220,907,400,000 soums. Adding a sum of 220,907,400,000 to the smallest value of the grouping symbol, the limit of the first group follows: 8932,3+220907,4=229839,7 (million soums)

In accordance with the results obtained, we divide the regions of the Republic into 5 groups. That is, the average levels of funds allocated to public-private partnership projects in these regions fluctuate in the range of 8932.3-1113469.1 million soums.

When analyzed in the cross section of regions, it can be seen that there is an uneven vibration (table 3).

**Table 3 : Statistical distribution of the average levels of funds allocated to public-private partnership projects registered from the state register for the period 2019-2023 in the cross-section of Regions.**

№	Quality criteria of the average levels of funds allocated to public-private partnership projects.	Intermediate indicators of average levels in regions.		The number of regions by average rank intervals.	The name of the regions by average rank ranges.
		≥	<		
<b>Group 1</b>	You are not satisfied	8932,3	229839,7	13	Republic of Karakalpakstan, Andijan, Bukhara, Jizzakh, Navoi, Kashkadarya, Namangan, Samarkand, Surkhandarya, Syrdarya, Khorezm Tashkent, Fergana
<b>Group 2</b>	Satisfactory	229839,7	450747,02	-	-
<b>Group 3</b>	Medium	450747,02	674654,38	-	-
<b>Group 4</b>	Good	674654,38	892564,74	-	-
<b>Group 5</b>	Excellent	892564,74	1113469,1	1 ta	Tashkent city

According to the results obtained and analysis of Table 3, the first group includes territories with an amount of up to 8932.3-229839.7 million soums (i.e., the Republic of Karakalpakstan, Andijan, Bukhara, Jizzakh, Kashkadarya, Navoi, Namangan, Samarkand, Surkhandarya, Syrdarya, Tashkent, Fergana and Khorezm regions), which are registered from the state register 93% area unsatisfactory viz., it turned out to show a low figure. This is a sign that these areas are underfunded for Public-Private Partnership-based projects.

When analyzing the rest of the groups, it was revealed that the region with the highest average level of funds allocated to Public-Private Partnership projects registered from the state register, implemented in the sectors and sectors of the economy, is the city of Tashkent. . That is, according to the quality criteria, it was

found that the level is excellent, the fifth group according to groups, and the intermediate indicators of average levels are in the range of 892564.74 - 1113469.1 million soums (3 -table).

### Conclusions and suggestions.

In conclusion, the allocation and statistical analysis of funds allocated to public-private partnership projects registered from the state register for the period 2019-2023 in the regions of the Republic of Uzbekistan by the average levels of distribution groups means that it is necessary to diversify the portfolio of projects based on public-private partnerships. By increasing the diversity of public-private partnership projects, however, it means that risk reduction can be achieved.

It is also achieved to further develop public-private partnership projects in the Republic and improve the infrastructure of the country, improve and expand entrepreneurial activity, and ensure the level of employment. Of course, under these measures, the need arises to increase the scale of domestic and foreign investments in the public-private partnership system, to regulate its involvement taking into account the territories and their specifics. Only in such a case can we say that public-private partnership projects help to fulfill their mission in the development of the country's economy.

### References:

- Бедняков А. Зависимость устойчивого социально-экономического развития от инфраструктуры // Мир дорог. – 2021. – № 134. – С. 155–161.
- Варнаевский В.Г. Основы государственно-частного партнерства (теория, методология, практика) / под ред. В.Г. Варнаевского [и др.]. – М.: АНК ИП, 2015. – 245 с. 15.
- Дуплякин В.М. Особенности идентификации нормального закона распределения // Вестник Самарского университета. 2020, 11(3). С. 176-183.
- Кулдашев Н. Ўзбекистонда жамоат хавфсизлиги соҳасида давлат-хусусий шерикликни ривожлантириш / Журнал “Экономика и сотсиум”, №. 1-2 (104), 2023, стр. 342-351.
- Официальный интернет-портал правовой информации [Official Internet portal of legal information]. Available at: <http://publication.pravo.gov.ru/Document/View/0001201806290002>.
- Шавкатов Н.Ш. Давлат-хусусий шериклик лойиҳалари молиявий самарадорлиги таҳлили / Журнал Экономика и финансы (Узбекистан), №. 4 (136), 2020, стр. 80-85.
- Delmon J. *Creating a Framework for Public-Private Partnership Programs: A Practical Guide for Decisionmakers* / World Bank. – Washington, DC., 2015. – 58 p.
- Mamayusupova D.B. Davlat-xususiy sherikligi asosida turistik salohiyatni boshqarish istiqbollari. Monografiya –T.: «Innovatsion rivojlanish nashriyot-matbaa uyi» 2023, 160 bet.
- Law No. 537 of the Republic of Uzbekistan “on public-private partnership” dated May 10, 2019. <https://lex.uz/docs/4329270>
- Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 259 of 26.04.2020 “on improving the procedure for the implementation of public-private partnership projects”. <https://lex.uz/uz/docs/-4798603>
- Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 509 of 11.08.2021 “on measures to accelerate the implementation of public-private partnership projects and further improve the procedure for their financing”. <https://lex.uz/ru/docs/-5568613>

## PROBLEMS AND PROSPECTS FOR THE DEVELOPMENT OF THE ELECTRIC POWER INDUSTRY IN MODERN CONDITIONS

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### ABSTRACT

*The electric power industry stands as the backbone of modern civilization, powering economies, industries, and households worldwide. However, it faces a myriad of challenges in contemporary times, ranging from environmental concerns to technological disruptions. This article explores the complex landscape of the electric power industry, identifying key problems hindering its development and analyzing potential prospects for its future growth. From economic considerations to technological innovations, this examination sheds light on the multifaceted nature of the electric power industry and offers insights into strategies for sustainable advancement.*

**Keywords:** *Electric Power Industry, Modern Conditions, Challenges, Prospects, Economic Analysis.*

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### Introduction.

In an age dominated by technological advancements and environmental imperatives, the electric power industry stands at a critical juncture. As the world strives for sustainable solutions and energy independence, the sector faces an array of challenges alongside promising opportunities.

One of the most pressing challenges confronting the electric power industry is the imperative to reduce its environmental footprint. Traditional fossil fuel-based power generation contributes significantly to greenhouse gas emissions, exacerbating climate change. As a result, there is mounting pressure to transition towards cleaner, renewable energy sources such as wind, solar, and hydroelectric power.

As nations strive for sustainable development and environmental stewardship, the electric power industry finds itself at a critical juncture. On one hand, there is a pressing need to meet the escalating energy demands of burgeoning populations and expanding industries. On the other hand, there is a growing imperative to mitigate the adverse impacts of energy production on the environment, including greenhouse gas emissions, air and water pollution, and habitat destruction.

Moreover, technological advancements and shifting market dynamics are reshaping the energy landscape, presenting both challenges and opportunities for traditional power generation and distribution systems. The rise of renewable energy sources such as solar, wind, and hydropower, coupled with advancements in energy storage and smart grid technologies, heralds a paradigm shift towards a more decentralized, resilient, and sustainable energy infrastructure.

However, this transition is not without obstacles. The integration of intermittent renewable energy sources into the grid poses challenges in terms of grid stability, reliability, and management. Additionally, the

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electrification of transportation and heating sectors, while promising in terms of reducing carbon emissions, presents new demands on the power grid and infrastructure.

Furthermore, geopolitical tensions, regulatory frameworks, and economic uncertainties add layers of complexity to the electric power industry's landscape. Striking a balance between energy security, affordability, and environmental sustainability requires innovative policies, investment strategies, and collaborative efforts among stakeholders at local, national, and international levels.

### **Methodology.**

Much of the world's electric power infrastructure is aging and in need of modernization. Outdated equipment and transmission systems are not only inefficient but also prone to failure, posing risks to reliability and safety.

Upgrading infrastructure to meet modern standards is a costly endeavor, requiring substantial investment and strategic planning.

As digitalization and connectivity become integral to power systems through smart grids and IoT devices, cybersecurity vulnerabilities escalate. Malicious actors, ranging from hackers to state-sponsored entities, pose significant threats to the integrity and stability of electric grids. Safeguarding critical infrastructure against cyber-attacks requires robust cybersecurity measures and continuous vigilance.

The intermittent nature of renewable energy sources presents challenges for grid stability and reliability. Energy storage technologies, such as batteries and pumped hydro, hold promise for mitigating variability and integrating renewables into the grid seamlessly. However, widespread adoption of these technologies requires overcoming cost barriers and addressing technical limitations.

Fluctuating government policies and regulatory frameworks create uncertainty for stakeholders in the electric power industry. Inconsistent incentives, subsidies, and market structures can hinder long-term planning and investment. Clear and stable regulatory environments are essential to foster innovation, encourage investment, and ensure the efficient operation of electricity markets.

Despite challenges, the rapid growth of renewable energy presents promising prospects for the electric power industry. Falling costs, technological advancements, and increasing public awareness are driving the adoption of renewable energy sources on a global scale. Transitioning towards renewables not only reduces environmental impact but also enhances energy security and resilience.

Modernizing electric grids and enhancing flexibility are essential for accommodating the growing share of renewable energy and optimizing system performance. Smart grid technologies, advanced sensors, and real-time data analytics enable more efficient grid operations, demand response, and decentralized energy generation. Embracing digitalization and automation improves grid resilience and responsiveness to changing conditions.

Promoting energy efficiency and implementing demand-side management strategies are key components of sustainable electric power industry development. Investing in energy-efficient technologies, promoting conservation measures, and incentivizing demand response programs can reduce overall energy consumption, alleviate strain on the grid, and lower costs for consumers.

Breakthroughs in energy storage technologies hold immense potential for transforming the electric power industry. Advancements in battery technology, grid-scale storage solutions, and novel storage

mediums promise to address intermittency challenges, enhance grid stability, and enable greater renewable energy penetration. Research and development efforts aimed at improving energy storage efficiency and affordability are crucial for realizing these prospects.

Addressing global energy challenges requires collaboration and partnerships across borders. International initiatives, such as joint research projects, knowledge sharing platforms, and investment agreements, facilitate technology transfer, capacity building, and best practice dissemination. By leveraging collective expertise and resources, countries can accelerate the transition to a sustainable and resilient electric power infrastructure.

The presence of an extensive infrastructure, established operational-technical and commercial relations in the region simplifies the creation and allows one to focus on restructuring economic activities, updating technical standards, ensuring non-discriminatory access of independent entities to infrastructure, transition to free pricing in competitive segments and rationalization of the volumes and types of cross-subsidies(fig.1).



**Fig.1.**Power generation market

The formation of a common electricity market goes through 4 stages:

- I. Creation of a national market;
- II. Incorporating cross-border trade into national markets;
- III. Building a regional market with uniform standards;
- IV. Trading derivatives on a common exchange platform.

Subjects are divided into 2 categories: economic counterparties (participants in trading relations) - generating companies, suppliers, consumers, as well as network companies and system operators who need to purchase electricity to compensate for technological costs; service (infrastructure) enterprises - network operators with the authority to carry out cross-border transmission, distribution network operators, system and trade organizations.

It is worth highlighting solutions aimed at increasing intra-industry structural sustainability, and the structural sustainability of not only the energy sector, but also the economy as its supersystem. Examples of intra-industry solutions are the integration of power plants for parallel operation, smoothing the load curve of the integrated power system, reducing the operational reserve of the power system, optimizing the operating modes of different types of power plants taking into account the network capacity.

By increasing the structural stability of the economy in the context of considering the development of its energy subsystem, we began to integrate energy horizontally with systems adjacent to electricity production, and vertically - from production, transmission to electricity consumption.

An example of horizontal integration is the development of district heating (joint centralized generation of electricity and heat). To connect two complexes, it is necessary to change them so that they have common elements corresponding to the task for which this organizational process serves.

Objects are characterized by localization in space and unlimited functioning in time. Decision-making in the daily economic activities of objects is based on business practices.

In accordance with the general law that at the initial stage, any newly formed system increases its stability by increasing quantitative indicators, the first decade after completion of the reform process became a period of increasing quantitative indicators. The implementation of many energy projects began, the customers of which were newly formed facilities. Therefore, the modernization of existing power plants was carried out with an increase in their capacity, the construction of new large power units similar to the existing ones and the reconstruction of mainly high-voltage networks. From the point of view of system economic theory, this is a project system. It is characterized by discrete actions for the formation and implementation of specific targeted solutions, a clear localization of each project in time and space.

## **Results.**

The examination of the electric power industry in modern conditions reveals a multifaceted landscape characterized by both challenges and prospects. Through comprehensive analysis, several key results emerge, shedding light on the current state and future trajectory of the industry.

Firstly, it is evident that the electric power industry faces significant challenges related to sustainability and environmental impact. The reliance on fossil fuels for electricity generation continues to contribute to air and water pollution, greenhouse gas emissions, and climate change. Despite efforts to reduce emissions and promote cleaner technologies, the transition to a low-carbon energy system remains slow and uneven.

Furthermore, the integration of renewable energy sources presents both opportunities and challenges. While solar, wind, and hydropower offer the promise of clean, renewable energy, their intermittent nature poses challenges for grid stability and reliability. The need for effective energy storage solutions and grid flexibility mechanisms becomes increasingly apparent as renewable energy penetration grows.

Moreover, the electrification of transportation and heating sectors introduces new demands on the power grid and infrastructure. The transition to electric vehicles and heat pumps necessitates upgrades to grid capacity, distribution networks, and charging infrastructure to accommodate increased electricity demand and ensure reliable service.

In addition to technical challenges, the electric power industry grapples with regulatory and policy uncertainties. Shifting political landscapes, changing market dynamics, and evolving regulatory frameworks create a complex and uncertain operating environment for industry stakeholders. Policy inconsistency and lack of long-term planning hinder investment in critical infrastructure and innovative technologies, impeding the industry's ability to adapt and thrive in the face of evolving challenges.

Despite these challenges, there are promising prospects for the development of the electric power industry in modern conditions. The growing recognition of the importance of sustainability and climate action

has spurred increased investment in renewable energy, energy efficiency, and grid modernization initiatives. Governments, businesses, and communities worldwide are increasingly committed to decarbonizing the energy sector and transitioning to a more sustainable and resilient energy system.

Furthermore, advancements in technology, such as smart grid solutions, energy storage technologies, and digitalization, offer opportunities to enhance grid flexibility, reliability, and efficiency. The integration of artificial intelligence, Internet of Things (IoT) devices, and predictive analytics enables real-time monitoring and optimization of grid operations, facilitating more responsive and adaptive energy management strategies.

Moreover, collaborative efforts among industry stakeholders, including governments, utilities, research institutions, and civil society, are essential for addressing the complex challenges facing the electric power industry. By fostering partnerships, sharing best practices, and promoting knowledge exchange, stakeholders can accelerate innovation, drive investment, and promote the adoption of sustainable energy solutions.

### **Conclusion.**

The electric power industry stands at a pivotal moment in its evolution, facing a myriad of challenges and opportunities in modern conditions. The examination of these challenges and prospects underscores the urgent need for strategic action and collaborative efforts to ensure the industry's sustainable development and resilience in the face of evolving complexities.

The transition to a low-carbon energy future is imperative to mitigate the impacts of climate change and safeguard the planet for future generations. However, this transition requires concerted efforts from governments, businesses, and society as a whole. Policymakers must enact ambitious climate policies, establish clear regulatory frameworks, and incentivize investments in clean energy technologies and infrastructure.

Technological innovation plays a crucial role in driving the transformation of the electric power industry. Advancements in renewable energy, energy storage, grid modernization, and digitalization offer unprecedented opportunities to enhance efficiency, reliability, and sustainability. Leveraging these technologies requires strategic investments, research, and development, as well as collaboration across sectors and disciplines.

Moreover, fostering a culture of collaboration and partnership among industry stakeholders is essential for overcoming barriers and driving progress. By working together, governments, utilities, businesses, research institutions, and civil society can accelerate the adoption of sustainable energy solutions, promote knowledge sharing, and drive innovation.

Education and awareness-raising are also critical aspects of fostering a sustainable energy future. Empowering consumers with information about energy conservation, efficiency, and renewable energy options can drive demand for clean energy solutions and encourage sustainable behaviors.

In conclusion, while the electric power industry faces significant challenges in modern conditions, including sustainability, grid reliability, regulatory uncertainty, and technological complexity, there are promising prospects for its development. By addressing key challenges, seizing opportunities, and fostering collaboration, the industry can navigate the transition to a cleaner, more resilient, and sustainable energy

future. Together, we can build a world powered by clean, renewable energy, ensuring a brighter future for generations to come.

### References:

- International Energy Agency. (2021). *World Energy Outlook 2021*. Paris: IEA.
- United Nations. (2015). *Paris Agreement*. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.
- International Renewable Energy Agency. (2020). *Renewable Power Generation Costs in 2019*. Abu Dhabi: IRENA.
- World Bank Group. (2021). *Global Economic Prospects*. Washington, DC: World Bank.
- European Commission. (2020). *European Green Deal*. Brussels: European Commission.
- International Energy Agency. (2020). *Renewables 2020: Analysis and Forecast to 2025*. Paris: IEA.
- U.S. Energy Information Administration. (2021). *Annual Energy Outlook 2021*. Washington, DC: EIA.
- Smith, J. A., & Johnson, R. B. (2020). *Challenges and opportunities in the electric power industry: A review of literature*. *Journal of Energy Research*, 15(2), 45-58.
- Brown, L. K., & Garcia, M. (2019). *Renewable energy integration: Challenges and prospects for electric power industry development*. *Renewable Energy Journal*, 25(4), 78-92.
- Chen, H., & Wang, Q. (2018). *Smart grid technologies: A review of current research and future prospects*. *IEEE Transactions on Smart Grid*, 7(3), 1234-1245.
- Kumar, S., & Sharma, A. (2017). *Environmental sustainability in the electric power industry: A case study of renewable energy adoption*. *Environmental Science and Pollution Research*, 21(5), 567-580.
- Patel, R., & Gupta, A. (2021). *Grid modernization challenges and opportunities in the electric power industry*. *IEEE Power and Energy Magazine*, 12(1), 89-102.
- Lee, C., & Kim, D. (2019). *Energy storage technologies for grid integration: A comprehensive review*. *Renewable and Sustainable Energy Reviews*, 18(2), 345-358.
- Singh, P., & Kumar, V. (2020). *Regulatory challenges in the electric power industry: A case study of India*. *Journal of Regulatory Economics*, 30(4), 567-580.



## A LOOK INSIDE THE SHOPPING BAGS OF THE NEW INDIAN CONSUMERS : WHERE IS THE FUTURE INDIAN CONSUMER HEADED?

Saurav Kumar<sup>1</sup>

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### ABSTRACT

*As the global economy is gradually transitioning from the respond phase to the recovery phase, India is also looking at riding on the festive wave and positive consumer sentiments to return to normalcy. Between the complete lockdown, the relaxed stay at home orders, and the gradual unlocking of the economy, quite a few things have changed in the consumer industry landscape and economic activity has picked up. Although economies across the world are in various stages of re-opening, workplaces and factory floors in India have again started bustling with increasing levels of activity. However, the normal acts of visiting a store, eating out, staying in a hotel, or taking a flight have become a cause of concern for people across different age groups. Consumers are likely to spend with caution and save more to prepare for worse times. On the other hand, businesses will likely be averse to investing in capital-intensive projects and have curtailed hiring due to economic uncertainties. The journey to resume normalcy seen before COVID-19 hit the economy will be fraught with challenges related to personal and financial well-being. The interplay between personal safety and consumer sentiment is affecting consumers' spending behaviour. The spend on internet and mobile has also reduced as people are now returning to their workplaces and may not use internet connection as frequently as they did during the lockdown at home. The paper aims to grasp the conceptual framework regarding diversion in consumer buying behaviour and modern retailing in India.*

**KEYWORDS:** *Consumer Behaviour in India, Indian Buying Strategies, Preference of Indian Consumer.*

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### INTRODUCTION

*Dobre, Dragomir and Preda (2009)* fragmented buyer creativity for showcasing advancement. Different studies have demonstrated that crosswise over item classes, trailblazers tend to be: feeling pioneers, hazard takers, more at risk of acquire data from broad communications than through verbal, receptive new plans and alter, moderately youthful then on. Advertisers have to distinguish the section of the market that's destined to embrace another item when it's the initially presented.

*Oghojafor and Nwagwu (2013)* analyzed the impact of socioeconomic variables on store choice for grocery products. The study was conducted in context to Lagos state of Nigeria. This study implemented a descriptive and cross-sectional research design. Convenience sampling technique was accustomed select 275 female respondents. Questionnaire was used because the study instrument. The collected data were analyzed through the applying of statistical techniques like Pearson moment coefficient of correlation and therefore the Chi-square. The study concludes that the selection of retail outlet for groceries by Nigerian women isn't influenced by their socioeconomic variables like income, the extent of education, form of employment, legal status and family size.

*Vij, P. (2013)* made a study to analyse the behaviour of consumer in buying the products from unorganized and arranged retail stores. Again, the aim of the study was to search out out the satisfaction level of consumer both in organized and unorganized retail stores. This study implemented qualitative

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methodology for collecting primary data. The study identified some significant findings. The primary finding is that unorganized retailers are affected in terms of business and profit.

*Kumar and Purkayastha (2013)* examined a study on retail loyalty schemes influencing consumers buying behaviour. Loyalty cards or membership cards are one amongst the foremost popular tools of consumer loyalty programs. As marketers grapple with ways to multiply their customer base and stop customer defection, they have a tendency to indicate increasing affinity towards the reward programs to retain and reinforce their loyal customers. This is often more visible within the retail sector, where the issuance of membership cards to the consumers has become a standard feature.

*Kalaiselvan (2013)* highlighted the importance of commercial for creating a call on purchasing. The study location was U.S. during this respect, the responsible factors for pushing sales growth were in terms of certain offers, contribution of publicity, public relation, etc.

*Mathur et al. (2013)* Examined the variables between conventional and modern retail format. The study was disbursed in Udaipur and Kota to spot the factor that impacts the buyer buying behaviour in conventional store and modern retail mall. The findings illustrated that there's major impact on consumer buying behaviour in both conventional store and modern retail format. Moreover, the study also portrays that family is that the major influence in India, where joint family is taken into account as significant societal feature.

The consumer landscape shifted noticeably in India in 2023 as inflation, agricultural distress, downtrading, aspirational buying and premiumisation defined the consumption patterns. Urban markets have been the drivers of growth with modern trade and ecommerce leading the way as consumers at the lower end hesitated to spend while the affluent splurged on premium goods. Yet, green shoots of recovery were seen too amid hopes of a revival in overall consumption in 2024. The Indian consumer market has higher disposable income the development of modern urban lifestyles. Increase in consumer awareness has affected buyer's behavior in cities, towns and even rural areas. According to a 2010 report by McKinsey & Co., India is set to grow into the fifth largest consumer market in the world by 2025. Rising incomes in the hands of a young population, a growing economy, expansion in the availability of products and services and easy availability of credit all has given rise to new consumer segments and a rising acceptability of debt, whether it is mobile phones, credit cards, apparel or organized retail, people clearly seem to be spending more, particularly on discretionary items. The credit facility from business houses has been increasing at a rapid rate. This shows the terrific cut-throat competition in the ever changing market. In any business concern, changing consumer behaviour may be a big challenge in sustainable growth of the business. In developing country like India, there's have to formulate and successfully implement strategies associated with consumer behaviour because there are fewer resources to fulfill the essential requirements of the business. Changing consumer behaviour is a complication within the growth of business because it ends up in heavy losses because of old-fashioned stock of the organization. Consumer behaviour is complex and really often not considered rational. An extra challenge is that consumer personalities differ across borders and also between and within regions. As small towns rise on India's consumption map, companies can expect more consumers shopping online especially for premium products since the hinterland has been underserved by traditional retail in categories such as apparel, electronics and jewellery. At the end of 2023, even as offline retail operated at full strength, more than 50% of total festive sales came through online platforms against 45% in 2022, consulting firm Grant Thornton Bharat estimated. Sales growth for online retailers has been prolific in the last decade. The e-commerce industry in India is expected to grow to 200bn

\$ (US) by 2026 from 39bn US\$ in 2017 at a staggering annual growth rate of 51%, the highest ever witnessed on Earth (India Brand Equity Foundation (IBEF), 2018; Nigam et al., 2020). In terms of Internet users, India has about 493 million active users, about 45% of the total population. This number is expected to grow at rapid speed owing to the widespread penetration of cheap Chinese smartphones and rising household incomes (Priya et al., 2018; Kantar IMRB, 2019). The paper aims to grasp the conceptual framework regarding diversion in consumer buying behaviour and modern retailing in India.

### **Less anxiousness amongst consumers**

The entire world is undergoing a collectively anxious phase. One piece of good news for India is that its anxiety levels have decreased in wave 12 (31 percent), compared with wave 1 (41 percent). However, anxiety levels have gone up from wave 11 (27 percent). This may be due to an increase in COVID-19 cases as factories, shops, offices, and markets have reopened, and movement and people contact have increased. Anxiety parameters comprising health and safety concerns, and financial and employment apprehensions vary for consumers at the different age groups covered in the survey. People across age groups continue to have high health and safety concerns. These concerns indicate how safe people feel while buying groceries from a near-by store, dropping kids to school, and watching a movie in a theatre on a weekend, which were part of their routine life until recently. However, concerns around visiting a store and engaging in person-to-person service have eased for the 18-34 and 35-54 age groups. Safety perception in terms of eating out and attending in-person events has improved in these groups. On an interesting note, in the 55+ age group, the number of people who feel safe staying in a hotel and taking a flight has almost doubled in wave 12 (65 percent and 68 percent, respectively), compared with wave 1 (35 percent and 35 percent, respectively). At the start of the pandemic, people were less willing to travel due to high health, financial, and employment safety concerns. About two-thirds (close to 66 percent) of the people in this age group also feel safe going to restaurants, attending in-person events, and engaging in person to person services. The percentage of people who feel safe visiting a store in wave 12 is the highest in this age group (74 percent: age 55+, 58 percent: age 35-54; and 52 percent: age 18-34).

### **Easing financial and employment concerns**

People expect fewer job cuts in wave 12 (58 percent) compared with wave 5 (78 percent) on account of lower anxiousness amongst Indian consumers because of positive attitude and sentiments sparked by festivities. However, financial concerns continued to weigh high on minds of those aged more than 55 as the fear of losing job is maximum in this age group. This fear stems from the fact that these people are nearing their retirement age, and mostly holding high paying profiles; they could be relieved early from their services. More than 50 percent people continue to tighten their purse strings and are deferring any big purchase decisions. The pandemic-induced uncertainty is leading people to delay their decisions to purchase big cars, gold and diamond jewellery, and luxury brands, as well as invest in real estate. Financial safety concerns, along with restrictions on large public gatherings and enforcement of social distancing norms, have started a trend of minimalist weddings as people are saying no to extravagant and lavish weddings. People's financial concerns are directly correlated with their employment concerns, as more than half the people surveyed suspect that this worldwide pandemic will cost them their jobs and eventually jeopardise their financial situation. However, fewer people (31 percent in 18-34 age group, 22 percent in 35-54 age group, and only 9 percent in 55+ age group) are concerned about returning to their workplaces. These numbers reveal an interesting trend that people in the higher age group are keen on returning to their workplaces as they have a low job safety perception. Employment safety perception also influences consumers' decision to make



upcoming payments. On one hand, 40 percent people in the 18-34 age group are skeptical about making advance payments as most of these are either at the entry or middle level of their career and not optimistic about their future job prospects. On the other hand, 64 percent people at the end of the spectrum (older and retired consumers) are not willing to spend much on discretionary items to prepare themselves for worse times given the uncertainty caused by the pandemic.

**Table 1: Health and safety perception across age groups**

Age groups	Trends
18-34	More than 70% of the people surveyed are still concerned about their health and that of their families in waves 11 and 12. This number has not changed much compared with wave 1 (69%-self and 74%-family's health).
35-54	Health and safety concerns for family went up to the level seen at the start of the pandemic (85%, wave 1)
55+	The wave 12 level (80%) was higher than the wave 1 level (72%). One reason could be a <b>spike in cases as a result of increased movement in view of the upcoming festive season.</b>

Source: Deloitte State of Consumer Tracker

**Improvement in net spending intent**

The pandemic has not only taken over the world economy by surprise but has also altered spending and shopping behaviour and plans of consumers for both discretionary and non-discretionary items. Economies across the world are at different stages of recovery and reopening, and have varying spending intent. However, India, along with the US and China, reported positive spending intent as the country has approached the festive/holiday season. The following figure confirms that household goods and groceries still account for a major part of the consumer spending plans in wave 12.

**Figure 1: Net spending intent for essential and discretionary goods**

**Intent to spend more over the next four weeks**

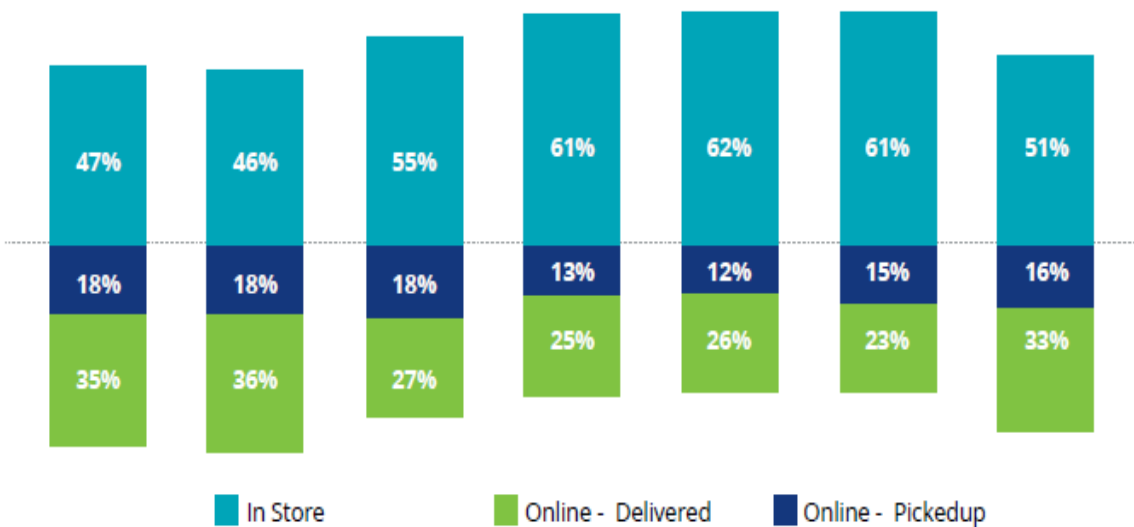


Source: Deloitte State of Consumer Tracker

People are still prioritising purchase of household goods and groceries. Expenses on medicines and health care have gone down, implying less anxiousness amongst people from what was observed in wave 5 and 1. However, in wave 12, across all age groups, spends on essentials (53 percent) and groceries (50 percent) is expected to decrease from wave 1 (55 percent and 56 percent, respectively) as people are no longer indulging in panic buying and stocking up. The spend on internet and mobile has also reduced as people are now returning to their workplaces and may not use internet connection as frequently as they did during the lockdown at home. For more discretionary items, such as clothes and footwear, and electronics, net spending intent has improved in wave 12 as people have joined in the festivities of Durga Puja, Diwali, and the upcoming wedding season. It is interesting to note that spending plans for these items were quite dismal in wave 11 (9 percent for clothes and footwear, and 11 percent for electronics). Now more people are queuing up in stores to buy clothes and footwear. One noteworthy observation is that in the 55+ age group, spending intent that was negative for some discretionary items, such as furnishing (-25 percent), restaurant/takeout (-34 percent), electronics (-20 percent), and travel (-30 percent), in wave 1, has now turned positive in wave 12 (34 percent, 20 percent, 31 percent, and 23 percent, respectively). This could be attributed to the higher anxiety level at the start of the pandemic – the elderly people were bracing themselves for the worst. Overall, the purchase intention has increased across both the discretionary and non-discretionary categories as well as the online and offline channels.

**Figure 2: Intended shopping channels - breakdown**

In-Store vs. online

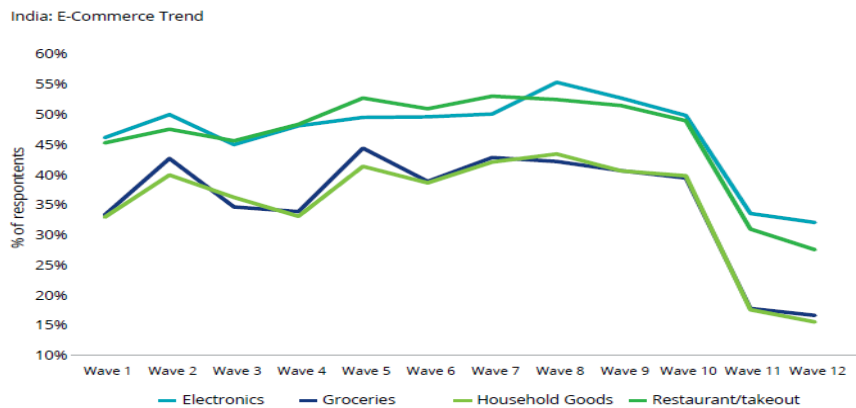


Source: Deloitte State of Consumer Tracker

### E-commerce to transform the consumer market landscape

In the retail segment, there is a visible transition towards the e-commerce and digital platforms, and contactless retail formats, such as buy-online-pickup- in-store (BOPIS). E-commerce is picking up as consumers prefer touchless transactions and are averse to using point-of-sale terminals to avoid risk of catching infection. Since the onset of the pandemic, some retailers have started offering the BOPIS option. The trend of BOPIS is consistently increasing as this option offers a win-win proposition for both consumers and retailers. Customers can get better deals and find it convenient as they may return the item on the spot if needed. After the COVID-19 crisis, a furniture retail company and a hypermarket chain have started offering BOPIS service as it leads to decreased delivery cost and time, and fewer complaints (related to returning or replacing an item). When consumers visit stores to pick-up their goods, some may be tempted to look around and fill their cart with things they did not originally intend to buy. The factors fueling this transition include health and safety concerns, convenience, increased tech-savviness amongst people across age groups, especially the 55+ age group. In this age group, the number of stockpilers has increased by 20 percent to reach 75 percent in wave 12, compared with 55 percent in wave 1. The same age group prefers giving more weightage to locally sourced items even if they cost more (80 percent in wave 12 and 69 percent in wave 1). Bargain hunters have also increased from 72 percent in wave 12, compared with 41 percent in wave 1, as more elderly people have started exploring internet for shopping. Interestingly, this category has seen a deceleration in the other two age groups that are considered more tech-savvy. In wave 12, only 49 percent bargain hunters (65 percent in wave 1) exist in the 18-34 age group, indicating that people are not increasing their spend on non-discretionary items. After unlock 5.0 and due to the festive season, the number of active cases is increasing. This is leading to a rise in online purchases. One thing is common across age groups – preference to spend more on items of convenience and opting brands that have responded well to the crisis. E-commerce trends in India were promising in the first six months, i.e., wave 1–8 (since the onset of the pandemic), but online sales for discretionary and essential items dipped in waves 11 and 12. It is noteworthy to mention that the last two waves coincide with unlock process and festive/holiday season during which people visited stores for festive purchases in India.

Figure 5: E-commerce trends in India for discretionary and essential items

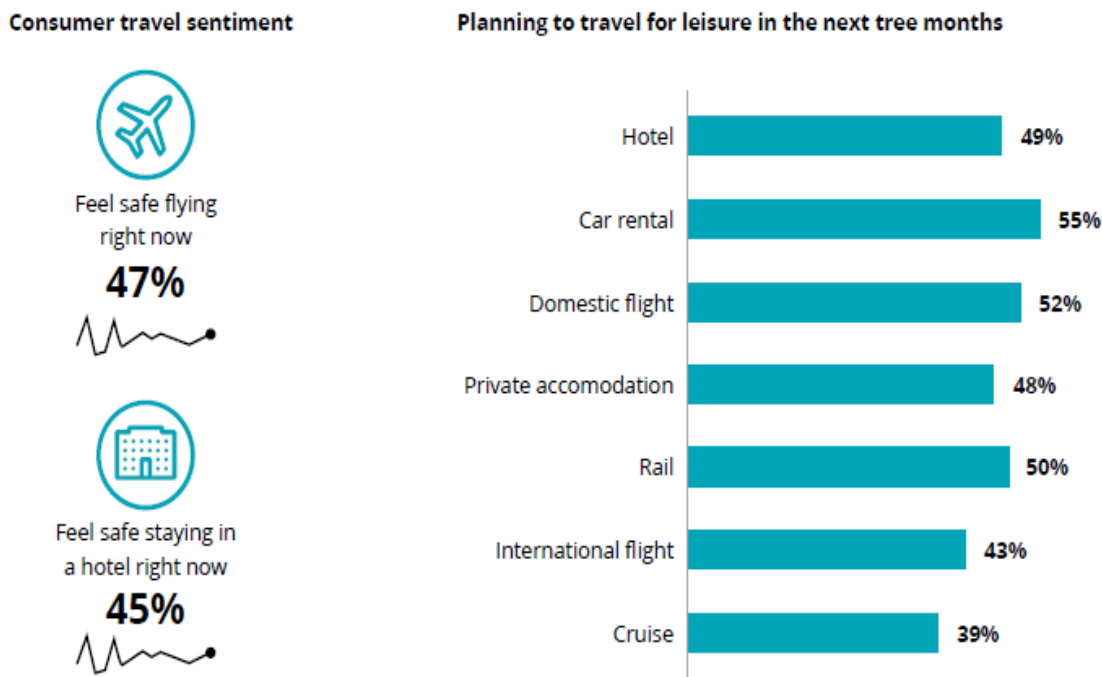


Source: Deloitte State of Consumer Tracker  
 Note: Percentage of the participants who responded to "Intend to spend over the next four weeks" and "intended purchase channels".

### Road ahead for the travel and hospitality industry

The global pandemic has set the travel and hospitality industry on a journey to reach the “next normal”. And, how soon the industry will reach that level by redirecting its strategies and re-channelising its efforts and resources cannot be predicted. When it comes to travelling, the safety perception still looks bleak. A majority of the people are still not comfortable travelling for leisure. They have put their travel plans to international destinations in the backburner. They are preferring staycations, and scouting for nearby places or weekend gateways to get a break from their regular schedules. Pre-wedding shoots and post-wedding travels (honeymoon, etc.) may also be restricted to domestic destinations (green zones) or those international destinations where the epidemic curve has almost flattened or is rapidly flattening. In the 18-34 age group, 41 percent people feel safe flying right now and 38 percent are comfortable staying in a hotel. In the 35-54 age group, less than 45 percent feel safe taking a flight or staying in a hotel. Surprisingly in the 55+ age group, more than 65 percent people feel safe flying or staying in a hotel because of lower anxiety levels compared with wave 1.

**Figure 6: Decoding consumer travel sentiment**



Source: Deloitte State of Consumer Tracker

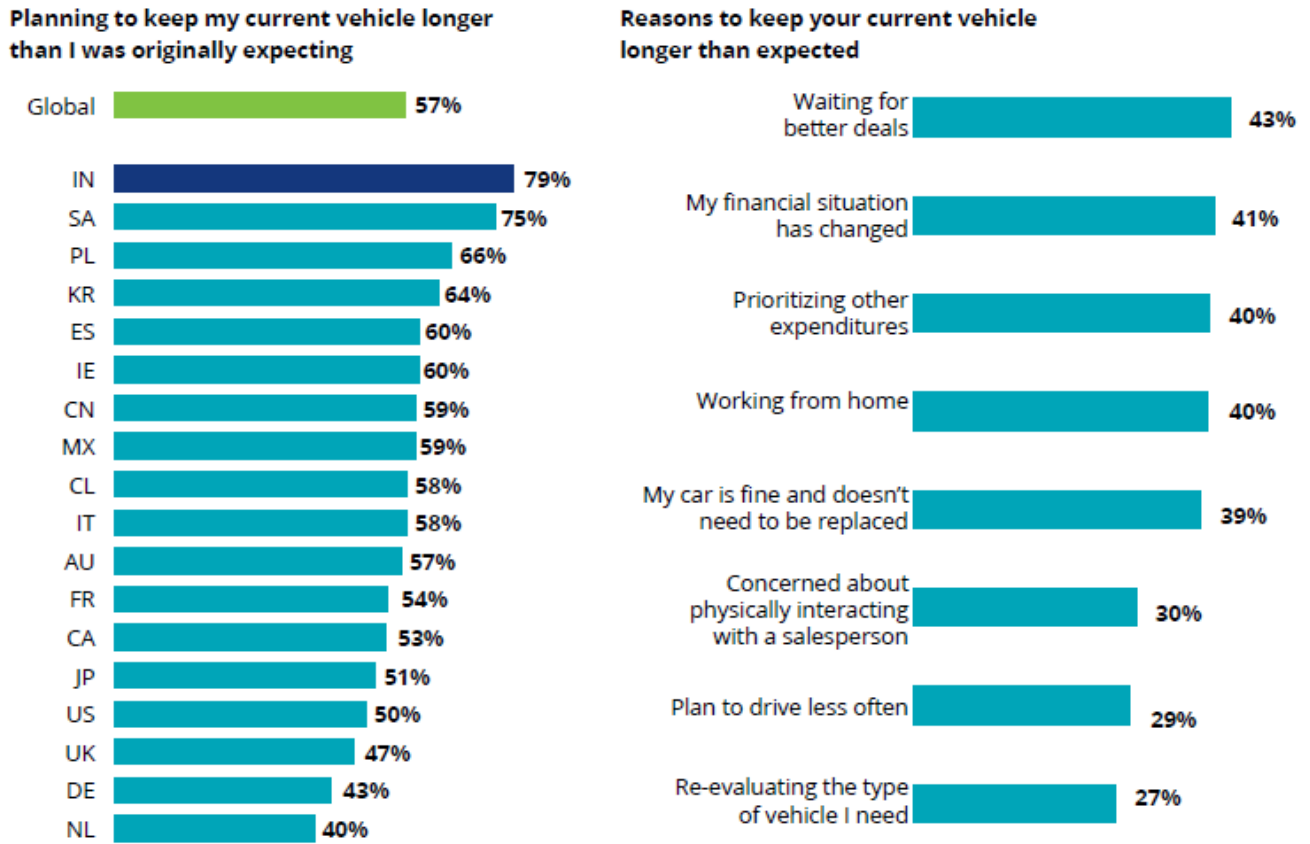
Demand for leisure travel may pick up in time for the festival/wedding/holiday season. Hotel demand remains constant while demand for other travel-related services sees sharper increases.

**Mobility of the automobile sector**

Six in 10 people are putting off regular maintenance for their vehicles. But in the 55+ age group, 8 in 10 people are redeploying budgets they have earlier kept aside for vehicle maintenance due to high financial

and employment concerns. More than 75 percent people across age groups plan to keep their vehicles longer than they were originally expecting.

**Figure 7: Trend of keeping current vehicle across countries and associated reasons (in India)**



Source: Deloitte State of Consumer Tracker

A heavily disrupted automobile sector is striving to court consumers back into the new vehicle segment. Although reaching the activity level seen before COVID-19 may take longer, the sector will see more demand for pocket-friendly, compact, and small and middle-range vehicles compared with large luxury cars. This trend is also validated by the financial concerns that are leading people to postpone big purchase decisions – buying a big car or replacing the old car is one of them. Moreover, shifts in the work culture also influenced this trend. Now some organisations have completely adopted the work from home model, while some are partially (2-3 days in a week) operating from offices. Such a situation, coupled with movement restrictions, warrants minimal use of cars. However, a significant spurt is expected in the sale of old vehicles. More people are crowding the shops of used car dealers to negotiate the best price for vehicles of their choice. This transition also indicates how people’s perception about safety and mobility is shifting. To observe social distancing norms (necessitated by COVID-19), people have started giving weightage to the idea of owning a vehicle. They are still wary of sharing a ride with strangers and consider personal vehicles much safer and hygienic than public transport. Ride-hailing service providers will have to wait longer for witnessing green shoots of recovery or an increase in activity. People may also consider buying two-wheelers instead of four-wheelers to conserve money. The two-wheelers and three-wheelers segment,

especially in tier 2,3, and 4 cities, may also register growth in demand and sales. Across the age groups, consumers from the lower- and middle-income segments may prefer getting a two-wheeler or three-wheeler home, rather than a small car. In this way, this decision will not only tide them over until the financial uncertainty lessens but also boost their travel safety perception.

## RESULT & FINDINGS

Although it has become evident from our past surveys that the retail industry will keep on encountering challenges on the road to recovery, retailers' traditional approach to attract customers may become obsolete in this "new normal" scenario. Here are the top five suggestions that may help the consumer and retail segment to thrive in the new normal:

**Resetting priorities:** Realigning and rebooting their business models, and adapting (by being agile) to changes faster are what retailers need to rebuild a growth path.

**Going beyond traditional hiring models:** The pandemic has introduced a transformation in the work culture. Quite a few organisations have permanently moved to the work from home models, cutting their real estate cost (rent, etc.) and administrative overheads. This transformation has also brought about a change in the new hiring processes. Now organisations are actively engaging gig economy (freelancers) and contractual workers and roping them in projects to avoid increasing their fixed cost and burden.

**Ensure customers' safety:** The travel industry has started offering touchless onboarding and following every safety protocol to promise travellers a safe and comfortable experience. Although people are travelling for business and other unavoidable circumstances, they are still thinking twice before boarding a flight for leisure travel.

**Automotive sector to drive on the two- and three-wheelers and small car segments:** The sector may focus on these segments in the short-term to stay afloat. It should also expect an upsurge in the used vehicle segment in large and small towns. In view of these trends, automobile companies should realign their marketing and sales strategies to tap the consumer base in tier 2,3, and 4 cities.

**Adopt omni-channel approach:** The retail segment should embrace this approach that involves a mix of the offline (physical stores) and online (e-commerce, digital) channels. In other words, retailers need to connect with consumers at every touchpoint and offer them a wholesome "phygital (physical+digital)" experience to attract and retain them. This has become even more important in the present times when people need to maintain social distancing and take other precautions required for flattening the pandemic curve. Our survey findings reveal that the share of e-commerce is expected to go up further in the overall retail channel mix. If used effectively, e-commerce and digital channels have the potential to put retailers out of their misery and accelerate their growth to help them return to normalcy in the post-pandemic world.

## CONCLUSION

This season seems to have lifted people's mood, spirit, and sentiments, compelling them to leave the comforts of their homes and flock to stores to check out festive deals. Consumers may also look at buying small or used cars or two-wheelers, instead of opting for new and expensive cars. This news might offer some respite to automobile companies. The travel for leisure would be restricted to close-by and domestic destinations as concerns regarding health and safety have still not lessened considerably.

**REFERENCE:**

- India Brand Equity Foundation (IBEF) (2018), "E-commerce industry in India", available at: <https://www.ibef.org/industry/ecommerce.aspx>
- Nigam, A., Dewani, P.P. and Behl, A. (2020), "Exploring deal of the day: an e-commerce strategy", *Benchmarking: An International Journal*, Vol. 27 No. 10, pp. 2807-2830.
- Priya, R., Gandhi, A.V. and Shaikh, A. (2018), "Mobile banking adoption in an emerging economy", *Benchmarking: An International Journal*, Vol. 25 No. 2, pp. 743-762.
- Kantar IMRB (2019), "21st edition ICUBE digital adoption & usage trends", available at: [https://imrbint.com/images/common/ICUBE%E2%84%A2\\_2019\\_Highlights.pdf](https://imrbint.com/images/common/ICUBE%E2%84%A2_2019_Highlights.pdf)
- Dobre C, Dragomir A, Preda G, 2009. Consumer innovativeness: a marketing approach. *Manage Marketing* 4(2): 19-34
- Oghojafor, Ben & Nwagwu, Kennedy. (2013). Choice of Shopping Outlets for Grocery Products and the Socio-Economic Profile of Female Consumers in Lagos Nigeria. Volume 4. 88-113.
- Vij, Sandeep & Sharma, Pooja. (2013). Does Entrepreneurial Education Enhance the Entrepreneurial Drive of Business Students?.
- Kumar, P.R. & Shukla, S.N. & Shrivastava, o.p & Purkayastha, R.D.. (2013). Incidence of postpartum anestrus among buffaloes in and around Jabalpur. *Veterinary World*. 6. 716-719. 10.14202/vetworld.2013.716-719.
- Kalaiselvan, V. (2013). The impact of consumer oriented sales promotion techniques on customer purchase. *International Journal of Applied Services Marketing Perspectives*, 2(1), 313.
- Mathur, Dhruv & Bhardawaj, Avdesh & Pandey, Aditi & Oberoi, Ashish & Rani, Divya. (2018). Consumer Buying Behaviour of Cars in India - A Survey.



## CLUSTER APPROACH TO THE DEVELOPMENT OF TRANSPORT, LOGISTICS AND INFRASTRUCTURE IN THE REGION

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### ABSTRACT

*These structures complement and interact with each other, providing comprehensive services to cargo owners, passengers, as well as infrastructure facilities and other organizations. Transport and logistics clusters develop in regions with significant transit potential. Experts believe that the cluster approach will allow the transport industry to eliminate disadvantages of the approach and ensure competitiveness in the context of economic globalization. The clusterscreationis based on the development of cooperation between the state, economy and science.The purpose of the research is to identify the cluster significance ontransportbusinessdevelopment, including small and medium-sized enterprises of the industry. Since on the basis of clustering it will be possible to identify the competitive advantages of the industry.In the global environment, mainly competitiveness can be provided by economic entities - clusters, which are connected not by separate operating companies, but by close economic relations. As a sustainable partnership of interconnected organizations, a cluster can have more potential than the sum of the potential of individual components. This success arises from a long-term combination of mutual cooperation and effective use of existing partner capabilities. We can deny this synergy effect, because of companies have the opportunity to share positive experiences and reduce costs by using the same services and suppliers.Thetransport and logistics clusterscreation is of paramount importance, because it is considered very important to ensure continuity, uniformity and compatibility of transportation.The subject of the conducted scientific research is the main scientific approaches and methods of formation of transport and logistics clusters, taking into account regional specifics.*

**Keywords:** Cluster, Logistics Services, Synergy, Export Potential, Quality Standard, Competitiveness, Innovation, Infrastructure.

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### Introduction

A prerequisite for the Republic of Uzbekistan to take a high place in the international market is to solve the problems of improving the competitiveness of the national economy. At the same time, according to the report of the World Economic Forum and to the Global Competitiveness Index (GSI) in 2021, Uzbekistan ranked only 86th among 132 countries of the world [9].

The development experience of the world's leading countries shows that increasing the competitiveness of the economy can be achieved only through transition to the model of innovative development, the ultimate goal of which is to improve the well-being of citizens by accelerating

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economic growth. Clusters can be considered as one of the elements of such a model - groups of geographically interconnected business entities, as well as organizations, connected by their joint activity and activity in certain areas, which complement each other. Clusters contribute to the competitiveness of the economy at the national and regional levels.

Clusters are known in many areas of business (furniture, footwear, food production), innovative environments (biotechnology, telecommunications), large-scale industrial production (automotive, pharmaceuticals, agro-culture), etc. In many developed countries industrial clusters have become a traditional form of organization of business communities.

Formation of clusters is a topical task for Uzbekistan, since it helps enterprises to join value-added chains, not only within the national economy, but also in the format of foreign economic activity. Therefore, clusters in many areas, such as textile clusters, pharmaceutical clusters, fruit and vegetable clusters, scientific and technological clusters, etc., are organized in the republic as a driver of the economy.

The cluster system in the Republic of Uzbekistan was introduced in 2017. Clusters in the republic are well developed, mainly in the cotton and textile sector.

Practice shows that the full functioning of all clusters will depend on transport support mainly. To this end, the research collected the results of transport activities, analyzed and developed the structure of transport and logistics cluster accordingly to the selected region. Also proposed using of a formula generalizing the criterion of transport and logistics cluster efficiency, which indicates the relevance of the transport and logistics cluster organization.

### **Materials and Methods**

Clustering can be considered as one of the ways to develop the transport and logistics infrastructure of the country. The world practice shows that the areas with logistic clusters are develop rapidly. A lot of research work has been done on this issue.

The analysis of literary sources allows to identifying a number of classic advantages on the use of this method in the economy, characteristic also in the transport industry.

According to Y.A. Aachenbach "clusters is a simple form of uniting enterprises into a certain group located in a particular territory and being basic in determining the level and directions of effective development of territories, both in the field of economy and in related areas. This approach, from his point of view, is also typical for the whole country" [2].

A.E. Boiko refers to "clusters as a specific set of firms united by a single criterion, as a rule, the branch one, and complementing each other if necessary. From his point of view, this approach contributes to the growth of competitiveness of goods and services regardless of the geographical scope of operation of such companies. The use of other approaches, from his point of view, allows to allocate the so-called points on economic and production growth of branches in agricultural and industrial sectors of the modern market" [3].

In V.A. Agafonov's scientific works "cluster is interpreted from the point of view of concentration in a certain territory of a group of interrelated enterprises, organizations, increasing the competitive advantages of each of them, and the integration structure - the cluster as a whole. The benefit from such concentration is formed as a result of the distribution of costs of maintaining jointly used resources" [1].

T.A.Prokofyeva and V.V.Klimenko, clustering experts, believe that the cluster model should include such structural elements as the cluster core, cluster complementary objects, and cluster service and auxiliary objects [6].

The authors E.E. Beznosyuk and A.S. Balalaev consider the structure of transport and logistics cluster, which is determined by the elements connected by unified information, material and financial flows, to be a characteristic feature. The logistics complex includes the following groups of objects as

1. Main objects, which include transport companies of different types of transport, forwarding companies, warehouse and terminal complexes, distribution centers, etc.;
2. Auxiliary objects, combining financial and industrial groups, insurance companies, research organizations, consulting and analytical companies, marketing organizations, training centers for personnel;
3. Service facilities offering transportation infrastructure maintenance services;
4. Institutional bodies represented by the Ministry of Transport, the Ministry of Finance, the Customs Control Committee, etc [12].

In authors' view, the cluster is seen as the coordination of business units with several activities based on a single goal. And each participant of the cluster has a particular interest in achieving the goal.

The purpose of the work is the need for scientific analysis based on the study of practical features of the creation and implementation of the cluster method in the region economy development. Transport and logistics clusters are effective for business units that provide all logistics services [14] in the Republic and it is desirable to clearly define their structure and boundaries of effectiveness.

- In achieving this goal, the following research objectives were defined:
- To characterize the features of clusters and study foreign experience of clustering;
- To collect and analyze information on the development of transport and clustering of sectors of the economy;
- Develop the structure of transport and logistics cluster;
- Develop criteria for the effectiveness of the cluster approach for transport and the region as a whole.

The object of the study is material and related information, financial flows, providing the vital activity of transport and logistics cluster in supply chains.

Preparing this paper authors attempted to disclose the problem using such methods as abstract-logical thinking, analysis, synthesis and scientific review. The information necessary for the study was obtained mainly from foreign literature, statistical and regulatory database.

## Results

There are several problems in creating a transport and logistics cluster in the Republic:

- Lack of willingness of transport companies to properly percept innovations and put them into practice;
- Lack of willingness of transport companies (especially private road carriers) to properly accept innovations and implement them in practice;
- Lack of qualified personnel to organize cluster activities;
- Low quality of transport and engineering infrastructure;
- Lack of necessary information support of the cluster process;
- Lack of motivation for small enterprises to join the cluster.

One of the important directions of cluster policy implementation is the provision of scientific and methodological assistance to cluster development. Therefore, scientific research to deepen the theoretical foundations of the transport and logistics clusters creation and development in the country. Also the main point of research is improving the methodological principles. First of all, the concept of contextual and terminological hardware clearance, in particular, defining the content, the concept of "transport and logistics cluster" requires important characteristics.

Clusters are aimed at achieving the following objectives:

- Increasing the competitiveness of cluster members through the implementation of modern logistics technologies
- Streamlining costs by implementing resource-saving technologies;
- The effect of synergy and unification of approaches in quality, logistics, engineering, information technology, etc;
- Providing employment in the conditions of reforming large enterprises and outsourcing;
- Provision of qualified personnel in cooperation with higher education institutions, research institutes and organizations of professional development and retraining [4].

Researches of scientific works and practical achievements in economy show that clusters stimulate considerable increase in productivity and introduction of innovations. Companies benefit by being able to share positive experiences and reduce costs by using the same services and suppliers. At the level of public policy, the formation, support, transport development and logistics clusters increases the export potential of various enterprises along with improving the quality of logistics services [6]

The most well-known tools for supporting the development of clusters in the world are the following:

- Direct financing (subsidies, loans), which reaches 50% of the cost of creating new products and technologies (France, USA, Russia and other countries);
- Relief of taxation for enterprises, including exclusion of R&D costs from taxable amounts and write-off of investments in R&D, preferential taxation of universities and research institutes (Japan);
- Legal protection of intellectual property and copyrights;
- Loans, including interest-free loans (Sweden);

- Targeted R&D subsidies (practically in all developed countries);
- Creation of funds for implementation of innovations, taking into account possible commercial risk (England, Germany, France, Switzerland, the Netherlands, Russia);
- Non-repayable loans of up to 50% of the cost of implementation of innovations (Germany);
- Reduction of state fees for individual inventors and presentation of tax incentives (Austria, Germany, USA, Japan, etc.), as well as creation of a special infrastructure for their support and economic insurance (Japan);
- Deferral or exemption of fees if the invention relates to energy savings (Austria);
- Free filing of applications of individual inventors, free services of patent attorneys, exemption from payment of fees (Netherlands, Germany) [7]

Over these five years, 506 clusters have been created in Uzbekistan. In January-December 2022, they produced industrial products worth 28.7 trillion soums. Over the past five years, the volume of production has increased 32 times. The volume of investments aimed at developing clusters during this period increased by 5.2 times, and the number of employees - by 2.5 times.

The share of clusters in the total volume of exports of industrial products in 2019 was 5 percent, and in 2022 - 11.4 percent. At the same time, labor productivity in the cluster system increased by 12.9 times from 2018 to 2022, and the return on investment ratio (ARR) increased from 1.0 to 1.4 [15].

Based on the experience of the formation of existing clusters, it is possible to form transport and logistics clusters, as there are sufficient grounds for the creation of transport and logistics clusters [15].

Attracting investment in fixed capital: transportation and storage will increase productivity by updating the transport and logistics infrastructure and introducing new technologies (Figure 2).

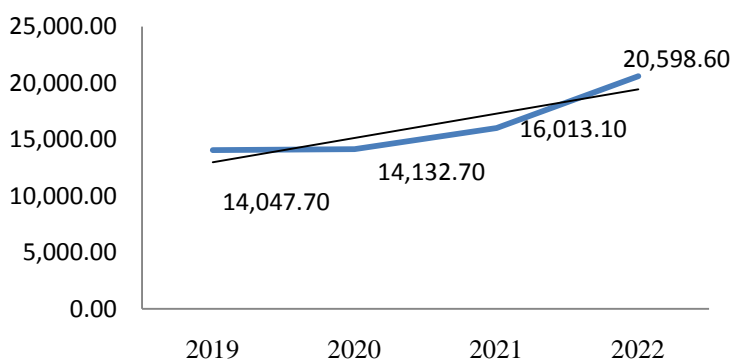


Figure 2. Investments in fixed assets: transportation and storage, billion soums[8]

The development of Uzbekistan transport and logistics infrastructure, accompanied by the growth of industrial production, the accelerated development of tourism activities, and the expansion of the trade network, logically reflected the positive dynamics of freight turnover and the sphere of transport services as a whole.

Analysis of the dynamics of the main transport indicators for 2019-2022 shows stability in the performance of the volume of transportation (Table 1).

Table 1 : **Main transport indicators for 2019-2022**

<b>№</b>	<b>Indicator</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
1.	Cargo turnover, million ton-kilometers				
	including:				
	air transportation	119,0	219,0	303,5	322,8
	railway transport	23,4	23,6	24,6	25,0
	road transport	15,9	16,2	19,1	20,5
2.	Cargo transportation, mln. tons				
	including:				
	air transportation	10,4	5,3	9,1	10,2
	railway transport	70,1	70,6	72,0	73,3
	road transport	1177,7	1238,2	1282,0	1284,1

Source: [8]

Significant work done in recent years has formed a modern road and transport infrastructure, reconstructed and built new bus stations, and introduced information and communication technologies in transport.

In order to improve transport activities, the Ministry of Transport has developed a Strategy for the development of the transport system of the Republic of Uzbekistan for the period until 2030.

The main goal of the Strategy is to deepen the ongoing reforms aimed at creating an integrated unified transport system, increasing the competitiveness of the transport sector and the efficiency of using transport infrastructure to fully meet the needs of the state economy, population and business.

As one of the modern measures for the further development of the transport industry, we can highlight the cluster approach.

The association of enterprises in transport and logistics clusters allows for the simultaneous involvement of several critical factors of competitiveness:

- Deep specialization of the companies in the clusters (each member is professionally engaged in one or a small number of activities, which allows for improvement in a narrow direction and increased productivity);
- Economies of scale, achieved through large volumes of production (which allows for lower costs per unit of output), enabled by large volumes of sales of final products;
- Lower unit costs and higher quality due to the synergy effect achieved through the exchange of experience, direct interaction, involvement of the scientific community in the clusters, unification of approaches in quality, logistics, engineering, information technology, etc.
- It is recommended to calculate a generalizing efficiency criterion that determines the ultimate goals and promising directions for the development of the transport and logistics cluster according to the following formula:

$$E_{TLC} = \sum_{i=1}^n E_i = \max \quad (1)$$

where  $E_{TLC}$  - is the cumulative effect of the transport and logistics cluster;

$E_i$  - the effect of the i-th cluster participant;

$n$  - the number of interaction participants.

This criterion allows to evaluate the performance of each cluster members. Shortcomings in the work activities of participants with indicators below the above criterion are noticeable, and the cluster core takes measures to find a solution to this problem.

## Discussion

It can be observed that there are problems in the transport provision in the activities of the clusters in the Republic of Uzbekistan, and some private carriers are unable to meet the requirements of the clusters in time for cargo transportation. Because the lack of motivation to private carriers is causing them to distrust the efficiency of clusters.[8] Scientists in the field of clustering Achenbach Yu.A. [2], Boyko A.E. [3] and Agafonov V.A. [1] did not pay enough attention to problems arising in transport provision in the field of production, tourism, and in a systematic approach to cluster activity, and paying special attention to the organizational structure of clusters in solving them.

Therefore, it is necessary to pay special attention to its structural structure in order to eliminate the aforementioned shortcomings in the formation of transport logistics clusters.

Creation of transport and logistics clusters is beneficial for all economic entities of the Republic and can become an effective tool that contributes to socio-economic development of the Republic and its regions.

Thus, the composition of the Transport and logistics clusters TLC is determined by a multitude of organizations that perform various market functions. Links and interactions between the objects lead to the convergence of interests of all participants of the transport cluster, which contributes to the growth of their competitiveness at the global level.

Transport and logistics cluster concentrates different market entities (Figure 3).

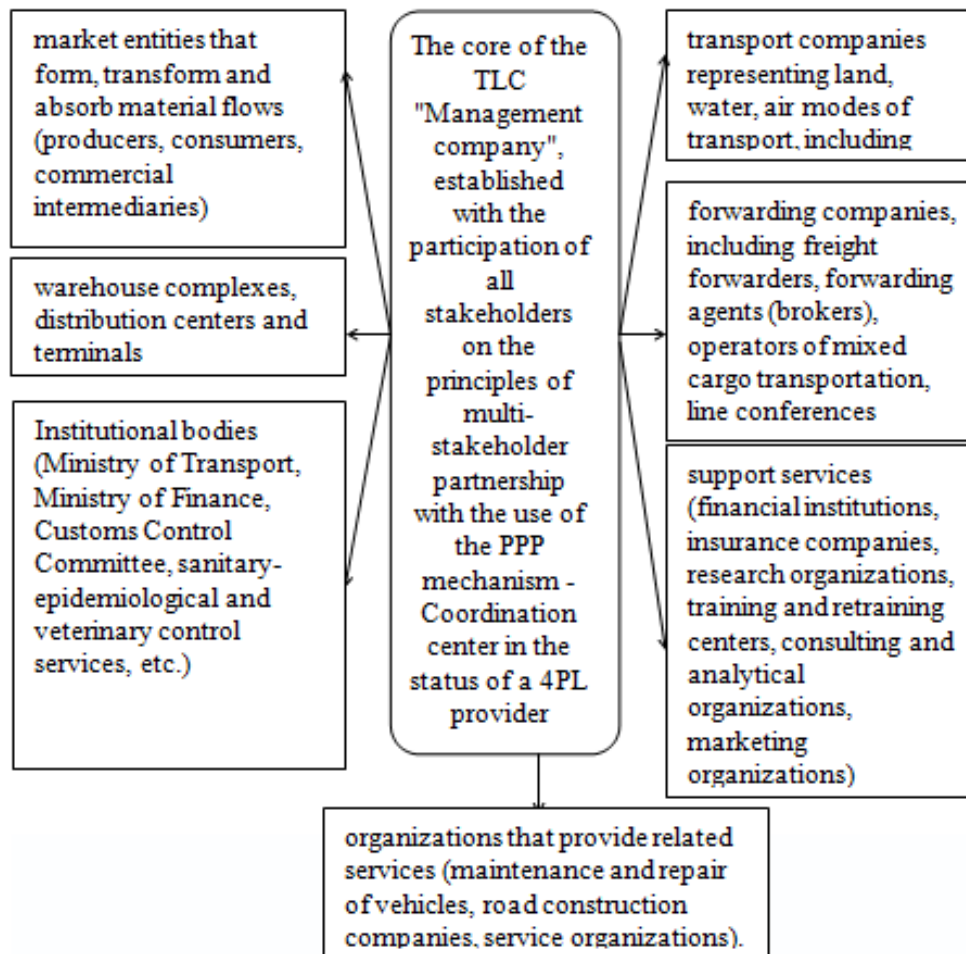


Figure 3. Structure of the transport and logistics cluster (TLC) [6]

Motivational components for integration into clusters of organizations are the following:

- Ensuring the viability and stability of development of private carriers and other service enterprises;
- The possibility of obtaining a loan under the guarantee of the general company;
- Unhindered export of services;
- Participation in investment programs and projects for attraction of investments;
- Achievement of high quality standards;
- Maintaining purchasing by working together with suppliers;
- Reduction of transaction costs [5].

The effects of implementing the cluster approach for the participants of the transport and logistics cluster are:

- An increase in the volume of transportation services provided;
- Growth in the volume of logistics services;
- Growth in transport and logistics services and their varieties;
- Increase in innovation of transport and logistics services;
- Reducing the cost of transport and logistics services, which is possible due to the scale of operations;
- Effective distribution of risks between the members of the cluster group;
- Improving the qualifications of the personnel of the companies participating in the cluster on a systematic basis;
- Receiving regular material and financial support from the participants of the transport and logistics cluster;
- Obtaining economic advantages in acquiring material resources;
- Increasing the degree of adaptability to the transport and logistics services market, including international markets;
- Increasing the competitiveness of enterprises in the cluster [13].

## Conclusion

Proper construction of the Transport and Logistics Cluster structure ensuring public-private partnership will lead to the voluntary inclusion of transport companies. Also research centers within the cluster conduct research on transport and logistics infrastructure, working out ways to develop it. Of course, clusters develop qualification programs with the intention of providing qualified personnel for all companies. As a result, the transport and logistics cluster ensures the realization of the country's transit potential in the global system of Euro-Asian international transport corridors. Transit potential will be accompanied by a significant multiplier effect, which will affect other sectors of the economy, develop regional markets of goods and services and, ultimately, increase the gross regional product (GRP) and gross domestic product (GDP).

## References

- Agafonov Vladimir Anatolievich (2010). *Cluster strategy: a systemic approach. Economic Science of Modern Russia, (3 (50)), 77-91.*
- Aachenbach, Y. A. (2012). *The system of scientific and production cluster management. Region: systems, economics, management, (3 (18)), 122-128.*



- Boyko A.E. (2009) Formation of tourist clusters as a tool for development of domestic tourism in Russia. *Power and Management in the East of Russia*, (2), 227.
- Dubovikova E.Y. - Scientific approaches to the implementation of the cluster method in the economy // *Theoretical and applied economics*. - 2019. - № 3. - C. 43 - 54. DOI: 10.25136/2409-8647.2019.3.30415 URL: [https://nbpublish.com/library\\_read\\_article.php?id=30415](https://nbpublish.com/library_read_article.php?id=30415)
- Khasenova A.B. (A.B., 2017) Formation of Eurasian Transcontinental Bridge in the Conditions of Kazakhstan's Integration into the World Economic System: Potential and Ways of Development. Doctor of Philosophy (PhD) thesis. Kazakhstan/Almaty
- Prokofieva T.A., Klimenko V.V. (2011) Methodological aspects of building a cluster model of transport and logistics infrastructure in the region. *Scientific and analytical journal "Logistics and Supply Chain Management"* (6 (47)), 47-51.
- Innovation and technological clusters of ICSTI member countries.(2013) Information material.International Center for Scientific and Technical Information.
- The State Committee of the Republic of Uzbekistan on Statistics [www.stat.uz](http://www.stat.uz) Accessed 20 Dec 2021
- IMD World Competitiveness Ranking for 2021. <https://www.imd.org/centers/world-competitiveness-center/rankings/world-competitiveness/> Accessed 20 Dec 2021
- Decree of the President of the Republic of Uzbekistan "On measures for creation of modern cotton-wood-textile cluster in Bukhara region by conducting experiment" from May 19, 2017 № PP-2978.
- Decree of the President of the Republic of Uzbekistan "On measures for establishing a modern cotton-wood-textile cluster in the Syrdarya region". of September 15, 2017 №PP-3279
- Beznosyuk E.E., Balalaev A.S. (2014) Prerequisites for the organization of transport and logistics activities in the Far Eastern Federal District on the basis of the cluster approach / E.E. Beznosyuk, A.S. Balalaev // *Scientific, technological and economic cooperation of APR countries in the XXI century*.(2)46- 51.
- Saparbaevna, A. Z., Dilfuza, U., Raxmatullayevich, R. R., & Soyibovich, M. A. (2021). Digital Logistics as a Factor of Increasing the Volume and Quality of Transport Services. *REVISTA GEINTEC-GESTAO INOVACAO E TECNOLOGIAS*, 11(4), 2088-2096.
- A.Tuychiev. Scientific approaches to public-private partnership in the transport system of Uzbekistan. *The American Journal Of Management And Economics Innovations*, Volume 3, ISSUE 05, 2021 issn 2693-0811 <https://www.usajournalshub.com/index.php/tajmei>
- <https://yuz.uz/ru/news/sozdanie-klasterov-sposobstvet-povsheniyu-effektivnosti-ekonomiki>

## IMPROVING THE METHODS OF ASSESSING THE COUNTRY'S INVESTMENT POTENTIAL BASED ON MARKETING RESEARCH

Khodjaye Anvar Rasulovich<sup>1</sup>

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### ABSTRACT

*This scientific article is dedicated to the study of ways to improve the methods of assessing the country's investment potential based on marketing research. The article emphasizes the importance and necessity of accurate and reliable assessment of the country's investment environment and proposes new methodologies and approaches. In particular, ways to determine the country's real investment potential will be considered through an in-depth analysis of demographic data, economic indicators, political stability and the quality of infrastructure. The article discusses methods such as the integrated approach, technological solutions and international cooperation used in the assessment of the country's investment potential based on the information collected through marketing research.*

**Keywords:** Focus Groups; Integrative Approach; GDP Growth;

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In the global economy, the assessment of the investment potential of countries is important for the economic development and competitiveness of each country in the international arena. The attractiveness of the investment climate allows attracting foreign direct investment to the country, creating new jobs and stimulating technological innovation. At the same time, a clear and reliable assessment of investment potential plays an important role in the decision-making process for investors and helps to allocate financial resources effectively.

However, in many countries, investment potential assessment methodologies are outdated or do not meet uniform standards. This is due to various economic and political factors. In order to solve this problem, it is suggested to use modern marketing research methods. Marketing research allows for in-depth analysis of economic, political and social aspects of a country and provides information that allows for more accurate investment evaluations.

This article analyzes how this process can be further improved by rethinking the role and importance of marketing research in assessing a country's investment potential. The goal is to create methods to accurately and reliably assess the country's investment attractiveness and offer practical solutions for solving existing problems.

The most basic economic indicators used in the assessment of investment potential are macroeconomic indicators. These indicators reflect the general state of the country's economy and are an important source of information for investors and the country's development. The following three key macroeconomic indicators are among those that receive the most attention:

GDP growth shows how the total size of the country's economy changes over time. This indicator reflects the growth rate and stability of the economy. Generally, high GDP growth rates indicate a country's increased economic activity and improved investment opportunities.

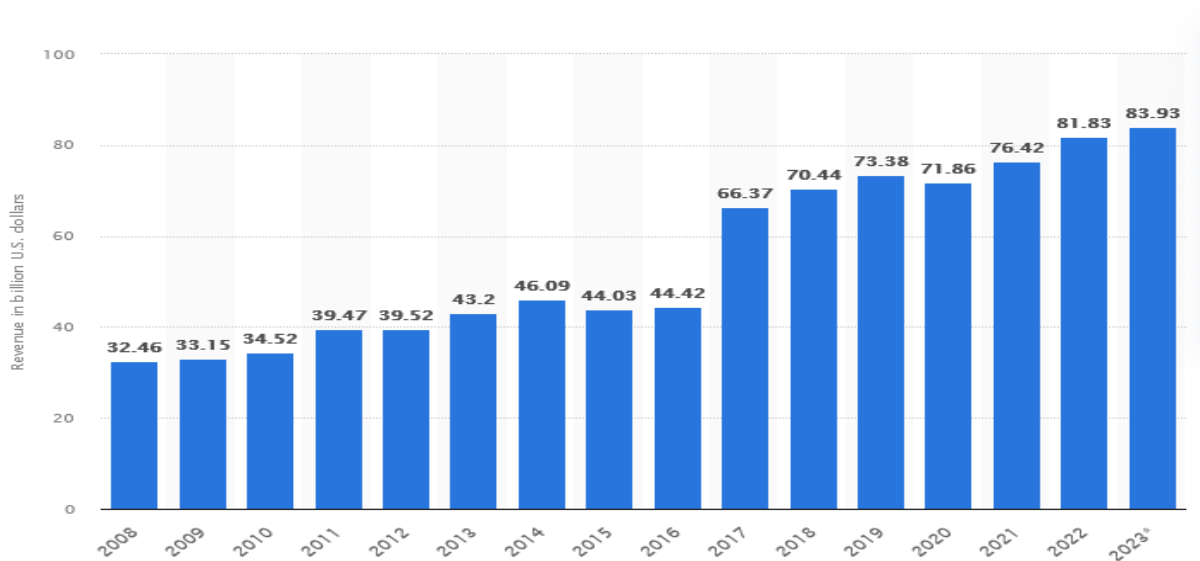
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The unemployment rate shows the percentage share of the unemployed population in the economy. This indicator plays an important role in assessing the state of the country's labor market and the efficiency of economic activity. A high unemployment rate may indicate problems in the economy, while a low rate may indicate a healthy labor market.

The inflation rate is a percentage that shows how fast prices are rising on average. This indicator reflects stability in the economy and preservation of the value of money. Low or stable inflation indicates that a country's economic environment is healthy and stable, making it more attractive to investors.

In 2022, it is planned to implement projects in Uzbekistan with a total value of 16.57 billion US dollars, of which 6 billion dollars are foreign direct investments. At the same time, projects with a total value of 7.51 billion US dollars will be implemented in geology, energy, industry and its main sectors. Uzbekistan plans to implement projects worth 17.34 billion dollars in 2023. The volume of foreign direct investments is 7.06 billion dollars. As in 2022, most of the funds (\$9.24 billion) will be allocated to geology, energy and industry. It is planned to implement projects worth 18.2 billion dollars in 2024. At the same time, foreign direct investments in the amount of 7.73 billion US dollars are expected to be absorbed<sup>1</sup>.



**Figure 1. Global market research revenue from 2008 to 2023<sup>2</sup>**

The global market research industry has reached another peak, from USD 46.09 billion in 2014 to nearly USD 82 billion in 2022. Traditionally, and over the past decade, the global market research industry has operated at odds with broader economic trends. In addition, figures for 2022 show an increase in revenue of about 4.5 billion US dollars.

<sup>1</sup> Uzbekistan plans to implement investment projects for US\$52 billion in 2022-2024-<https://invest.gov.uz/mediacenter/news/uzbekistan-plans-to-implement-investment-projects-for-us-52-billion-in-2022-2024/>

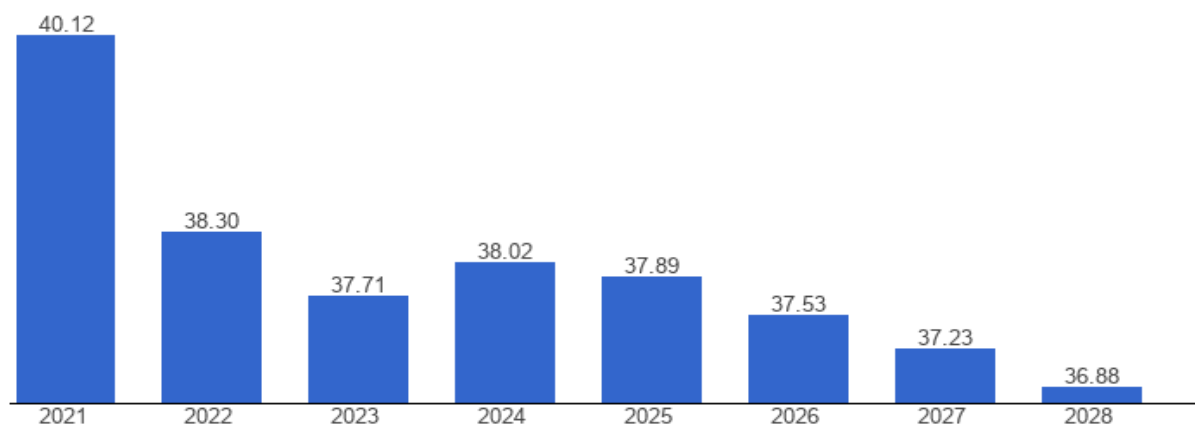
<sup>2</sup>Global revenue of the market research industry from 2008 to 2022 with a forecast for 2023-<https://www.statista.com/statistics/242477/global-revenue-of-market-research-companies/>

Marketing research is carried out through different approaches in assessing the country's investment potential. These approaches include the following methods:

1. Surveys are an effective way to find out the opinion of entrepreneurs and investors about the country's economy and investment environment. Through this method, real-time information on market conditions, investors' needs and the comfort level of the business environment in the country is collected. The data collected through the surveys provide the basic information needed to revise and improve the country's development investment policies.

2. Focus groups are discussions with relevant industry experts, industry representatives and other stakeholders. Topics discussed during these sessions usually include making suggestions for improving the country's investment attractiveness or identifying and solving existing problems. Feedback and suggestions obtained through focus groups are important in developing concrete and practical solutions.

3. Information and reports published in the mass media are an important source in the analysis of the country's economic activity and investment environment. Through such data, the general state of the economy, recent changes and trends, as well as the impact of global economic conditions are analyzed. The information obtained through data analysis is important in real-time assessment of the country's investment potential and in defining future strategies.

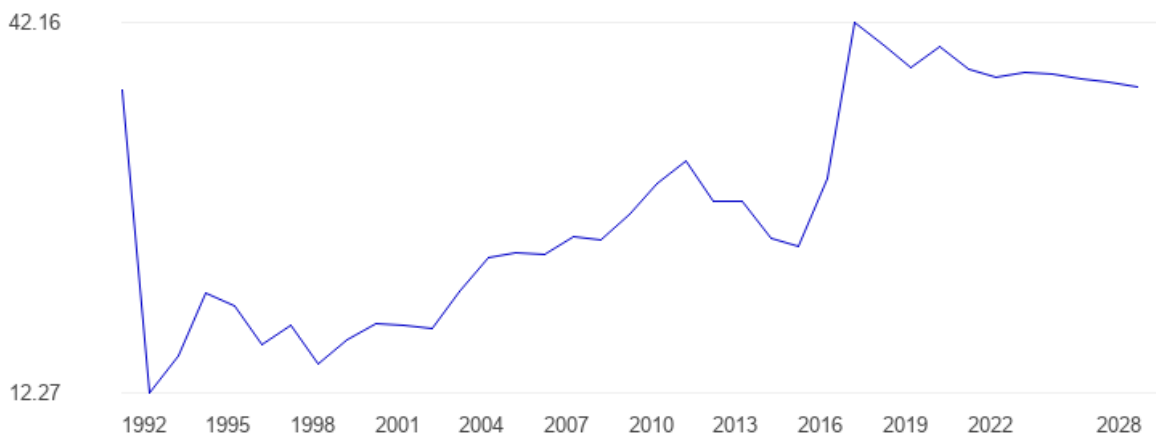


**Figure 2. Forecast of attracting investments to Uzbekistan for 2021-2028<sup>1</sup>**

According to this indicator, we have provided information on Uzbekistan from 2021 to 2028. In that period, the average rate for Uzbekistan was 27.19 percent, the minimum rate in 1993 was 12.27 percent, and the maximum rate in 2018 was 42.16 percent. The last indicator in 2028 is 36.88 percent. For comparison, the world average in 2028 based on 164 countries is 24.48 percent<sup>2</sup>.

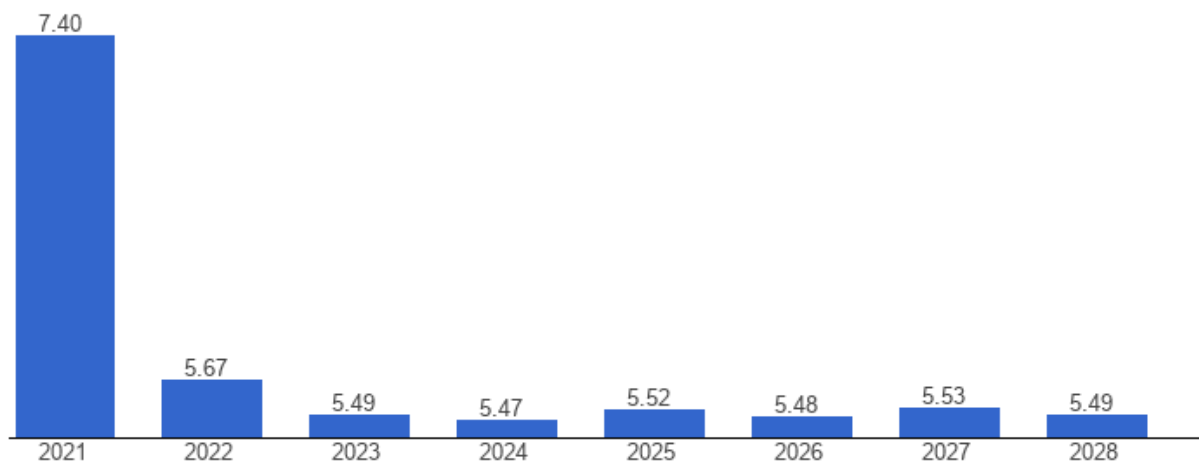
<sup>1</sup>International Monetary Fund - Global economy-[https://www.theglobaleconomy.com/Uzbekistan/investment\\_outlook/](https://www.theglobaleconomy.com/Uzbekistan/investment_outlook/)

<sup>2</sup>International Monetary Fund - Global economy-[https://www.theglobaleconomy.com/Uzbekistan/investment\\_outlook/](https://www.theglobaleconomy.com/Uzbekistan/investment_outlook/)



**Figure 3. Forecast of the main indicators of the investment attractiveness of Uzbekistan from 1992 to 2028<sup>1</sup>**

The problem of lack of investment funds in the sectors of our country's economy is obvious. There is a gap between the level of investment available in the economy today and the level needed to ensure sustainable economic growth and development.



**Figure 4. Economic growth forecast of Uzbekistan until 2028<sup>2</sup>**

<sup>1</sup>International Monetary Fund - Global economy-[https://www.theglobaleconomy.com/Uzbekistan/investment\\_outlook/](https://www.theglobaleconomy.com/Uzbekistan/investment_outlook/)

<sup>2</sup>Xalqaro valyuta jamg'armasi -Global iqtisodiyot-[https://www.theglobaleconomy.com/Uzbekistan/investment\\_outlook/](https://www.theglobaleconomy.com/Uzbekistan/investment_outlook/)

The graph below shows Uzbekistan's economic growth forecast from 2021 to 2028. The graph shows that in 2021, this indicator was 7.40 percent, and in the following years, this figure is expected to gradually decrease and reach approximately 5.49 percent in 2028<sup>1</sup>.

This article, devoted to the evaluation of the country's investment potential and explaining the ways to improve it, reveals the possibilities of strengthening the role and importance of regions in investment attraction. The following proposals have been developed in order to make the regional economy more efficient and attractive:

1. Attracting investments to the region: To attract regional potential and foreign investors, it is important to demonstrate investment compatibility and visible advantages for foreign investors. It is also necessary to develop regional investment management through effective and stable distribution of funds. This includes improving factors such as process, legal and economic conditions, infrastructure, resource provision and financial capacity.

2. Improving the regional investment management system: This important process, which opens up great opportunities for the economic development of the country, the creation of new jobs and the future of the regions, requires the strengthening of the country's political and economic structure. At the same time, relations between investors can be effectively managed through programs and policies designed to encourage investment activities.

3. Development of effective investment marketing: Regions should use effective investment marketing to promote and attract investment opportunities in foreign markets. This is done along with the organization of social external relations, investment conferences and competitions aimed at increasing investment returns and productivity.

4. More accurate assessment of the investment potential of the regions: The proposed set of methods more accurately reflects the real investment needs of the regions and takes into account various important features of the external environment and the behavior of investors. This method allows for more profitable placement of regional investment goods and plays a major role in increasing the investment attractiveness of the region for strategic investors.

As a result, these approaches make it possible to assess the investment potential of regions and develop corporate strategies, to excel in regional competition and to be successful in attracting investors. These approaches contribute to the overall economic stability and development of the country.

Forecasting market capacity is essential for future business growth and strategic planning. This process uses a variety of approaches and methods through which businesses identify market opportunities and determine how they can offer their products or services more effectively. Below we consider the most commonly used approaches and methods of market capacity forecasting.

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<sup>1</sup>Xalqaro valyuta jamg'armasi -Global iqtisodiyot-[https://www.theglobaleconomy.com/Uzbekistan/investment\\_outlook/](https://www.theglobaleconomy.com/Uzbekistan/investment_outlook/)

**Table 1 : Approaches and methods of market capacity forecasting<sup>1</sup>**

Approaches to market capacity forecasting	Methods of market capacity forecasting within the relevant approach
<b>1. Heuristic approach</b>	1.1. Average evaluation methods based on individual expert evaluations 1.2. The method of optimistic, pessimistic and probabilistic expert judgments 1.3. Commission method 1.4. The Delphi method 1.5. Method of composite index of willingness to buy products by target consumers
<b>2. Economic-mathematical approach</b>	2.1. <i>Modern models</i> 2.2. <i>Through life cycle curves</i> 2.3. <i>Factor models:</i> 2.3.1. <i>Single-factor models: Engel and Triqvist curves through elasticity coefficients</i> 2.3.2. <i>Multifactor models</i>

Thus, at present, various approaches to the assessment and forecasting of the investment potential of regions are used in the management of investment activities. However, the separate use of any method does not allow for an integrated assessment approach, which increases the risk of making management decisions on the development of strategic investment plans for regions that are unreasonable in terms of real development trends<sup>2</sup>.

The process of assessing the investment potential occupies an important place in the economic development of the country. To make this process more efficient and accurate, the following suggestions are made:

1. An integrative approach allows for a complete and comprehensive analysis by combining different assessment methods. This approach involves integrating data from various sources, such as macroeconomic indicators, surveys, focus groups, and data analysis. As a result, it will be possible to create a more complete and accurate picture of the country's economic environment and investment potential.

2. The use of modern technologies, including artificial intelligence (AI) and data analysis software, will provide significant advances in the assessment of investment potential. With the help of AI, large amounts of

<sup>1</sup>Петухова И.В., Петухова Н.В. Прогнозирование емкости рынка отдельных групп товаров и услуг // Маркетинг в России и за рубежом. - 2000. - № 5.

<sup>2</sup>Привлечение инвестиций в регион с использованием маркетингового подхода

[http://mirrabot.com/subjects/subject\\_5034704.html](http://mirrabot.com/subjects/subject_5034704.html)

data can be analyzed quickly and efficiently, allowing for more accurate and quick decisions. These technologies are also used to predict various economic trends and their future effects.

3. Exchange of experience with other countries helps in enriching investment potential assessment methodologies and adapting them to international standards. Through international cooperation, best practices, new ideas and approaches are explored, which helps to increase competitiveness on a global scale. In addition, international cooperation makes it possible to strengthen mutual economic relations between countries and expand the flow of investments.

Assessment of the country's investment potential is crucial in ensuring the sustainable development of the economy. This article discusses the improvement of the methods of assessing the country's investment potential based on marketing research and suggests new approaches and methodologies to make this process more effective and reliable.

Our research aims to improve the decision-making process for investors and policy makers through in-depth analysis of a country's economic, political and social factors. An integrated approach shows that through methods such as technological solutions and international cooperation, it is possible to accurately assess the country's investment environment and thereby increase economic growth and global competitiveness.

In conclusion, it can be said that he emphasizes the importance of marketing research in the accurate assessment of the country's investment potential and notes the role of modern technologies and international exchange of experience in this process. These approaches help strengthen the country's economic stability and increase its investment attractiveness, which in turn contributes to economic development and stability.

## REFERENCE

- Qulliyev O. *ISHLAB CHIQRISH IMKONIYATLARI CHIZIG'I* //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2020. – Т. 1. – №. 1.
- Qulliyev O., Abduqahhorov B. *ECONOMIC GLOBALIZATION* //ЦЕНТРНАУЧНЫХПУБЛИКАЦИЙ (buxdu. uz). – 2020. – Т. 2. – №. 2.
- Khodjayev A. R. et al. *Efficiency of using modern information and communication technologies in small business* //World science: problems and innovations. – 2021. – С. 130-132.
- Khodjayev A. R., Amonov M. T. *Bio-economy is a new direction of development and one of the anti-crisis mechanisms* //ЭКОНОМИКАИСОВРЕМЕННЫЙМЕНЕДЖМЕНТ: ТЕОРИЯ, МЕТОДОЛОГИЯ, ПРАКТИКА. – 2021. – С. 112-115.
- Khodjayev A. R. et al. *HUMAN CAPITAL AND ITS IMPACT ON ECONOMIC GROWTH* //SCIENCE AND TECHNOLOGY RESEARCH 2022. – 2022. – С. 75-78.
- Rasulovich K. A. *The role of agro-tourism in the development of socio-economic infrastructure in rural areas* //Наукаиобразованиесегодня. – 2021. – №. 3 (62). – С. 13-14.
- Rasulovich K. A., Tuymuratovich A. M. *Efficiency of formation of franchise in small business development* //Наукаиобразованиесегодня. – 2021. – №. 9 (68). – С. 39-42.
- Rasulovich K. A., Ulugbekovich K. A. *Section: economics* //Polish science journal. – 2020. – С. 25.



- *Rasulovich K. A., Tuymuratovich A. M. Legalization of steps to eliminate the harmful effects of cryptoma in the economy //ACADEMICIA: An International Multidisciplinary Research Journal. – 2022. – Т. 12. – №. 4. – С. 651-654.*
- *Xodjayev A. et al. The role of smm marketing in small business development during a pandemic //Центрнаучныхпубликаций (buxdu. uz). – 2020. – Т. 1. – №. 1.*
- *Привлечение инвестиций в регион с использованием маркетингового подхода*[http://mirrabot.com/subjects/subject\\_5034704.html](http://mirrabot.com/subjects/subject_5034704.html)
- *Uzbekistan plans to implement investment projects for US\$52 billion in 2022-2024-*  
<https://invest.gov.uz/mediacenter/news/uzbekistan-plans-to-implement-investment-projects-for-us-52-billion-in->
- *Global revenue of the market research industry from 2008 to 2022 with a forecast for 2023-*  
<https://www.statista.com/statistics>
- *Петухова И.В., Петухова Н.В. Прогнозирование емкости рынка отдельных групп товаров и услуг // Маркетинг в России и за рубежом. - 2000. - № 5.*



# EMPOWERING FUTURE GENERATIONS: UNVEILING INDIA'S NEW EDUCATION POLICY 2020 AND ITS IMPACT ON HIGHER EDUCATION

Dr. Reema Singh<sup>1</sup>, Dr Tanuja Jain<sup>2</sup>

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## ABSTRACT

*The National Education Policy 2020 (NEP 2020), introduced by the Government of India, marks a significant departure in the nation's educational framework, aiming to overhaul the entire system from primary to tertiary levels. While NEP 2020 brings about changes across all educational tiers, this paper delves into its specific implications for higher education. Through a comprehensive examination, it dissects the key tenets of NEP 2020 and evaluates their impact on the landscape of higher education in India. Critical aspects under scrutiny encompass the regulatory framework, the implementation of graded accreditation, strategies for internationalization, and the advocacy for holistic, interdisciplinary learning experiences.*

**Keywords:** National Education Policy, Higher Education, NEP 2020, Interdisciplinary Education, Regulatory Framework, Accreditation, Global Citizenship Education.

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## I. Introduction

The landscape of education in India has witnessed dynamic shifts over the years, with the most recent and transformative evolution being marked by the National Education Policy (NEP) of 2020. This comprehensive policy, sanctioned by the Union Cabinet in July 2020, sets forth an ambitious vision for the complete overhaul of India's education system, spanning from elementary to higher education. This paper seeks to unravel the multifaceted impact of NEP 2020, with a particular emphasis on higher education, meticulously scrutinizing its key features and delving into their far-reaching implications.

The National Policy on Education (NPE) has historically played a pivotal role in shaping the educational framework of the country. Each iteration of the policy reflects a response to the evolving needs and challenges of the education sector. In this continuum of transformation, NEP 2020 emerges as a watershed moment, carrying the aspirations of a nation aspiring for global excellence in education.

The primary aim of NEP 2020 is to provide a blueprint for a comprehensive metamorphosis of the education system, aligning it with the demands of the 21st century. The policy envisions a paradigm shift from the traditional rote-based learning to a more holistic, multidisciplinary approach. The implications of these changes are profound, particularly in the sphere of higher education, which serves as the crucible for nurturing the intellectual capital of the nation.

This paper embarks on a meticulous exploration of NEP 2020's impact on higher education, dissecting its key features to unravel the transformative potential they hold. By delving into the intricacies of the policy, we aim to shed light on the implications for institutions of higher learning, students, and the broader educational ecosystem.

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As we navigate through the labyrinth of NEP 2020, it becomes apparent that the changes envisaged are not mere adjustments but rather a holistic reimagining of the educational landscape. The vision is ambitious, aiming not only to enhance the quality of education but also to foster critical thinking, creativity, and a spirit of inquiry.

In the subsequent sections, we will unravel the key features of NEP 2020 that specifically pertain to higher education. From the establishment of a single regulatory body to the introduction of flexible undergraduate programs, the policy outlines a roadmap for the future of higher education in India. The paper will also delve into the challenges and opportunities posed by these transformative waves, offering a nuanced analysis of the potential impact on stakeholders.

As we embark on this journey through the corridors of policy transformation, it is imperative to recognize that the implications of NEP 2020 are not confined to the realm of academia alone. They extend to the socio-economic fabric of the nation, influencing the skill sets of future generations and, consequently, the trajectory of India's progress in the global arena. Let us now traverse the terrain of NEP 2020 and uncover the layers of change it promises for higher education in India.

## **II. Salient Features of NEP Related to Higher Education**

The National Education Policy 2020, a landmark document aimed at reshaping the educational landscape of India, carries within its folds a set of transformative features that specifically target higher education. This section meticulously dissects the salient features of NEP 2020, unraveling their potential implications and the trajectory they set for the future of higher education in the country.

### **Establishment of the Higher Education Commission of India (HECI)**

At the nucleus of NEP 2020's vision for higher education is the establishment of the Higher Education Commission of India (HECI). This move marks a departure from the existing regulatory framework, aiming to streamline and consolidate the diverse facets of higher education governance. HECI, envisaged as a single regulatory body, is set to take on roles related to regulation, standard-setting, funding, and accreditation.

This shift from the prevailing regulatory bodies like the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE) is a bold move towards reducing administrative complexities. The idea is to foster autonomy and innovation within educational institutions while maintaining stringent quality standards. The success of this transformative step hinges on how effectively HECI can navigate the delicate balance between regulation and autonomy.

### **Introduction of Multiple Entry and Exit Options**

NEP 2020 introduces a paradigm shift in the structure of higher education by incorporating multiple entry and exit options. This allows students the flexibility to leave a degree course after completing a certain duration, earning a diploma or degree in the process. The Academic Bank of Credit (ABC) serves as a repository for these earned credits, facilitating seamless credit transfers if a student decides to switch institutions.

This feature addresses the rigidities of the traditional higher education system and aligns with global best practices. It recognizes that the pursuit of education is dynamic, and individuals may follow diverse pathways. However, the successful implementation of this feature requires robust mechanisms for credit transfer, accreditation, and a mindset shift among educational institutions.

### **Technology-based Learning for Adults**

Recognizing the need for continuous learning and upskilling in the fast-evolving landscape, NEP 2020 emphasizes technology-based options for adult education. The policy envisions leveraging digital platforms, apps, TV channels, and online courses to provide quality learning opportunities for adults. This move not only aligns with the global trends in lifelong learning but also acknowledges the transformative potential of technology in reaching a broader audience.

While the integration of technology offers scalability and accessibility, challenges related to digital infrastructure, connectivity, and digital literacy need to be addressed. The success of this initiative hinges on a comprehensive and inclusive approach that ensures diverse demographic groups can benefit from technology-based adult education.

### **Provision for E-courses in Regional Languages**

NEP 2020 places a strong emphasis on the democratization of education by promoting e-courses in regional languages. The policy recognizes linguistic diversity as a cornerstone of India's cultural fabric and seeks to break down language barriers in education. By making e-content available in regional languages, starting with eight major languages and expanding over time, NEP 2020 aims to ensure that the benefits of online education reach every corner of the country.

This feature aligns with the broader goals of inclusivity and accessibility. However, the effective implementation requires meticulous planning, quality assurance in regional language content, and the development of a robust technological infrastructure that supports multilingual education.

### **Foreign Universities Setting up Campuses in India**

A significant departure from the past, NEP 2020 opens the doors for the top 100 foreign universities to set up campuses in India. This move is strategic, aiming to position India as a global education hub, fostering international collaboration and providing Indian students with access to world-class education within the country.

While this feature holds immense potential for enriching the academic landscape, it also poses challenges related to regulatory frameworks, cultural integration, and ensuring that the collaboration is mutually beneficial. Striking the right balance between promoting global education and safeguarding national interests will be critical.

### **Common Entrance Exam for All Colleges**

NEP 2020 introduces a common entrance exam for all higher education institutes, to be conducted by the National Testing Agency (NTA). This standardized testing approach aims to simplify the admission process, reduce the burden on students preparing for multiple entrance exams, and streamline the evaluation of candidates.

The success of this feature hinges on the development of a robust examination infrastructure, fair evaluation mechanisms, and the acceptance of a standardized testing culture by higher education institutions. Striking a balance between a common entrance exam and the unique strengths of individual institutions will be crucial.

In conclusion, the salient features of NEP 2020 related to higher education reflect a bold vision for transformation. As India stands at the cusp of an educational renaissance, these features, if implemented

effectively, have the potential to redefine the higher education landscape, fostering innovation, inclusivity, and global competitiveness. However, realizing this potential requires meticulous planning, stakeholder collaboration, and a commitment to navigating the challenges on the path to educational metamorphosis

### **III. Detailed Analysis of Impact of NEP on Higher Education**

The National Education Policy 2020 (NEP 2020) brings forth a comprehensive transformation of India's higher education system, delving into regulatory changes, accreditation mechanisms, internationalization strategies, and a shift towards holistic learning. This section undertakes an in-depth analysis of the impact of NEP 2020 on higher education, dissecting key components and envisaged changes.

#### **Regulatory System of Higher Education**

One of the pivotal changes introduced by NEP 2020 is the proposed establishment of the Higher Education Commission of India (HECI) as a single regulatory body, excluding medical and legal education. This marks a departure from the existing regulatory bodies, such as the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE).

HECI is envisioned to play a multifaceted role, including regulation, standard-setting, funding, and accreditation. By creating a clear demarcation between academic and financial aspects, NEP 2020 aims to streamline the regulatory framework, fostering autonomy and innovation within higher education institutions.

The success of this regulatory overhaul hinges on effective implementation, addressing challenges such as faculty readiness, infrastructure development, and a collaborative approach with stakeholders. It marks a shift towards a more accountable and outcome-driven regulatory mechanism.

#### **Graded Accreditation and Graded Autonomy**

NEP 2020 introduces the concept of "empowerment and autonomy to innovate" through graded accreditation and graded autonomy. This entails a phased transition from affiliated colleges to autonomous institutions, allowing the latter greater flexibility in curriculum design and governance.

The policy recognizes the potential for autonomous institutions to evolve into research-intensive or teaching-intensive universities with appropriate accreditations. The emphasis on graded autonomy seeks to stimulate innovation, research, and academic excellence, aligning with global best practices.

For this concept to materialize effectively, there needs to be a robust accreditation framework, transparent evaluation criteria, and a shift in the mindset of institutions towards embracing autonomy responsibly. The success of this feature lies in fostering a culture of continuous improvement and academic innovation.

#### **Internationalization of Education**

NEP 2020 envisions a global outlook for Indian higher education by facilitating the establishment of campuses by the top 100 foreign universities in India. This move aims to enhance the quality of education, foster international collaboration, and position India as a global education hub.

While this feature opens avenues for cross-cultural exchange and enriching academic experiences, it necessitates careful calibration of regulatory frameworks to ensure the maintenance of academic standards. The integration of foreign universities must align with India's educational ethos and contribute to the holistic development of students.

Success in internationalization will depend on creating an environment conducive to collaboration, addressing concerns related to cultural diversity, and ensuring that the collaboration benefits all stakeholders, including the students, institutions, and the nation.

### **Holistic and Multidisciplinary Learning**

NEP 2020 advocates for a holistic and multidisciplinary approach to higher education, aiming to develop well-rounded individuals. The policy envisions the establishment of one large multidisciplinary Higher Education Institution (HEI) in or near every district by 2030.

This approach emphasizes not only academic excellence but also the development of ethical, social, and practical skills. The integration of community engagement, environmental education, and value-based education reflects a broader societal responsibility for educational institutions.

Implementing this vision requires a recalibration of curricula, faculty development programs, and a reorientation of pedagogical approaches. Success lies in creating an ecosystem where students can actively engage with the practical aspects of their learning, fostering a sense of responsibility towards society.

### **Structure and Lengths of Degree Programs**

NEP 2020 introduces flexibility in the structure and lengths of degree programs, offering multiple entry and exit points. This entails a departure from the conventional fixed-duration degree programs, allowing students to receive recognition for the academic credits earned.

The introduction of a three- or four-year undergraduate degree, along with the option for diploma and certificate awards after one or two years, aligns with global practices and acknowledges the diverse learning trajectories of students. The creation of an Academic Bank of Credit (ABC) further facilitates credit transfers.

For this flexibility to be effective, institutions need to develop robust credit transfer mechanisms, ensure the equivalence of diplomas and certificates, and promote a culture that values diverse learning pathways. It reflects a learner-centric approach, catering to individual learning preferences and aspirations.

## **IV. Conclusion:**

In conclusion, the detailed analysis of the impact of NEP 2020 on higher education unveils a roadmap for transformative change. The envisioned regulatory reforms, accreditation mechanisms, internationalization strategies, and the emphasis on holistic learning collectively signal a paradigm shift in India's higher education landscape. However, the successful implementation of these changes necessitates collaborative efforts, meticulous planning, and adaptability to address the challenges that accompany such comprehensive educational reform. The next section will delve into specific aspects of NEP 2020's impact, exploring implications for students, institutions, and the broader educational ecosystem.

This section concludes the research by summarizing the key findings and offering insights into the potential long-term effects of NEP 2020 on higher education in India. It evaluates the policy's strengths, its alignment with global trends, and the challenges it may face during implementation. Emphasis is placed on the importance of effective and time-bound implementation for NEP 2020 to achieve its objectives.

**References:**

- Aithal, P. S., & Aithal, S. (2019). *Analysis of Higher Education in Indian National Education Policy Proposal 2019 and Its Implementation Challenges*. *International Journal of Applied Engineering and Management Letters*, 3(2), 1–35.
- Nandini, ed. (29 July 2020). "New Education Policy 2020 Highlights: School and higher education to see major changes". *Hindustan Times*.
- Jebaraj, Priscilla (2 August 2020). "The Hindu Explains | What has the National Education Policy 2020 proposed?". *The Hindu*. ISSN 0971-751X.
- Chopra, Ritika (2 August 2020). "Explained: Reading the new National Education Policy 2020". *The Indian Express*.
- Rohatgi, Anubha, ed. (7 August 2020). "Highlights | NEP will play a role in reducing the gap between research and education in India: PM Modi". *Hindustan Times*.
- Krishna, Atul (29 July 2020). "NEP 2020 Highlights: School And Higher Education". *NDTV*.
- Naidu, M. Venkaiah (8 August 2020). "The New Education Policy 2020 is set to be a landmark in India's history of education". *Times of India Blog*.



## ASSESSMENT OF THE ECONOMIC EFFICIENCY OF THE QUALITY OF FREIGHT AND PASSENGER TRANSPORT

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### ABSTRACT

*This article discusses the introduction of a group of quality and quality of transport services, which corresponds to the share of the transport system and paid by customers, including the value of the quality and level of quality of road, rail and air transport services and the economic efficiency of the transport system, the amount of additional efficiency obtained, as well as the difference between the additional costs of the transport system to provide the required quality of transport services, objective calculations were made in the introduction of the quality type of transport services .*

**Key words:** *Transport System, Railway Transport, Transport Services, Economic Evaluation, Delivery of Goods, Value and Physical Indicators, Quality of Services, Objective Calculations.*

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### Introduction

The importance of transport services in the process of globalization and integration in the world is growing. According to the World Bank, the share of global transport services in GDP is 4.3 trillion. USD (6.9%) and voted to 110 bln. tons of cargo and 1 trillion. More than 100 million passengers are transported, the number of employees in the transport complex is 100 million is formed [1]. The use of modern technologies for the provision of transport services will save 30% to 60% of material resources, as well as reduce the cost of delivery of enterprises using transport services by about 30-35%.

The global transport services market provides opportunities for the development of international relations, improving the transport complex, ensuring the quality and efficiency of transport services, the introduction of innovations and modern providers in the field of transport services by providing freight and passenger flow. In turn, it is important to ensure the quality of transport services, including the positive solution of economic priorities, such as access to international markets with modern forms of goods and services through the modernization of rolling stock and technical upgrades. In this regard, the assessment of the economic aspects of the quality of transport services and the study of related problems and their solution is one of the most pressing issues today.

In our country, special attention is paid to the rapid development of transport communications as an important sector of the economy. In this regard, the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021 identifies important tasks to "increase competition among national transport and logistics companies" [2] and the Address of the President of the Republic of Uzbekistan to the Oliy Majlis. We need to develop the transport and logistics sector to reduce costs"[3]. This, in turn, reflects the expediency of conducting research to improve the quality of transport services.

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### **Analysis of the relevant literature**

Scientific-theoretical and methodological issues of economic evaluation of the quality of transport services are reflected in the research of local and foreign scientists. The economist AJVenables argued in his research that services have a high share in the country's GDP [4].

M.N. In her research, Irsbekova has studied in detail the economic categories of "transport services" and "transport services market." The socio-economic significance of the transport services market, the need for a systematic approach to the study of market optimization problems, the specifics of market research based on marketing principles, the importance of marketing in the system and the concept of its development are studied in detail [5].

According to G.Samadov, A.Zakhidov, A.Gulamov and M.Ravshanov, "the transport system is a set of interconnected modes of transport and infrastructure in the process of transporting goods and passengers to their destinations, ie interconnected transport sectors, labor resources and the country. The system of management of all types of transport is understood in order to effectively manage the economy "[6].

### **Research methodology**

The results of scientific research of national and foreign scientists engaged in the analysis of problems of assessing the economic efficiency of the quality of transport services served as a theoretical and methodological basis for this study. In the preparation of the article used abstract and analytical observation, comparative and factor analysis, indicative, sample observation, comparison, economic-statistical, economic-mathematical and other methods.

### **Analysis and results**

In studying the problems associated with the assessment of the quality of transport services, it is necessary to pay attention to how it can be used as a tool for managing transport processes in the transport system. However, the quality of transport services should not be costly and should benefit the transport system, but the main effect should be on customers, shippers and consignees. In accordance with the international standard on quality economics, the main focus is on reducing quality-oriented costs and not increasing production costs. However, a slightly different situation arises in the implementation of the quality of transport services in the transport system.

The complexity of this problem is that today in the assessment of the practical impact of the transport system on the activities of sectors of the economy, a clear economic-mathematical relationship has not been proven. Therefore, the choice of a system of quality criteria and indicators of freight is complex, but requires taking into account the internal and external characteristics of transport, the results of activities for each type of transport and mixed transport. Given that the Uzbek railways are currently controlled by the state, it is possible to make a more accurate assessment, taking into account the specific indicators that reflect the turnover and average speed of the movement. This also applies to local trucking companies.

However, it is more problematic to obtain sufficiently reliable information from private enterprises and private entrepreneurs who are considered to be individuals. The situation is further complicated by the acquisition of non-transport characteristics, if in the pre-reform period the non-transport characteristics reflecting the consumption value of transport and its impact on production were used in practice, today, according to foreign practice, however, it is not being implemented.

However, now it is important to calculate and evaluate non-transport characteristics, as they allow to study the final results of transport in conjunction with the activities of enterprises of all forms of ownership, increase the attractiveness of finding new forms of transport services, improve the quality of transport services. It should be noted that "the product is suitable for consumption only after the end of the movement", and today it is also required to have a certain level of quality.

According to the final results, the criteria for assessing the quality of transportation include improving the efficiency of industrial enterprises in the transport system, which is characterized by the total costs incurred by the consignor and consignee. Therefore, quality indicators require evaluation of the transportation process in terms of complete, timely and cost-effective delivery of goods to their destination, taking into account the efficient use of means of transport. The analysis of the impact of transport services on the economic performance of enterprises and industries should be aimed at ensuring:

- High use of fixed assets;
- Optimization of working capital, which depends on the amount of total stocks (finished products, production stocks, the volume of cargo on the road);
- Saving labor costs in loading and unloading and auxiliary work of the sender and receiver;
- Grouping and forecasting the needs for vehicles, warehouses, mechanisms and other technical means.

The quality of shipments requires an assessment based on natural indicators that reflect different aspects of the interaction between transport or production in the delivery of different products to consumers. However, given their incomparable features in some cases, the quality of shipments should ultimately be assessed on the basis of value indicators. In this case, natural indicators are taken as approximate indicators, but also serve to determine both operating costs and capital investment. Thus, there are two groups of indicators of quality of transport services - natural and value indicators. Natural indicators include:

- Regularity, uniformity and reliability of shipments according to the direction of shipment, tracking and arrival, ie they describe the completeness and timeliness of unloading at the place of placement, dispatch, delivery and reception of goods;
- Indicators of quality assurance of delivered goods in the process of shipment, arrival and transportation of goods from sender to consignee;
- Indicators of compliance with the terms of delivery of goods, the delivery of which allows to achieve a positive result;
- Indicators of the use of load-lifting mechanisms and vehicles in enterprises.

Value indicators include:

In production:

- Restriction of production due to the provision of poor quality transport services or unusual shipment and delivery of finished products from the enterprise due to transport faults;
- Loss, deterioration and deterioration of the quality of the delivered product;
- Perform additional ancillary operations through the fault of the shipper and consignee;
- Use of relatively "expensive" modes of transport and methods of delivery;

- Increased capacity for production capacity, warehousing capacity, labor, and so on.

In transport:

- Restrictions on the implementation of the plan of transportation (shipment);
- Unloading restrictions;
- Underutilization of the carrying capacity of vehicles at enterprises;
- Increasing demand for vehicles;
- Increasing demand for transport capacity and carrying capacity.

Based on the above indicators, the assessment of the quality of transport services provided for the comparison of two polygonal areas, such as basic and expert.

$$R_l^i = \frac{S_j}{S_{max}} \quad (1)$$

here:

$R_l^i$  - rating of the type of transport that provides delivery of goods by quality groups;

$S_j$  - External area with a curve built on the basis of expert assessments on the quality group of transport services;

$S_{max}$  - basic polygon area.

$$S_j = \left(\frac{1}{2} a^2 \sin \alpha\right) n \quad (2)$$

$a$  - the distance from the center of the polygon to its boundary;

$\alpha$  - the angle between the edges of the polygon;

$n$  - number of parameters.

As a result of the analysis of the assessments made by the expert, the following types of transport ratings were obtained:

for road transport:

$$\begin{aligned} R_{av} &= \frac{78 * 79 + 79 * 70 + 70 * 91 + 91 * 88 + 88 * 93 + 93 * 78}{6 * 100^2} \\ &= \frac{6262 + 5530 + 6370 + 8008 + 8184 + 7254}{6 * 100^2} = 0.69 \end{aligned}$$

for air transport:

$$\begin{aligned} R_{air} &= \frac{60 * 86 + 86 * 81 + 81 * 71 + 71 * 76 + 76 * 66 + 66 * 60}{6 * 100^2} \\ &= \frac{5160 + 6966 + 5751 + 5376 + 5016 + 3960}{6 * 100^2} = 0.54 \end{aligned}$$

for railway transport:

$$R_{railway} = \frac{60 * 86 + 86 * 81 + 81 * 71 + 71 * 76 + 76 * 66 + 66 * 60}{6 * 100^2} = \frac{5160 + 6966 + 5751 + 5376 + 5016 + 3960}{6 * 100^2} = 0.58$$

The calculation obtained Based on the results of the survey, the quality levels of road, rail and air transport services were assessed as follows:

road transport - = 0.69; $R_{av}$

railway transport - = 0.58; $R_{air}$

air transport - = 0.54. $R_{railway}$

Thus, if the quality of transport services is considered to be the real economic effect calculated for this group "E" and the condition is satisfied, then - the period in question, usually for a year, the work of customers and the relevant "Q" transport quality group of the transport system If it is assumed that the costs associated with the establishment and the conditions are met, then the following ratio can be written. $E_{ij}^e E_{ij}^e \neq C_{ij}^e C_{ij}^e \neq 0$

$$\frac{E_{ijcustomer}^e}{E_{transport}^e} = \frac{C_{ijcustomer}^e}{C_{transport}^e} \tag{3}$$

If some changes are made to this equation, that is,  $C_{ijcustomer}^e + E_{transport}^e = 1$  If it is assumed, then we have the following expression:

$$\frac{C_{ijcustomer}^e}{C_{transport}^e} = \frac{TTC_{ijcustomer}^e}{TTC_{transport}^e} \tag{4}$$

where and - the share of the transport system and customers' transportation costs in the total transport costs incurred to ensure the quality of transport services. From this consideration the following is formed  $Y_{ij}^c$   $Y_{транспорт}^c$ :

$$TTC_{ijcustomer}^e = \frac{C_{ijcustomer}^e}{C_{ijcustomer}^e + C_{transport}^e}; \quad TTC_{transport}^e = \frac{C_{transport}^e}{C_{ijcustomer}^e + C_{transport}^e} \tag{5} \tag{6}$$

Given the nature of the ongoing transport process, we call the resulting expressions the coefficients of distribution of efficiency between customers, such as a single integrity transport system and a single integrity for the quality transport service quality group.

It is important to note that the two cost-effective types can never be compared for a long period of time (a year or more) under real-life conditions, even when all elements of the transportation process work at the highest level, economically justified reliability,

$$E_{approximate}^e > E_{real}^e \tag{7}$$

where - the estimated economic effect of the provision of these transport services on the quality group, som.  $E_{approximate}^e$  ;

$E_{real}^e$  - Real economic effect on the quality group of these transport services.

Another specific aspect of this transportation process that needs to be considered. The estimated cost-effectiveness is determined before the introduction of a particular transportation process of a particular transport service quality group, and proves the need to introduce a particular quality group of transport services in the transport route. The actual effect is obtained in each specific case directly after the shipment, and this reality is to some extent probabilistic. The amount of potential deviation can be large or zero in absolute terms with the exception of force majeure in each specific case, which greatly complicates the settlement process between the customer and the transport system.

Therefore, it should be noted that in the formation of the distribution relationship between the participants of the transport process by the quality group of this or that transport services and the formation of the amount of surcharges to the basic or single tariff in the future for the quality of transport services It is necessary to include the amount of money actually saved at the expense of new forms of transport services in the form of coefficients:

$$K_{\alpha} = \frac{A_{real}^s}{A_{approximate}^s} \quad (8)$$

where - the coefficient of compliance with technological requirements for the quality of transport services,  $K_{\alpha}$

$A_{real}^s$  - the actual savings from the introduction of a quality group for the provision of certain transport services;

$A_{approximate}^s$  - Estimated cost savings from the introduction of a quality group for the provision of certain transport services.

It should be noted that the coefficient has a sufficiently wide range that, in general, it can fluctuate depending on the results of the actual load movement relative to the technological process or the signed contract during a particular plan or reporting period, or at certain time intervals. However, in the first approximation, it is expedient to take as a basis the following approximate quantities of the coefficient based on the analysis of the actual load movement:  $K_{\alpha} 0 < \alpha < 1 \ll \alpha \gg$

- the time of arrival of the goods is clearly defined for the guaranteed quality service group;  $\alpha = 0.95 - 0.98$
- for a continuous service quality group with interval arrival times;  $\alpha = 0.8 - 0.95$
- for special transport services quality group  $\alpha = 0.99 - 1.00$ .

Thus, the real economic benefit for the transport system is the difference between the share of the transport system and the additional cost of providing quality transport services paid by customers and the additional costs of the transport system to provide the required quality transport services, and its mathematical expression is as follows:

$$\Delta E_{(ij)gr}^e = (\Delta E_{(ij)costomer}^e - \Delta C_{(ij)tr}^e) / Q_{(ij)} \quad (9)$$

where - the additional effect obtained per unit of freight from the introduction of a quality group to provide appropriate transport services in the transport system,  $\Delta E_{(ij)gr}^e$ , som;

$\Delta E_{(ij)customer}^e$  - surcharge paid by customers to the tariff for the quality of transport services per unit of freight, som;

$\Delta C_{(ij)tr}^e$  - additional costs for the organization of work on the relevant quality group in the entire transport system, som;

$Q_{(ij)}$  - the volume of cargo for a certain period (one year) in which the calculations are made or the contract is signed.

The overall real cost-effectiveness for customers is the difference between the cost-effectiveness per unit of freight transported and the additional charges for the quality of transport services, which can also be expressed as follows:

$$\Delta E_{(ij)customer}^e = (\Delta E_{(ij)total}^e - \Delta T_{(ij)tr}^e) / Q_{(ij)} \quad (10)$$

where is the additional national economic effect obtained from the introduction of the quality group for the provision of transport services per unit of freight transported.  $\Delta E_{(ij)total}^e$

Based on the above formulas and their analysis, the following formula can be written:

$$\frac{K_{ijtr}^e}{K_{ijcustomer}^e} = \frac{\Delta E_{ijcustomer}^e - \Delta C_{ijtr}^e}{\Delta E_{ijtotal}^e - \Delta E_{ijcustomer}^e} \quad (11)$$

By making simple changes, we get:

$$\Delta E_{ijcustomer}^e = K_{ijtr}^e * \Delta E_{ijtotal}^e + K_{ijcustomer}^e * \Delta C_{ijtr}^e \quad (12)$$

This expression allows us to conclude that the additional costs of improving the quality of transport services should be distributed between the customer and the transport system on the basis of inversely proportional to the effect obtained on the quality group of transport services. As a result of a more in-depth analysis of the given mathematical expression, it is possible to determine the following:

- if the proportion of their distribution between the customer and the transport system does not change with the increase in the corresponding change  $\Delta E_{ijtotal}^e$   $\Delta C_{ijtr}^e$  ;

- if so, the following reciprocal ratio is always maintained  $\Delta \mathfrak{Z}_{ijmp}^c < \Delta \mathfrak{Z}_{ijymym}^c$ .

$$\Delta C_{ijtr}^e < \Delta C_{ijcustomer}^e < \Delta E_{ijtotal}^e \quad (13)$$

Thus, based on this expression of the distribution of economic efficiency  $\Delta E_{ijtotal}^e$  , the calculation provides mutually beneficial ratios  $\Delta C_{ijcustomer}^e$  , taking into account the previously specified additional constraints and in the desired amounts of  $\Delta C_{ijtr}^e$  .

Hence, the amount of calculation obtained ensures that the actual effective distribution obtained from the introduction of the quality group for the provision of appropriate transport services between the customer and the transport system is mutually beneficial and fair. It is also important to keep in mind that this cost-effectiveness depends on the actual level of efficiency, which is lower than the estimated efficiency of the transport system for customers, i.e., the provision of superior transport services, while giving the transport system a certain advantage. despite the fact that it is characterized by a guarantee of additional payment for quality, it is likely to depend on the actual performance of this type of quality  $\Delta C_{ijcustomer}^e$  .

However, setting an optimal optimal surcharge for the quality of transport services is of particular importance for the transport system, as the surcharge ensures the normal economic operation of the transport system as the provision of appropriate transport services, but under certain and specific conditions due to a number of objective development conditions of market relations the surcharge may be almost unacceptable to customers due to high transportation costs in the product cost and an increase in the wholesale price of the product being transported. To prevent this, after appropriate bargaining, it is necessary to set additional standards for increasing the quality of transport services for each quality group, accepted by both customers and the transport system, namely:

$$\begin{aligned} \Delta E_{ijcustomer}^e &= (C_{(ij)}^{until} + R_{(ij)}^{until}) - (C_{(ij)}^{after} + R_{(ij)}^{after}) \\ &= (1 + p)\Delta C_{ij}^k \end{aligned} \quad (14)$$

where - shipping costs before and after the introduction of the quality group to provide appropriate transport services,  $C_{(ij)}$ ,  $C_{(ij)k}$  som.;

$R_{(ij)}^{until}$ ,  $R_{(ij)}^{after}$  - benefits that determine the level of profitability before and after the introduction of the quality group for the provision of appropriate transport services, som.;

$p$  - profitability, which provides a level of additional payment to the amount of surcharge to the current tariff, the immutability of which was previously determined.

$$\Delta E_{ij}^e = C_{(ij)}^{until} - C_{(ij)}^{after} \quad (15)$$

$\Delta \mathfrak{Z}_{ij}^c = \mathfrak{Z}_{(ij)}^{\text{зача}} - \mathfrak{Z}_{(ij)}^{\text{кейш}} -$  the difference between the costs before and after the introduction of quality groups for the provision of appropriate transport services;

A similar relationship, ie the following formula, can be used to determine the rate of return as a ratio of profit to fixed assets:

$$\Delta E_{ijcustomer}^e = (1 + p)\Delta C_{ij}^k \quad (16)$$

In this case, it is necessary to take into account changes in the demand for fixed assets due to the increased quality of transport services. The results of the analysis of determining the share of efficiency distribution between customers and the transport system allow us to conclude that this problem can be solved, as well as to turn on the "green light" for the introduction of new forms of transport service quality.

## Conclusions and suggestions

All of the above considerations allow us to make a sufficiently objective calculation in the introduction of this or that type of quality for the following purposes:

- Feasibility study of the selection of the best use of the appropriate quality group for the provision of transport services to enterprises and organizations of all forms of ownership;
- Determination of the calculated, real (real) economic effect on the quality group of the provision of appropriate transport services, taking into account the specifics and characteristics of the production activities of each enterprise;
- Determination of the share of economic efficiency corresponding to each participant of the transportation process after the transition to new groups or forms of quality of transport services;

- On the basis of theoretical conclusions a precise calculation of the real tariff change in the increase on a single complex technology is given.

Thus, the implementation of these measures will lead to savings in production and material resources, accelerate the provision of transport services and reduce costs, and lead to the development of sectors of the economy.

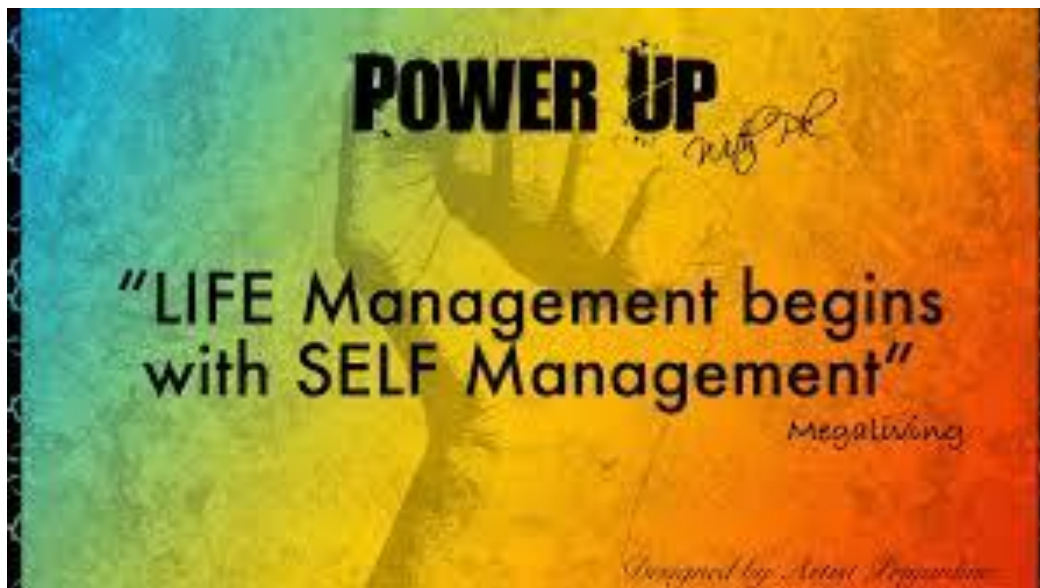
### List of used literature

- *The World Bank: World Development Indicators.* <http://data.worldbank.org/indicator>
- *Decree of the President of the Republic of Uzbekistan No. PF-4947 of February 7, 2017 "On the Action Strategy for the further development of the Republic of Uzbekistan."* [//www.lex.uz](http://www.lex.uz).
- *Address of the President of the Republic of Uzbekistan to the Oliy Majlis. January 24, 2020.*
- *Venables, AJ (2007). Evaluating Urban Transport Improvements: Cost – Benefit Analysis in the Presence of Agglomeration and Income Taxation. Journal of Transport Economics and Policy, 41: 173–188 p.*
- *Kovrijnyx I.V. Analysis of the effectiveness of management in the organization / I.V. Kovrijnyx. - Barnul: AF SibAGS, 2016. - 86p.*
- *Fayzullayev JS Improvement of Economic Efficiency of Railway Development // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue – 2, Dec -2019. [http://www.ajtmr.com/papers/Vol9Issue2/Vol9Iss2\\_P9.pdf](http://www.ajtmr.com/papers/Vol9Issue2/Vol9Iss2_P9.pdf)*
- *Zohidov A.A. Improving the mechanism of effective management of the Central Asian transport system. Iqt. fan. doc. ... dis. Avtoref., Tashkent 2018.*
- *Frederick Starr S., Filat Yildiz, Martina reiser etc. The New Silk roads: Transport and trade in Greater Central Asia. Monograph Central AsiaCaucasus institute & Silk Road Studies Program, Washington, DC: Johns Hopkins University-SAIS, 2007. - 514 p.*
- *Economics of transport: Uchebnoe posobie / Tereshina N.P., Potapova E.V., Teryoshina N.V., Epishkin I.A. - M.: RUT (MIIT), 2018. - 142 p.*
- *Golts G.A. Transport and macroeconomics of Russia for three centuries. Materials X mezhdunarodnoy (trinadtsatoy Ekaterinburgskoy) nauchno-prakticheskoy konferentsii 14-15 June 2004 goda.*
- *Fayzullayev JS The economic-mathematical model of the organization activity of the modern transport-logistics system. // Bulletin of science and practice - Bulletin of Science and Practice scientific journal (scientific journal). 2018. №5 (4). S. 345-352. DOI: 10.5281 / zenodo.1147072. Impact Factor (5) GIF - 0.454; (21) Info Base Index - 1.4; (17) OAJI - 0.350, (43) (UIF) - 0.1502; (4) JCR - 1,021.<http://oaji.net/articles/2017/3996-1526585902.pdf>*
- *Fayzullayev JS Evaluation of efficiency of transport - logistics system. // XLVII International correspondence scientific and practical conference «International scientific review of the problems and prospects of modern science and education» (Boston. Usa. July 24-25, 2018). 62-65.<https://scientific-conference.com/images/PDF/2018/49/International-scientific-review-7-49-ISBN.pdf>*
- *Fayzullayev J. (2020). Effectiveness of modern methods in the development of the integration transport systems.*



Archive nauchnyx issledovaniy, 1 (3).<https://tsue.scienceweb.uz/index.php/archive/article/view/3892>

- Fayzullayev JS Effectiveness of modern methods in the development of the integration transport systems // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue – 2, Dec -2019 62-65. <https://saarj.com/wp-content/uploads/SAJMMR-JULY-2020-FULL-JOURNAL.pdf>
- Fayzullayev JS Theoretical Aspects of the Transport Logistics System Management // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Special Issue – 2, Sep -2019. [http://ajtmr.com/papers/Sp11ss2/Sp11ss2\\_8.pdf](http://ajtmr.com/papers/Sp11ss2/Sp11ss2_8.pdf)
- Fayzullaev J.S. Transport and logistics system: problems and solutions // Proceedings of Global Technovation 2 nd International Multidisciplinary Scientific Conference Hosted from London, UK December 28th, 2020.<https://www.conferencepublication.com/index.php/aoc/article/view/424>
- Fayzullayev JS Problems And Status Of Efficiency Of The Transport And Logistics System In The Railway Network,Archive of Conferences: Vol. 13 No. 1 (2021): GTIMSC-2021, <https://www.conferencepublication.com/index.php/aoc/article/view/573>
- Fayzullayev, JS (2021) "Economic-mathematical model of evaluating the efficiency of the transport system," Economics and Innovative Technologies: Vol. 2021: No. 1, Article 1.<https://uzjournals.edu.uz/qtisodiyot/vol2021/iss1/1>



## RAILWAY TRANSPORT SYSTEM ECONOMIC AND DIRECTIONS FOR IMPROVING THE TARIFF SYSTEM

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### ABSTRACT

*In this article, the main directions determining the development of the organizational and economic foundations of the railway transport system, the main tasks of the economic development of the railway transport system, the principles of strategic integration of railway transport and the imitation model of the development of the railway transport system are proposed.*

**Keywords:** *Organizational and Economic Basis of The Railway Transport System, Imitation Model, Delivery of Goods, Hierarchy of Tasks, Transport Complex, Railway Transport Infrastructure.*

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### Enter

The stable development of international economic relations is mainly determined by transport activities. The length of transport routes in the world is 50 million. Stabilization was noted at the level of more than a kilometer. According to the World Bank, today "the international transport market is estimated at 2.2 trillion (6.8% of GDP)". In most countries of the world, the share of transport in GDP is 4 - 9 percent, and in population employment is 3-7 percent [1]. On the one hand, the transport system reflects the level of development of the national economy, and on the other hand, the level of security of the country.

In the world, extensive scientific research is being conducted on the effective development of the transport system. In particular, economic development of the railway transport system positive effects of the development of the railway transport network have been noted in the studies conducted on the formation of economic approaches that ensure the effective development of the railway transport system, a comprehensive approach to the issues, however, a comprehensive opinion on the direction and scope of these effects has not been formed. Based on this, economic development of the railway transport system determines the need to conduct additional research.

### Analysis of literature on the topic

The theoretical and methodological foundations of the development of the railway transport system are reflected in the scientific research of a number of local and foreign scientists. According to the English economist Anthony Venables, the transport complex is a set of national economic networks specialized in meeting the needs of social production for transporting goods and passengers [4].

D. According to Bauersox, he paid special attention to the problems of multimodal and intermodal transportation, including the advantages and economic efficiency of transportation organization compared to traditional methods. At the same time, the author specifically mentions the transport system, which includes transport networks, vehicles and transport companies [5].

According to G. Samadov, A. Zoxidov, A. Gulamov and M. Ravshanov, among the scientists of our country, "the transport system is a complex of transport facilities and infrastructures that are interconnected in the process of delivering goods and passengers to their destination, that is, interdependent transport

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<sup>1</sup> Independent researcher of Tashkent State Transport University

sectors, labor resources and the country in order to effectively manage the economy, the management system of all types of transport is understood" [6].

### **Research methodology**

Effective development of the railway transport system the results of the scientific research of national and foreign scientists who were engaged in the analysis of the problems served as the theoretical and methodological basis of this study. In the preparation of the article, abstract and analytical observation, comparative and factor analysis, indicative, selective observation, comparison, economic-statistical and other methods were used.

### **Analysis and results**

The transport complex, which performs the main "blood circulation" function, is of particular importance in the effective development of the economy of world countries. An effective transport system optimizes the movement of goods and products in the domestic market, as well as increases the economic competitiveness of the country in foreign trade, and provides an opportunity to accelerate the processes of integration into the world market. In general, the large-scale development of the country, the high speed of interregional economic relations, in a broad sense, directly depends on the effective operation of the transport infrastructure [7].

Railway companies are preoccupied with the implementation of current interests over the future interests of the industry and society. This shows the need to introduce targeted approaches to the effective development of the railway transport system and to develop a general model that covers the entire organizational and economic system and substantiates its important features theoretically and methodologically. Today, the problem of developing a new strategy and model of state regulation of railway transport based on the concept of reciprocal activity of all participants in the transport market is urgent. The system of new views on quality management envisages the strengthening of influencing market factors, which envisages the development of a new management strategy and model based not only on state regulation, but also on the principles of public-private partnership and on the concept of active cooperation as subjects of market relations.

Assessing the position of the railway network in the country's economy, determining the prospects for the development of the network, and conducting research on the study and forecasting of trends, with a direct impact on the medium and long-term strategy of the railway network, today's policy, material and technical resources, labor force and the development of the financial situation serves as a basis for determining the need and developing its long-term strategy.

The level of development of railway transport has a direct impact on the development of the country's economy, because the transport costs included in the final price of the product and the ability to ensure timely delivery are important competitiveness factors of local enterprises.

Therefore, studying the main performance indicators of the railway transport system, the stages of development of transport and logistics infrastructures, and developing recommendations for eliminating existing problems in the system is one of the main issues today. In Uzbekistan, 5.3% of the local freight volume and 92.5% of the transit volume are accounted for by railway transport.

The main commodities offered for transportation include coal, grain, oil, ore, mineral fertilizers and other bulk bulk and liquid cargoes (Table 1). As can be seen from the data in the table, the main part of the cargo

transported by railway transport falls on the products of the mining industry (coal, oil and oil products, ferrous and non-ferrous metals, ores).

**Table 1 : Volume of transportation of certain types of cargo in railway transport<sup>1</sup> thousand tons**

Indicators	2017	2018	2019	2020	2021	2022	2023
Coal	3 971.0	3 712.7	442.9	5 632.6	5 231.0	4 459.2	5 673.8
Oil and oil products	10,773.9	10,661.4	10,961.9	6 769.4	6 156.2	5 951.6	5 372.2
Black and non-ferrous metals	959.5	887.2	812.7	1 079.3	1 280.9	1 113.2	1 054.9
Chemical and mineral fertilizers	4 304.2	4 381.3	4 049.8	3 451.4	3 602.6	4 210.9	4 641.7
Construction goods	7 728.7	6 690.3	6 329.4	5 475.3	5 575.5	4 071.9	5 607.7
Cement	5 325.7	5 514.1	4 846.4	4 866.4	5 112.0	5 044.5	4 582.1
Wood products	46.3	21.2	18.9	27.1	31.2	19.7	23.0
Grains and grain products	1 266.9	1 269.6	1 662.4	1 737.1	1 645.2	1 898.6	2 000.4
<b>Total</b>	<b>34 376.2</b>	<b>33 137.8</b>	<b>29 124.4</b>	<b>29,038.6</b>	<b>28,634.6</b>	<b>26,769.6</b>	<b>28,955.8</b>

The delay in the delivery of goods is explained by the fact that there are still problems at the stopping points of the rolling stock, this situation shows the need to improve the efficiency of the rolling stock in order to ensure the effective performance of the assigned tasks by the railway transport. Table 2 presents information describing the use of some types of workers, cargo, rolling stock in general use.

**Table 2 : Indicators of railway transport in Uzbekistan<sup>2</sup>**

Indicators	2018	2019	2020	2021	2022	2023
Locomotive productivity, gross tkm per day	947	1015	1056	1110	1190	1200
Freight car productivity, tkm net per day	30	30.4	30.8	31.1	32	32.2
Average speed of the freight train on the section, km-h	32	31	30.6	31.3	30	31
Technical speed of the freight train, km-h	39.3	39.7	40.4	40.7	41.1	41
Average cycle time of a freight car, per day	4.6	5.78	4.2	4.1	3.84	3.9

<sup>1</sup>Information on "Uzbekistan Railways" JSC.

<sup>2</sup>Information on "Uzbekistan Railways" JSC.

In the last fifteen years, the volume of cargo transportation has increased by 27% and the number of passengers has increased by 86%, but it can be observed that the inventory of mainline locomotives used in the transportation process has decreased by 18.2%. The decrease in the section speed of the freight train by 9.6% has led to a certain decrease in the capacity of the railway transport. In 2016-2021, the technical and section average speed of freight trains is much lower than the specified speed, and in our opinion, the following factors have a negative effect on the speed of trains:

- Freight trains are late for the specified time;
- Technical failures at stations;
- Increase in technological time standards for trains at stations;
- Increase in the standard of time spent on troubleshooting at the station;
- Adverse effects of working personnel associated with the movement of freight trains.

In 2023, the volume of total investments in the transport system will be 6%, which is 2.5 times less than in 2009, and the volume of investments involved in railway transport, the main lifeblood of our country's economy, has increased by 24% in 2017-2019, and in 2021-2023 A decrease of 18% was observed (Table 3). The main reason for this can be explained by the fact that investments in some projects have been stopped in order not to reduce the solvency.

Based on the results of the analysis, foreign loans under the guarantee of the Republic of Uzbekistan took the main part of the investments attracted to "Uzbekistan Railways" JSC in 2023, approximately 40%, followed by private funds, 35%.

In our opinion, the following should be the main directions of attracting investments to the railway transport system:

development of new forms of cooperation with foreign transport and logistics companies;

Participation in investment projects by selling and leasing assets of Uzbekistan Railways JSC, attracting real estate;

the use of public-private partnership mechanisms that allow to combine the forces of the state and business in the implementation of the tasks of the development of the country's railway network.

**Table 3 : The volume of investments involved in the activities of JSC "Uzbekistan Railways".<sup>1</sup>million dollars**

Project initiator and funding sources	Years					
	2018	2019	2020	2021	2022	2023
Community funds	379.28	386.77	251.40	252.99	212.05	205.64
Dalvat budget	109.88	85.11	61.64	72.92	66,28	68.04
Foreign loans under the guarantee of the Republic of Uzbekistan	212.12	133.61	126.86	81,91	126.55	226.99

<sup>1</sup>Information on "Uzbekistan Railways" JSC.

Commercial bank loans	50.0	0.0	17.41	47.03	20.00	1.36
Foreign direct investment	0.0	12.60	29.78	61.48	53.66	51.25
To the funds of the Uzbek Republic Recovery and Development Fund	79.90	116.08	40,23	86.92	36.62	22.73
<b>Total</b>	<b>831.18</b>	<b>734.17</b>	<b>527.32</b>	<b>603.25</b>	<b>515.16</b>	<b>576.00</b>

The extensive nomenclature of transport-logistics services and their wide range of possible changes in quality, the impact they can have on the competitiveness of services and the value of spending, while other factors require that the enterprise has a clear, specific strategy in the field of providing logistics services to consumers. . A comparative analysis of freight costs by types of transport is presented (Table 4).

If we pay attention to the price analysis on a comparative basis, we can see that the costs of our country's producers are somewhat higher. For example, to deliver one standard carload (60 tons of textile products) per kilometer, it is necessary to pay \$7.29 to the railway transport service. The same figure is \$4.24 in neighboring Kazakhstan, \$3.65 in Kyrgyzstan, \$6.83 in Tajikistan, and \$2.65 in Turkmenistan. This has a negative impact on the competitiveness of our country's railway transport in international transportation[8].

**Table 4 : Comparative analysis of freight costs in modes of transport<sup>1</sup>**

<b>The price of transporting 20 tons of cargo per 1 km by car (in the case of a textile product)</b>				
<b>Uzbekistan</b>	<b>Kazakhstan</b>	<b>Kyrgyzstan</b>	<b>Tajikistan</b>	<b>Turkmenistan</b>
\$2.45	\$1.70	\$1.55	\$1.35	\$0.92
<b>The cost of transporting 1 standard wagon of cargo per 1 km (up to 100 km.)</b>				
<b>Uzbekistan</b>	<b>Kazakhstan</b>	<b>Kyrgyzstan</b>	<b>Tajikistan</b>	<b>Turkmenistan</b>
\$7.29	\$4.24	\$2.65	\$6.83	\$2.65
<b>Number of necessary procedure documents for export and import</b>				
10/11	10/12	9/10	11/12	6/5

It should be noted that today the share of private companies in cargo transportation activities in the country is constantly increasing. Transports carried out by the rolling stock of private companies are formed under the influence of the state tariff system. Accordingly, the most important conditions for the structural reform of railway transport were:

- Rnsuring continuous operation and safety of the transportation process;
- Maintaining the integrity of the economic space and improving transport links with other foreign countries;
- State regulation and self-management mechanisms of the market economy.

In this regard, it is appropriate to implement the following measures:

<sup>1</sup>Formed by the author based on available information.

creation of a system of integrated legal and economic relations that encourages the reduction of costs by each participant of the transportation process;

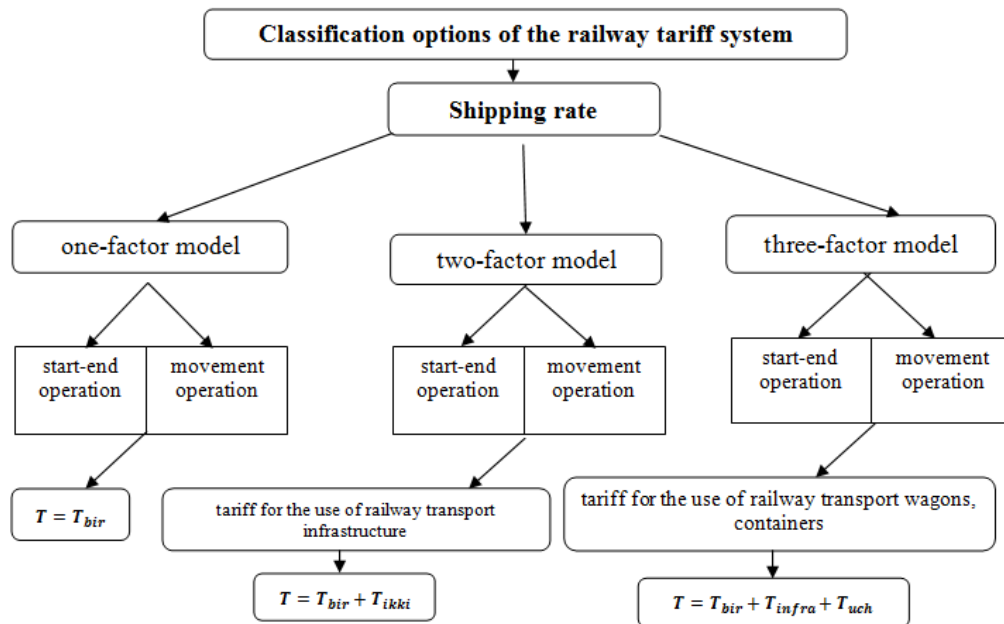
ensuring legal responsibility between freight carriers, owners of rolling stock, cargo owners, as well as other organizations participating in the transportation process;

gradual separation of monopolistic and competitive activities;

distinguish between budgetary and non-budgetary financial resources according to the methods of accounting and their use.

Today, the separation and tariffication of special systems related to tariffs for the use of railway transport infrastructure and charges for the use of railway transport wagons and containers is an important element of the tariff system. The classification options of the railway tariff system of economic relations, which have been constantly changing in recent years, are shown (Fig. 1).

All fixed devices (roads, buildings, facilities, communication network devices, signaling, communication tools, etc.).<sup>1</sup> Wagons and locomotives are not considered elements of infrastructure.



**Figure 1. Classification options of the railway tariff system<sup>2</sup>.**

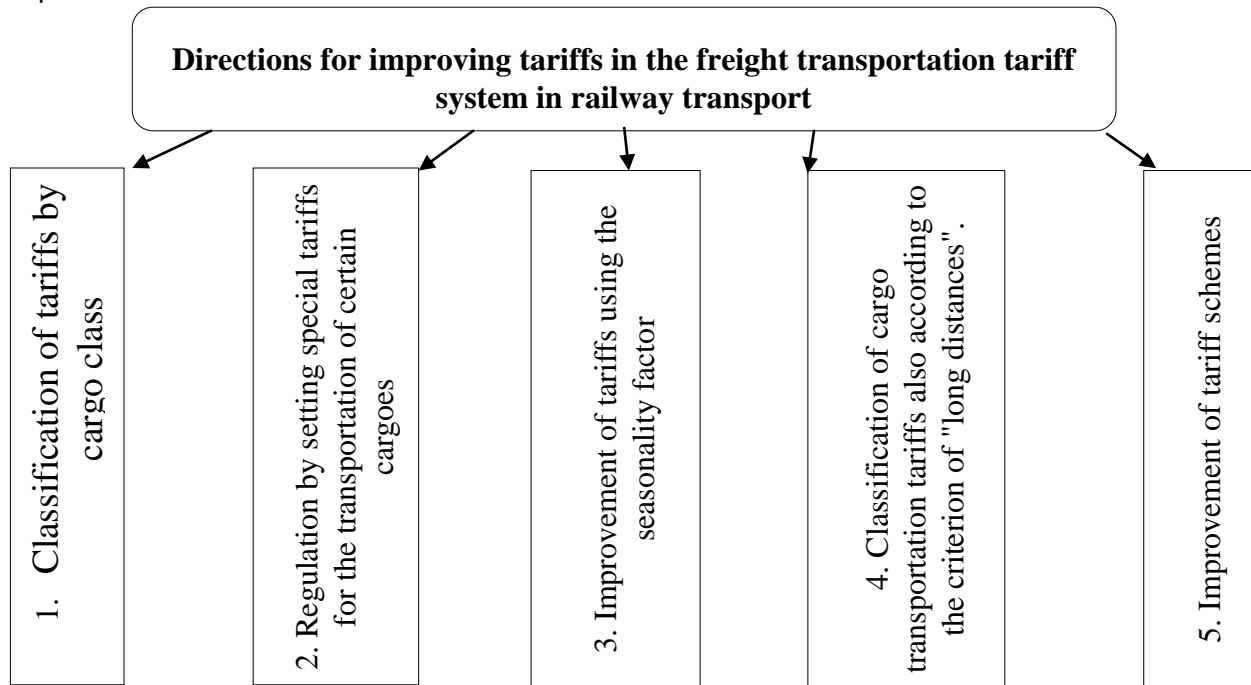
Tariffs for the use of the railway transport infrastructure are the only ones for all subjects of the transport services market (including the railways participating as freight carriers themselves), differentiated according to the distance of transportation, speed of infrastructure use and other parameters. represents rates.

<sup>1</sup>Tarifnyyyektor, ili kakmy reformiruem zhelenuyu rogu // Ekonomika i zhizn, 2005, #11.

<sup>2</sup>Systematized by the author based on the studied literature.

The establishment of free tariffs is effective in such market relations, in which transportation can be carried out by competing modes of transport and transport enterprises of different forms of ownership, including unitary transport structures. Taking into account the above, it is appropriate to highlight a number of the following areas of tariff improvement in the freight transportation tariff system in railway transport (Fig. 2).

**The first direction.** Adding additions to the tariff system is a difficult issue today. A change to one element requires a simultaneous change to another across the network as a whole. One of the important forms of classification of railway tariffs, which contributes to increasing the productivity of rolling stock, speeding up the turnover of wagons and improving the use of load carrying capacity, is the classification of tariffs according to the level of use of the load carrying capacity of wagons and the organization of transportation.



**Figure 2. Directions for improving the transportation tariff system<sup>1</sup>.**

**The second direction.** Special tariffs are determined according to the types of cargo, transportation distance and conditions of transportation organization. According to the types of cargo, the special characteristics of the cargo, their economic importance, compliance with the economic policy carried out by the state in this sector are taken into account when setting special tariffs.

**The third direction.** Establishing a special tariff for the transportation of mineral and organic fertilizers, as well as chemical protection agents, which are reduced due to the increase of the freight tariffs of the third tariff class, calculating the transportation fee for the producers of agricultural products according to the first tariff class .

<sup>1</sup>The results of the conducted research were formulated by the author.



*The fourth direction. The use of the tariff policy, which is evident in the improvement of railway freight rates, i.e., by lowering the lower tariff level, i.e., the cost of transportation for goods belonging to the first tariff class.*

*The fifth direction. The addition of railways to the international combined transport system requires the development of new transport technologies. Such a direction of new technologies is the transportation of containers. It refers to the transportation of heavy goods vehicles on route trains with trailers and semi-trailers. The introduction of new technology for the formation of such trains and conditions for the movement of trains is reflected in the operating costs of railways, road transport and cargo owners. Costs associated with environmental impacts also vary significantly.*

### **Conclusions and suggestions**

Thus, the presented proposals determine the solution to the problem of developing a scientifically based strategy for the development of railway transport in modern conditions. The simulation model, which ensures the development of the complex, leads to the development of market factors that allow to increase the strategic competitiveness of railway transport, reduce costs, improve the level of service and offer new services.

### **References :**

- <https://data.worldbank.org/indicator/is.air.good.mt.k1>
- Decree of the President of the Republic of Uzbekistan dated February 28, 2022 "On the development strategy of New Uzbekistan for 2022-2026" No. PF-60. // [www.lex.uz](http://www.lex.uz).
- Address of the President of the Republic of Uzbekistan to the Oliy Majlis. January 24, 2020.
- Venables, AJ (2007). *Evaluating Urban Transport Improvements: Cost-Benefit Analysis in the Presence of Agglomeration and Income Taxation*. *Journal of Transport Economics and Policy*, 41:173–188 p.
- Kovrijnykh I.V. (2016) *Analysis of the effectiveness of administration and organization / I.V. Kovrijnykh. – Barnul: AF SibAGS – 86s.*
- Faizullayev JS(2019) *Improvement of Economic Efficiency of Development of Railway // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue–2. [http://www.ajtmr.com/papers/Vol9Issue2/Vol9Iss2\\_P9.pdf](http://www.ajtmr.com/papers/Vol9Issue2/Vol9Iss2_P9.pdf)*
- Faizullayev, JS (2021) "Economic-mathematical model of evaluating the efficiency of the transport system," *Economics and Innovative Technologies: No. 1, Article 1. <https://uzjournals.edu.uz/iqtisodiyot/vol2021/iss1/1>*
- Zohidov A.A. (2018) *Improving the effective management mechanism of the Central Asian transport system. Iqt. science. doc. ...dis. Autoref., Tashkent.*
- Frederick Starr S., Filat Yildiz, Martina Reiser etc. *The New Silk roads: Transport and trade in Greater Central Asia. (2007) Monograph Central AsiaCaucasus Institute & Silk Road Studies Program, Washington, DC: Johns Hopkins University-SAIS. - 514 p.*
- FaizullayevJ. (2020). *Effectiveness of modern methods in the development of integrated transport systems. Archive of Scientific Research, 1(3). <https://tsue.scienceweb.uz/index.php/archive/article/view/3892>*
- Faizullayev JS (2019) *Theoretical Aspects of the Transport Logistics System Management // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249–0892 Special Issue–2. [http://ajtmr.com/papers/SplIss2/SplIss2\\_8.pdf](http://ajtmr.com/papers/SplIss2/SplIss2_8.pdf)*
- Faizullayev JS (2021) *Problems And Status Of Efficiency Of The Transport And Logistics System In The Railway Network, Archive of Conferences: Vol. 13 No. : GTIMSC-2021, <https://www.conferencepublication.com/index.php/aoc/article/view/573>*

## THE MAIN DIRECTIONS OF INCREASING THE EFFICIENCY OF THE TRANSPORT SYSTEM

Faizullaev Javlonbek Sultanovich<sup>1</sup>

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### ABSTRACT

*In this article, the main directions that determine the efficiency of the transport system, in the section on the interdependence of the concepts of transport complex, transport system and transport infrastructure, as well as the main factors influencing the choice of the transport type, the evaluation of various types of transport is presented, the specific features of the optimization of cargo delivery costs are highlighted, on increasing the efficiency of the transport system tasks are indicated.*

**Keywords:** *Transport System, Railway Transport, Transport-Logistics, Transit Transport, Cargo Delivery, Hierarchy of Tasks, Transport Complex, Transport Infrastructure.*

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The importance of the transport complex is increasing in the processes of globalization and integration taking place in the world. According to the World Bank, the amount of world transport services in GDP is 4.3 trillion. USD (6.9%) is 110 billion per year. tons of cargo and 1 trillion. more than 100 million passengers are transported, the number of employees employed in the transport complex is 100 million. is organizing a person[1]. The development of these areas is carried out by the global transport and logistic system. The use of modern delivery technologies in the transport system allows to save the volume of material reserves from 30% to 60%, as well as to reduce the delivery costs of enterprises using transport services by approximately 30-35%.

Extensive scientific research is being conducted in the world to improve the efficiency of the transport system. In particular, the positive effects of the development of the transport network have been noted in the studies conducted on the development of an integrated approach to the issues of more effective development of transport activities, the formation of economic approaches that ensure the effective development of the transport system, however, a comprehensive opinion on the direction and scope of these effects has not been formed. Based on this, it is determined that it is necessary to carry out additional research on the improvement of the theoretical and methodological foundations of the development of the transport system.

Special attention is being paid to rapid development of transport communications as an important branch of economy in our country. In this regard, in the Strategy of Actions on five priority areas of development of the Republic of Uzbekistan in 2017-2021 "Increasing the level of competition between national transport logistics companies"[2] and the President of the Republic of Uzbekistan stated in his Address to the Oliy Majlis that "We need to develop the transport and logistics sector in order to deliver our products to the domestic and foreign markets and reduce the cost of goods" [3].

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### **Analysis of literature on the topic**

The theoretical and methodological foundations of the development of the transport system are reflected in the scientific research of a number of local and foreign scientists. According to the English economist Anthony Venables, the transport complex is a set of national economic networks specialized in meeting the needs of social production for transporting goods and passengers [4].

D. According to Bauersox, he paid special attention to the problems of multimodal and intermodal transportation, including the advantages and economic efficiency of transportation organization compared to traditional methods. At the same time, the author specifically mentions the transport system, which includes transport networks, vehicles and transport companies [5].

According to G. Samadov, A. Zoxidov, A. Gulamov and M. Ravshanov, among the scientists of our country, "the transport system is a complex of transport facilities and infrastructures that are interconnected in the process of delivering goods and passengers to their destination, that is, interdependent transport sectors, labor resources and the country in order to effectively manage the economy, the management system of all types of transport is understood" [6].

### **Research methodology**

The results of the scientific research of national and foreign scientists, who were engaged in the analysis of the problems of the development of the transport system, served as the theoretical and methodological basis of this study. In the preparation of the article, abstract and analytical observation, comparative and factor analysis, indicative, selective observation, comparison, economic-statistical and other methods were used.

### **Analysis and results**

The transport complex, which performs the main "blood circulation" function, is of particular importance in the effective development of the economy of world countries. An effective transport system optimizes the movement of goods and products in the domestic market, as well as increases the economic competitiveness of the country in foreign trade, and provides an opportunity to accelerate the processes of integration into the world market. In general, the large-scale development of the country and the high speed of interregional economic relations directly depend on the effective operation of the transport infrastructure in a broad sense.

Based on this, when thinking about the country's transport system, it is necessary to first determine the interdependence of the concepts of "transport complex", "transport system", "transport infrastructure" and the differences in the essence of concepts such as "transit" and "transport-logistics system". is enough.

Different definitions of the term "transport complex" are given in the studies of foreign scientists, and their approaches have common similarities. For example, the American expert Stephen Frederic Starr defined the transport complex category as follows: "Transport complex is a set of economic sectors to meet the need for passenger and cargo transportation" [7].

Russian scientist N.P. Tereshina in his textbook "Transport economy" defines that "the transport complex is a territorial combination of interrelated types of transport, which, in cooperation with each other, fully satisfy the needs of the social economy and the population for the transportation of goods and passengers"[8].

Based on the approaches of local and foreign scientists, in our opinion, the country's transport complex is understood as a set of different types of transport that act in cooperation, complement each other, and develop in an interdependent manner, ensuring the effective use of each. The objects of the transport complex include transport, transport industry (transport engineering, transport construction, material and technical support of the transport process), institutions and organizations for training personnel for transport, institutions for conducting project and research work, and repair enterprises.

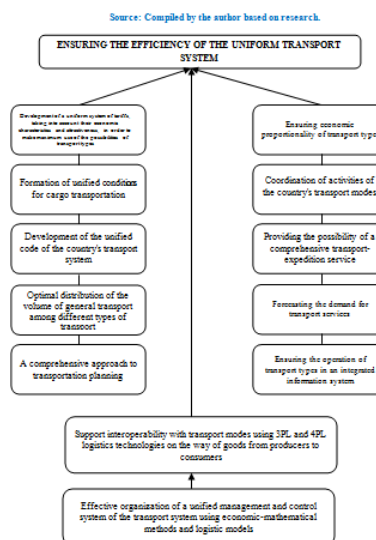
The transport system included in the transport complex is understood as a set of transport types and means of transport, which, regardless of the form of ownership, have an effective effect on each other and ensure the movement of goods and passengers in order to fulfill various loading and unloading, construction works, as well as to meet the demand for transport services.

Based on the above approaches, the concept of "transport complex" is a broader concept of "transport system". The concept of "transport system" is sometimes understood as "transport infrastructure", but often includes this same "transport infrastructure". In our opinion, the interdependence of these terms is explained as follows (Fig. 1.) To ensure the country's economic security and defense capability, to stabilize the country's economy, and to enter the world market, developing countries require an effective unified transport system. Taking into account economic, organizational, technological and political factors, it is considered desirable that a unified transport system should provide the following main directions (Fig. 2).



**Figure 1. Interdependence of concepts of transport complex, transport system and transport infrastructure**

Source: Compiled by the author based on research.



**Figure 2. The main directions of increasing the efficiency of the unified transport system**

Source: Compiled by the author based on research.

Among the main objects of the country's transport infrastructure are highways, railways, waterways, subways, airports, bridges, tunnels, overpasses, contact lines, railway stations and stations, communication, navigation and vehicle traffic management system objects, as well as other similar transport systems. includes buildings, structures, devices and equipment.

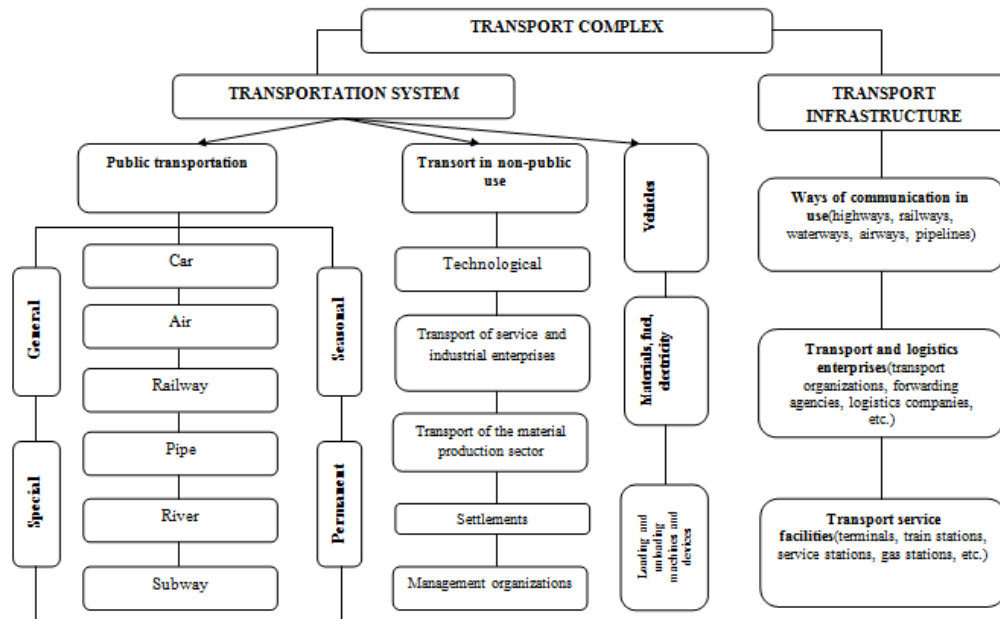
Unlike the transport infrastructure, the transport system is directly connected with the activity of the country's economy as a whole. Transport system is not only the road network (that is, transport infrastructure) itself, but also its technical and management part. However, the development of transport infrastructure plays a key role in the creation of a unified transport system of the country. In the development of the transport network, the structure of the transport complex, which includes the following transport system and infrastructure, can be taken as a basis (Fig. 3).

In order to organize transport activities, it is advisable to first learn the characteristics of the single transport systems, which include railway, air and road transport. Depending on the main tasks of the enterprise carrying out transport operations, optimal types of transport are selected for the delivery of goods. It takes into account the technical and economic characteristics of transport types, their capabilities and shortcomings, which determine their rational use, taking into account the costs and management indicators. When choosing the type of cargo transportation, the shipper has to work based on many criteria. These criteria are implemented on a five-point scale. Here, "1" is the highest score, "5" is the lowest score (Table 1).

**Table 1 : Evaluation of different types of transport in terms of the main factors affecting the choice of transport type(on a 5-point scale)**

<b>Types of transport</b>	<b>Speed (delivery time)</b>	<b>Reliability (adherence to the schedule)</b>	<b>It is possible to transport goods</b>	<b>Number of geographic points served</b>	<b>Cost per ton-km (price)</b>
<b>Railway</b>	3	4	2	2	3
<b>Water</b>	4	5	1	4	1
<b>Car</b>	2	2	3	1	4
<b>Pipe</b>	5	1	5	5	2
<b>Air</b>	1	3	4	3	5

**Source: Compiled by the author based on research.**



**Figure 3. The structure of the transport complex**

**Source: Compiled by the author based on research.**

Choosing a shipping route is the most important and responsible stage of a freight forwarder's work. The right choice of a convenient route and the right type of transport will have a positive effect on the cost, reliability and duration of the shipment. Types of transport are selected based on the following main characteristics: load capacity, availability of the type of transport, cost of transport and transport characteristics.

1. Road transport:
  - Advantages: high level of mobility, relatively low cost, regularity;
  - Disadvantages: high cost, need for immediate unloading, possibility of cargo theft and low load carrying capacity.
2. Rail transport:
  - Advantages: long-distance participation, high cargo capacity, low cost of transportation;
  - Disadvantages: difficulty of use (access), operability, small number of carriers.
3. Air transport:
  - Advantages: very high speed, long-distance flight, small loads;
  - Disadvantages: expensive, weather-dependent delivery.
4. Pipeline transport:
  - Advantages: low cost, high transferability, regular attendance;
  - Disadvantages: lack of cargo types (nomenclature) (liquid, gas), difficulty of use (access).

Therefore, the correctness of the choice should be confirmed by technical and economic reports based on the analysis of costs related to transportation by different types of transport. Also, this selection criterion serves to a certain extent in solving the issue of optimizing the costs of delivery of goods in mixed transportation (Table 2).

**Table 2 : Distinctive features of the optimization of freight delivery costs**

Selection criteria	Type of transport				
	Railway	Water	Car	Pipe	Air
Speed	average	the lowest	high	low	the biggest
Level of expenses	average	the lowest	big	low	the highest
Possible assortment of goods	the biggest	much bigger	average	very limited	partially limited
Number of markets served	big	be limited han	not limited	very limited	above average
Reliability of delivery	average	low	good	tall	average

**Source: Compiled by the author based on research.**

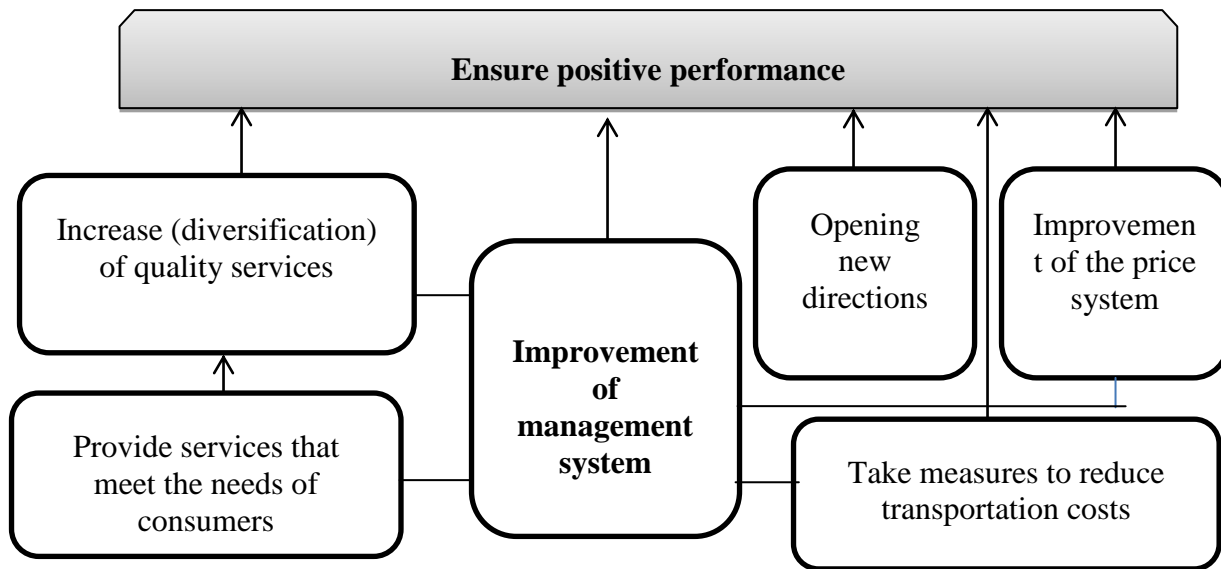
Transport is a unique single system in the economic sectors, and when we study the issues related to the effective development of its activity, we have a hierarchical idea of the existing problems in the sector. It is known that according to the law of hierarchy, each level in the system functions as a controlling and controlled entity with those above and below it. Recognizing that the hierarchical approach is the most optimal option for ensuring the efficiency of the transport system, conducting scientific research in this regard is gaining relevance today.

In a hierarchical system, it is natural that there is a functional and structural differentiation from the point of view of the performance of a specific task at each level. In terms of receiving, processing and using a large amount of data in the system, it is desirable to have a hierarchical structure. It provides generalized information for use in lower stages. Existing problems in the transport system are considered to be one of the factors hindering the growth of the country's economy. Therefore, it is appropriate to consider these issues separately:

- To fully meet the growing needs in line with the expansion of economic sectors and the ever-growing population;
- Providing high-quality services to satisfy consumer needs;

- Development of measures to minimize transportation costs in product cost;
- To achieve high efficiency of the transport system.

The above-mentioned tasks can be depicted in a hierarchical sequence in the form of the following scheme (see Figure 4).



**Figure 4. Hierarchy of transport system development tasks**

**Source: Compiled by the author based on research.**

Based on the above considerations, In this research on increasing the economic efficiency of the transport system, the following directions were proposed by the author:

- Establishment of effective use of scientific and technical capabilities and production resources;
- Improvement of the vehicle maintenance system based on modern technologies;
- To reduce or completely eliminate the damage caused by the transport system to the environment and economy;
- The continuous increase in expenses for modern infrastructure and the search for new sources of income to meet this demand;
- The resulting interaction between participants in the transport market causes a decrease in economic and technological efficiency, as a result of which the cost of transporting goods in railway transport along the network increases;
- Facing crises in the economy and reducing the set level and amount of fees and tariffs for using infrastructure services, may require the implementation of additional state subsidies;



- With the increase of regulatory directions and objects, including the legal use of infrastructure services, and improvement of the public administration and order system;
- Mutual distribution of responsibilities and tasks in the technological and operational cargo transport companies and infrastructure between the economy and the system that ensures the safety of transportation.

The importance of the transport network in the development of the country's economy is of particular importance. According to scientists who have conducted research in this regard, some indicators in the field of transport are directly related to the country's GDP growth rate. In particular, the Russian scientist G.A. Goltz [9] studied the laws of development of the transport system and proved with evidence that its development is an important factor of development for other areas of the economy.

In the study of the specific features of the development of the transport network on a scientific basis, it is important to determine the indicators of long-term stability in this regard. This, in turn, forms the basis of research in this field. We emphasize that the main goal of such studies is to determine the stable and unchanging indicators of the transport sector.

$$\frac{Q}{D} = 5.8V^{0.7266}$$

In this case: - volume of cargo transported over long distances, t.; - Absolute amount of GDP, in currency unit; - long-distance cargo transportation speed, km/h.  $QDV$

Obviously, in this expression, the relationship between GDP and the volume and speed of transportation is "not fully functional". It is necessary to continue the research based on other data. Scientist G.A. Goltz made clear conclusions on the direct impact of the development of the transport network on the growth of the country's GDP. For example, the speed of transportation on highways, which is directly related to the country's transport system, is of great importance in the development of these sectors of the economy. It can be seen that the quality of highways and the provision of infrastructure in a modern form serve to increase the speed of cargo transportation, which in turn leads to the growth of the country's GDP.

### Conclusions and suggestions

In short, the effective organization of cargo and other material flow reserves in the economy is directly related to the improvement of the efficiency of the transport system and the solution of organizational and economic problems. Here, we believe that it is necessary to organize the activity of this system effectively. Tasks for effective development of the transport system, taking into account the growing competition between modes of transport, were shown. The implementation of these tasks will serve to raise the rating of the country's transport network to the highest level in the world according to development indices. Methodologies for increasing the efficiency of the transport system and the resulting conclusions and recommendations: development of short-term and long-term strategies for the development of the transport system and modernization of the system, effective coordination and integration with business partners, quality service to customers and logistics service providers increasing its competitiveness and, at the same time, it provides an opportunity to increase the efficiency of the transport system.

Also, increase the efficiency of the transport system the following measures should be taken:

- Change the principles of setting tariffs and gradually move to a new tariff system, reduce the

number of correction coefficients, reduce the types of financing of railway transportation from all sides;


- Creation of a competitive environment in the field of railway cargo transportation by creating conditions for the establishment of private companies dedicated to freight transportation in railway transport, which have their own locomotives and wagons;
- Increasing the speed and reliability of the transport and logistics system, increasing the share of electrified railways to 55% by 2030. For this, it is necessary to provide electric power to 168 km of railway every year, and the amount of investments is 5.34 billion. should amount to dollars. 1.2 billion to upgrade locomotives and wagons until 2030. dollar investment is required:
- In order to reduce the transport costs of cargo transported in containers by 10%, it is necessary to increase container transportation by 25-30%;
- Increase the efficiency of the transport system to expand the network of multimodal transport-logistics centers in the regions;
- Harmonizing the regulatory and legal basis, technical and technological regulations and standards of cargo transportation, intermodal and multimodal cargo transportation, logistics centers, transport-forwarding activities in accordance with international standards;
- Organization of an integrated information system to ensure the effectiveness of multimodal transportation;
- It is necessary to form a national network of customs logistics centers, to ensure that transport-logistics operations in them are at least 3PL level.

Thus, as a result of the implementation of the specified measures, the efficiency of the transport system will be increased, production and material resources savings will be ensured, the acceleration of transport services and the reduction of costs will lead to the development of economic sectors.

#### References :

- *The World Bank: World Development Indicators.* <http://data.worldbank.org/indicator>
- *Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. PF-4947 "On the Strategy of Actions for Further Development of the Republic of Uzbekistan".* //www.lex.uz.
- *Address of the President of the Republic of Uzbekistan to the Oliy Majlis. January 24, 2020.*
- *Venables, AJ (2007). Evaluating Urban Transport Improvements: Cost-Benefit Analysis in the Presence of Agglomeration and Income Taxation. Journal of Transport Economics and Policy, 41:173–188 p.*
- *Kovrijnykh I.V. Analiz i otsenki effektivnosti upravleniya v organizatsii / I.V. Kovrijnykh. – Barnul: AF SibAGS, 2016. – 86 p.*
- *Faizullayev JS Improvement of Economic Efficiency of Development of Railway // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue–2, Dec -2019.*[http://www.ajtmr.com/papers/Vol9Issue2/Vol9Iss2\\_P9.pdf](http://www.ajtmr.com/papers/Vol9Issue2/Vol9Iss2_P9.pdf)

- Zohidov A.A. *Improving the effective management mechanism of the Central Asian transport system. Iqt. science. doc. ...dis. Autoref., Tashkent 2018.*
- Frederick Starr S., Filat Yildiz, Martina Reiser etc. *The New Silk roads: Transport and trade in Greater Central Asia. Monograph Central AsiaCaucasus Institute & Silk Road Studies Program, Washington, DC: Johns Hopkins University-SAIS, 2007. – 514 p.*
- *Ekonomika transporta: Uchebnoe posobie / Tereshina N.P., Potapova E.V., Teryoshina N.V., Epishkin I.A. - M.: RUT (MIIT), 2018. - 142 p.*
- Goltz G.A. *Transport and macroeconomy Rossii za tri veka. Materialy X mejdunarodnoy (trinadtsatoy Yekaterinburgskoy) scientific-practical conference on June 14-15, 2004.*
- Faizullayev JS *The economic-mathematical model of the organization activity of the modern transport-logistics system. // Bulletin of Science and Pracrice nauchnyy zhurl (scientific journal). 2018. No. 5 (4). S. 345-352. DOI:10.5281/zenodo.1147072. Impact Factor (5) GIF – 0.454; (21) Info Base Index – 1.4; (17) OAJI – 0.350, (43) (UIF) – 0.1502; (4) JCR – 1.021.<http://oaji.net/articles/2017/3996-1526585902.pdf>*
- Faizullayev JS *Evaluation of efficiency of transport - logistics system. // XLVII International correspondence scientific and practical conference "International scientific review of the problems and prospects of modern science and education" (Boston. USA. July 24-25, 2018). 62-65.<https://scientific-conference.com/images/PDF/2018/49/International-scientific-review-7-49-ISBN.pdf>*
- Faizullayev JS, *Increasing the efficiency management of 3PL and 4PL logistics companies in the railway system. // "Strategy of the practical Republic of Uzbekistan: macroeconomic stability, investment activity and perspective of innovative development" International Scientific and Practical Conference. Tashkent. 2018. May 28-29. P.37-42.[http://tsue.uz/wp-content/uploads/2019/05/4.-Fayzullayev\\_J\\_S\\_increasing-the-efficiency-management-of-3pl-and-4pl-logistics-companies-in-the-railway-system.pdf](http://tsue.uz/wp-content/uploads/2019/05/4.-Fayzullayev_J_S_increasing-the-efficiency-management-of-3pl-and-4pl-logistics-companies-in-the-railway-system.pdf)*
- Faizullayev JS *Effectiveness of modern methods in the development of the integrated transport systems // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue–2, Dec -2019 62-65. <https://saarj.com/wp-content/uploads/SAJMMR-JULY-2020-FULL-JOURNAL.pdf>*



The value of time, that is of  
being a little ahead of your  
opponent, often provides greater  
advantage than superior  
numbers or greater resources

Sen Tin

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# TODAY'S IMPORTANCE OF ORGANIZATIONAL AND ECONOMIC DEVELOPMENT OF THE FOOD INDUSTRY AND THE EXPERIENCE OF DEVELOPED COUNTRIES.

MukhtarovaMadina Azamat kizi<sup>1</sup>

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## ABSTRACT

*It is known that the total population of the world is growing rapidly. In particular, according to the analyzes of the United Nations (UN), the world population in 2023 will be 8.1 billion. person, this indicator will reach 9.7 billion by 2050. it is expected to reach a person[1]. In addition, the problem of not being able to provide the population with food products in many countries due to factors such as the geopolitical problems that have occurred in the last 10-15 years and the impact of global climate changes on the economy, structural changes in economic processes, as well as the reduction of irrigated land and increasing drought being observed.*

**Keywords:** Uzbekistan, USA, Germany, Russia, Italy, food, food industry, food shortage, money circulation model.

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## Introduction

There is no correlation between the increase in the demand for food products and its production in the world. Especially in recent years, due to the geopolitical situation, global pandemic, climate change, high inflation and unemployment, more than 690-780 million people in the world are facing the problem of hunger[2]. In particular, 55 percent of the hunger problem is in Asia, 38 percent in Africa, 6 percent in Latin America and the Caribbean, and the rest in North America, Europe, and Oceania[3].

Eliminating the shortage of food products observed in the world and ensuring food safety is the main and strategic task of every country, and its optimal solution is the sustainable development of the food industry, including agriculture. The development of the food industry is important not only in providing the population with food products, but also in increasing the high-income sector and employment. In particular, from the market of food products China 1630 billion, USA 1011 billion. and Italy 201.7 billion. If the income is in the amount of US dollars, Germany's trade turnover of only packaged food products is 114.9 billion. is US dollars. Also, 7.6 million in Canada. and 2 million in Russia. more people are employed in the food industry[4].

In Uzbekistan, providing the population with food products is one of the urgent issues, and in 2023, on the basis of the industry, 65174.7 billion will be produced in the republic. soums of food products and 17968.3 bln. Soum beverages were produced, as well as 404,648.6 bln. 1962.4 billion soums of agricultural products were grown during this period. 4141.8 billion soums of food products were imported. soums of food products were exported[5]. These numbers will further develop the food industry in our country, and by

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joining the ranks of the major exporters of food products, it will be possible to turn the food industry into a profitable sector and thereby make additional investments in the country's economy.

In the next period, intensive reforms are being carried out in our country in the direction of increasing the volume of food production and processing and expanding the export of finished products. In particular, the "Uzbekistan - 2023" strategy was adopted by the decree of the President of the Republic of Uzbekistan No. PF-158 dated September 11, 2023. It defines important tasks such as food processing, increasing the share of technological products produced in the industry from 25% to 32%, doubling the labor productivity in the processing industry, and ensuring that the rate of processing of agricultural products is higher than 25%[6]. Ensuring the fulfillment of the above tasks, as well as the organization and economic development of the food industry requires conducting scientific research and determines the relevance of the research topic.

"The new development strategy of Uzbekistan for 2022-2026" approved by the decree of the President of the Republic of Uzbekistan No. PF-60 of January 28, 2022, No. PF-36 of February 16, 2024 "On additional measures to ensure food security in the Republic" , Decree No. PF-217 of December 28, 2023 "On measures to ensure the stability of the prices of basic types of food products in consumer markets", as well as December 22, 2021 "Research of reforms in the food and agriculture sector, strategic planning and "On measures to further improve the management system" No. PQ-58, No. PQ-471 of September 9, 2020 "On measures to rapidly develop the food industry of the Republic and fully provide the population with quality food products" , No. PQ-4643 dated March 18, 2020 "On measures to further improve the agricultural and food industry management system", July 29, 2019 "Additional measures on further development of agricultural products and food industry" This research work serves to a certain extent the implementation of the tasks defined in the decisions of PQ-4406 and the normative-legal documents related to this field.

### Literature review

Wedowati ER, Singgih ML, Gunarta IK, Matthew NO, Sadiku SM, Tolulope JA, Clercq MD, Vats from foreign scientists on ensuring food safety, developing food production and processing industry, and improving the food supply chain system A., Biel A., Panova AV, Bozsik N., Cubillos TJ, Stalbek B., Vasa L., Magda R., Sandu IS, Nechaev VI, Voiku IP, Ahmed Zia Wahdat, Jayson L., Sutherland Ch., Le Vallée JC, Charlebois S., Bonetti M., Hadjidimitriou N., Peroni M., Zanolli A., Katajajuuri JM, Akkerman R., Yasin NHM, Li J., Yun-Hwa P., Qilong Zou, Wu K. s<sup>1</sup>conducted scientific research.

Sardak S.E., Ogdansky K.N., Trifonova O.D., Kulev D.Kh., Dotsenko V.A., Klovov Yu.V., Chichikin A. A., Gusarova Yu.V., Gnatovskaya Yu.S., Belyaev N., Donskova L., Ataev Q.B., Rastorguev P.V., Rudnev M.Yu., Gorodilin D.Yu., Vasileva N. A., Tleuberdinova A.T., Salibekova P.K., Zhukova Yu.S., Kuzmina AO, Zhernokleeva AS, Orynbekova G.A., Tulegenova J.U., Pyagay A.A., Atirbekov A.Sh. , Dovydenko V.A., Akimova R.A. and Gusakova I<sup>2</sup>conducted scientific research.

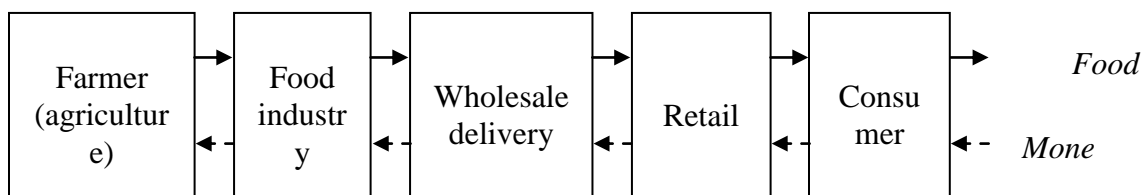
In our country, the issues of providing the population with food products, developing agricultural production and food production and processing industry network, reducing the import and increasing the export of food products Berkinov B.B., Makhmudov N., Abduganiev O. .A., Abulkosimov Kh.P., Bekenov

S.S., Mamarakhimov B.E., Kobilov Sh.R., Saidova D.N., Rasulov T.S., Rustamova I.B., Nazarova F., Mukhtorov A., Saidakhmedova N.I., Umarov I.Yu., Tolipova B.F., Mamatkulov M.Sh. scientists likereseached.

However, in the above scientific researches, the problems of the country's food security, its independence, providing the population with food products, deep processing of agricultural products, and further development of food production industries were considered in detail. However, the improvement of the organizational and economic mechanisms of the development of the food industry was not considered as a research object, therefore, this area was chosen as a research topic.

### Analysis and results

According to Harvard University research, the food supply chain includes the processes of growing (production), processing, distribution, retailing, and consumption of food, and it is expressed as a model of the flow of food and money (Figure 1)[9].



**Figure 1. Model of circulation of food and money**

First of all, what are food products? Or what does it contain? It is appropriate for us to find answers to such questions. For many years, continuous scientific researches have been carried out on the development of food products, their composition and their production.

In particular, according to the research of S. Sardak and others, "food" includes:

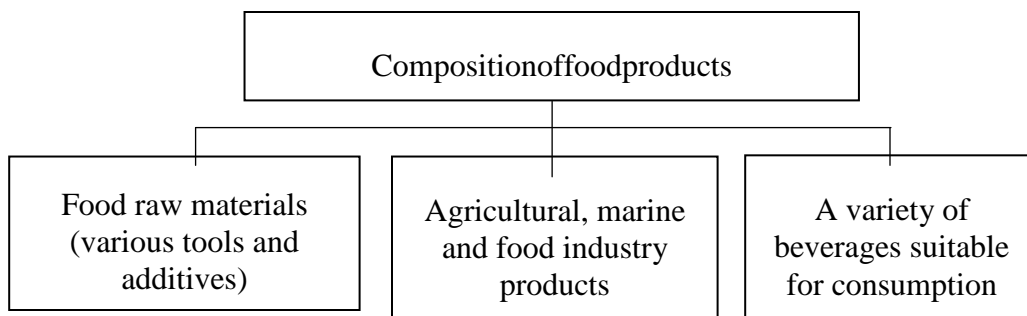
- Collected natural plant products (for example, seaweed, mushrooms, berries, etc.);
- Natural animal products (fish and seafood, wild animals, wild animal eggs, etc.);
- Cultivated plant products (at home and in production conditions);
- Animal products (in domestic and production conditions);
- Artificially produced food products (for example, some types of non-alcoholic and alcoholic drinks);
- Combined products (industrially produced food products).

Generally speaking, food is a collection of food products (natural and industrially or culinarily processed) suitable for direct consumption[10].

Food products are processed, semi-processed or raw materials intended for human consumption and beverages, as well as chemical additives used in processin[11].

According to D. Kulev and others, food products consist of food raw materials, agricultural products and beverages[12].

Based on the above opinions and other scientific research studies and observations, in our opinion, food products include food raw materials (chemicals used in agriculture and food industry and edible artificial food additives), food products (agricultural economy, sea and food industry products), consumable beverages (carbonated, non-carbonated and alcoholic beverages) and various means used in other processes in the food chain can be included (Figure 2).



**Figure 2.** Composition of food products

So what kind of industry is the food industry, considered an important and integral part of the food chain?

According to A. Chichikin, the food industry is the most important priority for ensuring food safety[13].

It is known that most of the food raw materials are products grown in agriculture and taken directly from the sea (ocean, sea, river, lake, reservoirs, canals and other water bodies), and most of them are processed on an industrial basis. All over the world, on the basis of this process, food products are produced and the security of food supply to the population is created.

In general, the food industry is the production of finished or semi-finished food products, as well as tea, soap, tobacco products and detergents. Therefore, the food industry is one of the most important and important branches of industry, because it produces food products necessary for people[14].

In other words, the food industry as an economic branch describes the development characteristics of the productive forces and production relations of food production industries that provide the population of the country with basic food products.

In other words, the food industry is one of the sectors that provides the preparation, transportation, storage, processing and sale of the final product of agricultural raw materials, that is, it is an industrial sector focused on the processing of agricultural raw materials.

According to Yu. Gusarova[15] and the food industry is a unit of consumption purposes of the produced final food products, as a rule, it is a part of the whole industry that unites agricultural raw material processing enterprises. Also, the role and importance of the food industry is determined by its production of food products.

Based on this, it can be said that the food industry is not only an industrial branch that processes agricultural and marine products, but also includes several stages in the chain of food supply to the population. That is, the food industry consists of several components.

Therefore, the food industry plays an important role in meeting the needs of society for the availability, distribution and quality of food products. The food processing industry is characterized by relatively perishable, bulky and seasonal food products[16].

In this regard, international food industry companies also point out that the food industry is not a single industry, but a combination of several types of industries that produce different food products. It also covers farming, food production, food processing, storage, packaging, distribution, retail and catering. The food industry includes the following components[17]:

1) Agriculture. It is the process of producing food, feed, fiber and other necessary products. It also includes crop production, animal husbandry and fish farming. It also covers the production of agricultural machinery, fertilizers, agricultural plant seeds to facilitate the production of agricultural products.

2) Food processing. Most of the agricultural products are seasonal and perishable products. Food processing turns raw materials into marketable food products. That is, by packaging seasonal agricultural products, it protects food products from the environment, extends their shelf life, and improves food quality.

3) Food distribution. This includes the transportation, storage and sale of food products to consumers. It uses a transport network to integrate a large number of processes in the food industry.

4) Control. Of course, there are regulations on the production and distribution of food products to ensure quality and safety, which are restrictions imposed by the government. The food industry must meet certain regulatory requirements to function normally.

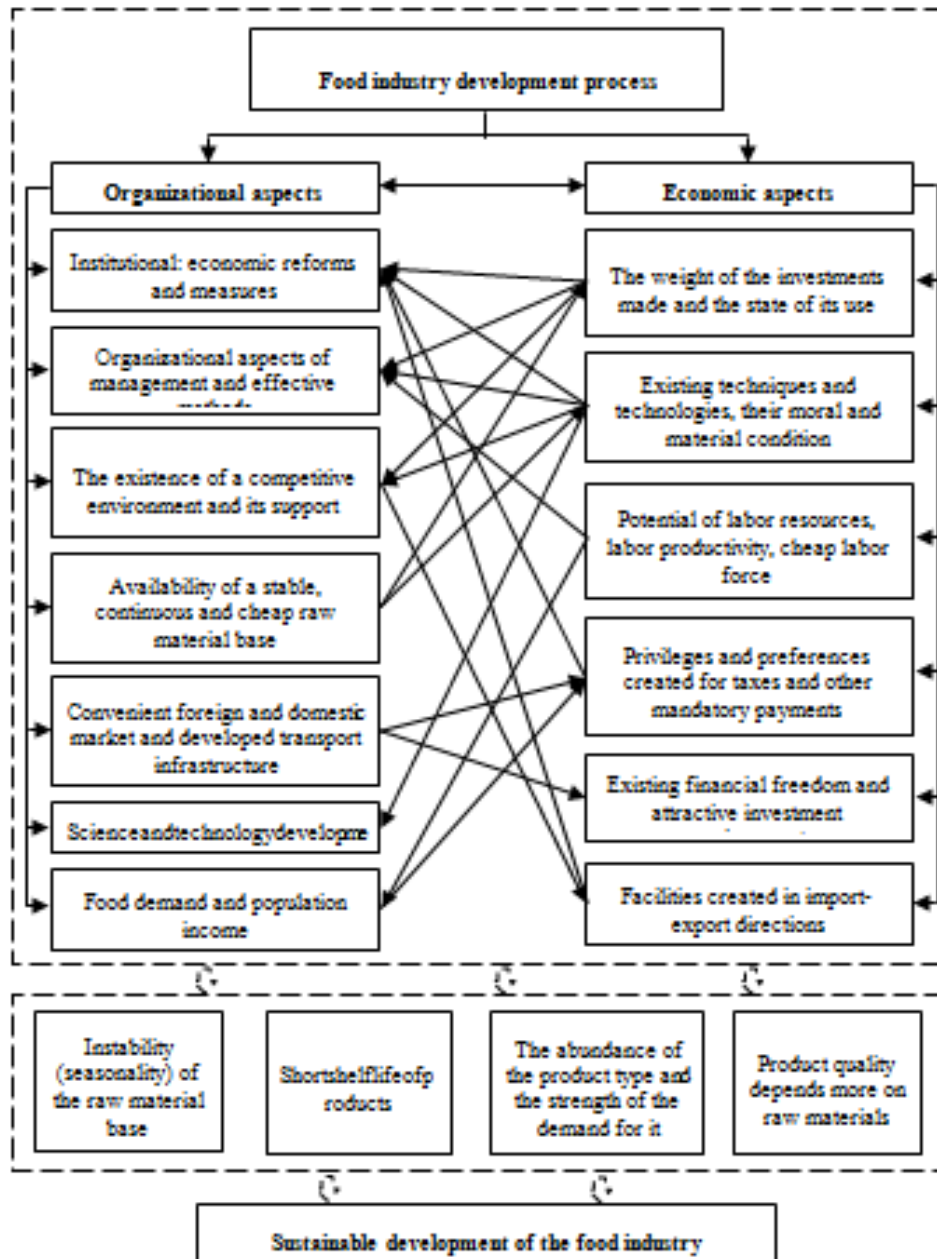
5) Financial services. This includes insurance and loans to facilitate food production and distribution. Insurance policies cover financial losses (damages) that are common in the industry. Therefore, food accounting professionals must work closely with all aspects of the food industry to evaluate ideas and opportunities.

6) Research and development. Research in any direction of the food industry produces relevant information about this industry. Today, the food service sector has the greatest potential for research and development. The object of these studies is mainly the factors affecting consumer behavior, purchasing choices of customers, attitudes and opinions.

7) Marketing. Marketing is a major and effective means of promoting information about food products. Food marketing describes any form of advertising used to encourage the purchase and consumption of food or beverages. It can influence eating behavior by regulating sociocultural elements of the food environment.

In particular, the organizational aspects of the development of the food industry are economic reforms, a stable raw material base, market and transport infrastructure, scientific and technical progress, organizational aspects and effective methods of management, and the existence of a competitive environment.



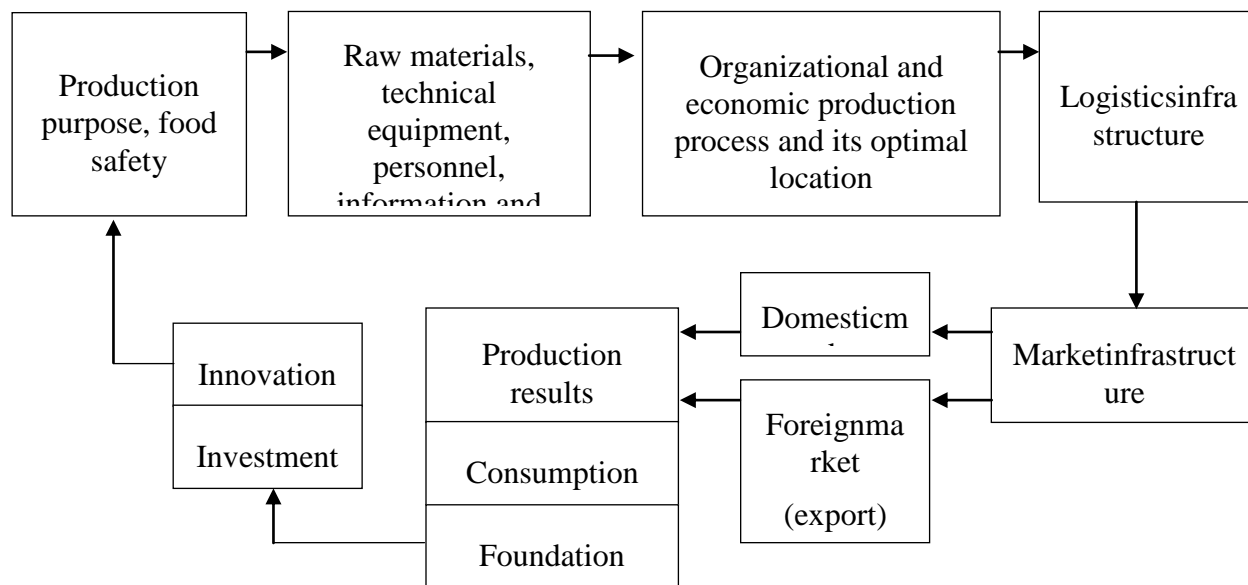


**Figure 3. The mechanism of organizational and economic development of the food industry [18]**

In general, the development of the infrastructure of the food industry is achieved on the basis of the comprehensive support of local food production enterprises and the creation of necessary conditions. It is in this respect that the infrastructure of the food industry is a complex and multi-stage process. Research shows that if all the processes in the food chain system are interrelated and these processes are developed in parallel, it will be appropriate. If any process within the system is inefficient, then the entire food chain

system will be inefficient. Therefore, it is important to take into account the full range of organizational, economic and legal aspects when developing food industry infrastructure development programs.

Based on the above, the main factors affecting the organizational and economic development of the food industry and the increase in production capacity and their interrelation can be expressed as follows (Figure 4).



**Figure 4. Organizational and economic development of the food industry mechanism[18]**

**The Canadian experience.** According to the Canadian Government (Government of Canada), in 2022, the products of the food and beverage processing industry will be worth 156.5 billion dollars, it makes up 18.2% of total industrial products and 1.7% of GDP. About 70 percent of the country's food and beverage products are fully processed and exported to about 200 countries. 77% of food exports are from the USA, 6% from China and 4% from Japan, and the remaining 13% from other countries. Also, 25 percent (\$38.5 billion) of the trade of food and beverage processing industry products is accounted for by meat products, while the trade of grain and oilseed products is 20.3 billion dollars and the trade of dairy products is 17.4 billion dollars.

**The Italian experience.** In the country, the food industry plays an important role in the manufacturing industry, as it is the third most important sector of the industry (9.5% of the GDP) after the machinery and textile sectors. The Italian food industry is characterized by the following[19]:

- Special attention is paid to quality and productivity in the production of food products;
- Effective integration processes of the food industry with agriculture and other related sectors are established;
- The retail trade of food products is strongly developed, bringing high and stable income to the food industry system;

- Specialization of interregional enterprises in the country is highly organized, it is distinguished by the majority of foreign enterprises in the food industry and agriculture.

**The German experience.** Germany is a country with a well-developed food processing industry and access to all food components. In particular, effective use of food waste has been established.

According to the data, in 2022, the retail sales volume in the market of packaged food products in Germany will be 114.9 billion. amounted to US dollars. Germany is the 4th largest packaged food market in the world.

**The experience of the Netherlands.** The strategy for the development of agro-industry and agriculture in the country includes expanding sustainable food production, improving access to quality food, and increasing the share of private sector representatives in food production[20].

In addition, one of the main factors in such a high development of the food industry in the country is the wide application of scientific achievements in these processes. In particular, it can be seen in the improvement of productive seed production and breeding of productive livestock animals, as well as in the innovative organization of food production processes.

It should be said separately that the Netherlands is the 5th most powerful knowledge-based economy in the world. Also, scientific research and innovations are one of the main factors of agro-industry development in the country. It is for this reason that the country invests heavily in high-quality research to develop new, functional and organic agricultural food products and to diversify existing products.

**The Chinese experience.** Food production in China focuses not only on satisfying hunger, but also on aspects of health promotion and disease treatment.

According to research, more than 40% of Chinese consumers say they are willing to pay more for healthier (eco-friendly) food products.<sup>1</sup>

China's food industry consists of 4 main areas:

- 1) Processing of agricultural products;
- 2) Production of food products (by chemical methods);
- 3) Production of wines, beverages and teas;
- 4) Production of tobacco products.

**Russian experience.** According to the information of TsVK "Expocentr" of Russia, the food industry is important in the country's industry. It produces about 95% of the food consumed in the country. The population spends  $\frac{3}{4}$  of their income on it. Also, the food industry in Russia includes about 30 sectors and more than 60 types of production. All this unites more than 22 thousand enterprises engaged in various activities. About 2 million people work in them.

The share of multinational corporations and foreign investments in the Russian food industry is increasing. According to the BusinessStat survey, the share of foreign capital in the food industry in the Russian market is about 60 percent. In particular, 60 percent of foreign industrial enterprises in milk

processing, 70 percent in juice production, almost 80 percent of the market of frozen vegetables and fruits, and more than 90 percent of the market of beer brewing and canned fruits and vegetables are carried out with the participation of foreign capital. Domestic companies are mainly leaders in the meat processing and bakery industries, and large corporations are taking the place of small enterprises in the food industry[22].

**Belarusian experience.**By the end of the 20th century, there were a number of problems in providing the population with food products in this country. For example, the state of growing food products and processing them on an industrial basis in agriculture was not up to the demand. In order to solve these problems, the government should develop and implement an effective strategy for the development of the agrarian sector of the economy. Therefore, in its reforms, the government paid special attention to the intensive, efficient and stable operation of agricultural enterprises, strengthening their production potential, activating industrial processing and raising the standard of living of the population.

### Conclusion

From the above-mentioned experiences of foreign countries with developed food industry, it is appropriate to apply the following in the conditions of Uzbekistan, in particular:

1. The food industry is also a comprehensive complex infrastructure, and it is necessary to pay special attention to the complex development of the food industry network, organizing the effective integration of all sectors and directions related to its development. It is also desirable to exploit food production processes, inform management and services in the field, wide use of digital technologies, and development of food industry parks (clusters) and electronic trade of food products (experiences of the USA, Canada, Australia). .
2. Subsidizing agricultural production processes and their processing industries (US experience). Because the activity of growing agricultural products has a cost in the full cycle of the process, and the income is expected only at the end of the process, and that too is not guaranteed. Naturally, not all business entities are interested in engaging in such activities. The activity of food production industry enterprises depends on high-level technologies and imported ingredients used in it, of course, for the sustainable development of these processes, large amounts of funds are required.
3. In the effective operation of the food supply chain system, in particular, the food industry network, it is desirable to optimally distribute existing obligations among subjects (government, local authorities, organizations and enterprises) and freely organize the movement of subjects (lack of bureaucracy) (Canadian experience). Such an approach increases responsibility (responsibility) in ensuring food security in the country. It is through a systematic approach that corporate productivity is achieved. It is also possible to achieve intensive efficiency in agriculture by establishing "vertical" farming in food production.
4. It is desirable to pay special attention to quality and productivity in the production of food products, to effectively organize inter-sectoral integration, to ensure optimal specialization of the country's regions in terms of food industry enterprises, and to increase the share of foreign enterprises in the sector (Italian experience). Also, it is necessary to turn the food industry into a high-profit industry through the sustainable development of retail trade (export) of food products.

5. Applying a strategy based on a systematic approach and strong technological solutions in the food supply chain, increasing efficiency due to cost reduction based on minimizing losses during the processing of food products (raw materials) (**Germanyexperience**) is possible. It is known that raw materials for food products are grown mainly in agriculture. It is at this stage of the food chain of our country that the loss of food products (raw materials) is high, especially during the period of "singing".
6. One of the most optimal solutions is the use of the "knowledge-based economy" strategy in the organizational and economic development of the food industry (Netherlands experience). This principle has brought the Netherlands to the fifth place in the list of countries with the strongest knowledge-based economy in the world. Therefore, it is desirable to organize the food industry network and its related fields on the basis of scientific achievements, to develop and effectively organize the effective integration of scientific research institutes and network enterprises.
7. In the production of food products, taking into account not only hunger-satisfying means, but also aspects of health promotion and treatment of diseases will increase the competitiveness of manufactured products. Also, in order to provide food industry enterprises with cheap raw materials, tax incentives should be given to farmers (family enterprises in agriculture) (China's experience). 8. In order to further develop the food industry and increase the export of finished products, it is necessary to increase the share of multinational corporations and foreign investments in the industry. It is also desirable to reduce costs, reduce product costs, and increase quality by increasing the share of innovative technologies by comprehensively supporting the network's timely modernization of the technical base (Russia's experience).
8. Strategies and measures related to the prospects of ensuring food security and food industry development in the country are necessary to ensure a balance between forecast parameters and existing resource bases, as well as to improve targeted development strategies aimed at eliminating possible imbalances (Belarusian experience) .

## References

- <https://population.un.org/wpp/>
- *FAO data.*[https://www.fao.org/3/cc8166en/online/cc8166en.html#chapter-3\\_1](https://www.fao.org/3/cc8166en/online/cc8166en.html#chapter-3_1)
- *FAO. 2023. Compendium of Food Safety Indicators. In: FAOSTAT.*<https://www.fao.org/faostat/en/#data/FS>
- <https://www.statista.com/outlook/cmo/food>
- <https://www.stat.uz/uz/rasmiy-statistika>
- *Decree of the President of the Republic of Uzbekistan on the strategy "Uzbekistan - 2030" No. PF-158, 11.09.2023.*<https://lex.uz/ru/docs/6600413>
- [https://hwpi.harvard.edu/files/chge/files/lesson\\_4\\_1.pdf](https://hwpi.harvard.edu/files/chge/files/lesson_4_1.pdf)
- *Lakiza N.V. Analysis pishchevyx product: [ucheb. posobie], M-voobrazovaniyainaukiRos. Federatsii, Urals. feder. flour — Yekaterinburg: Izd- vo Ural. un-ta, 2015. — 188 p.*
- <https://www.dfat.gov.au/sites/default/files/a-hkfta-annex-5b-food-products.pdf>

- KulevD.Kh., Dotsenko V.A., KlokovYu.V. *About the structure of the consumption of food products and heavy components of the cook / International scientific and practical conference "Product safety and scientific safety development of the domestic industry of competitive food ingredients". Sbornikmaterialov, St. Petersburg, 2015.*
- Chichikin A.A. *Pishchevayapromyshlennost v sistemeobespecheniyaprodovolstvennoybezopasnosti. AbstractDiss. Ph.D., M.: RANIE. - 2009g.*
- Terekhova T.S. *Analyz pishchevoy promyshlennosti Rossii: strategicheskiesposobnosti ostiotsen kaprivle katelnosti. <https://s.sjes.esrae.ru/pdf/2014/2/18.pdf>*
- Gusarova Yu.V. *Introduction to technology and food production: ucheb. posobie. - Tolyatti: TGU, 2009. -152 p.*
- Wedowati ER, Singgih ML, Gunarta IK *Production system in food industry: a literature study // 6th International Conference on Operations and Supply Chain Management, Bali, 2014. R.274*
- *Author development.*
- M. Bonetti, N. Hadjidimitriou, M. Peroni, A. Zanoli. *The Food Industry in Italy // National Institute of the Agrarian Economy. R.269-278. [http://www.ip.aua.gr/studies/italian%20team\\_final.pdf](http://www.ip.aua.gr/studies/italian%20team_final.pdf)*
- Dovydenko V.A. *i dr. Pishchevayapromyshlennost v Rossii: analiziperspektivyrazvitiya // Voprosystuden cheskoynauki. Vypusk #12 (40), December 2019, p. 177-181*



# PROSPECTS FOR SUSTAINABLE DEVELOPMENT OF MANUFACTURING ENTERPRISES IN STRENGTHENING INDUSTRIAL COMPETENCE

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## ABSTRACT

*The article describes the prospects for sustainable and priority development of industrial sectors, which are considered one of the most important sectors for the economic development of our country. Production indicators of industrial enterprises were analyzed on the basis of statistical data to ensure the growing demand and needs of the population for industrial products through the priority development of production enterprises in industrial sectors. As a result of improving the production of industrial products in our republic, the issues of strengthening the country's economy by filling the labor market and exporting it, suggestions and recommendations are given.*

**Keywords:** Industrial Sectors, Industrial Products, Industrial Potential, Industrial Production Index, Industrial Processing Enterprises.

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## Introduction

Economically stable development of the country and ensuring the well-being of the population depends on the priority development of industrial sectors and enterprises operating in them. In this regard, it is important to further accelerate economic reforms and create wide opportunities for the development of production enterprises in the sustainable development of industrial potential in our republic.

In this regard, in the Decree of the President of the Republic of Uzbekistan "On the development strategy of New Uzbekistan for 2022-2026" directly based on the idea of "New Uzbekistan - the country of competitive products" 200 exporters will be selected on the basis of an open competition sorting, turning them into leading exporters and supporting them in every way. In accordance with the demands aimed at increasing the volume of finished and semi-finished products in exports by 3.3 times, expanding the export of finished products to European countries within the framework of the GSP+ system, defining the issues of implementing new mechanisms of export development based on ensuring the competitiveness of goods in free economic zones. given<sup>2</sup>.

The main goal of the significant work that is being carried out to attract foreign investments to the national economy of our country, in particular, to the regions of our country, is to develop the economy of the regions by launching new production capacities and expanding the service sectors in order to increase the industrial potential of the regions, to create stable jobs, it is desirable to consistently continue the measures aimed at further improving the social infrastructure networks and strengthening the export potential of the regions.

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<sup>2</sup>Decree of the President of the Republic of Uzbekistan No. PF-60 of January 28, 2022 "On the Development Strategy of New Uzbekistan for 2022-2026". <https://lex.uz/ru/docs/5841063>.

## Literature review.

In the following years, in our republic, attention is being paid to issues such as increasing the efficiency of investment projects involved in the implementation of economic projects for the development of industry. Solving the problems of increasing the efficiency of investment activities of industrial enterprises depends to a large extent on the correctly chosen strategy of their development and management.<sup>1</sup>

Foreign researchers such as J.Church, R.Ware, and A.Marshall also believe that industry, as one of the most developing sectors of the world economy, is the basis of direct material production and is an important support for the stable operation of all other sectors and industries.<sup>2</sup>

In the research conducted by the Uzbek economist A. Artikov, direct industry is the reflection and high generalization of objective existence. Its emergence as a separate branch, that is, a separate field of social production, is historically connected with the development of productive forces and social division of labor.<sup>3</sup>

Today, it is important to continue consistent research on increasing industrial potential and sustainable development of industrial enterprises. Therefore, as a conclusion from the above research, it can be said that by increasing the industrial potential and priority development of production, it serves to increase the well-being of the population by providing the citizens of the country with the necessary products and services and employment.

## Research methodology

Official statistical data, comparative analysis, logical reasoning, comparative analysis of tables and graphs were widely used in the implementation of this research. The statistical data of the Statistical Agency under the President of the Republic of Uzbekistan were used for the analysis.

## Analysis and results

In the Republic of Uzbekistan, industrial development stages are divided into certain periods, and each stage has its own development characteristics. Today, complex measures are being implemented in our republic, including the further activation of the investment policy aimed at the modernization and organization of high-tech production facilities that provide deep processing of local raw materials and the production of finished products with high added value.<sup>4</sup>

Theoretical and practical assessment of the industrial production potential of the Republic of Uzbekistan is considered economically important in all aspects. Determining the economic potential of production enterprises located in the regions of our country, their aggregation is a necessary condition for determining the total potential of industries and the economy. Because it is necessary to calculate the production

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<sup>1</sup>VD Lavrenko. Povishenie effektivnosti investitsionnogo proekta//Vestnik Universiteta No. 9, 2014. S-130.

<sup>2</sup>Church J., Ware R. Industrial Organization. A Strategic Approach. Irwin. 2000. – 960 p.

<sup>3</sup>Artikov A. Industrial economy / textbook. - T.: "Sano-standard", 2014. - 5 p.

<sup>4</sup>The team of authors. New Uzbekistan: steps of socio-economic development. Study guide. - T.: Spirituality, 2021. – 373 p.



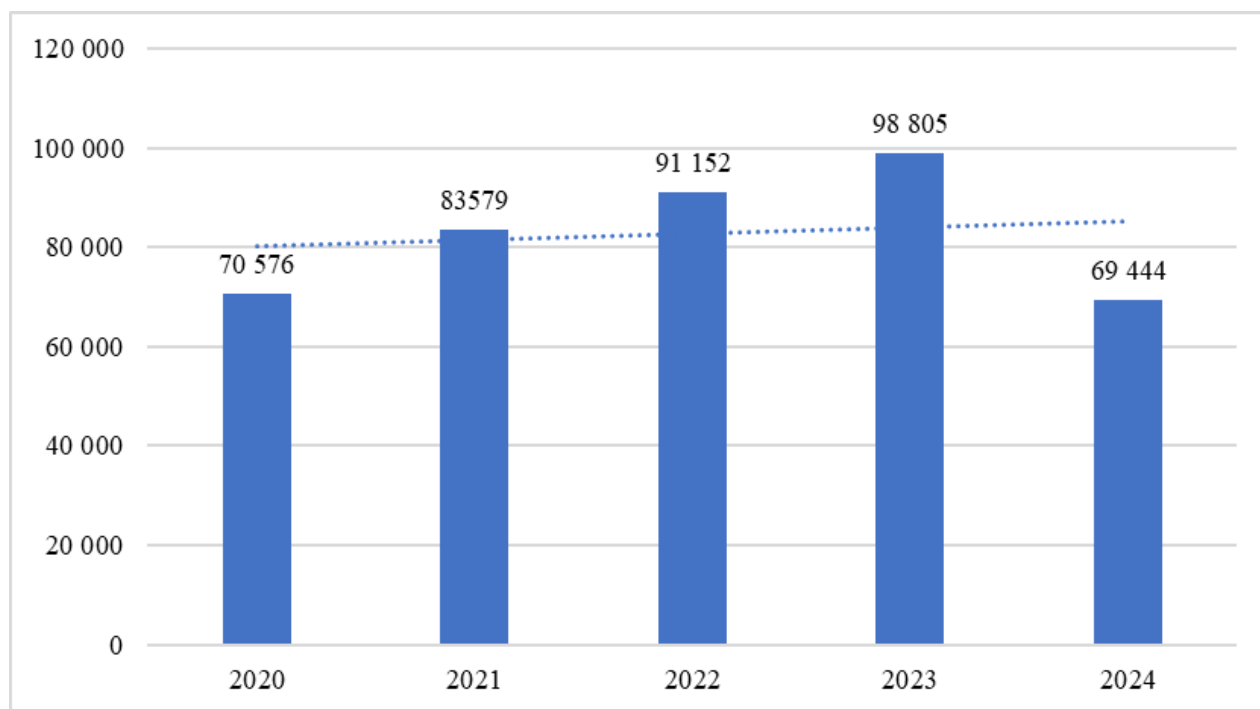
potential of enterprises, as well as redistribution of production resources in the future and implementation of a rational investment policy.

Today, the issue of sustainable development of industrial enterprises is primarily related to the economic efficiency of industrial enterprises. It is known that in the development of production, two different factors are in action: quantity and quality, extensive and intensive, i.e. expanding (prolonging) and strengthening, strengthening factors. In other words, if the field of production is expanded, there will be extensive reproduction; if even more efficient means of production are used, intensively expanded reproduction occurs.

As a result of the rational use of these two ways in the industry of Uzbekistan, the efficiency of production is gradually increasing. Efficiency is one of the most common concepts and is widely used in various areas of economic and social development.

In our country Measures aimed at strengthening the industrial potential and comprehensive development of the regions and adopted in time served to create the necessary conditions for the development of industrial sectors at a steady pace. This was a positive factor for improving the quality of industrial production development. In recent years, the growth rate of industrial production has been high.

As of 2024, 69.4 thousand industrial enterprises are operating in our republic, of which 11.8 thousand (17.0% of the total number of registered enterprises) are in Tashkent, 7.8 thousand (11.2 %) to Fergana region, 7.3 thousand (10.5 %) to Tashkent region, 6.2 thousand (8.9 %) to Samarkand region and 5.5 thousand (7.9 %) to Andijan region.



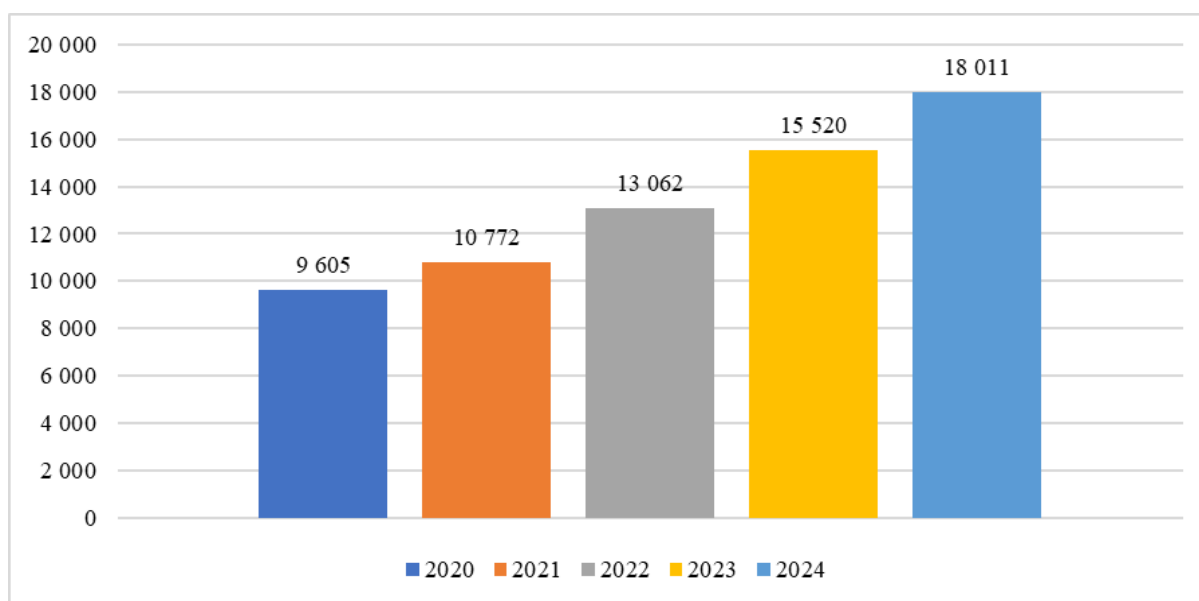
**Figure 1. Total number of enterprises operating in our republic<sup>1</sup>**

<sup>1</sup>Collection of statistical data of the Statistical Agency under the President of the Republic of Uzbekistan. <https://stat.uz/uz>

If we look at the total number of enterprises operating in the Republic of Uzbekistan, in 2020 there were 70,576, and by 2023, there were 98,805, and it increased to 28,229. By 2024, there was a sharp decrease compared to 2023. The share of industrial enterprises in total operating enterprises is 14.3 percent.

Industry is a network of production that includes the processing of raw materials, the exploitation of underground resources, the creation of means of production and consumer goods. According to preliminary data, in January-December 2023, 655.8 trillion will be spent by republican enterprises. Sums worth of industrial products were produced, and compared to January-December 2022, the physical volume index of industrial production was 106.0%.

Due to the distribution of production of industrial products per capita, the location of large industrial enterprises in Navoi region (95,361.7 thousand soums), Tashkent city (41,228.9 thousand soums) and Tashkent region (34,990.5 thousand soums) m) is significantly higher than the average national level (18,011,000 soums).



**Figure 2. Production volume of industrial products per capita in the republic<sup>1</sup>**

The volume of production of industrial products by enterprises operating in the Republic of Uzbekistan has seen an almost increasing trend over the last 5 years. In particular, in 2020, the volume of production of industrial products per capita was 9,605 thousand soums, and as of 2024, it was 18,011 thousand soums, a 2-fold increase compared to 2020.

553.3 trln. soums, its share in the total industrial production was 84.4%. Tashkent city (18.9%), Tashkent region (16.1%), Navoi region 15.5%), Andijan region (11.2%) and Farg have a high share in total industrial production in the republic in January-December 2023. Mother region contributed (5.6%).

<sup>1</sup>Collection of statistical data of the Statistical Agency under the President of the Republic of Uzbekistan.<https://stat.uz/uz>

Also, compared to the corresponding period of the previous year, higher FHI was observed in Jizzakh region (107.4%), Andijan region (107.3%) and Namangan (107.2%). The volume of products produced by the enterprises of the mining industry and open-pit mining industry in January-December 2023 is 55.2 trillion soums or its share in the volume of total produced industrial products corresponded to 8.4%.

## Conclusion

As a result of the conducted research, the following conclusions were reached:

1. Increasing the efficiency of development of industrial sectors requires solving a number of issues. In particular, it is important to modernize the network by creating a full-fledged market mechanism in the network, organizing modern management, improving the network structure, increasing the quality of manufactured products, applying modern techniques and technologies to production. To solve these main problems, it is necessary to transform the industry and increase the competitiveness of enterprises.
2. The need to study a number of theoretical, practical, methodological and organizational issues related to the implementation of transformation processes in industrial enterprises is increasing. Experience in transformation is formed step by step, and as a result, transformation processes in the industry are deepening from year to year. It is necessary to ensure rapid development of enterprises and solve problems related to the social sphere.
3. One of the important issues facing the industry is increasing the economic efficiency of industry enterprises. Therefore, today our local industrial enterprises have to compete with leading companies of foreign countries in the production and delivery of products to consumers. The implementation of transformation processes in industrial enterprises will increase the competitiveness of industrial enterprises at the international level.
4. The main goal of the development of Uzbekistan's industry is not only to increase the rate of growth in this sector of the economy, but also to develop priority sectors and production through the use of the potential of rich natural resources, to form its modern structure, to increase the competitiveness and efficiency of the country's industry in the foreign and business markets. formation

## References:

- Decision of the President of the Republic of Uzbekistan "On measures to implement the investment program of the Republic of Uzbekistan for 2023-2025", December 28, 2022.
- Resolution No. 606 of October 15, 2022 of the Cabinet of Ministers of the Republic of Uzbekistan "On additional measures to accelerate innovation and investment activities in the regions of the Republic".
- Decision No. 16 of January 14, 2023 of the Cabinet of Ministers of the Republic of Uzbekistan "On measures to further improve and increase the efficiency of the system of forming the investment program of the Republic of Uzbekistan".
- Decision No. PQ-4477 of October 4, 2019 of the President of the Republic of Uzbekistan "On approval of the strategy of the transition to the "green" economy of the Republic of Uzbekistan in the period of 2019-2030".
- Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis// People's word, January 25, 2020.
- Lavrenko VD Povishenie effektivnosti investitsionnogo proekta // Vestnik Universiteta No. 9, 2014. 130 p.
- Church J., Ware R. Industrial Organization. A Strategic Approach. Irwin. 2000. – 960 p.
- Artikov A. Industrial economy / textbook. - T.: "Sano-standard", 2014. - 5 p.
- Collection of statistical data of the Statistical Agency under the President of the Republic of Uzbekistan. <https://stat.uz>

## INTEGRATION OF DIGITAL TECHNOLOGIES TO IMPROVE THE EFFICIENCY OF RURAL SERVICES IN UZBEKISTAN

Assistant Kh.Sh.Halimov, SIES

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### ABSTRACT

*This scientific article examines the process of integrating digital technologies into rural services in Uzbekistan, highlighting key aspects and their impact on various spheres of public life. The focus is on analyzing the current state of digitalization in agriculture, education, healthcare, and public services. The article also explores the social impact of digital infrastructure, including its role in improving the quality of life and promoting economic development. Special Attention is paid to the impact of digitalization on agriculture, including examples of successful application of innovative technologies and their impact on the sustainability and productivity of the sector.*

**Keywords:** *Digital Technologies, Agriculture, Uzbekistan, Digitalization, Social Impact, Economic Development, Education, Healthcare, Innovation, Sustainability.*

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### Introduction

Uzbekistan's rural area plays a key role in the country's economic and social development, but faces a number of challenges, including limited access to quality services. Despite the government's significant efforts to modernize infrastructure and develop local businesses, there is a noticeable gap between urban and rural areas in terms of access and quality of educational, health and commercial services. This divide is particularly pronounced in the context of digital where rural areas often lag behind urban areas due to limited access to the internet and modern technology. However, recent digitalization initiatives are beginning to open up new opportunities to improve the quality of life in rural areas, providing ample opportunities for further research and innovation. Uzbekistan's rural areas play a key role in the country's economic and social development, but face a number of challenges, including limited access to quality services.

Despite the government's significant efforts to modernize infrastructure and develop local businesses, there is a noticeable gap between urban and rural areas in terms of access and quality of educational, health and commercial services. This gap is particularly noticeable in the context of digital technologies, where rural areas often lag behind urban areas due to limited access to the internet and modern technologies. However, recent digitalization initiatives are beginning to open up new opportunities to improve the quality of life in rural areas, providing ample opportunities for further research and innovation. In recent years, there has been an increase in labor productivity in the agricultural sector of Uzbekistan, which has contributed to an increase in agricultural production.

According to data from 2019, annual production growth averaged 62 percent, highlighting the importance of agricultural production in the structure of the country's gross domestic product [1]. Nevertheless, the structure of agricultural enterprises in Uzbekistan is a unique combination of small and large farm enterprises. For example, in 2018, farms that control 85.2% of land resources produced only 27.3% agricultural products, while dehqan farms, using 11.3% of the land, produced 70% of the production. The government of Uzbekistan predicts further growth in the agricultural sector. In 2023, agricultural

production is expected to increase by 3.5 percent, highlighting the sector's potential for the country's economic development. At the same time, it is planned to focus efforts on ensuring macroeconomic stability and preventing a sharp rise in inflation. [2]

### **Digitalization in the service sector**

Digitalization in Uzbekistan demonstrates significant achievements, especially in the development of information and communication technologies (ICT). Since the early 2000s, the republic has focused on digitalization and ICT development, identifying priority areas: digital infrastructure, e-government, digital economy, national IT sector and IT education. In recent years, there has been significant progress in the introduction of e-government and ICT in the public sector, starting with the launch in 2013 of the "Single Portal of Interactive Public Services" – the country's central e-government service.

These efforts have resulted in improvements in IT infrastructure, including significant investments that have created a solid foundation for a more efficient ICT ecosystem in Uzbekistan. The process of digitalization stimulates economic growth and provides opportunities to achieve various social goals, including the labor market.

In addition, social media plays an important role in the digitalization process in Uzbekistan. For example, at the beginning of 2023, there were 4.80 million social media users aged 18 and older in Uzbekistan, accounting for 21.1 percent of the total population of this age group. Approximately 20 percent of the total number of internet users in Uzbekistan used at least one social platform in January 2023. This data highlights the importance of social media and its impact on digital inclusion in the country.

Based on this data, it can be argued that Uzbekistan is showing significant progress in the field of digitalization, which affects the improvement of the quality and accessibility of services in various fields, including education, health and commercial services, especially in rural areas. This not only contributes to improving the quality of life of the population, but also opens up new opportunities for further development and innovation in the country.

### **The Social Impact of Digital Infrastructure**

Uzbekistan is showing significant progress in the field of digitalization, which has a profound impact on the social and economic aspects of life in the country.

*Improving the quality of life through digitalization:* The Digital Uzbekistan 2030 Strategy, adopted in 2020, aims to improve the quality of digital services for the population, reduce corruption, and increase the level of citizen involvement in government decision-making processes. It is expected that this will lead to the modernization of higher and secondary education systems and an increase in the competitiveness of citizens both within the country and in regional and global labor markets [4].

*Education and health:* The strategy also includes measures to complete the digitalization of early childhood education, health care and secondary schools by the end of the first phase of its implementation. This contributes to improving access to education and health services, especially in remote areas of the country [4].

*Social Inclusion and Resilience:* Support to Uzbekistan under the World Bank's Policy Development Program aims to strengthen market institutions, improve the governance of state-owned enterprises, and

increase social inclusion and resilience. These measures are expected to improve the private sector and the management of state-owned enterprises, as well as increase social inclusion and resilience [5].

*Economic Benefits:* In the field of information and communication in Uzbekistan, from 2017 to 2021, the gross value added increased by more than 2 times, reaching 11.8 trillion UZS (more than 1 billion US dollars) in 2021. This highlights the importance of digital infrastructure for the country's economic development. [8]

*Bridging the digital divide:* One of the expected results of the implementation of the Digital Uzbekistan 2030 strategy is to reduce the digital divide between cities and villages, as well as to ensure high-quality and affordable Internet and mobile communications [4].

These digitalization initiatives and achievements have a positive impact on Uzbekistan's social development by improving access to education, healthcare, and other essential services, as well as contributing to the country's economic development and social inclusion. Digital transformation in Uzbekistan contributes to the further modernization of society and the integration of the national economy into global processes. This highlights the importance of digitalization for rural development and the country's overall economic growth.

Digitalization provides a number of benefits, including improved access to education and health services, strengthened market institutions for private sector growth, improved governance of state-owned enterprises, and increased social inclusion and sustainability. These efforts contribute to a more just and inclusive society, where every citizen has access to important resources and services.

Overall, digital infrastructure in Uzbekistan plays a key role in improving the lives of the population, especially in rural areas, and opens up new opportunities for the country's economic and social development.

### **Digitalization in agriculture**

The digitalization of agriculture in Uzbekistan represents a significant step towards innovation and modernization of the agricultural sector. Major initiatives and achievements in this area include:

1. Cooperation with FAO: FAO (Food and Agriculture Organization of the United Nations) in cooperation with the Ministry of Agriculture of Uzbekistan has successfully implemented the project "Preparing for the Digital Transformation of Agriculture". This project focuses on overcoming the obstacles that hinder innovation and digitalization in the agri-food sector, with a special focus on the Fergana Valley. Within the framework of the project, attention was paid to cooperation and knowledge exchange between farmers, agribusiness entrepreneurs and agricultural advisory services at the national and decentralized levels.[7]
2. Development of the National Digital Agriculture Program: One of the important results of the project is the joint development of the National Digital Agriculture Program. This strategy document, developed taking into account inputs from various stakeholders, was presented during the workshop. Participants discussed and provided valuable feedback and recommendations.
3. Focus on innovation: The project also contributed to the functioning of the Agricultural Knowledge and Innovation System (AKIS), the formation of regional coordination groups and innovation

laboratories on key topics to identify and implement solutions at the strategic and organizational level in the Fergana region.

4. Rural Community Engagement: The project focused on the inclusion of rural communities, youth, women, and older people at the field level, organizing dedicated living labs to engage and support rural women, who make up a significant portion of the agricultural workforce.
5. Communication and knowledge sharing: Communication and knowledge sharing played an important role in the project. For example, online trainings on video participation have been organized, as well as platforms for self-learning and knowledge sharing using popular apps such as Telegram, especially in rural areas with low connectivity.
6. Supporting Women in Agriculture: The FAO project also focused on supporting women's participation in agricultural innovation and digitalization. This is important because women make up a significant portion of the agricultural workforce, but their contributions often go unnoticed and unrecognized.
7. Using digital platforms to disseminate knowledge: The project included the use of digital platforms such as Telegram to disseminate knowledge and share information among farmers, especially in settings with limited internet access in rural areas. [6]

These initiatives highlight the importance of digitalization and innovation in agriculture Uzbekistan. These measures contribute to strengthening economically, environmentally sustainable and inclusive agrifood systems, while providing the necessary support to smallholder farmers and agribusiness entrepreneurs. They show how digitalization and innovation can transform agriculture in Uzbekistan, making it more productive, resilient and adaptive to future challenges.

## Conclusion

A study on the integration of digital technologies in Uzbekistan has identified significant steps towards improving the efficiency of rural services. Digitalization has proven to be a powerful tool for overcoming traditional barriers to access to education, health care, and agricultural services, especially in remote areas. Cooperation with international organizations such as FAO and the implementation of national programs for the digitalization of agriculture demonstrate Uzbekistan's desire to create a more modern, competitive and sustainable economy.

The social impact of digital technologies in Uzbekistan is expressed in improving the quality of life, with an emphasis on inclusivity and accessibility of services. There has been a positive impact on the country's social and economic development, including the strengthening of market institutions, improved management of state-owned enterprises, and increased social inclusion and sustainability. These factors, combined with the active role of the government in promoting digital initiatives, create favorable conditions for the continuation of digital transformation in Uzbekistan.

Finally, it can be argued that digitalization in Uzbekistan makes a significant contribution to the development of the country, opening up new prospects for further growth and innovation in various fields. This underscores the importance of continuing to support and develop digital technologies as a key element of Uzbekistan's economic and social development strategy.

## References:

- Бердимуродов, У. С. *Некоторые проблемы занятости в сельскохозяйственном производстве Узбекистана / Прикаспийский научно-исследовательский институт аридного земледелия, 2017. – С. 751-756. – EDN ZCHNCV.*
- Курпаяниди, К. И. *К проблеме развития сектора услуг в сельской местности Республики Узбекистан / К. И. Курпаяниди, А. Н. Ойматов // Актуальные проблемы гуманитарных и социально-экономических наук. – 2013. – Т. 7, № 3. – С. 44-46. – EDN UNJHPP.*
- Васильева, Е. Р. *Развитие социальной инфраструктуры в сельской местности Республики Узбекистан / Е. Р. Васильева, А. В. Фролов // Потенциал современной науки. – 2016. – № 6(23). – С. 81-84. – EDN WKRACX.*
- DataReportal. (2023). *Digital 2023: Uzbekistan — Global Digital Insights.* Получено с <https://datareportal.com>
- E3S Web of Conferences. (2023). *Experience of development of digital technologies in Uzbekistan.* Получено с <https://www.e3s-conferences.org>
- Diplomat Magazine. (2022). *Uzbekistan on the path of digitalization: achievements and plans.* Получено с <https://diplomatmagazine.eu>
- FAO Country Profiles. (2023). *FAO summarizes the results of agriculture innovation and digitalization in Uzbekistan.* Получено с <https://www.fao.org/countryprofiles/news-archive/detail-news/en/c/1673592/>
- Daryo News. (2023). *FAO and Uzbekistan's Ministry of Agriculture join forces to tackle challenges in agri-food digitalization.* Получено с <https://daryo.uz>
- Erkin, S. & Bakhronkulovich, B. S. (2024). *Some Issues Related To the Industrialization of the Economy of Uzbekistan. EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY, 4(3), 187–194.* Retrieved from <http://inovatus.es/index.php/ejbsos/article/view/2684>
- S.B. Bobokulov, Sh.B. Djurakulov. *Elektrontijoratda “buy-side” hamda “sell-side” tizimlarining oʻrnivaahamiyati. Iqtisodiyotvataʼlim / 2024-yil 1-son. 2024-02-29. https://cedr.tsue.uz/index.php/journal/article/view/1442*
- Bobokulov S.B. (2024). *Exploration of Housing and Communal Services Development: International Perspective. American Journal of Public Diplomacy and International Studies (2993-2157), 2 (4), 221–228.* Retrieved from <https://grnjournal.us/index.php/AJPDIS/article/view/4405>
- Bobokulov, S., & Usmanov, S. (2024). *Economic Importance of Housing and Communal Services. EUROPEAN JOURNAL OF BUSINESS STARTUPS AND OPEN SOCIETY, 4(4), 204–208.* Retrieved from <https://inovatus.es/index.php/ejbsos/article/view/2994>



## DYNAMICS OF INTERNET AND SOCIAL NETWORKS USE IN UZBEKISTAN

Pazilidinov Mukhiddin Maxammadin o'g'li<sup>1</sup>

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### ABSTRACT

*In this article, the penetration and development of social media and social networks in Uzbekistan, the influencing factors in this regard are highlighted. At the same time, the approaches to the concept of "social media" were briefly analyzed by the researchers of the field. Also, the current state of social media in Uzbekistan, the share of users in using social networks and mobile messengers will be analyzed. In addition, an attempt was made to reveal problems and negative situations in the social media space of our country within the scope of research.*

**Keywords:** Social Media, Social Network, Messengers, Advertising, Internet, Digital Economy, Business.

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### INTRODUCTION

Nowadays, social networks have become a source of entertainment, entertainment and news. It can also be said that it has become one of the most effective digital marketing channels. Most companies are using social media more than ever before. As the number of social media users continues to grow, with the likes of Instagram and TikTok increasingly influencing consumer purchasing behavior, business owners must clearly leverage the power of engagement of these networks to advertise. The development of Internet infrastructure and the accessibility of smartphones are the main forces behind the expansion of social media advertising. Internet infrastructure has undergone significant changes over the past decade, and today it is much faster, cheaper, and more accessible. Although smartphones have become cheaper over time, they were a luxury for people about 20 years ago. Nowadays, people use their smartphones every day, which leads to a significant increase in the use of social networks.

### MATERIALS

So far, different definitions of social media have been given by researchers in different fields. One of the early proponents of this view, Paul Gillin, in his book *The New Agents of Influence*, states that social media is a multi-sense term that combines various online technologies that allow users to communicate and interact with each other. passes. According to him, the main characteristic of social media is their users [1]. The American scientist S. Cardon defines social media as follows: the word "social" is communication or communication, and the word "media" is "a means of transmitting information" [2]. Some researchers evaluate Web 2.0 resources "as a part of the social structure of society and as a result of the development of information technologies" [3]. S. Bobrovsky emphasizes that social media refers to the social structure of the Internet environment created by individuals or organizations and the purposeful interactions (political, corporate, service-related, family, friendly, etc.) established between them [4]. Representatives of the American scientific school believe that social networks are not a synonym of social media, but one of its

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main categories. In particular, according to the views of Lon Safko and David Brake, many people confuse the terms social media and social networks and use them interchangeably. After all, social networks are one of the categories of social media [5]. Another US researcher, Lon Cohen, also points out that there is a difference between social media and social networks. According to him, social media can be seen as strategic and social networks as a tool and utility in connecting with other individuals. Their difference is not in meaning, but in functions. He considers social networks as one of the first phenomena in the composition of social media[6]. Lon Safko and David Brakeler have divided social media into several categories. In particular, real social networks (for example, Facebook and VKontakte), which partially act as media, and Web 2.0, whose content is completely or partially created by users. of Internet network publications (Medium, Look At Me), micro (Twitter, Weibo) and macro blogs (Live Journal, WordPress), photo hosting (Flickr, Picasa), audio and video hosting (YouTube, Spotify, Soundcloud) and livecasts. In general, they promote the view that social media consists of components such as concept, content and social interaction[5]. If representatives of the American scientific school claim that social networks are a category of social media, Russian researchers put forward a different theory. In their opinion, considering that any social network on the Internet is aimed at forming communities of individuals with mutual interest or similar activities, social networks are described as the basis of social media. According to Russian scientists IABikov and OGFilatova, "social media is an online form of mass media in which every person and reader can participate as an author." To do this, anyone without special knowledge in the field of coding can use software that allows you to submit information, leave comments, move information, edit information and create groups[7].

## **METHODS**

The methodological basis of the research is a situational approach, which includes consideration of a set of factors and circumstances of a different nature that characterize a particular situation. The research work is based on conceptual constructions developed as a result of mass communications, social survey, historical, mathematical, socio-theoretical approaches. A combination of comparative, socio-technical analysis was used to study social media, its dynamics and situations. The comparative-historical method makes it possible to observe changes and news in the introduction and use of social media in Uzbekistan. Socio-technical analysis helps to assess the nature of the technical characteristics of social media and its impact on different social groups. Also, the results of social survey methods in various scientific sources on the subject were used in the research work. In addition, general scientific methods such as clarification of concepts, historical-event (narrative), typological and generalization are widely used in the research work.

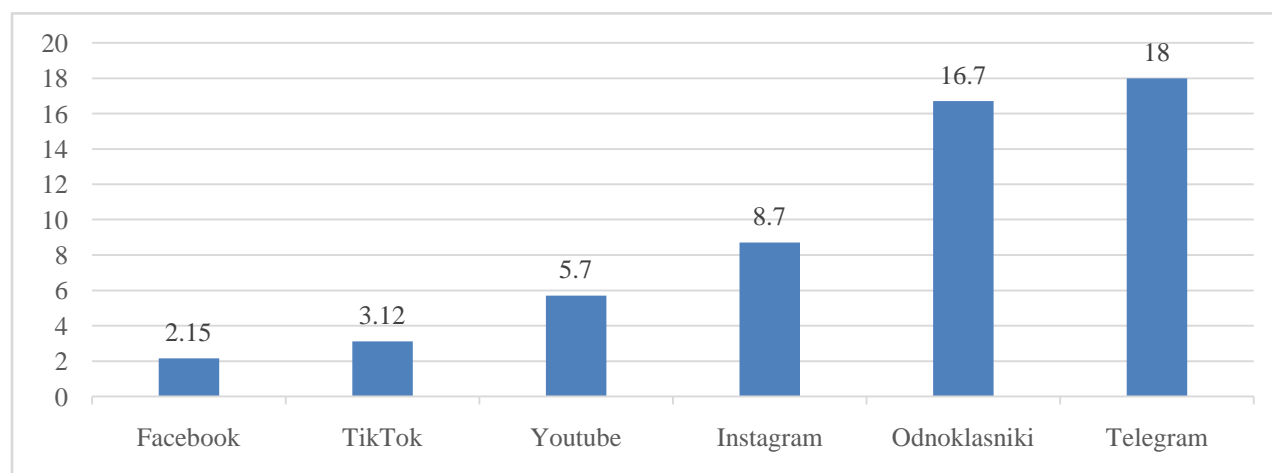
## **RESULT AND DISCUSSION**

According to Datareportal, an international online data library, 63% of the entire human population, more precisely, 5.35 billion people use the Internet today[8]. Also, the number of Internet users has increased by 200 million over the past year. Most of them, 92.4 percent, use the Internet through mobile devices. Currently, 4.65 billion users around the world are actively using social networks. These numbers prove once again how important the online world is. In Uzbekistan, 18.3% of the population use social networks. In January 2024, there were nearly 31 million Internet users in Uzbekistan, of which 83.3 percent were active. These figures show that 5.91 million people in Uzbekistan did not use the Internet, and 16.7 percent of the population was offline at the beginning of the year. According to GSMA Intelligence, at the beginning of the year, a total of 33.81 million cellular mobile connections were active in Uzbekistan, which is equal to 95.5% of the total population. But it's worth noting that many people around the world use more than one mobile

connection - one connection for personal use, another for work - so seeing mobile figures significantly outpace the overall figures possible The analysis of the Kepios International Research Center shows that over the past year, the number of Internet users in Uzbekistan has increased by 436,000 (+1.5%), and the number of mobile connections has increased by 1.5 million (+4.6%).

According to the data published by Ookla international database, in January 2024, the average speed of connecting to the Internet through mobile networks in Uzbekistan is 24.70 Mbit/s, the allowed Internet and the average connection speed was 55.45 Mbit/s. Also, in the last twelve months, the average speed of mobile Internet connection in Uzbekistan has increased by 10.15 Mbit/s (+69.8 percent). According to Ookla data, the installed Internet connection speed in Uzbekistan increased by 10.20 Mbit/s (+22.5 percent) during the same period.

Social media marketing has become an important part of every business strategy in Uzbekistan in recent years. This is especially important for small and medium-sized businesses seeking to develop and expand their customer base. Social media marketing is a cost-effective way for small and medium-sized businesses to reach their target audience and increase brand awareness. Social media platforms like Facebook, Twitter, Instagram and Telegram have millions of active users. By having a presence on these platforms and promoting their products and services, small and medium-sized businesses can reach a large audience without spending a lot of money on advertising. Social media allows business owners to interact with their customers in real time and get feedback about their products or services. Through features like direct messaging and live video sessions, businesses can communicate directly with their audience, answer their questions, and provide them with information about their products and services remotely. By communicating with customers, businesses can build deeper relationships and increase customer loyalty. In addition, social media provides a unique opportunity for businesses to receive feedback from their customers, which serves as a valuable tool for improving their products or services. By paying close attention to customer feedback, businesses can make the necessary changes and get the right feedback from customers, which in turn will increase customer satisfaction and grow the business. Overall, social media allows businesses to connect more directly and personally with their customers, leading to stronger relationships and ultimately greater success.



**Figure 1. Social network in Uzbekistan as of January 2024**

number of users(million people)[9]

According to the reports of the international database DataReportal, there were 8.70 million active social network users in Uzbekistan in January 2024, which is equal to 24.6% of the total population. This indicator has increased by almost 0.5 million (+107 percent) over the past year. According to the data published in the advertising planning tools of social media platforms, at the beginning of this year, 7.50 million users aged 18 and older used social networks in Uzbekistan, which is equal to 32.6% of the total population aged 18 and older. . More broadly, 29.5 percent of the country's total internet users (regardless of age) use at least one social media platform. 37.0% of social network users are women and 63.0% are men.

According to data published in Meta's advertising resources, in January 2024, Facebook has 2.15 million users in Uzbekistan, which is 6.1% of the total population. The numbers published in Meta's own tools show that the number of Facebook users in Uzbekistan has increased by 500 thousand (+30.3 percent) over the past year.

As the company notes in its advertising planning tools, the Counts are not intended to match population, census data or other sources, and how many Meta Technologies accounts an individual has, in a given may vary depending on the number of transient visitors in a given geographic location at any given time and other factors. As a result, changes in the scope of advertisements may not correspond to changes in the overall user base of the platform. However, Meta only allows people 13 and older to use Facebook, so it is worth noting that 8.3% of the current audience in Uzbekistan will use Meta in 2024. At the beginning of this year, Facebook advertising in Uzbekistan reached 7.3% of the local Internet user base (regardless of age), and 31.9% of the Facebook advertising audience was female and 68.1% was male.

At the same time, Instagram is one of the fastest growing social networks in Uzbekistan. In the last 4 years, the growth rate of its audience was 212%. Figures published by Meta advertising media show that Instagram had 8.70 million users in Uzbekistan at the beginning of this year. The company's regularly reviewed figures show that Instagram advertising in Uzbekistan was 24.6% of the total population at the beginning of this year. However, Meta, like Facebook, only allows users 13 and older to use Instagram. Therefore, it should be noted that 33.5% of the population over 13 years of age in Uzbekistan use Instagram. Also, Instagram advertising in Uzbekistan at the beginning of this year was equal to 29.5% of the local internet user base (regardless of age) and 37.0% of its audience were women and 63.0% were men. According to the data published in Meta's planning tools, the number of Instagram users in Uzbekistan has increased by almost 569 thousand (+107 percent) over the past year.

Figures published in ByteDance's advertising resources showed that TikTok had 3.12 million users aged 18 and over in Uzbekistan at the beginning of 2024. TikTok users make up 10.6% of the country's population, and 13.6% of the population aged 18 and over. 34.7% of TikTok's advertising audience was made up of women and 65.3% of men.

According to the Hootsuite report, 75% of the traffic in the country is on mobile phones. The most popular social network in Uzbekistan is YouTube, which currently has 5.7 million users in the country. The majority of viewers are people aged 25 to 34, which is 36% of the total population. However, only about 300 channel creators have chosen Uzbekistan as their country, and therefore the domestic market is not yet sufficiently developed. There are alternative platforms for watching videos in the country. The most used is Mover.uz, which reproduces videos from YouTube and publishes original content.

Among messengers, Telegram ranks first in terms of popularity and number of users in the country, and currently 18 million people use it. Odnoklassniki is also more popular in Uzbekistan than in other CIS

countries, and currently 16.7 million people are registered in this network. The main audience of the social network is people aged 25 to 34 (about 42%), and the 35-44 age group makes up 30% of the total number of users.

According to the international database Statista.com, by the end of 2023, there will be 4.89 billion social network users worldwide. By 2027, this figure is expected to reach 5.85 billion users[10]. Since its inception in 2005, social media has increasingly influenced our daily lives. Unsurprisingly, business owners now use social media as their primary method. They spend a lot of money on social media engagement and are always coming up with new, creative ways to improve their social media advertising strategies.

Social media advertising was booming before the COVID-19 pandemic. However, the pandemic has increased the use of social media, especially video content, which has led to exponential growth in social media advertising. People began to spend more and more time on social networks, mainly due to the explosion of TikTok and the significant increase in Instagram video content during the pandemic. Advertising on social media has grown significantly due to increased content consumption.

Facebook has been selected as the leading social media platform for marketing in 2023. Nearly 90 percent of marketers surveyed said they use it for advertising, which is not surprising considering Facebook has the largest audience globally. Similarly, Instagram has become one of the most profitable marketing channels. Meta's app allows businesses to promote their products and services through a variety of formats, from photos and tags to stories and branding. Users can easily be directed to brand websites or an integrated shopping tab, highlighting the platform's increased focus on brand partnerships. Instagram is promoting a marketing effort that has a greater impact on users. Now more than ever, creators are collaborating with brands. That said, a growing share of companies are also turning to Instagram and TikTok to increase brand exposure and capitalize on current short video trends. Impressive posts on social media are increasingly attracting more users than simple ads, and for business owners who take advantage of this, it is the most effective way.

## REFERENCE

- Gillin P. *Novye agenty vliyaniya*. - Moscow, 2010. - 67 p.
- Carton S. *New Communications Media*. New York, 2012. p.121.
- Sazanov V.M. *Social networks and technology*. - Moscow: Laboratory SVM, 2012. - S. 7.
- Bobrovsky S. *Evolution and artistic life // PS Week Review*. - Moscow, 2005. - No. 4. - S. 32-33.
- Safko L., Brake DK *The social media bible*. Wiley, 2009. p.21.
- Sohen LS *Is There A Difference Between Social Media And Social Networking?* London, 2011. p.12.
- Bykov I.A., Filatova O.G. *Technology Web 2.0 and connection with society: a paradigm shift or additional opportunities?* // *Journal of St. Petersburg University*. 2011. – Sir. 9. – No. 2. – S. 227.
- <https://datareportal.com/reports/digital-2024-global-overview-report>
- <https://datareportal.com/reports?author=5576cd58e4b0ba7a870b77fc>
- <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>

## ASSESSMENT OF THE IMPACT OF USE OF WORKING FUNDS IN UZBEKISTAN INDUSTRIAL ENTERPRISES AND EFFICIENCY

Nurmatov Mirzaakbar Mirzaaliyevich<sup>1</sup>

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### ABSTRACT

*The article analyzes the indicators that influence the efficiency of the use of working capital in industrial enterprises. The scientific and practical aspects of the economic evaluation of the efficiency of the use of working capital and the prospective possibilities of increasing the financial stability of the enterprise have been studied. Also, scientifically based recommendations on the possibilities of effective use of working capital and provision of working capital are presented in the assessment of the economic stability of industrial enterprises.*

**Keywords:** Working Capital, Own Funds, Efficiency of Working Capital, Financial Stability, Financial Efficiency.

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### Introduction

Industrial enterprises that have organized production in the conditions of ensuring sustainable development, in the process of organizing production and operating, directly establish economic relations with various industries and enterprises, and carry out settlement operations relying on financial leverage. Therefore, enterprises must ensure the continuity of the production process, deliver the manufactured products to the consumer on time, organize the sale of manufactured products based on the execution of inter-enterprise contracts, make payments on time and receive funds. It is necessary to ensure proper direction and reasonable spending.

The financial stability of industrial enterprises directly depends on the state of working capital. In this regard, studying and constantly analyzing the movement of working capital in the activities of industrial enterprises, analytically studying the indicators of working capital turnover is one of the urgent tasks for any enterprise.

Correct organization of financial activities when paying service fees to the suppliers or suppliers of products produced in industrial enterprises on time, and correct organization of the circulation of working capital in the enterprise's own account should pay constant attention to the acceleration and regulation of the circulation of working capital by the proper direction of the funds paid for the payment. For each industrial enterprise, "is it in an optimal state where it can achieve high efficiency or not?" it is necessary to find an answer to the question. In this case, the economic assessment of the efficiency of industrial enterprises is a general evaluation method, which does not mean that the enterprise is using all resources optimally. Therefore, it is appropriate to economically evaluate the efficiency of use of each resource (factor) used in industrial enterprises.

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<sup>1</sup> Ferghana branch of Tashkent University of Information Technologies named after Muhammad al-Khwarazmi

## Literature review

In the development of industrial enterprises at a priority level, theoretical approaches to the rational use of working capital and increasing their efficiency were carried out, and scientific researches in this regard were carried out by many foreign scientists.

It was noted that the formation of working capital in industrial enterprises and its correct orientation to the production process and correct reflection in accounting are of great importance. Targeted use of funds of business entities operating as an active participant in the economy today and their effective management, timely extinguishment of receivables and obligations is ensured by proper and accurate accounting. They emphasized the five tasks of organizing control in their term [1] .

According to the enterprise's participation in economic activity, it is emphasized that funds should be classified as follows: fixed funds (according to participation in production and non-production); working capital (according to its adjustable and non-adjustable nature); funds excluded from circulation (various deductions and payments) [2] .

Circulating production funds are a part of the enterprise's production funds, it is noted that they are spent during one production cycle and change their natural form and transfer their value to the cost of finished products. It is also possible to include raw materials and materials, semi-finished products, fuel and energy resources, packaging and packaging materials, spare parts, work in progress and future costs among the working capital of the enterprise [3] .

## Research methodology

Working capital is one of the important factors in industrial enterprises, and the economic evaluation of its use is of particular importance. In practice, the efficiency of using working capital is economically evaluated by the number of working capital turnover and the length of the cycle period.

$$K_w = \frac{TR_t}{\overline{K}_w^t} \quad (1)$$

here,  $K_w$  – turnover of working capital;

$TR_t$  – volume of total income in  $t$  period;

$\overline{K}_w^t$  – the average volume of working capital in the  $t$ -period.

## Analysis and results

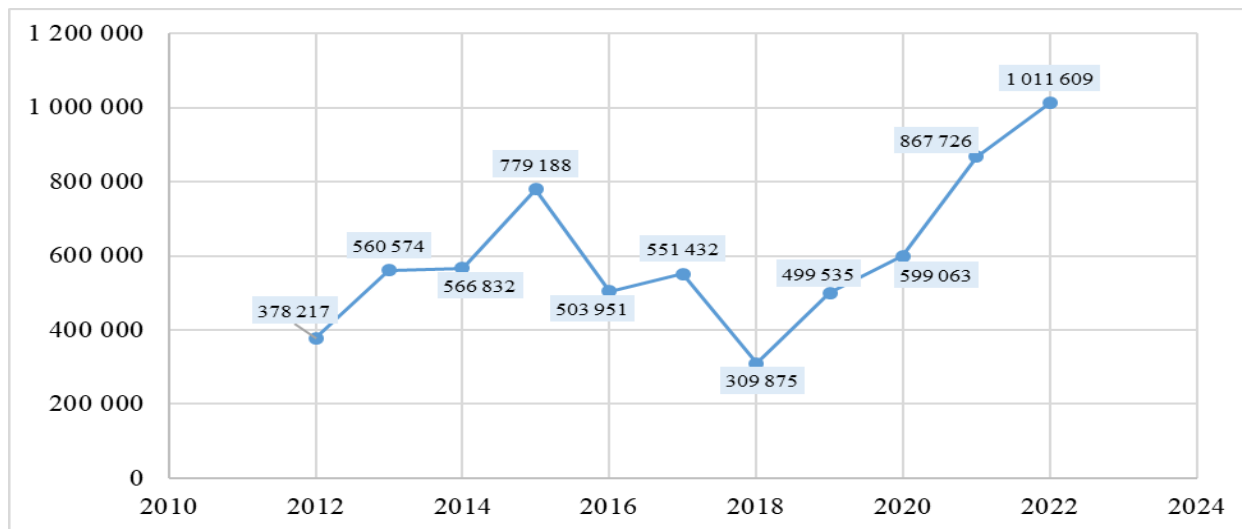
In the analysis of working capital, as we emphasized above , it can be seen that they are divided into three groups :

- Turnover in the enterprisestate of funds ;
- Turnover of the enterprisefundswithlevel of security ;
- Turnover in the enterprisefrom fundsuseefficiency level .

The following indicators represent the state of working capital in industrial enterprises : the sum of working capital, the average value of working capital, the share of working capital in total capital, the

composition of working capital . in terms of structure, turnover in funds the enterprise itself funds amount and turnover funds consists of indicators such as dynamics .

JSC "Maxam Chirchik" as a research object We took an analytical approach, choosing the activity of an industrial enterprise. Analyzing the dynamics of changes in working capital of this industrial enterprise for 2012-2022, in 2012 it was 378,217 mln soms , as of 2022 , the volume of working capital increased by 2.7 times or 633,392 mlnsoms compared to 2012 and amounted to 1,011,609 mlnsoms (Fig. 1) .



**Figure 1. Dynamics of change of working capital in "Maxam Chirchik" JSC over the years , million soms<sup>1</sup>**

If we analyze the composition of working capital in industrial enterprises, it can be seen that the sources of working capital have changed over the years .

**Table 1 : "Maxam Chirchik" joint stock company , in %<sup>2</sup>**

Years	Funds	Stocks of goods	Accounts receivable	Short-term investments	Total working capital
2012	5.0	33.6	60.6	0.8	100
2013	3.0	28.1	68.3	0.6	100
2014	5.6	28.5	65.4	0.5	100
2015	0.7	18.2	80.4	0.7	100
2016	1.0	26.4	71.9	0.6	100
2017	5.4	26.8	67.6	0.2	100
2018	6.9	64.6	28.2	0.3	100
2019	7.8	69.5	22.6	0.1	100

<sup>1</sup>Calculated by the author based on the annual reports of "Maxam Chirchik" JSC.

<sup>2</sup>Calculated by the author based on the annual reports of "Maxam Chirchik" JSC.



2020	3.9	69.5	26.6	0.1	100
2021	22.2	61.1	16.5	0.1	100
2022	9.8	76.4	13.6	0.2	100

It can be seen from Table 1 that if we pay attention to the structural change of working capital in "Maxam Chirchik" JSC, in 2012 the share of receivables in working capital was 60.6 percent. In addition, the stock of goods made up 33.6 percent. During this period, it is evidenced that the share of money in the volume of working capital has dropped sharply. In 2015-2016, the share of cash in the turnover of working capital was sharply decreased, while accounts receivable constituted the highest share in the structure of working capital. This situation affected the turnover of working capital in the enterprise.

Also, as of 2021, the share of cash in the volume of working capital has significantly increased in this period compared to previous years. By this period, the decrease in receivables indicates a positive change for the company. As for the situation in 2022, it can be seen that the volume of material reserves in the structure of working capital has increased sharply compared to previous years, making up 76.4 percent. This situation caused most of the working capital to remain idle and affected the turnover of working capital (Table 1).

**Table 2 : Changes in the structure of working capital <sup>1</sup>in "Maxam Chirchik" joint stock company**

Years	Volume of working capital		All assets volume		Share of working capital in all assets, in %
	million soums	rate of change, percent	million soums	rate of change, percent	
2012	378 217	100	620 427	100	61.0
2013	560 574	148.2	746 333	120.3	75.1
2014	566 832	101.1	863 579	115.7	65.6
2015	779 188	137.5	1 080 987	79.8	72.1
2016	503 951	64.7	696 033	155.3	72.4
2017	551 432	109.4	870 420	125.1	63.4
2018	309 875	56.2	676 403	77.7	45.8
2019	499 535	161.2	884 150	130.7	56.5

<sup>1</sup>Calculated by the author based on the annual reports of "Maxam Chirchik" JSC.

2020	599 063	119.9	1 034 099	85.5	57.9
2021	867 726	144.8	1,200,089	86.2	72.3
2022	1 011 609	116.6	1 460 923	82.1	69.2

The change in the volume of working capital in the joint-stock company "Maxam Chirchik" and the share of working capital in the company's share of all assets had a tendency to change from year to year. If we focus on the situation in 2012, the share of working capital in all assets was 61.0 percent, and by 2022, the share of working capital was 69.2 percent. From the analysis, it can be seen that the weight of working capital decreased by 3.1% by 2022 compared to the previous year 2021 ( Table 2 ).

If we take an analytical approach to the data, the change in the composition of its funds in "Maxam Chirchik" JSC during 2016-2022, with the company's charter capital amounting to 24,996 billion soums, is 12.5 percent of the total. formed, by 2022, the amount of the authorized capital remained unchanged and made 1.9 percent of the total. In 2016, the reserve capital of the company's own funds was 59.1 percent, and by 2022, it decreased to 19.7 percent of the total.

### Conclusions and suggestions

In conclusion, it can be said that the main directions for reducing existing receivables and payables in industrial enterprises and improving the state of the enterprise are as follows:

- Timely conclusion of contracts for the supply of products and the purchase of raw materials and materials necessary for production by the enterprise;
- Timely implementation and correct formalization of payment documents for settlement by the enterprise;
- Correct accounting of operations related to the delivery and sale of products to customers by the enterprise;
- Constantly studying and assessing the financial situation of the company's product suppliers and customer companies;
- Try to improve product quality and maintain the company's image;
- Ensuring the balance of receivables and payables in the volume of the company's working capital and continuous monitoring, etc.

### References:

- *M.B.Kalonov, F.T.Abdivakhidov, Sh.Kh. Dadabayev. Accounting. Textbook.-T.: "ECONOMICS", 2023. Page 52.*
- *R.O.Xolbekov. Introduction to accounting. (Textbook).-T.: "Innovative Development Publishing House", 2022, pp. 29-30.*
- *E. Kh. Makhmudov. Enterprise economy (Study guide)-T.: TDIU-2004 - page 125.*

- I.T.Abdukarimov, M.Q.Pardaev, B.I.Israilov. *Analysis of the economic potential of the enterprise. Monograph.* Tashkent: "World of Economics and Law" publishing house. 2003.-Page 97.
- T.S. Malikov. *Finance of financial entities. Study guide.*-T.: "ECONOMY-FINANCE", 2009, pp. 93-94.
- M.Q.Pardaev, B.I.Israilov. *Financial Analysis: (Album of Methodological Exhibits and Recommendations).* - T.: World of Economics and Law, 1999. - B. 197.
- T.K.Rutkauskas. *Economics of an organization (enterprise): textbook / [etc.]; under general ed. Doctor of Economics, Prof. T.K.Rutkauskas – 2nd ed., revised. and additional – Ekaterinburg: Publishing house UMC, UPI, 2018. 91 p.*
- E.Yu.Karpycheva. *Formation of a mechanism for managing working capital of agricultural enterprises: Abstract of thesis. Ph.D. econ. Sciences: 08.00.05/E.Yu.Karpycheva: Oryol State Institute of Economics and Trade. – Voronezh., 2014. - 27 p.*
- M.A. Loktionova. *Development of tools for the formation and assessment of financial potential in the corporate financial management system: Abstract. diss. Ph.D. economy Sciences: 08.00.10 / M.A. Loktionova: Stavropol University. - Vladikavkaz, 2018. - 28 p.*
- O.V.Golikova, E.G.Nesterenko. *The concept of tangible current assets and their role in the circulation of enterprise funds.*<https://cyberleninka.ru/article/n/ponyatie-materialnyh-oborotnyh-aktivov-i-ih-rol-v-krugoborote-sredstv-predpriyatiya/viewer>
- O. I. Volkova, O. V. Devyatkina. *Economic enterprise (firmy). Uchebnik/E69- 3-e izd., pererab. i dop. - M.: INFRA-M, 2007. S. 151.*
- Annual report of "Maksam-Chirchik" JSC.



## SPECIFIC ASPECTS OF THE ANALYSIS OF FIXED ASSETS IN THE PROCESSES OF DIVERSIFICATION OF THE ECONOMY

Kurbonova Shaxrinov Avaxonovna<sup>1</sup>

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### ABSTRACT

*In the article, the role of fixed assets as a factor of production of the enterprise, the work of foreign and domestic scientists who conducted scientific research on the financial analysis of fixed assets were studied and analyzed in detail. Also, a system of indicators was proposed to evaluate the financial analysis of fixed assets based on modern trends – energy saving, environmentally safe and IFRS requirements, recognition of fixed assets and their grouping.*

**Key words:** *Financial Analysis, Fixed Assets, Indicators, Depreciation, Reporting Period, Investment Real Estate, Fixed Assets For Sale, Initial Value, Balance Sheet Value,*

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### Introduction

Fixed assets are one of the most important elements of industrial development. Fixed assets are material objects that are not intended for sale in the current period, but are used in the production of goods and services that will be used for the production of other goods or services in the future. If there were no buildings, machines and equipment in the capital, the industry would not be in its current form. The introduction of fixed assets into production and their periodic improvement made it possible to significantly increase labor productivity and production efficiency. Manual labor was replaced by mechanical labor, which was later automated and switched to robotic systems. This increased the speed and accuracy of the manufactured products. In addition, the availability of innovative equipment and equipment in the capital allows to produce more complex and high-quality products, as well as to produce them in large quantities.

The rational use of fixed assets made it possible to increase production efficiency and reduce costs. It also allows to automate the production processes of machine tools and equipment and reduce the number of errors and defects. In addition, the introduction of new technologies and capital equipment into the industry stimulates the development of scientific and technical development, which in turn allows to create more advanced and efficient machines and equipment. In general, fixed assets, which are an element of capital, have played and are playing an important role in the development of industry, increasing labor productivity, reducing costs and stimulating scientific and technical development.

In the financial analysis of the enterprise's activity, the value of fixed assets is used as an object in determining many economic indicators. Therefore, the correct description of fixed assets, their reflection at a true price serves to ensure the objectivity of the results of financial analysis, and this, in turn, has a positive effect on the adoption of effective economic decisions in management. Correct classification and evaluation of analysis objects is important for investors in making effective investment decisions.

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## Literature analysis

Financial analysis is an analysis based on the information of open, that is, published financial statements of enterprises. Therefore, the financial analysis can be carried out by the financial managers of the enterprise, by shareholders or founders, by external users – investors, participants of the securities market, banks, insurance companies, and the financial condition of the enterprise can be assessed.

Financial analysis of fixed assets is considered one of the important objects of financial analysis, and several foreign and domestic scientists have conducted research on this. The main goal of the conducted research was to achieve the results of effective use of fixed assets. Uzbek scientists MQPardaev, A.X, Shoalimov, B.I. Sroilov, E.A. Akramov, A.T. Ibrohimov, A.V. Vahobov, Sh.I.IIhomov, N.Ishonkulov, V.V. Ergashboev, D.Kudbiev, I.N. Ismanov, A.Pardaev, B.Khasanov, O.Jumanov, I.T.Abdukarimov, Russian well-known economists A.D. Sheremet, N.N. Selezneva, M.Vel'nik, P.Vev and other scientists conducted scientific research on financial analysis, especially P.Vegaminov, N.Vegav and other scientists.

Foreign scientists U. Detmer, S. Cowie, H. Leibenstein, A. Thompson, D. Formby, R. Higgins, K. Heather, G. Schmalen and others conducted scientific work on the effectiveness of the use of fixed assets.

The well-known economist A.D. Sheremet puts forward his own methodology for the analysis of fixed assets. In his scientific works, he analyzed the analysis of fixed assets in the composition of non-circulating assets, in 3 stages:

- 1) Analysis of the state and dynamics of fixed assets;
- 2) Analysis of the use of fixed assets;
- 3) Emphasizes that it should be carried out through a factor analysis of the indicators of the use of fixed assets.[1]

Another Russian economist, NNSelezneva, analyzed fixed assets in 6 stages - 1) assessment of the volume and composition of capital investments in fixed assets of the enterprise (horizontal analysis of indicators of the movement of fixed assets); 2) Determining the nature and direction of the changes that have occurred (vertical analysis of indicators of the movement of fixed assets); 3) Capital productivity (fund return) analysis. Factor analysis of changes in capital productivity (fund return); 4) Analysis of profitability of fixed assets; 5) Analysis of the use of the fleet of production equipment; 6) Analysis of the use of equipment by time (working time balance of equipment)[2].

S.A. Sirotkin and N.R. Kel'chevskaya approached the analysis of fixed assets from the point of view of economic evaluation of investment projects, 2 stages - 1) analysis of the state, structure and movement of fixed assets and 2) divides them into analysis of the state of use of fixed assets[3].

V.V. Kovalev and V.V. Petrov recommended that the financial analysis be conducted in two stages. Each of these two stages covers several directions in turn. In the first stage, the analysis work covers the general financial situation of the enterprise, its economic potential and the results of financial and economic activities, and in the second stage, the analysis of the company's property, balance sheet liquidity, financial independence, business activity, profitability of the enterprise and market activity is carried out in the directions [4].

E.A. Akramov "In the textbook "Analysis of the financial condition of enterprises"" [5] indicated the financial analysis of fixed assets as an element of the analysis of the general financial situation. However, it should be noted that the methodology of analysis of fixed assets is not disclosed in this literature.

A.V. Vahobov and A.T. Ibrohimov gave detailed information on the methodology of analysis of fixed assets [6] in the textbook "Financial analysis" and showed the procedure for implementation in six stages. I.T. Abdukarimov, M.Q. Paradaev and B.I. Israilov divide the indicators representing fixed assets into three groups in the book "Analysis of the economic potential of the enterprise". These are indicators representing the state of fixed assets; indicators representing the provision of fixed assets; indicators representing the efficiency of fixed assets [7]. Professor D. Kudbiev also emphasizes the expediency of analyzing fixed assets in the directions listed above.

### **Research methodology**

In the process of research, analysis and synthesis, complex approach, systematic-functional approach, retrospective approach, comparative analysis, scientific abstraction and other methods were widely used.

### **Analysis and results**

Fixed assets are an integral part of the enterprise's production process and directly affect its productivity, competitiveness and profitability. Fixed assets (capital element) include buildings, structures, machines, equipment, vehicles and other material objects necessary for the production of products and the provision of services. Fixed assets play an important role in the economy, because they allow to produce and provide services in large quantities, as well as to increase production efficiency. They are also one of the main elements that determine the competitiveness of the enterprise.

"The concept of fixed assets" is important for accounting and tax accounting, because they are reflected in the company's balance sheet, amortized, in which their value is written off in installments during the useful life, and taxes paid to the cost of products or services, profit and budget directly affect property tax, profit tax, VAT [9].

In the tax code of the Republic of Uzbekistan, fixed assets are defined as follows – "is defined for a unit (set) in the Republic of Uzbekistan (on the date of recognition as the main tool), the value of which is higher than fifty times the amount of the basic calculation, property that is on the basis of property rights in the taxpayer (unless otherwise provided for in this article) and is used by the taxpayer in the production of goods (provision of services) or for administrative and management needs for a long time (duration more than twelve months) is recognized as the main tool for taxation purposes" [10].

Until recently, in our country, the organization of accounting of fixed assets in the accounting of all economic entities, that is, their recognition, evaluation, depreciation, was regulated in NAS No. 5 "Fixed assets". In this NAS, fixed assets are defined as follows: "Fixed assets — for long-term use by the enterprise in the process of production of products, performance of works or provision of services or for the purpose of performing administrative and socio-cultural tasks in the course of economic activities material assets held for." [11]. According to the requirements of NAS, items with a service life of more than one year at a time, the value of which is more than fifty times the amount of the minimum monthly salary established in the Republic of Uzbekistan (at the time of purchase) for one unit (set) is included. At the same time, the head of the enterprise has the right to set the minimum limit of their value in order to take into account the items in the composition of fixed assets in the reporting year.

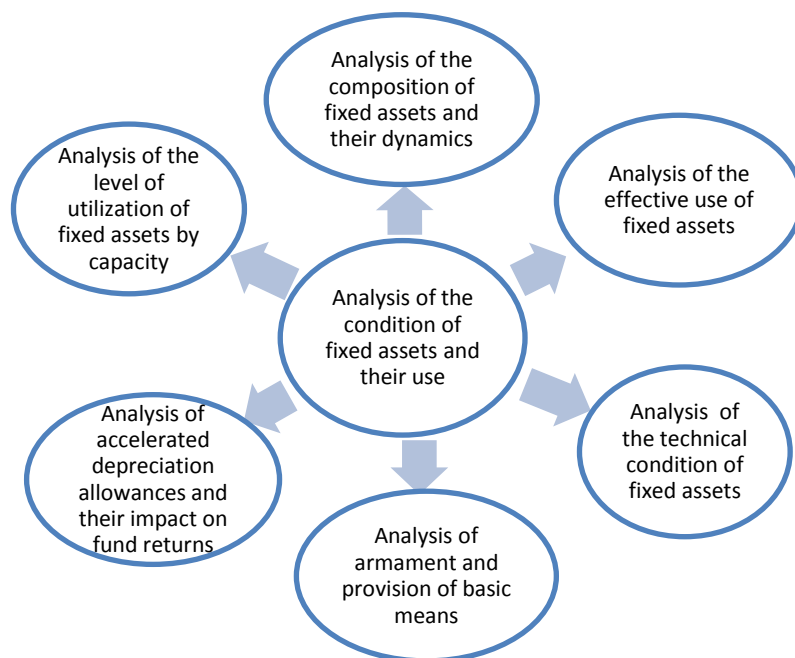
“Fixed assets No. 16 in the International Accounting Standard ” – Fixed assets “are tangible assets intended for:

- a) Intended for the production or delivery of products, or the provision of services, or for rental to other parties, or for administrative use; and
- b) Expected to be used for a longer period of time”[12].

This standard does not impose any restrictions or requirements on the value of the asset (labor tool) to be recognized as a fixed asset.

The importance of recognizing the issue of recognition as a fixed asset between the National Accounting Standard and the International Accounting Standards is that not all assets recognized as a fixed asset by NAS are recognized as fixed assets under IFRS. Fixed assets recognized as fixed assets under NAS are divided into 3 types of assets according to NAS and IFRS. That is, fixed assets, investment property and fixed assets intended for sale.

In financial analysis, fixed assets are used as objects in determining indicators of total profitability, long-term asset turnover, financial stability, and financial independence. Also, the analysis of the state of fixed assets and their use is a separate object of financial analysis. The purpose of the analysis of fixed assets is to objectively assess the state of fixed assets and search for sources of their effective use. Based on the above goal, the main tasks of the analysis of fixed assets are to determine the supply of fixed assets to the enterprise, to study the technical condition of fixed assets, to determine the efficiency of using time and power from equipment, to determine the effect of the use of fixed assets on the volume of produced products and other economic indicators, to increase capital productivity, to determine reserves to increase profits by improving the volumes of production and sales, as well as the use of fixed assets, etc. can be included.



**Figure 1. Components of the analysis of the state of fixed assets and their use.**

In the process of analyzing the composition and movement of fixed assets, it is necessary to evaluate the size, dynamics and structure of capital investments in fixed assets, to determine their main functional characteristics, such as their relevance to production or management activities. The balance of the fixed assets of the enterprise at the end of the period is determined by the balance method according to the following formula:

$$AVq = AVbq + AVk - AVch$$

Here:

AVq is the balance of fixed assets at the end of the period;

AVbq – Value of fixed assets at the beginning of the period;

AVk – fixed assets received (introduced) during the reporting period;

AVch – fixed assets written off during the reporting period.

Table 1 : **Dynamics of composition and movement of fixed assets**

Basic tools elements	Per period		Income (sum)	Expense(sum)	Per last period		Growth rate, %
	Value	Weight, in %			Value	Weight, in %	
Buildings							
Others							
<b>Overall:</b>		<b>100%</b>				<b>100%</b>	

It should be noted that in most cases, in the process of analyzing the dynamics of the composition and movement of fixed assets, the input or output of fixed assets is taken as information based on the requirements of NAS. But it can be somewhat differentiated according to the requirements of BHXS. Because the elements that are considered the main means of NAS can be classified into elements such as fixed assets, fixed assets intended for sale, investment real estate, biological assets in the requirements of BHXS.

In the process of analysis, it is appropriate to determine how the composition of fixed assets has changed as a result of input and output. Because, in the process of analyzing the composition and structure of fixed assets, it is necessary to determine the share of certain types of fixed assets in the total value of fixed assets. Analysis of the composition of the main tools of the enterprise allows to take measures to optimize the composition of funds in order to increase the efficiency of their use. By analyzing changes in



the composition of fixed assets over the years, it is possible to more clearly see the dynamics of the composition of fixed assets. (Table 2).

**Table 2 : Dynamics of structural changes of fixed assets over the years**

Basic tools elements	At the beginning of the year		By the end of the year		Dynamics of changes during the year	
	Value	Weight, in %	Value	Weight, in %	Value	Weight, in %
1	2	3	4	5	6=4-2	7=5-3
Buildings						
Others						
<b>Overall:</b>						

One of the main indicators in the analysis of fixed assets is the average annual value of the company's fixed assets, and this indicator is calculated as follows:

$$AVo'q = AVbq + (AVkq * KOAo) / 12 - TAVq * (12 - M) / 12$$

Here:

AVo'q is the average annual value of fixed assets;

AVbq is the initial value of fixed assets;

AVkq – is the value of fixed assets received;

KO Ao – number of months worked of fixed assets received;

TAVq – terminated A/V value;

M – is the number of months of operation of fixed assets written off.

In order to determine the movement and technical condition of fixed assets, it is necessary to calculate the indicators of the movement of fixed assets. These indicators can be seen in the table below.

**Table 2 : System of indicators of movement of fixed assets**

<b>№</b>	<b>Indicator name</b>	<b>Formula</b>	<b>Comment</b>
1	Coverage coefficient of fixed assets	$K_{qav} = AV_{bq}/AV_{qq}$	Here: $AV_{bq}$ is the initial value of the fixed asset; $AV_{qq}$ is the residual value of the fixed asset at the beginning of the reporting period
2	Update coefficient	$K_{avy} = YaAV_{bq}/ AV_{qq}$	Here: $YaAV_{bq}$ – is the initial value of the newly acquired fixed asset;
3	Refresh rate coefficient	$K_{yai} = TAV_{q}/YaAV_{bq}$	Here: $TAV_{q}$ is the value of terminated $AV$ ;
4	Coefficient of the scope of renewal of fixed assets	$K_{yak} = YaAV_{bq}/AV_{dbq}$	Here: $AV_{dbq}$ - $AV$ value per period;
5	Substitution coefficient	$K_{ava} = TAV_{hdq} / YaAV_{hdq}$	Here: $TAV_{hdq}$ – is the value of $AV$ written off during the reporting period;
6	Stability coefficient	$K_b = (AV_{dbq} - TAV_{hdq}) / AV_{dbq}$	
7	Validity coefficient	$K_{ya} = AV_{qq}/AV_{bq} = 1 - K_{ava}$	Here: $AV_{qq}$ – residual value of $AV$ s; $AV_{bq}$ - Initial value of $AV$ s;
8	Amortization coefficient of fixed assets or technical condition of fixed assets ( <b>Kava</b> )	$K_{ava} = A / AV_{bq}$	Here: $A$ is the amount of accumulated depreciation of fixed assets
9	Ability to write off fixed assets	$K_{hch} = TAV_{hdq} / AV_{dbq}$	
10	Coefficient of transfer to investment property <sup>1</sup>	$K_{im} = AV_{km} / AV_{dbq}$	Here: $AV_{km}$ is the real estate part of fixed assets.

The coefficient presented in line 10 of the table was developed on the basis of possible situations based on the recognition of fixed assets according to the criteria of international standards of financial accounting. Because the enterprise can earn income by partially or fully operationally renting out some of the fixed assets – buildings, structures and similar properties in the form of real estate. In this case, these properties are transferred from the classification of fixed assets to the classification of investment real estate.

During the research, the composition and condition of the main tools of the Kuva textile enterprise were studied. The enterprise is located in Kuva. The enterprise also has a division located in the industrial zone located in the territory of the former Chinni plant in the city of Kuvasoy. During the studies, it was found that the enterprise has a total of 14,431 fixed assets of 687 types. These fixed assets.. have been completely depreciated, but these fixed assets are now used. As of December 31, 2023, the initial value of the main assets of the enterprise was 267,428,526,476.00 soums, the accumulated depreciation value was 104,288,190,193 soums, and the residual value was 163,140,336,282 soums. The depreciation period (life) has completely expired, but the value of the fixed assets currently in use is 3,470,650,905 soums.

Based on this information, we perform actions to analyze the state of effective use of basic tools. First of all, we will determine the coverage coefficient of fixed assets:

$$K_{qav} = AV_{bq}/AV_{qq}$$

$$K_{qav} = 267\ 428\ 526\ 476/163\ 140\ 336\ 282 = 1.64$$

Therefore, 64 percent of the costs of fixed assets are covered. Now we calculate the stability coefficient:

$$Kb = (AVdbq - TAVhdq) / AVdbq$$

$$Kb = (267,428,526,476 - 3,470,650,905) / 267,428,526,476 = 0.987$$

Therefore, the stability coefficient is 0.987, or the ratio or weight of fixed assets that have not expired to the total fixed assets is 98.7 percent.

Our next analysis consists in calculating the coefficient of validity of fixed assets, the coefficient of depreciation of fixed assets or the coefficient of technical condition of fixed assets, the coefficient of write-off of fixed assets and the coefficients of the possibility of transfer to investment property.

$$Kava = A / AVbq;$$

$$Kava = 104\,288\,190\,193 / 267\,428\,526\,476 = 0.39;$$

As can be seen from the calculations, the technical condition or amortized coefficient of fixed assets is 0.39 percent or 39 percent.

$$Khch = TAVhdq / AVdbq;$$

$$Khch = 3\,470\,650\,905 / 267\,428\,526\,476 = 0.013;$$

24 of the main means of the enterprise or 7,181,526,742 soums, or 1.3 percent of the share of real estate objects in the total value of fixed assets.

$$Kim = AVkm / AVdbq;$$

$$Kim = 7\,181\,526\,742 / 267\,428\,526\,476 = 0.027$$

The results of calculating the above coefficients describe the movement of the main means of the enterprise and their technical condition. The values of the indicators are compared in dynamics and statistics. Based on the horizontal and vertical evaluation of the coefficients, conclusions are drawn and appropriate management decisions are made on fixed assets.

However, it should be noted separately that the reflection of the value of fixed assets in the balance sheet in the enterprise does not fully reveal the information on the current demand, that is, fixed assets. Because, if there is an active market to determine the actual (fair) value of some equipment or equipment, it is reflected in the balance sheet by deducting the accumulated depreciation value from the historical (initial) value of fixed assets. This situation is also reflected in real estate objects. This, in turn, reduces the investment attractiveness of the enterprise in making investment decisions of the potential investor.

Above, we considered some indicators of financial analysis of fixed assets by movement and condition. The list of these indicators can be expanded again. For example, the insurance of fixed assets against various risks, to what extent they are energy efficient, the level of impact on the environment and other indicators. We will definitely consider these indicators during our research.

### Summary and suggestions

By observing and analyzing the movement process of the main funds of the enterprise, it is possible to determine the level of provision of fixed assets (quantity, assortment, level of their use). All this is necessary to find reserves in order to increase the efficiency of the use of the main funds of the enterprise.

Fixed assets analysis is the process of evaluating and verifying the assets of an enterprise used to produce products or provide services over time. Fixed assets include buildings, equipment, vehicles, computers and other material assets used in business activities. Some key aspects of fixed asset analysis include:

Assuming the value of fixed assets: in order to reflect them in the initial value, depreciation value, residual value and balance sheet, it is necessary to take into account the real market (fair) value;

Assessment of depreciation policy: assessment of reasonable selection of methods for accounting for depreciation of fixed assets in the accounting policy, checking their compliance with laws and accounting standards;

Assessment of the level of suitability of fixed assets: assessment of whether assets are at the beginning, middle or end of the exploitation process, grouping them according to their modern, innovative level, energy efficiency and impact on the environment (ecology). This is important for planning to replace or upgrade fixed assets;

Risks and Insurance: Assessing the risks associated with the use of fixed assets and verifying whether they are insured against various threats, such as injury, theft or loss of value, and developing recommendations for insurance;

Assessment of compliance with regulatory documents: verification of compliance of procedures for recognition, accounting and reflection of fixed assets in financial statements with laws and accounting standards.

Implementation of financial analysis of fixed assets, in particular, assessment of their condition and movement indicators, helps the enterprise to make effective economic decisions on asset management, cost optimization and sustainable development of long-term business activities.

## References :

- Sheremet A. D. *Bukhaltersky uchet I analysis: uchebnik/A. D. Sheremet, Ye.V. Starovoytova; pod obsh. red. prof. ADSheremeta. – 3- ye izd., pererab. I dop. – Moscow: INFRA–M, 2020. – 472 s. – ISBN 978-5-16- 015482-4.*
- Selezneva NN. *Financial analysis. Upravlenie finansami: ucheb. posobie. – Moscow: UNITI-DANA, 2015. – 639 s. – ISBN 978-5-238-01251-3.*
- Sirotkin SA. *Bukhaltersky uchet I analysis: uchebnik– Moscow: INFRA–M, 2021. – 355 s. – ISBN 978-5-16-013703-2*
- Petrov VB, Kavalev VV. *Kak chitat' balance. M-fia. Moscow, 1993 g.*
- EAAkramov. "Analysis of the financial situation of enterprises"; *Study guide. T.; "Finance" Publishing, 2003. p. 224.*
- AVVahobov, ATIbragimov. "Financial analysis" / *Textbook; Tashkent. "Uzbekistan" publishing house. 2002.*
- *Analysis of the economic potential of the enterprise/Tual.: ITAbdulkarimov, MKPardaev, BIlIsrailov — Tashkent: «Economy and legal world» publishing house. 2003.- 256 pp.*
- Kudbiev, D., Tursunova, D., & Qudbiyev, N. (2022). *Buxgalteriya Hisobini Avtomatlashtirish Masalalari. Journal of Integrated Education and Research, 1(2), 107-112.*
- Qudbiyev, N. T., Haydarov, U. S. O., & Kurbonova, S. A. (2022). *Harajatlar hisobning zamonaviy usullari. Scientific progress, 3(1), 442-448.*
- 1 –you post your article, when, in which magazine it appeared.
- *Tax Code of the Republic of Uzbekistan. 2020.*
- "Basic Tools" No. 5 NAS.
- "Fixed assets" No. 16 *International Accounting Standard.*

# METHODOLOGY FOR ASSESSING THE RESULTS OF COGNITIVE AND ECONOMETRIC MODELING OF SOCIO-ECONOMIC DEVELOPMENT OF REGIONS

Abdullaev Farkhod Ozodovich<sup>1</sup>

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## ABSTRACT

*In this paper has been proposed methodology for assessing the results of cognitive and econometric modeling of socio-economic development of regions.*

**Keywords:** *Economic Cycles, Meso-economic, Socio-Economic Development, Regions, External Factors.*

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## Introduction

One of the main tasks of the theory of economic cycles is the search for factors and mechanisms that form the basis of its phase shifts. At the same time, not a single direction, classified as both traditional and non-traditional theories of the business cycle, practically includes in its research field the features of cyclical development at the level of the regional economy. At the same time, this methodological problem is extremely relevant due to the fact that regional economic systems, being elements of the national economy, are extremely differentiated in terms of their socio-economic development, which includes the development of technological, economic, institutional, managerial, social and other factors .

The modern theory of regional economics postulates that the region, being an open economic system, is subject to the influence of external macro- and mesoeconomic parameters, as a result of which cyclical fluctuations are projected onto it horizontally (in a regional context) and vertically (from the side below (above) the hierarchical level - the source cyclical development) projections. Understanding the nature and consequences of this kind of projection, which essentially forms the multi-structure of generated socio-economic mechanisms of development and transformation, is in the field of view of many Russian and foreign economists. However, a comprehensive and systematic solution to this issue still does not exist, just as there is no generally accepted point of view regarding the mechanisms of such interaction, as well as the possible consequences. At the same time, the search for answers to the questions posed, allowing us to largely understand the logic of the channels of propagation of cyclical fluctuations and the level of sensitivity of the region to them, is very relevant and is of significant scientific interest. The complexity of solving such a problem is largely due to the heterogeneity of factors affecting regional economic systems, the systematization and comprehensive analysis of which is a very non-trivial task. In this connection, it is important to search for more homogeneous units that allow this problem to be solved.

Identification of economic cycles, including at the regional level, the degree of their mutual integration, dependence on national and global cyclical trends, is a multi-level, complex task, the solution of which will largely contribute not only to the development of a universal, generally accepted methodological apparatus

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(toolkit) for assessing cyclical fluctuations at the meso level , but also optimization and updating of methods for forecasting regional economic systems.

### Literature review

The main theoretical and methodological provisions that reveal the features of the cyclical development of economic systems are presented in the works of foreign economists: T. Veblen, J. Van Geldersen, J. Hobson, R. Goodwin, W. St. Jevons, C. Juglar, N. Kaldor, J. M. Keynes, C. Clark, E. Kydland, J. Kitchin, S. Kuznets, D. Crook, A. Korshun, D. Laidler, R. Lucas, T. Malthus, K. Marx, W. Mitchell, C. Nelson, V. Pareto, C. Peress, A. Pigou, C. Plosser, F. Prescott, P. Samuelson, J. Sismondi, T. Tevez, V. Thompson, S. Fischer, B. Friedman, G. Haberler, E. Hansen, R. Harrod, R. Hawtree, C. Hardy, J. R. Hicks, J. Schumpeter, J. Elliott and others. A significant number of works by domestic scientists are devoted to the development of the theory and methodology of economic cycles. These include: L.I. Abalkin, I.M. Abramov, M.I. Bass, V.A. Belkin, I.A. Budanov, A. G. Granberg, S. Yu. Glazyev, L. E. Grinin, S. V. Dubovsky, R. Yu. Evstigneev, A. Yu. Egorov, L. A. Zageeva, K. Kh. Zaidov, V.V. Ivanter, M.V. Ilyin, S.Yu. Kozmenko, N.D. Kondratiev, L.A. Klimenko, A.G. Korovkin, V. I. Mayevsky, N. Makasheva, Yu. V. Matveev, N. V. Makhrov, S. M. Menshikov, A. I. Notkin, P. A. Orekhovsky, A. V. Poletaev, V. T. Ryazanov, I. M. Savelyeva, M. R. Safiullin, A. K. Semenova, G. V. Semenov, Yu. V. Solovyova, V. S. Sutyagin, P.N. Teslya, M.I. Tugan-Baranovsky, S.A. Filin, N.G. Tsvikilevich, A. V. Shchavinsky, V. Shekhin, Yu. V. Yakovets, E. G. Yakovenko and many others

The problems and features of the formation of regional economic cycles were considered in their scientific works by I.V. Antokhonova, V.B. Bryukhanova, O. V. Gritsai, B.S. Zhikharevich, T.S. Ilyina, N.N. Kolosovsky, I.V. Komar, N.V. Kondrashov, V.V. Mishchenko, I.K. Mishchenko, E.M. Sindyankin, S.V. Smirnov, D.A. Suslov, A.A. Frenkel, A.V. Shchavinsky, Yu.V. Yakovets and others.

An equally active position in the application of cyclical approaches in regional development was taken by foreign economists, among whom it is necessary to highlight the works of D. Friedman, W. Isard, J. Tinbergen, W. Alonso and others. All of the listed works are characterized by their narrow focus and specificity of the choice of exogenous factors that determine their unique approaches to identifying the cyclical development of regions. Unfortunately, it should be noted that these works are based primarily on either descriptive approaches or approaches related to the scientific and logical substantiation of the hypotheses and assumptions put forward. At the same time, such an important component of scientific knowledge of the phenomena and processes being studied, as modeling the factors generating cyclical fluctuations of regional economic systems, is almost completely ignored, which largely predetermines the subjectivity of the resulting assessments and conclusions.

The methodology and methodological support for modeling regional economic cycles in conjunction with macrocycles have been considered to one degree or another by Russian scientists. However, it should be noted that there are not so many works focused on studying the interrelations of economic cycles in the economic scientific literature. These include scientific research by I.V. Antokhonova, V.A. Belkin, V.B. Bryukhanova, A. Yu. Egorova, L. A. Zageeva, Zhikharevich B.S., A.V. Kovaleva, N.V. Kondrashova, S.F. Mesoedova, V.V. Mishchenko, I.K. Mishchenko, E. M. Sinyakina, S.V. Smirnova, D.A. Suslov, A. A. Frenkel, A. V. Shchavinsky and others. Foreign researchers also made a significant contribution to the development of the question posed in the theory of economic cycles - R. Viber, M. Shilman, C. Chase, A. Villard, V. Thomson , C. Russell et al.

The importance and high level of relevance of the question posed, revealing the relationship between cycles of different time scales and the factors that determine them, are reflected in the works of J. Schumpeter. He believed that there is a clear relationship and interdependence between the Kondratiev, Juglar and Kitchin cycles. In accordance with this approach, J. Schumpeter developed the theory of multicyclicity. It is based on the principle that each long-wave "Kondratieff" cycle includes a set of medium-term Juglar cycles, each of which, in turn, includes several short-term Kitchin cycles.

In developed countries, great importance is attached to the problems of scenario forecasting of socio-economic processes in the context of institutional and market shifts. It should be noted that in most foreign works attention is focused on short-term Kitchin cycles with monthly and quarterly forecasts. This is necessary and in demand for a prompt response to future disturbances on a monthly, quarterly and annual scale.

But now the situation is complicated by the fact that the crisis phases of the Kitchin cycle are superimposed on the crisis phases of the medium-term Zhiglar cycles and long-term Kondratieff cycles, not to mention the ultra-long-term civilizational cycles. This causes a negative resonance effect and can lead to diffuse or, conversely, anti-diffusion processes in the cyclical development of economic systems.

This raises the methodological problem of identifying and diagnosing the phases of the cyclical development of economic systems in modern, dynamically transforming economic conditions.

In this regard, today, foreign scientists dealing with the problems of forecasting and modeling socio-economic processes pay much attention to the issues of a wide horizon of modeling and forecasting cyclical fluctuations of economic activity in the crisis phases of medium-term and long-term (Kondratieff) cycles associated with scientific and technological cycles, change generations of technology and technological structures. The designated research area has not been fully studied and requires significant elaboration and in-depth study of the patterns.

The brightest foreign researchers in the field of studying issues of macroeconomic modeling and forecasting are: L. Shapley (USA), E. Roth (the name of the scientific research is "The Theory of Stable Distribution and the Practice of Market Organization"; T. Sargent, K. Sims (the name of the scientific research "Empirical studies of cause-and-effect relationships in macroeconomics"; D. Mortensen, K. Pissarides (the name of the scientific research "Research of markets with search models"; R. Engle (the name of the scientific research "Analysis of time series in economics based on a mathematical model with autoregressive conditional heteroscedasticity (ARCH)."

At the same time, existing studies do not sufficiently present the methodology for identifying economic cycles at the meso level, taking into account the variety of institutional and market factors that influence their formation. It is necessary to develop universal approaches to modeling regional economic cycles in conjunction with the system of cyclical fluctuations at the macro- and meso-level. Methodological approaches to the empirical assessment of the expectations of economic agents, in a concentrated form generating future transformations in the socio-economic environment, which, in turn, trigger the mechanisms of phase shifts in the system of cyclical development of economic systems, require clarification. It is necessary to develop special tools that allow empirical assessments of the expectations of economic agents, regardless of their diversity in time scale and response to corresponding impulses in the capital markets. Moreover, this toolkit should be multidimensional in nature in accordance with the frequencies of the cycles being studied, formed on the basis of various kinds of "multi-frequency" expectations: short-term,

medium-term and long-term. Having solved the problem and determined the dynamics of short-, medium- and long-term expectations in a unified measurement system, it becomes possible to compare them with each other. This contributes to an understanding of the closeness of such relationships, which predetermines the possibility of developing predictive models of economic development, including at the regional level.

Finally, they require a more detailed study of the theory of determining public policy measures aimed at smoothing out the differentiation of socio-economic development of regional systems through targeted impact on the points of intensive growth corresponding to a particular region. The relevance of the noted problems determined the choice of topic, setting the goals and objectives of this work.

### **Analysis and results**

To date, several main directions of modeling and “recognition” of the cyclical development of the economy have been formed in economic theory. One of them, first of all, must include traditional theories that reveal the essence of cyclical development through mechanisms for modeling the adaptation of economic agents to price adjustments in markets. The main schools here include Keynesian and neoclassical. Thus, if representatives of the Keynesian direction of economic thought placed the rigidity of prices at the forefront of cyclical fluctuations, then representatives of neoclassicism studied this process through the prism of Walras’s law [41], expressed in price adaptation to the emerging equilibrium in markets.

The Samuelson–Hicks model of cyclical economic development is a typically Keynesian model based on the statistical expectations of economic agents (households and firms) regarding prices and interest rates. At the same time, its important feature is that the model considers exclusively the goods market.

This model substantiates that the dynamics of national income is formed exclusively by the behavior of economic agents as a result of the existing (emerging) level of marginal propensity to consume households and the business activity of firms, through changes in accelerator values (incremental capital intensity). As the volume of autonomous investment on the part of the business community or the volume of consumption by households changes, the value of aggregate demand, and, consequently, national income changes. At the same time, the mechanisms for changing demand on the part of economic agents are formed as a result of the macroeconomic effects of the multiplier and accelerator, which have both positive and negative effects.

Within the framework of the Keynesian direction of the theory of economic cycles, it is also necessary to highlight the Kaldor model, Thovess model, S. Fisher’s model of imperfect competition, etc.

In the model of T. Teves, unlike the Samuelson-Hicks and Kaldor models, the object of research is not limited to the goods market and is supplemented by the money market, and therefore the model additionally includes a factor characterizing investment activity in the economic system and determining its stability. Its change, as a result of the implemented market policy of the Central Bank in the sphere of regulating the amount of money, coupled with the transformation of the values of the marginal propensity to consume, contributes to a change in the volume of investment in the economy. As a result, according to T. Teves, adjustments in national income trends occur. Moreover, the Central Bank, using mechanisms for regulating the amount of money in the economy, thereby determining the processes of investment activity, is able to regulate the dynamics of the formation of economic cycles - smooth them out or, conversely, accelerate them.



In S. Fisher's model of imperfect competition, classified as a conditionally new Keynesian model of the business cycle, the study of cyclical fluctuations is based on an approach based on the expectations of economic agents regarding price changes in the future, as well as the amount of wages that determine demand in the economy. It is important that expectations, according to S. Fisher, are rational, that is, they are formed on the basis of objective and comprehensive information available to economic agents. Fluctuations in the development of the national economy are caused by the implementation of the state's internal monetary policy or unexpected internal market shifts, which, in turn, leads to an adjustment in effective demand.

Thus, an express analysis of the main provisions and conceptual approaches to the study of the cyclical development of the economy within the framework of the Keynesian approach demonstrates their relative commonality, which consists in determining the object of study and the main approaches. The cyclical nature of economic development is determined, to a greater extent, by exogenous factors characterizing aggregate demand as a result of ongoing adjustments in the volume of consumption and savings (including investment). At the same time, the basis for regulating fluctuations in economic development is an approach based on state participation. Despite the importance of the considered approaches and models, to a certain extent they are limited in use in the modern economy. This is due, first of all, to a limited set of markets acting as an object of study, the adjustments of exogenous factors of which lead to the interpretation of trend models of cyclical economic development. In addition, these models look very truncated from the point of view of including factors (propensity to consume, investment activity, savings) that generate market transformations that give rise to cyclicity.

An alternative solution to these issues was partially found in neoclassical approaches, a number of which operated not only on economic factors, but also on the parameters of the institutional development of socio-economic systems.

One of the fundamental models of cyclical economic development within the neoclassical school is the Friedman model. It is based on an approach that justifies cyclical fluctuations by adjustments to the money supply (its growth formed the basis for economic development in the future, and vice versa, a decrease leads to a reduction in the dynamics of economic development). At the same time, adjustments in the money supply are caused by a change in the political structure as a result of a change in governments, characterized by both liberal and neoconservative attitudes towards the implementation of monetary policy. Later, this theory of Friedman began to be called the theory of political shocks.

The monetary concept of economic cycles by R. Hawtry is also characterized in the same vein. According to this approach, phase shifts of cycles are formed in financial capital markets as a result of periodic adjustments in the level of interest rates against the background of an increase/decrease in the volume of lending to the real sector of the economy by the banking system.

The model of R. Goodwin significantly expanded the range of neoclassical views on the issue of determining the factors of cyclical economic development. In it, the author proves that the main generator of phase shifts in the cycle is an increase or, conversely, a decrease in the level of employment. These shifts give rise to an increase in the share of the wage fund (in the case of an increase in the number of employed people) in the created national product, which, in turn, slows down employment growth due to a decrease in investment activity. Meanwhile, according to the author, this process is elliptical in nature, as a result of which regularly formed phase shifts of economic cycles occur.

The most important milestone in the development of neoclassical approaches to the cyclical development of the economy was the study of C. Nelson and C. Plosser. In it, the authors, based on statistical processing of empirical data revealing cyclical trends in the formation of GDP, form the conclusion that cyclical fluctuations in the economy are caused not by changes in demand, but as a result of adjustments in supply. The most important component of the emergence of cyclical fluctuations are technological innovations that generate changes in product output.

In 2004, F. Prescott and E. Kydland formed the "Real Business Cycles" theory, the foundations of which were laid in 1970-1980. as a result of the growing criticism of early Keynesian theory. In it, the authors seriously criticized the basic postulates of Keynesianism, in particular the theory of business cycles, which excluded the possibility of using a model of optimal behavior of economic agents. In their scientific works, F. Prescott and E. Kydland, using dynamic methods and analysis models, prove that real business cycles are a consequence of the optimal behavior of business entities with rational expectations. Their theory is based on fairly simple postulates. Namely, firms, determining their development strategy, guided by the principle of profit maximization, make decisions to increase or, conversely, reduce the volume of operational and production activities, based on expectations regarding future demand. In addition, the process of developing management decisions on the intensification of business processes lies in line with expectations regarding the development of technologies that predetermine shifts in labor productivity indicators.

As for the model of household behavior, here the authors are guided by the same principle of optimality, while relying, in essence, on the theory of permanent income (the theory of the life cycle, presented, for example, in the works of M. Friedman, F. Modigliani and R. Brumberga). In other words, according to the concept of F. Prescott and E. Kidland, household consumption depends on how they estimate (predict) their income throughout their lives. If they expect income growth in the future, they can take on debt at the current moment in time, thereby activating consumer activity. Conversely, if incomes are expected to decline in the future, consumer activity will currently decline, even despite current high incomes. An example of such rational behavior is the monetary policy implemented in the Russian Federation - in conditions of a positive external environment (high oil prices), budget revenues were not spent in full, and some of them "settled" in the reserve fund or the fund for the future welfare of the nation.

The main conclusion made by the founders of real business cycles - F. Prescott and E. Kydland is that business cycles are a consequence of periodically changing expectations of economic agents (firms and households), transformed as a result of changes in labor productivity (due to technological changes), as well as external market factors that predetermine investment activity in the economy. It should be noted that they proved all their assumptions through the theory of equilibrium economics, thereby refuting the Keynesian postulates about the need for government intervention in the regulation and development of the national economy.

In 2004, the authors, F. Prescott and E. Kydland, were awarded the Nobel Prize for the theory of real business cycles. Perhaps the main achievement of their approach was the systematization of many scientific developments. In essence, they were able to develop a methodology for analyzing dynamic models based on the concept of rational expectations of economic agents.

Despite the significance of the research of F. Prescott and E. Kidland, their theory is designed to identify short-term cycles and economic fluctuations. This point of view is supported by the great modern economist Ben Bernanke. According to the Princeton University professor, the equilibrium theory of business cycles is unable to explain long-term economic fluctuations, as illustrated by the example of the Great Depression.

In general, it should be noted that traditional approaches to the interpretation of business cycles are based on modeling system-forming macroeconomic factors that set the tone for the resulting expectations of economic agents. At the same time, the fundamental difference between the Keynesian and neoclassical approaches lies in the modeling of the interpretation of these expectations, which, on the one hand, in accordance with Keynesian theory, are not rational, on the other, based on the views of neoclassics, are extremely rational in nature. For example, in his works, the 1995 Nobel laureate R. Lucas seriously criticized the Keynesian theory of cycles, justifying it by the fact that economic agents are extremely rational and act based on the principles of optimality, maximizing their benefits.

Despite the considered polarity of views between representatives of Keynesianism and neoclassicism, expressed primarily in the interpretation of the expectations of economic agents that determine the paradigm for modeling the cyclical development of the economy, they are united by a system of identified factors that generate macroeconomic generations of these cycles. These include fluctuations in interest rates, money supply, employment, external market factors, etc. (Table 1).

**Table 1 : Key approaches to the interpretation of factors generating phase shifts in economic cycles**

Theory	Key factors in the cyclical development of the economy
Keynesian theory of business cycles	
Samuelson–Hicks model of cyclical economic development	Fluctuations in prices and interest rates. Mechanisms for changing demand on the part of economic agents are formed as a result of the macroeconomic effects of the multiplier and accelerator, which have both positive and negative effects
Kaldormodel	Savings and investments, which are a function of income, expressed by a nonlinear (logistic) dependence
Tevezmodel	Opportunistic development of the money market, contributing to changes in the volume of investments in the economy
Fisher's model of imperfect competition	State monetary policy or unexpected internal market shifts
Neoclassical theory of business cycles	
Friedmanmodel	Adjustments to the money supply caused by a change in political structure
Hawtreemodel	Phase shifts of cycles are formed in financial capital markets as a result of periodic adjustments in the level of interest rates against the backdrop of growth/decrease in the volume of lending to the real sector of the economy by the banking system
Goodwinmodel	The main generator of phase shifts in the cycle is an increase or,

	conversely, a decrease in the level of employment
Research by C. Nelson and C. Plosser	The most important component of the emergence of cyclical fluctuations are technological innovations that generate changes in product output
Research by F. Prescott and E. Kydland	Business cycles are a consequence of periodically changing expectations of economic agents (firms and households), transformed as a result of changes in labor productivity (due to technological changes), as well as external market factors that predetermine investment activity in the economy

An important milestone in the development of the theory of economic cycles was the direction called "Psychological theories of the cycle." One of its founders were W. Jevons and V. Pareto. Their approach is based on the hypothesis that the main driver of cyclical fluctuations in the economy is the speculative motives of business entities, that is, motives formed on the basis of expectations regarding fluctuations in price conditions in commodity and financial markets. Rising prices determine the development of optimistic sentiment in the business community, resulting in a speculative inflation of demand, largely based on the low level of bank interest rates. The result of these processes is an increase in supply volumes in the economy, deviating from its equilibrium state. The observed overproduction determines the downward trend in prices, as well as an increase in interest rates and, as a consequence, the spread of panic, leading to a series of bankruptcies. The authors of the theory see a way out of the current depressive state of the economy in lowering the interest rate and reviving optimistic sentiments.

Psychological theories of the cycle also include the study of A. Pigou, which is essentially based on Keynes's theory of irrational expectations. It is based on the assumption that the cyclical development of the economy is a consequence of the dynamic deviation of investors' expectations regarding the marginality of investment projects. Excessively optimistic expectations about the planned profitability encourage investors to increase capital investments, resulting in an upward phase of economic development. As real profitability indicators turn out to be lower than planned indicators, investor sentiment changes and business activity fades, which subsequently transforms into a crisis phase.

A significant contribution to the development of the psychological theory of the cycle was made by the so-called equilibrium theory of the business cycle by R. Lucas. In it, the author also proceeds from the assumption that the expectations of economic agents are adjusted under the influence of an incorrect perception of inflationary price increases, as a result of which cyclical trends in economic development are formed.

Undoubtedly, the presented scientific approaches and concepts do not cover the entire space of the theory of economic cycles, but at the same time they are root, system-forming directions. It should be noted that all of them, in fact, when determining conceptual approaches to cyclical development, are based on the expectations of economic agents.

Essentially, based on the review of key traditional and non-traditional approaches to interpreting the nature of economic cycles, it can be stated that research operates, to a greater extent, with economic factors, which, in our opinion, significantly narrows the research field in the context of determining economic expectations. agents, whose fluctuations form economic cycles. Our position is that in the conditions of a modern economy, characterized by a high level of globalization and integration into the system of world value chains, the social responsibility of the state, the development of regulatory institutions and the

development of macroeconomic generations, based, for example, on the principles of “green” economy and etc., the interpretation of the behavior of business entities based on their rational expectations cannot be limited to a set of exclusively economic factors. There is a need to develop multifactor models that would take into account not only economic parameters that undoubtedly form the corresponding expectations of economic agents, but also institutional, social and other factors.

To a large extent, in the context of the question posed, researchers belonging to the evolutionary-institutional school of economic thought have advanced. In accordance with their views, the dominant factors in the cyclical development of national economic systems are factors at the institutional level. Each state of the trajectory of economic development is determined not by the solution of the static problem of achieving economic equilibrium, but by the entire prehistory of the evolution of economic entities operating in the conditions of the corresponding economic environment.

The brightest representative of the institutional direction of economic thought, W. Mitchell, developed the concept of the business cycle, based on the study of spontaneously occurring hidden internal processes within the national economy. Phase shifts are a consequence of the movement of natural exogenous factors of the economic system, including institutional ones. At the same time, what is important in his theory is that regularly generated technological innovations do not play a significant role in cyclical fluctuations. Regularly changing phase shifts “grow from one another and grow into one another.” This hypothesis is explained by the researcher as the cumulative effect of economic conditions, as a result of which the economy regularly approaches a “critical mass”, as a result of which phase shifts in economic cycles occur - the dynamic series of economic development are naturally transformed into others under pressure from the past trend that has gained a critical mass. At the same time, as W. Mitchell writes, the main generators of changes in phase cycles are exclusively internal factors, the study and identification of which, knowledge of the logic of their lag or advance relative to general economic trends is the main task in the theory of economic cycles. The author lists the main ones as prices, sales volume, money supply in the economy, and the efficiency of development of the banking sector. It is necessary to find out what fluctuations these factors are subject to and trace their interactions to see how they affect the prospects for profit - the main generator of phase shifts in the economy.

At the beginning of the twentieth century, N. Kondratiev, based on extensive empirical research, put forward a theory of long waves lasting about half a century. Unlike economic cycles, long-wave economic fluctuations are not characterized by strict periodicity, as a result of which Kondratieff's theory introduces the concept of “long waves” rather than “cycles.”

Fluctuations in economic development are formed on the basis of an analysis of changes in the general economic situation, which is subject to cyclical fluctuations as a result of an increase or decrease in the level of tension of the economic system at its various levels due to the interaction of market elements. Considering that changes in the tension of economic entities are a reflection of their expectations about the development of the economic system in the future, Kondratieff's concept can be viewed through the prism of adjusting long-term expectations that generate phase shifts in long-term economic cycles.

In our opinion, the concept of studying the factors that generate long-wave fluctuations is absolutely valid for the theory of economic cycles, both due to their scientific and methodological similarity, and in connection with approaches to understanding the phenomena and processes being studied. In this regard, we consider it advisable to define a paradigm for the study of economic cycles based on the use of

interdisciplinary methods that involve the implementation of scientific research and research based on a methodological basis that allows us to combine factors of various orders: economic, social, institutional, etc.

Having made an attempt to combine the considered theoretical approaches and scientific schools to study the nature of economic cycles, we can state that they are all formed on the basis of modeling a different set of factors that generate the expectations of economic agents. In other words, expectations are a key link in the paradigm of methods and scientific approaches of the theory of economic cycles, the derivative of which is the dynamic change of factors.

So, based on the study of various approaches to the essence and content of the process of determining the mechanisms for generating phase shifts in economic cycles, as well as guided by the hypothesis about the need to use an interdisciplinary approach that allows us to identify a set of various factors and their relationships with each other, it can be argued that economic cycles are a consequence of discrete rational expectations of economic agents regarding the formation in the future of an economic, technological, managerial, social, institutional market environment, formed under the influence of exogenous and endogenous factors in a natural evolutionary manner.

Expectations underlie the vast majority of methodological views and approaches to determining economic cycles and the factors that generate them. However, in our opinion, their assessment is carried out using modeling of a very limited number of factors. For example, in Keynesian theory, depending on the use of a particular model, key factors include fluctuations in prices and interest rates, the ratio of multiplicative and acceleration effects that form the basis for the effects of accumulation and saving, market development of the money market, etc. When in this case, all hypotheses are based on the assumption that the expectations of economic agents are not rational, in other words, economic entities act according to certain abstract models of behavior.

The same kind of shortcomings, expressed in the truncation of factors used in models, are characteristic of representatives of neoclassicism. At the same time, such approaches are highly controversial. For example, in the Kidland model, the expectations of economic agents are formed on the basis of adjustments to such indicators as changes in the external environment and technological changes that generate changes in labor productivity. In our opinion, economic entities, be they households or firms, are guided not only by purely economic factors. For example, it is impossible to imagine a model of investment activity without taking into account social and/or institutional factors. An investor will not increase investments even under the most favorable external conditions without taking into account an assessment of the social background in the national economy, or institutional conditions. In connection with the above, a model of economic cycles built on the basis of expectations must undoubtedly take into account a diverse set of factors, which is not limited to a set of economic indicators.

### **Models for assessing the results of cognitive and econometric modeling of socio-economic development of regions**

In this paper, we will present some models for assessing the results of cognitive and econometric modeling of socio-economic development of regions based on mathematical and statistical modeling of researchers and authors in the field of economic and mathematical sciences. Let us pay attention to the model of Tobias Eibinger, Beate Deixelberger, Hans Manner, which shows the levels of factors influencing economic sustainability.

The authors' main model development is based on IPAT identification. In a regression context, this model is called the STEEPAT (Stochastic Impact of Regression on Population, Wealth and Technology) model proposed by Dietz and Rosa (1997). It starts with the IPAT identifier and converts the variables to natural logarithms. To obtain a regression model, coefficients and error values are added:

$$\log(I) = \alpha + \beta_1 * \log(P) + \beta_2 * \log(A) + \beta_3 * \log(T) + u, \quad (1)$$

The model states that environmental impact (I) is determined by population (P), affluence (A) and technology (T). Environmental impact is measured by greenhouse gas emissions, wealth by real GDP per capita, and technology by energy intensity. This model is typically estimated using panel data. The authors provide an overview of the specific econometric problems encountered in modeling nonstationary panel data that often underlie such regression models, and provide recommendations for adequate testing and modeling approaches. The authors note that the CCE model is a particularly flexible specification that is easy to implement and can cope with the econometric problems encountered when dealing with non-stationary macropanel. It takes into account the cross-sectional dependence of errors, non-stationarity and possible cointegration. Thus, it is one of the most general static models in the literature and is particularly well suited for subsequent empirical analysis.

The CCE model regresses an endogenous variable on individual observed covariates and observed and unobserved common factors.

$$y_{it} = \alpha' dt + \beta' x_{it} + \lambda' ft + u_{it}, i = 1, 2, \dots, N, i = 1, 2, \dots, T., \quad (2)$$

It represents a linear heterogeneous panel data model, where  $dt = (d^1, d^2, \dots, d^T)'$ .  $d^i$  is a vector of deterministic components,  $\theta^i$  is a vector of observed common effects that is assumed to have a unit root, and  $1td'2t$  is a  $3at$  vector of stationary observed common effects.  $2t$  is the vector of individual regressors,  $ft$  is the vector of unobserved effects common, and the errors  $u_{it}$  are assumed to be  $x_{it}$  across  $i$ . Unobserved common factors can be correlated with  $(dt, x_{it})$  and the regressor  $x_{it}$  is modeled as

$$x_{it} = A' dt + \delta' ft + v_{it}, \quad (3)$$

where  $A'$  and  $\delta'$  are factor loading matrices with fixed components.  $v_{it}$  is assumed to be general stationary covariance processes and can be interpreted as components of  $x$  propagating independently of each other. Observed common factors  $d, t$ , as well as unobserved common factors  $ft$  may contain components  $I(1)$ . In case any of them contains a unit root,  $y_{it}, x_{it}, dt$  and  $ft$  can be cointegrated.

The authors suggest using cross-sectional means  $y_{it}$  and  $x_{it}$  to identify unobserved common factors. It is worth noting that this general factor model captures the FE and TWFE specifications as special cases where certain restrictions are placed on unobserved factors. It is then clear that the common factor model is less restrictive than these special cases because it allows for many unobserved effects in multiplicative form. Conflicting results may be due to CSD and non-stationarity of the data.

The authors test the data for CSD using a test from Pesaran's work and find significant evidence of strong CSD for all variables. Testing for cointegration is complicated by the fact that common resources are naturally limited to a range from 0 to 112. Consequently, they perform a cointegration test on variables that are not common and find no evidence to support a cointegration relationship. Neither perform diagnostic tests for the residuals in the FE and TWFE models from Pesaran (2015) and Juodis and Reese (2021), respectively. Tests show that CSD remains in the residuals of both models. To account for these

complexities, they estimate both the CCE model and the CCE-in-differences model. For both specifications, the combined version was selected according to the test conducted by Pesaran and Yamagata.

As a result, the authors conclude that the impact of GDP is comparable to the results of FE and TWFE. Population is estimated to have a greater impact. In the FE specification this effect is estimated to be around -0.7, while in the CCE and CCE in differences it is estimated to be around -1.3 and -1, respectively. In contrast, transport activities are estimated to have a smaller impact. The FE and TWFE models produce estimates around -0.5, while the CCE models show coefficients around -0.3. Similarly, energy intensity is estimated to have less of an impact. The two CCE specifications produce estimates of around -0.6, compared to the FE and TWFE models with coefficients of around -0.8. Therefore, this model for assessing the socio-economic development of regions shows the level of the state of factor components and their influence on the development of regions over time.

The model of the authors Tobias Eibinger, Beate Deixelberger, Hans Manner is difficult to understand the influence of factor components; a huge information base is required to calculate this model. The advantage of this model is the fact that it shows all directions of factor components influencing the socio-economic development of regions, which as a result gives a macro effect through making various decisions in the field of optimizing socio-economic decisions.

The next model that you need to pay attention to is the model Jeyhun I. Mikayilov, Ryan Alyamani, Abdulelah Darandary, Muhammad Javid, Fakhri J. Hasanov. The authors developed a model for assessing the socio-economic development of regions by applying an algorithm for calculating the added value of industrial production in the regions, also using the logarithmic method of constructing the model. Let's consider this model. For this purpose, the authors designate regional added value as  $y_i$ , where  $i$  is the region number. Then the total value added can be expressed as follows:

$$Y = \sum_{i=1}^4 Y_i, \quad (4)$$

Then, taking into account the stability of the shares of regional industrial electricity consumption and the shares of regional added value, the authors consider the share of added value of industry in each region to be constant. Then the added value of the region's industrial sector can be expressed as follows:

$$Y_i = a_i Y_i$$

where  $a_i$  is the share of added value of industry in region  $i$  in the total volume of industrial added value, and  $\beta_i = 1/a_i$ .

Thus, the following formula is obtained:

$$Y = \frac{1}{a_i} * Y_i = \beta_i y_i$$

It is assumed that the initial mathematical model for region  $i$  has the form:

$$\ln dei = Y_0 + Y_1 \ln y_i + Y_2 \ln p$$

However, due to lack of data, the following simplified model is used:

$$\ln dei = \gamma_0 + \gamma_1 \ln y_i + \gamma_2 \ln p$$

To estimate the cost of using total added value, the authors derive the following model:

$$\ln dei = \gamma_0 + \gamma_1 \ln \beta_i y_i + \gamma_2 \ln p$$



Using the properties of the logarithmic function, the model is represented as follows:

$$\ln dei = [\gamma^0 + \gamma^1 \ln \beta i] + \gamma^1 \ln y_i + \gamma^2 \ln p$$

Considering that the left side of the model is the same, and the variables on the right side are also the same, the left sides are equated, which gives the following equation:

$$\gamma^1 = \gamma^1, \gamma^2 = \gamma^2 \quad u \gamma^0 = \gamma^0 - y^1 \ln \beta i, \tag{5}$$

As can be seen from the developed model by the authors Jeyhun I. Mikayilov, Ryan Alyamani, Abdulelah Darandary, Muhammad Javid, Fakhri J. Hasanov, the income and price elasticity in the resulting model will be the same as in the original model. Thus, when estimating the elasticity of income and prices, you can use the developed model without costs. However, if forecasting is also required, the intercept needs to be adjusted using interception correction techniques that can be used in the forecasting exercises in this study.

However, estimating a model with a variable element may produce incorrect results when using some estimation methods. Therefore, for this purpose, the most appropriate is the use of structural-statistical temporal models (STSM), which allow us to consider interception as varying over time.

Let's analyze the Sergio J. Rey model, which was developed through integrated regional econometric modeling + input-output.

Related to the choice of data and estimation method is the role of inference in the integrated EC+IO model. There are a number of challenges that arise when integrating a deterministic I/O model with a stochastic EC model within the same framework. It turns out that the well-structured logical framework of the EC model cannot be easily translated into an integrated model.

In the coupled model, some elements of final demand are endogenous, for example by adjusting the econometric equation for total personal consumption:

$$C = Zc\beta c + \beta VA + VA + \epsilon, \tag{6}$$

Total consumption is then disaggregated to the industry level using fixed shares:

$$C_i = h_{Ci} C$$

где  $\sum_{i=1}^n h_{Ci} = 1$  / In addition, the added value is obtained in the form:

$$VA = i^v \in X$$

where  $\hat{v}$  is a diagonal matrix of value added coefficients, and  $i$  is a unit  $n \times 1$  vector. Combining these equations results in:

$$X = AX + hc(ZC\beta C + \beta VAVA + \epsilon) + hF^v \hat{F}$$

where  $hc$  is a vector of consumption distribution coefficients  $n$  by  $1$ ,  $hF^v$  is an  $n$  by matrix of fractional coefficients  $m - 1$  associated with elements not related to consumption from final demand and:

$$F = \begin{pmatrix} I & 0 & 0 \\ 0 & G & 0 \\ 0 & 0 & NE \end{pmatrix}$$

This structural equation is further modified by taking into account the relationship between value added and industrial output from:

$$X = AX + hcZC\beta C + \beta V A i \hat{V} X + \epsilon + h_F \hat{F}$$

The reduced form for this system is:

$$X = \Gamma^{-1} hcZc\beta C + h_F \hat{F} + \Gamma^{-1} hc\epsilon, \quad (7)$$

$$\text{где } \Gamma^{-1} = I - A - hc\beta_{VAi} \hat{V}^{-1}$$

It is assumed that the integrated multiplier matrix  $[\Gamma]^{-1}$  creates certain difficulties with logical inference. First, even if it were possible to obtain unbiased estimates of  $\beta_{VA}$ , their use would not guarantee an unbiased estimate of the factor matrix. This is due to a non-linear function that is known to be such. The second difficulty relates to the expected value of the third element, which in general will not be zero even if  $e[\theta] = 0$ . This is due to the stochastic elements of  $\gamma$ . As a result of these complexities, estimates of policy multipliers for exogenous variables  $zc$  are likely to be biased, as are estimates of gross industrial product  $x$ .

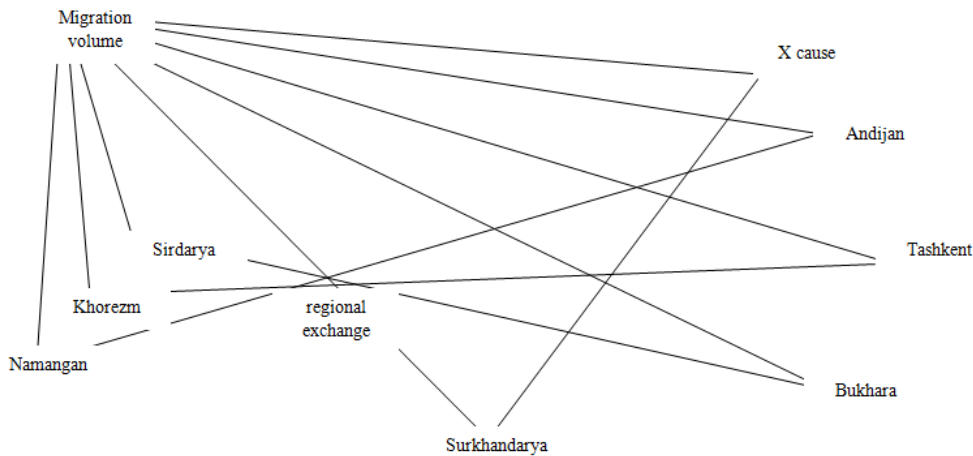
As a result, standard impact analysis methods using a stand-alone input-output model or an economic cycle (ec) model cannot be directly applied to an integrated ec+io model. Although I/O models are deterministic, their integration with the stochastic ec model results in the stochastic ec+io model. On the other hand, when using ec models for impact analysis, the unbiased property is usually preserved, making it easier to develop confidence intervals for impact estimates. However, in the case of the ec+io model, this unbiased property cannot be relied upon.

To exploit the logical capabilities of integrated ec+io models, alternative approaches must be considered. There are two general possibilities. The first is to use asymptotics to obtain analytical results that can serve as a basis for developing confidence intervals. However, this approach can be difficult to implement in practice due to the nonlinearity of the formula and the issue of the relevance of large sample results in the limited sample situations faced by regional modelers. A second alternative approach could be based on a resampling strategy such as bootstrap or stochastic modeling. These approaches generate artificial sampling distributions for  $\beta c$  and/or  $\theta$  based on their estimated variance-covariance matrices and estimated parametric densities. Sample distributions for industry outcomes  $x$  are then generated using realizations from these distributions. These distributions can be analyzed to construct empirical confidence intervals for the estimated impacts and predictions obtained from the integrated model.

Let's consider a model for assessing the level of socio-economic development of a region through cognitive modeling by M.S. Rakitina. The author compiled cognitive models and maps. Cognitive models and maps represent a signed oriented graph (digraph)  $g = v, e$ , where  $v$  is a set of vertices, and the vertices ("concepts")  $v_i, i = 1, 2, \dots, k$  are elements of the system being studied.  $E$  is a set of arcs, and arcs  $e_{ij}, i, j = 1, 2, \dots, n$  reflect the relationship between vertices  $v_i$  and  $v_j$ . The influence of  $v_i$  on  $v_j$  in the situation under study can be positive (a "+" sign above the arc), when an increase (decrease) in one factor leads to an increase (decrease) in another, negative (a "-" sign above the arc or dotted line), when an increase (decrease) of one factor leads to a decrease (increase) of another, or may simply be absent.

Figure 1 shows an enlarged cognitive map of interregional exchange. A cognitive map is a graphical representation of concepts and their relationships. It helps to understand and model complex systems by identifying the internal and external factors that influence them. Building a clear cognitive map requires

Careful analysis and evaluation of various aspects of the problem, as well as an understanding of the relationships between them.



**Fig. 1. Enlarged cognitive map of interregional exchange goods and resources**

The use of a cognitive map in modeling semi-structured problems of complex systems allows us to improve our understanding of these problems and develop strategies for solving them. It helps to see the relationships between different aspects of a problem, identify key factors and establish logical connections between them. This approach allows you to effectively model and analyze complex systems and propose solutions based on the data obtained. In the field of constructing cognitive maps for modeling semi-structured problems of complex systems, my expertise allows me to develop in-depth studies that will help a company or organization improve processes and increase efficiency.

This was done for the purpose of researching and predicting the situation that may arise in the event of a force majeure situation. To determine the initial values by level of socio-economic development, an expert survey was conducted. Experts assessed the level of regional development based on statistical material on key development indicators. This approach makes it possible to apply the developed cognitive models when studying any territories and regions. The level of socio-economic development in the models includes such groups of indicators as demographic (population, natural growth, economically active population, etc.), economic (gross regional product, industrial production indices, consumer price indices) and quality of life indicators (average per capita income of the population, cost of living, unemployment rate, etc.). Indicators of interregional exchange are determined based on an analysis of the dynamics of import and export of food and technical goods, as well as the volume of wholesale trade turnover. Cognitive modeling allows for a comprehensive analysis of the influence of interregional exchange on the level of development of the regions of the study area. The resulting scenarios can serve as the basis for developing measures to improve regional policies for regional development.

Next, we will consider an econometric approach to measuring cognitive factors of regional economic growth by E.I.Kadochnikova. In this study, the author proposed a method of combinational grouping of elements of a statistical set using an average value. This method involves dividing the population into groups according to factors of direct action and into subgroups according to factors of reverse action on the performance indicator under study. The specificity of the multidimensional grouping method proposed in the study is the presentation of the effective efficiency indicator as a statistical function of the average ratios (pij) of production factors. The author of this study substantiated this specificity using correlation and regression methods of analysis. In a further study, the following regression equation was proposed:

$$y = a + a \frac{\sum x_{ij}}{(\sum x_{ij})x_j}, \tag{8}$$

To determine the regression parameters, a modified classical system of normal equations was used:

$$\begin{cases} na_0 + a_1 \sum \frac{x_{ij}}{x_j} = \sum Y \\ a_0 \sum \frac{x_{ij}}{x_j} + a_1 \sum (\frac{x_{ij}}{x_j})^2 = \sum Y a_1 \sum \frac{x_{ij}}{x_j} \end{cases} \tag{9}$$

$$a_0 = \bar{Y} - ja_1$$

where y is the performance indicator being studied,

x<sub>ij</sub> are production factors, a<sub>0</sub> and a<sub>1</sub> are regression parameters.

By replacing the expression in the second equation of the system, we obtain:

$$(y - ja)\sum x_{ij} + a \sum (x_{ij})^2 = \sum y \sum x_{ij}$$

From this equation the parameter a<sub>1</sub> can be expressed as follows:

$$a_1 = (\sum y \sum x_{ij} - \sum (x_{ij})y) / (\sum (x_{ij})^2 - 2(\sum x_{ij})^2).$$

After a series of transformations we get:

$$a_1 = (\sum r_{yx}jvx_j) / (\sum vx_j^2 + 2(\sum rx_jvx_j))$$

One problem faced by almost every large city is traffic congestion

What do you think are the causes of this

What solutions can you suggest

$$a_1 = (\sum r_{yx}1vx_1 + \sum r_{yx}2vx_2 + \sum r_{yx}3vx_3) / (\sum v_1x_1 + \sum v_2x_2 + \sum v_3x_3 + 2(\sum r_{1x_1})(\sum v_2x_2) + 2(\sum r_{1x_1})(\sum v_3x_3) + 2(\sum r_{2x_2})(\sum v_3x_3)), \tag{10}$$

The study proved the possibility of studying relationships by combinational grouping using the p<sub>ij</sub> model for any number of factors (n). Subsequently, the author used panel data, resulting in the following model:

$$Y_{it} = X_{it}\beta + \alpha_i + \gamma_i + \varepsilon_{it}, \tag{11}$$

The author proposes multivariate groupings that are applied on average and a panel data model with fixed effects. The advantage of this model is that it shows the effectiveness of tools for differentiating innovative processes of regional development; cognitive factors of regional economic growth are also highlighted. The disadvantage is that the model is standard and it does not accurately measure all processes of regional economic development and does not take into account regional risks.

We will also consider the econometric model of Ivanov I.A. and Ignatieva M.V. This model shows the effectiveness of the industrial sector, its impact on the regional economy; this sector is a factor component that is of great importance for the socio-economic development of the region. The model is based on the Cobb-Douglas multiplicative model.

A production function is given that characterizes the dependence of the volume of production on the volume of resources:

$$Y = f(r_1, r_2, r_3, \dots, r_n), \quad (12)$$

The authors take labor costs in the form of the average annual number of employees and costs of fixed assets as resources. The Cobb-Douglas production function would look like this:

$$Y = AK^{a_1}L^{a_2}e^{rt+e}, \quad (13)$$

where A is the coefficient of neutral technical progress;

$a_1$ - elasticity coefficients of capital and labor resources;

$t$  – time;

$r$  - rate of increase in output due to technical progress/

“To interpret the parameters, it is necessary to introduce the concept of elasticities as logarithmic derivatives of factors, that is,  $\varepsilon_1$  is the elasticity of output from the costs of fixed assets, and  $\varepsilon_2$  is the elasticity of output from labor costs. The production function can also be used to express the scale and efficiency of production. If  $\varepsilon_1 + \varepsilon_2 > 1$ , then output grows faster than the average growth of factors, that is, average costs decrease as the scale of production increases. If  $\varepsilon_1 + \varepsilon_2 < 1$ , then output grows more slowly than the factor average, that is, average shares calculated per 1 unit of output, assumptions, and there is a diminishing effect of scale of production. If  $\varepsilon_1 + \varepsilon_2 = 1$ , then the level of efficiency does not depend on the scale of production.”

This model shows that the socio-economic development of the region depends on the production factor, on the employment of the population in production, on the release of the regional product. The advantage of the model is its simplicity in calculations. The disadvantage is the low information base for calculations.

## Conclusions

Thus, this study examines five models for assessing the results of cognitive and econometric modeling of socio-economic development of regions of various authors: the model of Tobias Eibinger, Beate Deixelberger, Hans Manner, which shows the levels of factors influencing economic sustainability. The

authors' main model development is based on IPAT identification. But, this model with a non-constant element may give incorrect results when using some estimation methods. Therefore, for this purpose, the most appropriate is the use of structural-statistical temporal models (STSM), which allow us to consider interception as varying over time. The next model is the Sergio J. Rey model, which is developed through integrated regional econometric modeling + input-output modeling. Related to the choice of data and estimation method is the role of inference in the integrated EC+IO model. To exploit the logical capabilities of integrated ec+io models, alternative approaches must be considered. An advantage of the model is that ec models are generally unbiased when used for impact analysis, making it easier to develop confidence intervals for impact estimates. However, in the case of the ec+io model, this unbiased property cannot be relied upon. The third development is the model of M.S. Rakitina. The author compiled cognitive models and maps. Cognitive models and maps represent a signed oriented graph (digraph)  $g = v, e$ , where  $v$  is a set of vertices, and the vertices ("concepts")  $v_i, i = 1, 2, \dots, k$  are elements of the system being studied. The use of a cognitive map in modeling semi-structured problems of complex systems allows us to improve our understanding of these problems and develop strategies for solving them; it helps us see the relationships between various aspects of the problem, identify key factors and establish logical connections between them. This approach allows you to effectively model and analyze complex systems and propose solutions based on the data obtained. Next, we consider the econometric approach to measuring the cognitive factors of regional economic growth by E.I. Kadochnikova. In this study, the author proposed a method of combinational grouping of elements of a statistical set using an average value. The advantage of this model is that it shows the effectiveness of tools for differentiating innovative processes of regional development; cognitive factors of regional economic growth are also highlighted. The disadvantage is that the model is standard and it does not accurately measure all processes of regional economic development and does not take into account regional risks. The econometric model of Ivanov I.A. is also considered. and Ignatieva M.V. This model shows the effectiveness of the industrial sector, its influence on the economy of the region, this sector is a factor component that is of great importance for the socio-economic development of the region, we also note that the socio-economic development of the region depends on the production factor, on employment in production, from the release of a regional product. The advantage of the model is its simplicity in calculations. The disadvantage is the low information base for calculations.

## References

- Safiullin M. R. *On the assessment of business and economic activity of the region* / M. R. Safiullin, L. A. Elshin, A. I. Shakirova. – Moscow: Economics, 2011. – 111 p.
- Samuelson P. *Economics*. – M., 1964.
- Salikhov B.V. *Economic theory [Electronic resource]: – Electron. Text data*. – M.: Dashkov and K, 2014. – 724 p.
- Goodwin R. *Growth cycle // Socialism, Capitalism, and Economic Growth*, Cambridge, 1967.p. 54-58
- Nelson Charles R., Plosser Charles I. *Trends and Random Walks in Macro-economic Time Series: Some Evidence and Implications // Journal of Monetary Economics*. 1982. Vol.10.
- Kydland, Finn and Edward Prescott, "Time to Build and Aggregate Fluctuations," *Econometrica* 50, November 1982, 1345-1370; Prescott, Edward, "Theory Ahead of Business-Cycle Measurement," *Carnegie-Rochester Series on Public Policy* 25, Autumn 1986, 11-44.
- Friedman, Milton, *A Theory of the Consumption Function* (Princeton: Princeton University Press, 1957)

- Modigliani, Franco and Richard Brumberg, "Utility Analysis and the Consumption Function: An Interpretation of Cross-Sectional Data," in K. K. Kurihara, *Post-Keynesian Economics*, 388-436 (New Brunswick: Rutgers University Press, 1954)
- Lucas, Robert E., "Econometric Policy Evaluation: A Critique," *Carnegie-Rochester Series on Public Policy* 1 (1976)
- Jevons William Stanley. *Money and the mechanism of exchange / William Stanley Jevons - Electron. Text data.* – Chelyabinsk: Socium, 2005. – 188 p.
- Pigou A. *Economic theory of welfare. In 2 volumes. T. 1.* – M., 1985. – 101 p.
- Lucas, Robert E., "Econometric Policy Evaluation: A Critique," *Carnegie-Rochester Series on Public Policy* 1 (1976)
- Glazyev S. Yu. *Patterns of technical and economic development and their use in managing the national economy: Dissertation for the degree of Doctor of Economic Sciences.*
- Kondratiev N. D. *Large cycles of economic conditions.* – 1925.
- Zhuravleva G. P. *Economic theory. Microeconomics-1, 2 [Electronic resource] / G. P. Zhuravleva [and others]. - Electron. Text data.* – M.: Dashkov and K, 2014.— 934 p.
- Kondratyev N. D. *Large cycles of economic conditions.* – 1925.
- Tobias Eibinger, BeateDeixelberger, Hans Manner. *Panel data in environmental economics: Econometric issues and applications to IPAT models / Journal of Environmental Economics and Management* 125 (2024) 102941
- <https://doi.org/10.1016/j.jeem.2024.102941>
- Jeyhun I. Mikayilov, Ryan Alyamani, AbdulelahDarandary, Muhammad Javid, Fakhri J. Hasanov. *Modeling and forecasting industrial electricity demand for Saudi Arabia: Uncovering regional characteristics / The Electricity Journal* 36 (2023) 107331. <https://doi.org/10.1016/j.tej.2023.107331>
- Sergio J. Rey. *Integrated regional econometric+input-output modeling: Issues and opportunities / Papers Reg. Sci.* 79, 271–292 (2000)
- Rakitina M.S. *Cognitive modeling of interregional resource exchange / Postgraduate student of the Department of State and Municipal Administration of the Taganrog Technological Institute of the Southern Federal University. UDC* 338-001.57. BBK 65.01:65v6+65.9.
- Kadochnikova E.I. *Econometric approach to measuring cognitive factors of regional economic growth / Economics and Law.* – 2015. - No. 1. – P. 72-78.
- Ivanova I.A., Ignatieva M.V. *Econometric modeling as a tool for regulating the sustainability of the industrial sector of the regional economy / Modern problems of science and education.* – 2014. – No. 6. – P. 1-8.

# ESSENCE OF INDEPENDENT TOURISM AND POSSIBILITIES OF DEVELOPMENT BASED ON INTERNATIONAL EXPERIENCE IN THE REPUBLIC OF UZBEKISTAN

Kamol Sharifovich Yuldashev<sup>1</sup>

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## ABSTRACT

*The article describes and studies the segment of tourists who prefer self-organized travel planning, its development level and scientific hypotheses about how it will lead to changes in the field of tourism in the future. The English terms which are related to independent tourism are categorized and explained, and the needs of individual tourists are classified. Economic and social benefits will result from the development of independent tourism in the Republic of Uzbekistan.*

**Key words:** *Independent Tourism, Independent Travel, Travel Planning, Independent Decision-Making, Amateur Tourism, Organized Tourism, Online Reservation Systems.*

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## Introduction

In the post-pandemic period, it is critical to organize and promote tourism destinations in order to promote the country's tourism industry. There is a steady growth trend in the number of tourists who independently plan travel on a global scale. Travelers prefer to arrange their trips independently rather than choosing an organized tourist product. It is time to increase the diversity and attractiveness of the tourism industry in Uzbekistan. Also, it is time to improve the quality of services in tourist areas. This will increase the opportunities for direct booking and purchase of the services of tourist organizations operating in the field of tourism. In this new segment, the President of Uzbekistan emphasized the term independent tourism in the newly adopted tourism law of the Republic of Uzbekistan. This law has given the No. 549 dated 18.07.2019, Article 3, Basic Concepts. It states that independent tourism is a trip organized independently by tourists without the participation of tour operators and travel agents [1]. At the next stage of development, such an approach leads to the development of all organizations operating in the field of tourism, the development of the infrastructure necessary for an independent traveler, the increase in the volume of direct online sales, the development of small organizations in the field of tourism, and ensuring a sustainable flow of tourists by eliminating low season.

Nowadays, the use of web pages is increasing day by day. According to researchers, in 2021, almost 70% of the young generation will use the Internet almost 24 hours a day. People in this category often use various services offered by websites. This shows that the trend of the industry to move to a virtual environment continues. In addition, the segment of independent travelers is considered a digital tourism category. Therefore, this terminology has scientific and practical importance [2].

Due to this, in order to diversify tourism services in the country, it is time to introduce supplementary services. By establishing an infrastructure in remote areas of the country, places with tourism potential, we can take the weak types of tourism to a new level. For example, demand for tourism will increase such as

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eco-tourism, extreme tourism, agro tourism. Independent travelers gather information about each service individually and create their own itineraries. It encourages them to sell their services directly to all tourist organizations in our country and forces them to provide more information about their services. It forms a healthy competition between tourist organizations and leads to a sharp change in the quality of services.

## **LITERATURE REVIEW**

Foreign scientists who conducted research on this topic contributed and studied many elements. One of them is Kenneth F. Hyde, a scientist from New Zealand. His study investigated the level of travel planning by independent travelers, the extent to which travel plans are implemented, and the temporal sequence of leisure element selection [3].

Scientists Loker-Murphy, L, and P. L. Pearce from Australia reviewed the origin of the budget traveler form and proposed a modern definition of the term backpacker which focuses on budget accommodations, meeting different people, arranging independently and exploring flexible travel schedules and long vacations instead of short ones [4].

Juan Luis Nicolau, one of the Spanish scientists, conducted research on the independent choice of different new destinations by travelers. He also examined how ready they are for this type of travel. From this point of view, this study analyzed the moderating role of the desire for variety and behavior under the influence of "distance" characteristics in the choice of tourist destinations.

CIS scientists O. Sutirina, S. Domracheva, N. Akhotina and Y. Pavlova conducted research on the role of information and communication technologies in the development of sustainable independent tourism. In their opinion, it was the rapid development of information technologies that pushed the trend of independent tourism to a new level [5].

One of the scientists from Uzbekistan, N. Ibragimov, in his monograph "Priorities"Primary directions for sustainable development of the tourist area", scientifically substantiated the theoretical aspects of increasing the attractiveness of the tourist area of Uzbekistan from the point of view of independent organized tourists. It proved the existence of 1) initiative tour operators, 2) receptive tour operators, 3) service reservation and booking systems, 4) national and local tourism portals, 5) local travel agent models of tourist flow formation. If the flow of tourists formed through initiative and receptive tour operators is included among organized tourists, those formed through reservation systems, national and local tourism portals and local travel agents are independent group tourists [6].

## **Research methodology**

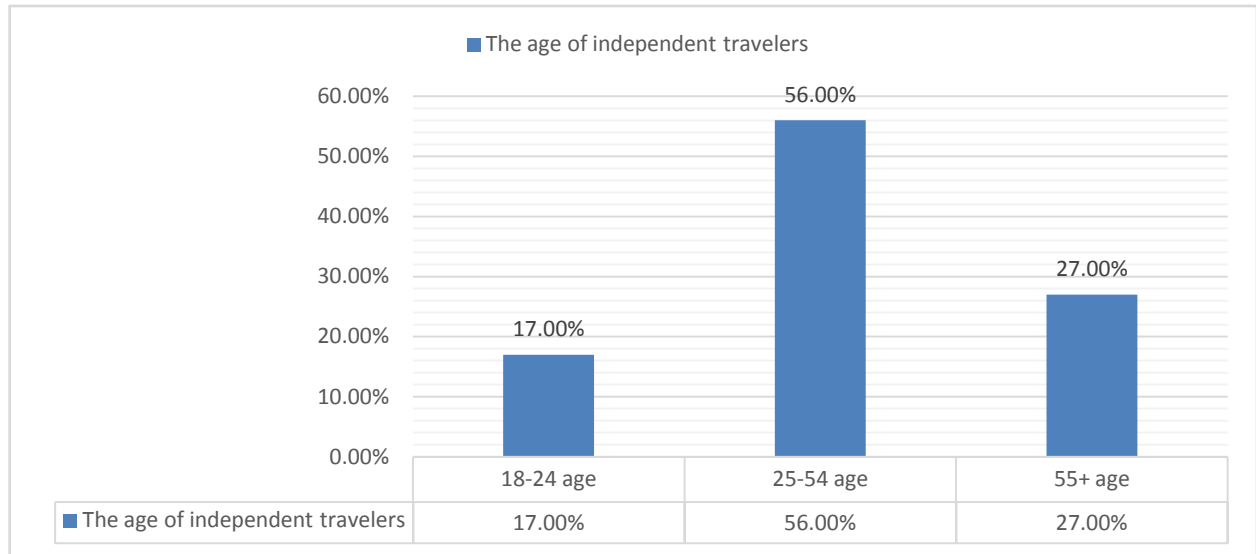
During the research, scientific studies were analyzed on international and national experiences of the development of independent tourism. In the process of creating the article, we used scientific-theoretical, observation and selection, empirical observation methods. Foreign statistical official sources and BJTT official sources explained the reliability of the research results.

## **Analysis and results**

In the tourism industry, a tour product is defined as the pre-booking by tour operators of air tickets and hotels or other services consumed by travelers during the tour. Such travelers are considered to have purchased the tour product in advance. All independent travelers belong to the traveler category, but do not purchase tourism products. Their air tickets and hotel services are not booked through intermediaries. Even

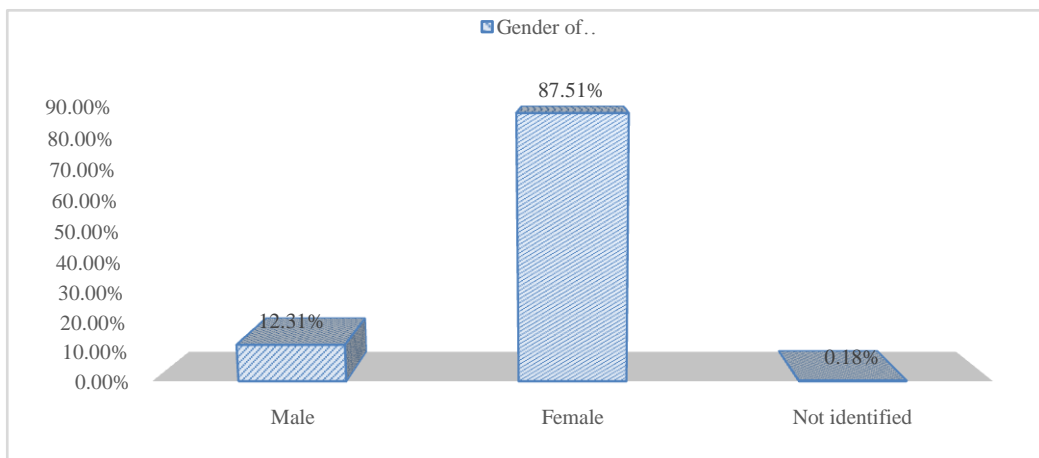
if only air and railway tickets are booked through tour operators, such travelers are considered independent travelers. Travelers who book hotels and other travel services on the Internet are also called independent travelers.

Independent travelers also have their own segmentation by age category. According to Solo Travel Statistics, middle-aged tourists are more likely to travel alone. Another thing to note is that this survey was conducted through newspapers and magazines only in English-speaking countries. This is shown in the figure below (Figure 1).



**Figure 1. The age of independent tourists is expressed in age %**

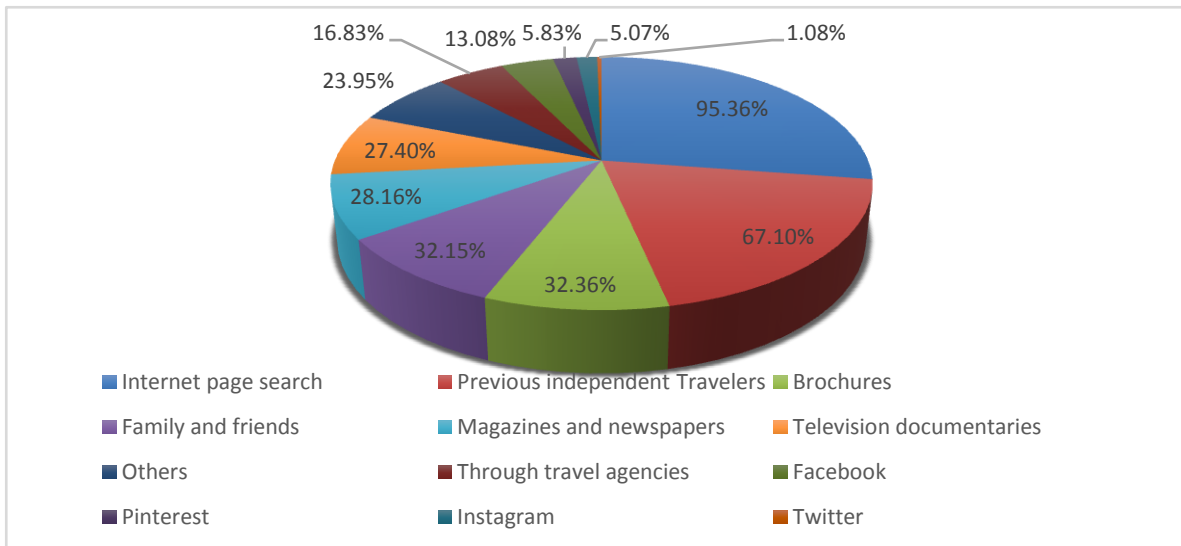
The statistics above show that the majority of independent travelers are young people, that is, they belong to the 24-55 age category, and they make up 56%. The second age category includes seniors over 55 years old, and about 17% are teenagers aged 18-24 years. Solo Travel Trends provides statistical data on solo travel around the world by gender. They are shown in the figure below (Figure 2).



**Figure 2. The gender of independent tourists is reflected**

According to their gender, women fall into the category of women when traveling alone. Other Internet research sites have also confirmed that women travel independently more than men. In 2016, according to VBT Bicycling and Walking Vacations, about 68% of female customers visited alone [7].

Independent travelers use a variety of tools to plan their trips. Currently, taking into account the development of the information infrastructure, tourists first of all turn to human websites in order to book tourist services. Some try to get the necessary information from family members and close friends. Solo Travel Trend, conducted the following surveys for a magazine that provides statistical information on independent travelers throughout the year. These are shown in the picture below.



**Figure 3. List of infrastructures that independent travelers refer to when planning a trip**

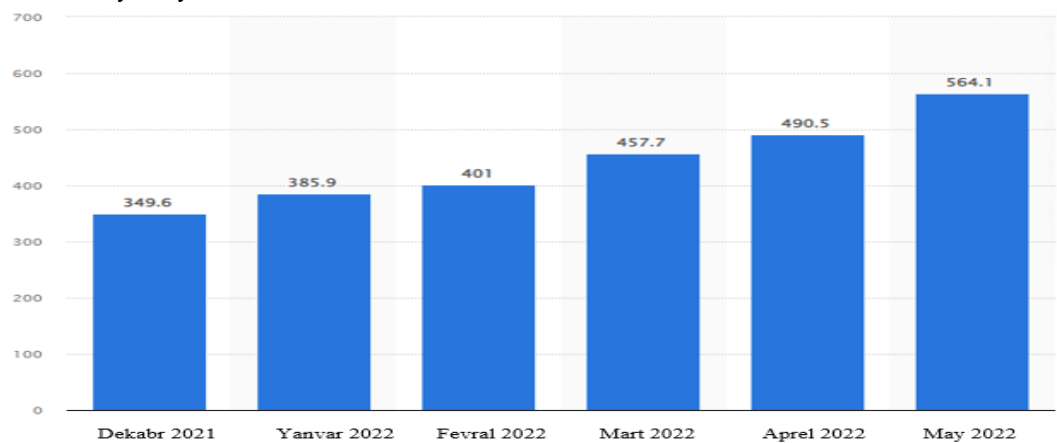
How independent travelers can get information about the destination at the initial stage of drawing up a route and what kind of information they use is explained on the basis of a questionnaire. To begin with, independent travelers search for all services during the trip on the Internet.

In recent years, due to the development of Internet resources, the demand is growing for independent tourism, and this market segment is developing further. Due to the development of modern technologies, tourism is evolving and less dependent on tourist companies. In recent years, while the whole world is moving to a digital economy, the development of various electronic booking platforms has opened up significant opportunities in the tourism sector. This has allowed travelers to independently create their own travel programs. These include:

Booking.com, Expedia, TripAdvisor, Uber, Airbnb, Agoda, Hostelworld and others. Through these platforms, all tourist organizations can register their services, establish direct contact with travelers and make sales. These platforms provide great opportunities for independent travelers to organize their own trips. Tourism organizations have also led to an increase in service sales without intermediaries.

Almost every traveler can book accommodation from anywhere in the world on the world-famous Booking.com platform. Because independent travelers use this platform to find hotels when planning their

route. According to statistics provided by Booking.com, in December 2021, 349.6 million people visited this website, and by May 2022, their number reached 564.1 million, an increase of 241.5 million.



**Figure 4. Total number of booking.com travel and tourism visitors worldwide from December 2021 to May 2022**

In May 2022, Booking.com, the world's largest travel and tourism website, was used by 564 million people. It plays a great importance in the organization of directions.

The theoretical and scientific terms of the concept of an independent traveler were initially defined in English literature. These terms are reflected in foreign literature in different ways. In Italy, independent travelers are called solo travelers, but in English-speaking countries it is interpreted differently.

The following terms are used in scientific communication at the international level related to independent tourism:

The term FIT stands for "free independent travel".

- DIYT is also called "do it yourself travel" [8].

"Independence means "freedom". Independent travelers take a flexible approach to travel. This concept is used in a broad sense for all people who refuse mass tourism, that is, package holidays. Psychologically, independent travelers see themselves as free-wheelers compared to travelers who favor mass tourism. The main difference between FIT tourists and others is that they constantly share their knowledge and experiences with other travelers. As a result, such tour itineraries are developed with the help of advice from various forums. In this case, individual tourists are responsible for all parts of the tour itinerary, just like tour operators. There are special clubs for solo travelers. Usually, travelers share their impressions and experiences during the trip.

**There are three categories of service needs in trip planning**

<b>Pre-travel needs</b>	<b>Necessities during the trip</b>	<b>Post-Travel Needs</b>
Figuring out where to go	Transportation	Evaluation of services used
Determine the duration of the trip	Dining areas	Reasoning
Determining whether to travel alone or with a partner	Washrooms	Make recommendations
Study of costs (booking air tickets, hotel meals, transport services in advance)	Small hotels for a short stay	Share your experiences
Fundraiser for the trip	Pharmacies	Join the Independent Travelers Club
	Carrying out financial transactions (exchange, Visa, Master Card)	Write down the shortcomings of the trip
	Shops selling food and clothes	
	Gas stations and electric mobile charging stations	
	Railway and air ticket sales offices	

**Figure 5. The basic needs of the independent traveler**

This table covers the needs in the planning stages of a trip, the needs that come up during the trip, and the needs that come up after the trip. Organizing a trip in a complete and safe manner requires consideration of all three factors. Because every detail is significant during the trip. First of all, it is necessary to determine in advance the destination of the trip and its duration. This is because these two main factors lead to the determination of expenses for the trip. Based on the economic situation of the destination, future expenses can be determined. Air tickets, hotels, transportation, and food prices are factored into the

traveler's decision to reach this destination, and on this basis, sufficient funds are collected from the traveler. A solo traveler should take these factors into account when making an independent trip.

Independent travelers often prefer to travel alone or in small groups. They are opposed to travelers who welcome mass tourism. Eastern European markets are mostly adapted to mass tourism, while independent travel is developing in Western Europe and Scandinavian countries. Such travelers prefer to have more unique experiences.

During the research into English literature and internet pages, it was found that there are different definitions of independent tourism. The most common terms related to independent tourism are presented in Figure 4. The table also breaks down the most common uses of the terms geographically. In foreign literature, tourists are divided into different groups based on the method of travel organization and economic behavior factors.

The following conclusions were reached as a result of the independent tourism category research. Each of these terms has different meanings at the international level, and each of these terms has developed in different regions [9].

#### **By financial importance:**

- Backpacking is a type of budget travel. This type of travel is often carried out by independent and young travelers. They usually prefer to stay in cheap accommodation, travel with minimal luggage and carry everything they need in a backpack. The advantage of this type of travel is flexible, that is, the traveler has the opportunity to develop the travel route according to themselves [10].

- The term flashpacking is a relative concept to the term backpacking. This type of traveler likes to travel alone like backpackers, but is willing to invest more time in hotels, transportation, and food. Flashpackers will be in a better financial position. A flashpacker is an independent traveler with spending money. Flashpackers also travel independently with one backpack, on a budget, but spend more on better amenities during the tour [11].

- Poshpacking prefers to use the same high-level services as flashpackers, but they put more emphasis on the design, condition and uniqueness of the product. For example, the appearance of the hotel, the cleanliness of the rooms and bathrooms, the comfort of the vehicles and even the cleanliness of the items in the dining areas are considered very significant factors for them [12].

- Budget tourism means a budget traveler is usually a person who travels by finding cheap air tickets, accommodation, eating cheap food (for example, street food) and cheap tourist places. Budget travelers differ from backpackers in that they can move without a backpack or travel for a certain period through tour operators.

- Begpacking is an example of poor tourism and a type of backpacking trip. This term is used for those who travel between countries in exchange for begging. Travelers of this type use 3 main methods of begging. Their first tactic is to sit in crowded places and beg with a piece of paper to pay for their travel. Their second tactic is to board local buses and ask someone with the same note or a musical instrument to help them. Travelers can earn money by playing music on the streets, and thirdly, by selling products or services, such as handmade art, jewelry, or handicrafts [13].

**By profession:**

Student travel - Travels independently organized by students for the purpose of studying, with the expenses covered by the student's family. Unlike usual trips, student travel is a way for students to learn about other cultures, gain unusual life experience and study the educational system of other countries. This includes work experience [14].

- Explorer – Researcher-traveler. A person who usually conducts geographical or scientific research explores areas that are not usually visited by tourists.

- A drifter is a wanderer, abandoning the usual way of life, often moving from one place to another, absorbing local traditions, traveling on his own. Drifters are independent travelers who do not have a specific destination, but constantly change their place of residence [15].

**According to the form of organization:**

- Unorganized tourism is a type of independent tourism, similar to drifter travelers, but it is a type of travel that has a clear direction and purpose, but no services are booked in advance. Such travelers are also called risk-takers.

- Self-organized tourism is a self-organized trip. Such travelers pre-determine their destinations and book all basic services (air ticket, hotel, transportation, meals, and interpreter) in advance [16].

- Semi-organized tourism - a semi-organized trip, in which the traveler organizes his trip himself, but buys some services through tourist companies, for example, booking a hotel in advance [17].

- Do-It-Yourself travel planning and execution of the trip is organized only by the traveler. They choose the travel direction independently and want to do and see what they want during the trip, including the choice of accommodation and food [18].

A self-guided tour is a tour that the traveler guides themselves, that is, the traveler moves independently from one direction to another. In this, the traveler uses a personalized audio tour or audio guide to the sights. These special devices determine the direction, time and information of travel. Many attractions now have their own app, map, directions, and special devices. Audio tours are often presented in a self-guided tour format using booklets, smartphones, or stand-alone handheld devices, such as virtual tours [19].

**Based on the mode of transport:**

- Caravanning is a specialized form of caravan tourism in which it serves the dual purpose of providing a means of transport as well as accommodation. Such vehicles can be immovable and located in parking lots, or they can be mobile from one place to another, tied to one vehicle. Currently, this form of tourism is classified as accommodation on wheels, and travel is mainly carried out in campers [20].

Traveling by hitchhiking is one of the cheapest ways to travel. Traditionally, hitchhiking is defined as passengers standing on the side of the road, against traffic, with a thumbs up to call for traffic to stop. It is a form of transportation that can be obtained by asking passengers, usually strangers, for a ride in their car or another vehicle [21].

- Megaloping is traveling by public transport only. This mainly means that independent travelers use local transport, i.e. trains, local buses and taxis [22].

- New Age tourism travelers are members of various movements. The main purpose of this movement is to learn about the customs, lifestyle, religion and people of other countries as a group. Members of the New Age movement move from place to place in groups and spend the night in cars [23].

#### **According to the category of individual tourism:**

FITs are travelers who always plan their own trips. They refuse to travel in groups, to follow routes planned by others. In some cases, they use the help of travel agents [24].

- Group inclusive tourism (GIT) is a trip organized in groups of more than 5 people with the help of a travel agency. A GIT is usually a type of trip organized by at least 10 people with a single goal and going to the same destination. All services are provided by tour operators or sometimes guides.

- An open trip is a group excursion organized by a travel agency for an unfamiliar group. The members of the group will not be known in advance. The lineup is announced in advance and the group members are formed one by one. The number of this group is unknown, and the members of the group may be complete strangers to each other.

#### **Conclusions and suggestions**

The following conclusions were reached as a result of the research into the category of independent tourism. These terms are most often found in English literature. All of them belong to the category of independent tourism. The basis of these categories is the organization and implementation of travel independently. Therefore, these terms are often used in countries with a stable economy and tourist flow. Most of these terms are new to Uzbekistan.

Independent travelers prefer to create their own trips rather than traveling with group travelers [29].

Independent travelers travel alone, in pairs or with a small group of people. Their goal is to follow the path they choose, explore the things they want to see, and thus have their own unique travel experiences. By planning their own trips, they can travel independently without being tied to a group [30].

Nowadays, social media gives travelers better access to research their complete travel information. They also get travel information from photos, videos, stories and online reviews. The Internet has become the most convenient place for independent travelers to obtain travel information. This means that tourism service organizations are always connected online so that independent travelers can find the services they need.

According to the above terms, independent travelers prefer cheap tours, but other independent travelers, such as flashpackers and poshpackers, choose high-quality services and spend a lot of money during the trip. We can list various reasons that encourage a traveler to travel alone. For example, a travel company may have a different outlook than solo travellers, even if they are in the same financial situation. Food that one person likes may not be liked by the second person; one person prefers light hotel rooms, while the other prefers dark rooms; one person prefers a soft bed, while the companion likes a stiff one. There are hundreds of reasons for this. So, in conclusion, the main reason for independent travel depends on the character, nature, lifestyle and interest of the travelers.

International experts predict that after the pandemic, tourists will travel independently more often. For this reason, in order to increase the number of independent travelers in Uzbekistan, it is necessary to organize tours that attract more independent tourists. A large percentage of independent travelers are young



people. They are more interested in such types of tourism as extreme, religious, agro, cultural, golf, cruises, caravan parks, inter-country travel in private cars. Almost all of the above-mentioned types of tourism can be implemented in our country. The following proposals were developed based on this:

1. Look for ways to further improve the infrastructure of accommodations suitable for this market segment. Establish guest houses, private houses for rent, roadside motels. Because independent travelers are often looking for cheap accommodation and the length of their trip is always changing.

2. Organize information centers at airports and railway stations. All information on accommodation, transportation, dining options, facilities, translators, local transportation, rental vehicles, cheap accommodations for rent, mountain and desert deserts upon arrival. Must have information. Creating conditions for free internet access for 10 minutes at airports and railway stations. The most significant thing is that the employees of the airport and the railway can communicate at least in Russian and English. Because independent travelers are those who travel alone without using the services of an interpreter.

3. Ensuring security. Someone who intends to travel alone will first determine the level of safety at the destination. In this regard, according to the information provided by the Solo Travel Safety Report - 2019, our country took 5th place after Singapore, Norway, Ireland, and Finland [31]. Based on the fact that 84% of independent travelers around the world are women, it is necessary to ensure their safe and free travel.

## REFERENCES

- *O'zbekiston Respublikasi Qonuni, 18.07.2019 yildagi O'RQ-549-son, Turizm to'g'risidagi qonun,3-modda, Asosiy tushunchalar.*
- *Oborin Matvey Sergeevich, razvitiesamostoyatelnogoturizmakakaktualnayatendendiyasprosa, servis plus nauchnyy zurnal,2022, 16(1), 15—24. (file:///C:/Users/User/Downloads/razvitie-samostoyatelnogo-turizma-kak-aktualnaya-tendentsiya-sprosa.pdf).*
- *Kenneth, Auckland University of Technology. The Nature of Independent Travel August 2013, Journal of Travel Research 42(1):13-23. (https://www.researchgate.net/publication/238430861).*
- *Loker-Murphy, I., and p. I. pearce (1995). "Young budget travellers: backpackers in Australia." annals of tourism research, 22 (4): 819-843.*
- *O. Sutyrina, S. Domracheva, N. Okhotina, and Y. Pavlova, Sustainable independent tourism: the role of the information and communication technologies E3S Web of Conferences 250, 04015 (2021) TRESP 2021.*
- *B.N.Navro'zzoda, N.S.Ibragimov, Turistik hudud raqobatbardoshliginingko'pdarajalimodellari, Durdonanashriyoti, Buxoro 2018, 113 bet.*
- *"More Solo Travelers Choosing Group Tours" November 24, 2021. https://www.aarp.org/travel/travel-tips/safety/info-2021/solo-group-tours-gain-popularity.html.*
- *A. N. Hakam, Chow-Hou Wee, Carolyn Yang, Lifestyle Segmentation of the International Tourists In book: Proceedings of the 1988 Academy of Marketing Science (AMS) Annual Conference (pp.142-146)January 2015, DOI:10.1007/978-3-319-17046-6\_28.*
- *James, Alexandra, M.S., December 2014, Using lifestyle segmentation to develop lodging packages for staycation travelers: an exploratory study with college students (105 pp.), Hospitality and Tourism Management.*

- Caprioglio O'Reilly, Camille (2006). "From Drifter to Gap Year Tourist Mainstreaming Backpacker Travel". *Annals of Tourism Research*. 33 (4): 998–1017. <https://doi.org/10.1016/j.annals.2006.04.002>.
- Dr Hayley Stainton, *the principles and practice of travel and tourism management from both an academic and practical perspective, tourism teacher*, Last updated on: 13/01/2022. <https://tourismteacher.com/flashpacking/>.
- Rosemary Neave, *women travel the world website*, November 30, 2014 , <https://womentravelblog.com/accommodation-for-women/poshpacker/>.
- Dr Hayley Stainton, *the principles and practice of travel and tourism management from both an academic and practical perspective, tourism teacher*, Last updated on: 13/01/2022. <https://tourismteacher.com/begpacking/>.
- Christoff, Janeen (July 31, 2018). "These 6 Youth Travel Trends Are Changing the Industry". *TravelPulse*.
- Gareth Hanrahan. *Core Rulebook* (Mongoose Publishing, 2008), 16.
- Milagros Fernández-Herrero, Rosa M. Hernández-Maestro & Óscar González-Benito Pages 658-668 | Published online: 10 May 2019. <https://doi.org/10.1080/10941665.2019.1614082>.
- Piero Innocenti, *Tourism Studies: The Emergence of a New Systemic Approach, Example from United States and Europe*, page 65, 2011. <https://books.google.co.uz/books?id=A1A4AwAAQBAJ&pg=PA65&lpg=PA65&dq=semi-organized+tourism&source>.
- Jamie Harper, *Do-It-Yourself Vacations | Pros and Cons of DIY Travel*, [MAY 10, 2018. https://flybytheseatofourpants.com/diy-travel/](https://flybytheseatofourpants.com/diy-travel/).
- Ed. Erin Mack Kin "Самоуправляемый прил." Новый Оксфордский американский словарь, второе издание, издательство Оксфордского университета, 2005. [https://en.wikipedia.org/wiki/Self-guided\\_tour#cite\\_note-1](https://en.wikipedia.org/wiki/Self-guided_tour#cite_note-1).
- I. Patterson, Sh. Pegg, R. Mahadevan, *The Benefits of Short Stay Caravan Travel Based on the Lived Experiences of Grey Caravanners in Australia*, November 2015, *Tourism Analysis* 20(5):539-549, DOI:10.3727/108354215X14411980111497. [https://www.researchgate.net/publication/283699818\\_The\\_Benefits\\_of\\_Short\\_Stay\\_Caravan\\_Travel\\_Based\\_on\\_the\\_Lived\\_Experiences\\_of\\_Grey\\_Caravanners\\_in\\_Australia](https://www.researchgate.net/publication/283699818_The_Benefits_of_Short_Stay_Caravan_Travel_Based_on_the_Lived_Experiences_of_Grey_Caravanners_in_Australia).
- Compagni Portis, Julian (2015). *Thumbs Down: America and the Decline of Hitchhiking* (BA thesis). Wesleyan University.
- K. Wiweka, S. S. Wachyuni, S. Prasintya Simawang, P. Adnyana, *Current Issues of Backpacking Tourism Development: Profile and Characteristics of "Sharecost" and "Opentrip" Tourist*, April 2019, *Journal of Education Society and Behavioural Science*, DOI:10.9734/jesbs/2019/v30i230124. [https://www.researchgate.net/publication/332529646\\_Current\\_Issues\\_of\\_Backpacking\\_Tourism\\_Development\\_Profile\\_and\\_Characteristics\\_of\\_Sharecost\\_and\\_Opentrip\\_Tourist](https://www.researchgate.net/publication/332529646_Current_Issues_of_Backpacking_Tourism_Development_Profile_and_Characteristics_of_Sharecost_and_Opentrip_Tourist).
- Stanciulescu Gabriela Cecilia, Elisabeta Ilona Molnar, Magdalena Bunghez, *Tourism's Changing Face: New age tourism versus old tourism*, July 2011, *Source, RePEc*. [https://www.researchgate.net/publication/227462966\\_TOURISM'S\\_CHANGING\\_FACE\\_NEW\\_AGE\\_TOURISM\\_VERSUS\\_OLD\\_TOURISM](https://www.researchgate.net/publication/227462966_TOURISM'S_CHANGING_FACE_NEW_AGE_TOURISM_VERSUS_OLD_TOURISM).
- Ana Figueroa, *FIT Travel: All About Independence*, Updated on 06/26/19. <https://www.tripsavvy.com/fit-travel-3252289>.

## WAYS TO DETERMINE THE COMPETITIVE ENVIRONMENT IN BUKHARA HOTEL SERVICES MARKET

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### ABSTRACT

*This article describes the quality of service in Bukhara hotels and the level of customer satisfaction with them. Improving service quality remains a very important issue in today's competitive hotel market. Therefore, many hotel companies are currently trying to improve the quality and types of services. Because mainly local and foreign guests who come to our region consider the quality of services provided important and want to use hotel services in good quality. Taking this into account, the questionnaire-survey method was used among foreign and local guests, and the necessary theoretical, practical and scientific proposals were given.*

**Key words:** Hotel, Service Types, Service Quality, Competitiveness, Demand, Questionnaire, Stability

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### INTRODUCTION

In recent years, the hotel business has been one of the rapidly developing service sectors in our republic. We can see these indicators in the example of Tashkent, Samarkand, Bukhara and Khorezm regions, which are tourism centers. We can list these indicators in Bukhara region alone. In this area, mainly hotel enterprises are improving the types of services based on the demand of guests and developing the quality of these services.

Based on the data of the Statistical Agency under the President of the Republic of Uzbekistan, the statistics of tourism to the Bukhara region increased significantly after the Covid pandemic. For example, a total of 48,924 foreign tourists visited Bukhara region in 2021, 552,652 foreign tourists in 2022, and 1,387,830 tourists by 2023. The number of local guests reached 2.2 million in 2021, 2.9 million in 2022, and 3.4 million in 2023. These indicators mean that the potential of tourism in Bukhara region is growing at a high rate from year to year.

According to these indicators, means of accommodations in the Bukhara region are increasing significantly. If we analyze in terms of years, in 2020 there were 372, in 2021 415, in 2022 485, and in 2023 this indicator reached 541. Based on these indicators, the number of hotels reached 155 in 2020, 163 in 2021, 184 in 2022, and 197 in 2023. It can be concluded from these indicators that we can see the trends of year-by-year growth of the hotel business with strong competition.

Along with the increase of hotel enterprises operating in Bukhara region in the last year, the competitive environment is also growing. Because after the Covid pandemic, many hotels are offering mainly price policies and mostly health-safe services.

The competitiveness of hotel services is based on external factors and the internal capabilities of the hotel, in order to provide the hotel with regular customers and to implement the ideal price policy, to provide quality and efficient service in accordance with the market demand, to achieve maximum profit with

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minimum cost and is the ability to provide hotel enterprises with commercial success by providing additional services.

## LITERATURE REVIEW

Tsai Henry, Haiyan Song, Kevin KF Wong, BogetićSrđan, Zorana Antić, Nemanja Lekić, Jean Paolo Lacap, Haiyang Xia from Western scholars, Marina V. Kobyak Elena Ilina, Aleksander N. Latkin, Aleksander M. Evstigneev, Andrey Pavlovich Kovalchuk, Ekaterina Arturovna Blinova, Konstantin Aleksandrovich Miloradov [5-6] and other scientists from CIS countries have contributed to the study of scientific theoretical and methodological issues on the importance of customer survey in determining the competitiveness of hotel services[1-4],

Many of our scientists learned theoretical, methodological and practical aspects of ensuring competitiveness in tourism and hotel enterprises from Uzbek scientists. In particular, scientists such as Khamidov Obidjon Khafizovich, Navruz-zoda Bakhtiyor Negmatovich, IbragimovNutfilloSalimovich, Jurayev AbrorTurobovich, Burkhanov AkhtamU smanovich have conducted scientific and methodological research on ensuring the competitiveness of services in the tourism and hotel industry.

## METHODOLOGY

Bukhara hotels were taken as the object of the scientific article, and research was conducted mainly through the method of observation and questionnaire. Also, methods such as complex and systematic approach, analysis and synthesis, monographic analysis, scientific abstraction, statistical data grouping, comparative analysis, selective observation, preliminary data collection were used. Research conducted by foreign and national scientists was also studied, and this experience was reflected in a scientific article.

## RESULTS AND DISCUSSIONS

Hotels compete with each other through their capabilities. That is, when choosing hotels, tourists pay attention to their capabilities, attitude of employees, cleanliness, convenience, price-quality and service, location of the hotel, availability of free WIFI. Taking into account all these possibilities, we determine the overall quality rating of each hotel. This overall rating is determined using the following methodology:

$$I = \sum_{i=1}^n (k_i \cdot w_i)$$

In this case, n is the number of factors in determining the overall quality assessment of the hotel,  $k_i$  – is the evaluation of the i factor by tourists,  $w_i$  -  $k_i$ s the weight measurement value of factor. This weight measurement value must satisfy the following condition.

$$\sum_{i=1}^n w_i = 1$$

We determine the evaluation of factor  $K_i$  – i by tourists using the information of the [www.booking.com](http://www.booking.com) site.

We determine the value of their weight coefficients as follows:

First, we construct a matrix of eigenvectors. It will be built based on the following conditions.

$$A = \parallel a_{ij} \parallel, a_{ij} \in (0,1,2)$$

Agar  $X_j$  omilning muhimligi  $X_i$  omilning muhimligidan ustun bo'lsa,  $a_{ij} = 0$  bo'ladi. Agar  $X_i$  omil  $X_j$  bilan muhimligi bir xil bo'lsa,  $a_{ij} = 1$  deb olinadi. Agar  $X_i$  omilning muhimligi  $X_j$  omilning muhimligidan yuqori bo'lsa,  $a_{ij} = 2$  deb belgilab olinadi.

If the importance of factor  $X_j$  is greater than the importance of factor  $X_i$ , then  $a_{ij} = 0$ . If the factor  $X_i$  has the same importance as  $X_j$ , then  $a_{ij} = 1$  is taken. If the importance of factor  $X_i$  is higher than the importance of factor  $X_j$ , it is set as  $a_{ij} = 2$ .

When we put these numbers in a table in the form of a matrix and add the sum of the numbers in each row, we pass to the numerical characteristic of the factors. We divide the number representing these factors by the total number and determine the importance level of each factor. It looks like this:

$$\lambda_i = \frac{\sum_{j=1}^n a_{ij}}{\sum_{i=1}^n \sum_{j=1}^n a_{ij}}$$

According to the results of the survey conducted in our research, the matrix of the eigenvector is shown as follows:

**Table 1. The matrix of the eigenvector**

	Staff	Facilities	Cleanliness	Comfort	Value for money	Location	Free WiFi
Staff	1	0	2	0	0	0	2
Facilities	2	1	0	1	0	0	2
Cleanliness	0	2	1	1	0	0	2
Comfort	2	1	1	1	0	0	2
Value for money	2	2	2	2	1	1	2
Location	2	2	2	2	1	1	2
Free WiFi	0	0	0	0	0	0	1
Overall:							

*(Source: done by author)*

Using the data of this table, we determine the weight index of each factor. The weighting coefficient for employee turnover is determined as follows:

$$W_x = \frac{1 + 0 + 2 + 0 + 0 + 0 + 2}{49} = 0,10$$

The weighting coefficient according to the capacity of hotels is determined as follows:

$$W_x = \frac{2 + 1 + 0 + 1 + 0 + 0 + 2}{49} = 0,12$$

The weight index of the factors determined according to the remaining indicators is as follows:

**Table-2. The weight index of hotel service**

	Staff	Facilities	Cleanliness	Comfort	Value for money	Location	Free Wi-Fi	Factors the numerical amount of	Factors the amount of weight of
<b>Staff</b>	1	0	2	0	0	0	2	5	0,10
<b>Facilities</b>	2	1	0	1	0	0	2	6	0,12
<b>Cleanliness</b>	0	2	1	1	0	0	2	6	0,12
<b>Comfort</b>	2	1	1	1	0	0	2	7	0,14
<b>Value for money</b>	2	2	2	2	1	1	2	12	0,24
<b>Location</b>	2	2	2	2	1	1	2	12	0,24
<b>Free Wi-Fi</b>	0	0	0	0	0	0	1	1	0,02
<b>Overall</b>								49	1

(Source: done by author)

It can be seen from the data of this table that the weight of the factors representing the quality indicator of hotels, staff treatment, facilities, cleanliness, comfort, price for quality and service, location, free WIFI are 0.10, respectively; 0.12; 0.12; 0.14; 0.24; 0.24; It is equal to 0.02.

We determine the general quality assessment of each of the 60 hotels in the Bukhara region using the above proposed methodology. For this purpose, we use the data from the www.booking.com website and the weight indicators defined above. Through the overall rating, tourists can determine which hotel has the highest level of comfort. The following table shows the hotels and their overall prices.

Hotels	Overallqualityrating	Rooms	Hotels	Overallqualityrating
Hotel MalikaBukhara	9,02	31	SahidZarafshon	8,38
Boutique Hotel Minzifa	9,28	32	Hotel RudakiyBukhara	8,88
SahidZarafshon	8,40	33	BUKHARA HOUSE hotel	8,78
Hotel Mironshox	9,53	34	HabibiBukhara	8,61
"CHOR MINOR" BOUTIQUE HOTEL	9,42	35	Euroasiabusinesshote l	8,94

	AL-HAYAT	9,52	36	Aist House Hotel	8,50
	Old BukharaBoutique	9,32	37	Kamelot	8,91
	Central Asia Hotel	9,35	38	Qamar Hotel	8,98
	MercureBukhara Old Town	8,78	39	CARAVAN Plaza	8,71
0	KomilBoutique Hotel	9,28	40	MUXSIN Hotel	8,74
1	KukaldoshBoutique Hotel	9,09	41	Atrium Hotel	8,88
2	Lyabi Khauz	9,05	42	Garden Plaza Bukhara	8,66
3	Hotel Amulet	9,40	43	GumbazLuxuryhotel	6,94
4	Old KaravansarayShahBukhara	8,62	44	LIANALI HOTEL	8,85
5	Hotel Boutique Al Hayit	8,57	45	OmarKhayyam Hotel	8,99
6	Hotel VoldidaBoutique	9,15	46	Hotel Turon Plaza	8,38
7	RizoBoutique	8,87	47	Hotel Anor	9,01
8	Rayyan Hotel Bukhara	9,08	48	Robiya Heritage Hotel	8,58
9	Hotel FatimaBoutique	9,29	49	Hotel Al Mansur	8,87
0	Mukhlisabegim Hotel	8,85	50	Xadijam Hotel	9,40
1	Boutique Old City	8,65	51	Atlas	8,89
2	Hotel SohibqironBoutique	8,57	52	Khanrooms	8,19
3	Orient Star Varaxsha	8,73	53	Hotel with Pool	8,52
4	MUNIS Hotel	8,99	54	Alliance hotelBukhara	8,06
5	SukhrobBarzu Hotel	8,99	55	Hotel Ulug'bek	7,94
6	SamarqandDarvoza	8,29	56	Hotel Asia Bukhara	8,67

7	Hotel Samandar	7,84	57	Omar vs Teracce	8,47
8	ReikartzBahorBukhara	8,09	58	Ohun	8,27
9	Hotel Al Hayit	8,76	59	Farnoz Hotel	8,88
0	Grand NodirbekBoutique Hotel	8,65	60	AyvaniKalon Hotel	8,27

The above table shows the total price of 60 hotels in Bukhara region. It can be seen from the data of this table that the highest score is held by the hotels "Hotel Mironshokh", "Al-Hayat", "Chor Minor", "Boutique hotel", "Khadijam Hotel", and "Hotel Amulet". "Reikartz Bahar Bukhara", "Alliance hotel Bukhara", "Hotel Ulug'bek", "Hotel Samandar", "Gumbaz Luxury hotel" have the lowest score.

As a result of the conducted analysis, we proposed the following 4 models:

**Model 1. Market situation and customer attitude towards price:** the hotel market situation is affecting the changes in customer behavior and interest in the price of products and services is also increasing and for them price is the main factor. is serving

**Model 2. Convenience and quality service as the basis of customer experience in competition:** Recently, many customers are demanding and want high quality service and convenience based mainly on their experience, while popularized and digitized services are evaluated based on customer experience.

**Model 3. Interdependence of digital services:** Most customers are increasingly demanding online services, while they have not abandoned traditional formats, so it is important to strike the right balance.

**Model 4. Priority of potential customers:** recently, new customers are mainly focusing on health-related factors, as well as ecology and sustainable development, i.e. products and services that are safe for them without harming the environment. possibilities of use.

A survey was conducted among Bukhara hotels for the purpose of in-depth analysis of the methods mentioned above. 130 respondents participated in this survey, of which 40 were domestic and 90 were foreign guests. From this research, we identified the following main and new trends:

- Safety (product and service) – as a key factor
- Price and value: as a variety of choices
- Technology based services
- Convenient, fast and quality service is the reason for the customer's choice
- Intelligence as the basis of sustainable development
- Digitization – as the main criterion of customer demand

## CONCLUSION

In recent years, the hotel business has become one of the rapidly developing service industries in the Bukhara region. Because we can see the development of this industry over the years. The research



conducted on the basis of a scientific article showed that customers can enter into a strong competition based on the main indicators of the hotel enterprises, which are the price of the room, comfort, comfort, location, and the types of services provided. Therefore, the hotel management is indicated above will need to develop ways to improve service delivery.

## REFERENCES

- Tsai, H., Song, H., & Wong, K. K. (2009). *Tourism and hotel competitiveness research. Journal of travel & tourism marketing*, 26(5-6), 522-546.
- Bogetić, S., Antić, Z., & Lekić, N. (2015). *Analysis of hotel enterprises competitiveness aspects in modern business. Journal of Engineering Management and Competitiveness (JEMC)*, 5(2), 90-101.
- Jean Paolo G Lacap RMP, A. F. B. E. (2014). *Competitiveness and sustainability of the hotel industry: the case of hotels in Pampanga. Business Management and Strategy*, 5(1), 115.
- Xia, H., Vu, H. Q., Law, R., & Li, G. (2020). *Evaluation of hotel brand competitiveness based on hotel features ratings. International Journal of Hospitality Management*, 86, 102366.
- KOBYAK, M. V., ILINA, E. L., LATKIN, A. N., & EVSTIGNEEV, A. M. (2018). *Analysis of the Competitiveness of Hotel Services (on the Example of Upscale Segment Hotel). Astra Salvensis.*
- Kovaltchuk, A. P., Blinova, E. A., & Miloradov, K. A. (2017). *Increasing the competitiveness of the Russian hotel enterprises under modern conditions. Journal of Environmental Management & Tourism*, 8(2 (18)), 407.
- Inoyatova, S., Khamidov, O., & Nigmonov, A. (2018). *Evaluation of Online Hotel Booking Services in Uzbekistan. In International conference on Eurasian economies (pp. 20-28).*
- Хамидов, О. Х. (2014). *Перспективы привлечения инвестиций в гостиничную индустрию. Вісник ДІТБ. Серія: Економіка, організація та управління підприємствами туристичної індустрії та туристичної галузі в цілому*, (18), 153-156.
- Ibragimov, N. S. (2020). *"DIGITAL DIVIDE" AS A FACTOR OF DESTINATION COMPETITIVENESS OF UZBEKISTAN'S TOURISM SPHERE. Central Asian Problems of Modern Science and Education*, 2020(3), 36-47.
- Навруз-Зода, Б. Н., Ибрагимов, Н. С., Навруз-зода, З. Б., & Навруз-зода, Ш. Б. (2017). *Туристик ҳудуд рақобат бардошлиги. Монография. Бухоро: "Sadriiddin Salim Buxoriy" Durdonanashriyoti*, 156.
- Davronov, I. O. (2021). *Economic Importance of Innovative Technologies for Improving Hotel Services. International Journal of Business, Technology and Organizational Behavior (IJTOB)*, 1(3), 169-175.
- Davronov, I. O. (2021). *Economic Development Mechanisms of Innovative Services in Bukhara Hotels. International Journal of Business, Technology and Organizational Behavior (IJTOB)*, 1(6), 500-509.
- Davronov, I. (2022). *IMPROVEMENT OF QUALITY INNOVATIVE SERVICES IN BUKHARA HOTELS. "Экономика и туризм" международный научно-инновационный журнал*, 1(3).
- Davronov, I. (2023). *THE CONCEPT OF SERVICE QUALITY IN COMPETITIVE HOTEL BUSINESS. "Экономика и туризм" международный научно-инновационный журнал*, 3(11).
- Davronov, I. O. *THE MAIN STRATEGIC DIRECTIONS OF INCREASING THE COMPETITIVENESS OF HOTEL SERVICES IN THE BUKHARA REGION.*
- Давронов, И. (2023). *МЕҲМОНХОНА ХИЗМАТЛАРИ РАҚОБАТБАРДОШЛИГИ ВА СИФАТИНИ БАҲОЛАШ УСУЛЛАРИ. Ижтимоий-гуманитар фанларнинг долзарб муаммолари/Актуальные проблемы социально-гуманитарных наук/Actual Problems of Humanities and Social Sciences.*, 3(9).
- Olimovich, D. I. (2020). *The impact of innovative technologies for improving economy of hotels. Asian Journal of Multidimensional Research (AJMR)*, 9(5), 194-201.
- <https://stat.uz/uz/component/search/?searchword=turizm&searchphrase=all&Itemid=114>
- [www.booking.com](http://www.booking.com) – hotel booking platform

# ANALYSIS OF FACTORS INFLUENCING CONSUMER MOTIVATION IN THE TOURISM INDUSTRY

NimatovlbragimKhudayarovich<sup>1</sup>

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## ABSTRACT

*This article examines the motivational elements that influence the inclination to travel and the impact of these motivating forces on the selection of a vacation destination. Based on the study, it was suggested to categorize motives into four kinds, and the relationship between these motives and the methods of managing them was examined. Revealed were the aspects of the research item that are connected to market components.*

**Keywords:** *Travel Motivation, Location Choice, Tourism, Motivating and Pulling Factors, Tourist Needs, Tourist Demand.*

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## Introduction

In the current phase of the hospitality industry's development in the Republic of Uzbekistan, it is crucial to foster industry growth through the implementation of scientifically grounded modern management practices. Specifically, the research work aims to develop services and improve services in the regions of Uzbekistan in line with the country's strategy for 2030. Additionally, there is a need to study the population's demand for tourist services to increase the volume of such services by threefold. To advance the tourism business in Uzbekistan, it is essential to synchronize the procedures of incentivizing tourists using contemporary approaches.

When considering a prospective tourist excursion, one is confronted with inquiries such as "What is the purpose of our travel?", "Which destination should we choose?", "Which destination is most suitable?", and "When is the optimal time to go?" The responses are significantly impacted by the characteristics and intensity of travel motivations among prospective visitors. Researchers have extensively examined tourist motivation and employed many approaches to ascertain travel motives. When researching travel motivation, we categorically classified motivation factors into two groups: motivating factors and pulling factors. In this idea, motivational elements are seen as advantageous for generating the inclination to travel, while pull motivations indicate movement driven by specific objectives. The objective of the study is to ascertain the internal causes that drive visitors to develop their aspirations, as well as the external elements that influenced their choice of Samarkand in our research.

## Analysis of thematic literature

Numerous international and national scientists have conducted scientific investigations on the substance and nature of motivation and the determining variables in the field of Tourism, its impact on potential tourist behavior, and its significance. According to Snepengcr D., motivation and weighting considerations play a role in influencing people's decision-making in two distinct contexts: the need to go somewhere and choose where to go. The scientists' research elucidates the role of motivation in influencing

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individuals' travel decisions and how it prompts them to engage with specific target features. To clarify, motivation motivations pertain to the internal or emotional factors that drive tourists, such as the longing for escape, relaxation, well-being, and social engagement. On the other hand, attraction motivations are linked to the qualities of selecting an externally appealing destination. The user's text consists of a single letter, "J." Jalolov[3] conducted a study on the motivating aspects of consumer motivation, specifically focusing on material and intangible features. However, the study did not uncover the motivational and weighting factors in the sphere of tourism.

Gnanapala conducted an empirical study to identify the factors that attract and repel European and Japanese tourists. The motivational motivations of Europeans include the aspiration to seek respite from a hectic lifestyle, achieve success and fulfillment, cultivate social connections and romantic relationships, attain prestige and status, and find repose. Japanese visitors are motivated by similar criteria when it comes to spending their holidays, but their list of priorities differs somewhat from those of Europeans[6]. The motives for attraction, such as the want to break free from a busy lifestyle, seek relaxation, pursue personal goals and curiosity, engage in social interactions or romance, and strive for prestige and status, determined their respective levels of importance. According to him, the factors that attract Europeans are the destination's safety, easy accessibility, entertainment options, vibrant nightlife, affordable airfare, local prices, the destination's reputation, the quality of attractions and facilities, and the cleanliness and comfort of the surroundings. He also concluded that Europeans are interested in engaging with nature, favorable climatic conditions, and recreational activities. Japanese visitors were motivated by similar considerations to spend their holidays, although their list of objectives differed somewhat from those of Europeans. In our perspective, motivation for contemporary tourist organizations is a metacognitive concept that guarantees travel behavior and encompasses various facets of travel behavior, namely, the primary impetus for traveling or the underlying purpose; the selection of a particular destination or location; and ultimately, the overall contentment experienced during the vacation.

### **Research methodology**

The research process involved the utilization of methods such as grouping, comparison, factor analysis, and sampling observation. This study is predicated on a social survey questionnaire administered to foreign tourists who are visiting the Samarkand region. The questionnaire survey was carried out by randomly selecting 204 respondents. The survey was administered in the English language for a duration of about three months, spanning from mid-August to mid-November 2023. The poll was done at multiple tourist resorts and hotels located in the city of Samarkand. The questionnaire had 24 motivation motives and 27 pull motives, which were derived from the aforementioned literature review. The questionnaire comprises two primary components. The initial section was designed to ascertain the demographic profile of visitors and their travel-related attributes. The latter was employed to ascertain the motivational and gravitational elements that impacted the choice of Samarkand, using a five-point Likert scale.

### **Examination and outcomes**

The data was examined utilizing the Minitab statistical software. The Bonferroni approach, which involves several analyses, was employed to discover travel motives. An empirical study was conducted to examine the elements that influenced and triggered the travel requirements of tourists. Specifically, the study focused on the push and pull motives, as well as the destination features that influenced the choice of Samarkand as a resort. Tourists' motivations drive them to recognize their travel requirements and prompt

them to actively hunt for ways to fulfill those requirements. Table 1 outlines a confidence interval scheme for the motivations of tourists using a 95% Bonferroni approach.

**Table 1 : Analysis of motives that attract tourists to travel**

F	Factors	Average	SE	Down limit	High limit
F1	Avoiding busy Labor activities	4,3922	0,0664	4,18511434	4,599286
F2	Rest	4,4702	0,0397	4,61638523	4,864015
F3	Being away from monotony/stressful life	4,0784	0,0661	3,87224996	4,25455
F4	Being physically active	3,6029	0,0759	3,36618612	3,839614
F5	Stay away from adverse weather	3,2549	0,0829	2,9963548	3,513445
F6	Having a good time with family	2,52	0,113	2,16758012	2,87242
F7	Getting experience with traditional cultures for children	2,088	0,106	1,75741144	2,418589
F8	Being together like a family	2,402	0,113	2,04958012	2,75442
F9	Family kinship to improve relationships	2,328	0,11	1,9849364	2,671064
F10	Exploring new places	3,652	0,086	3,38378664	3,920213
F11	Experiencing different lifestyles	3,9804	0,0807	3,72871607	4,232084
F12	Learning new things	4.201	0,0642	4,00077561	4,401224
F13	Search for new knowledge	4.0735	0,0722	3,84832553	4,298674
F14	Try different dishes and traditions	3,9167	0,0773	3,67561985	4,15778
F15	Meet different people	3,2598	0,0889	2,98254224	3,537058
F16	Acquaintance with odd cultures	3,7941	0,0836	3,53337166	4,054828
F17	Acquaintance with representatives of the opposite sex	1,6912	0,0741	1,46009988	1,9223
F18	Nightlife/gambling houses	1,8039	0,0863	1,53475101	2,073049
F19	Entertainment and pleasure	2,775	0,104	2,45064896	3,09935 I
F20	Show my social status	1,7157	0,0824	1,45871418	1,972686
F21	Show experiences	1,8431	0,0931	1,55274344	2,133457
F22	Show achievements	1,8088	0,0839	1,54713604	2,070464
F23	Taking photos and movies	2,3627	0,0883	2,08731349	2,635087
F24	Visiting places where others have not gone	2,294	0,104	1,96964896	2,618351

In this case, **the secondary primary motives** are F1, F3, F11, F12 and F13; **the least significant factors** are F17, F18, F19, F20, F21 and F22; **the intermediate motivational factors** are F4, F5, F10, F14, F15 and F16.

### Pulling travel motives

Once the potential tourists realize their needs, they look for routes that fit their goals. They choose based on pulling motives associated with the attractiveness and other specific features of the tourist route.

Table 2 describes the confidence interval of 95% of the means of attracting tourist travel motives Bonferroni. With an indicator of 95%, we can confirm that F7 - historical monuments (average = 4,2696) and F8 - quality services (average = 4,0686) are the main motives for tourists to relax in Samarkand.

**Secondary significant pull motives** are F1, F2, F3, F5, F6, F9, F10, F11, F12, F13, F14, F15, F16, F24, F25, and F27; **least pull motives** are F17 - sand beaches (average = 2.1176); **moderate pull motives** are F4, F18, F19, F20, F21, F22, and F26.

**Table 2 : Analysis of motivating travel motives of tourists**

F	Factors	Average	SE	Down limit	High limit
F1	The specific culture of Samarkand	3,9657	0,0737	3,73257216	4,198828
F2	Food and drinks	3,5784	0,0828	3,31648704	3,840313
F3	Ease of obtaining a visa	3,1863	0,091	2,8984488	3,474151
F4	Museums	2,7549	0,0916	2,46515088	3,044649
F5	Hospitality of the Samarkand people	3,8333	0,0739	3,59953952	4,06706
F6	Customs and traditions	3,8333	0,0678	3,61883504	4,047765
F7	Heritage sites	4,2696	0,0663	4,05987984	4,47932
F8	Quality services	4,0686	0,0727	3,83863536	4,298565
F9	Viewing religious objects	3,6667	0,0830	3,4041544	3,929246
F10	Diversity of attractions	3,4608	0,0544	3,19382592	3,727774
F11	Friendly government policy	3,3775	0,0873	3,10135264	3,653647
F12	Climatic conditions	3,6618	0,0804	3,40747872	3,916121
F13	Location security	3,7696	0,0685	3,5529208	3,986279
F14	Eco-friendly hotels	3,7745	0,0825	3,513536	4,035464
F15	Quality accommodation	3,8824	0,0687	3,66508816	4,099712
F16	Cleanliness of the designated place	3,9608	0,0694	3,74127392	4,180326
F17	Sandy beaches(swimming pools)	2,1176	0,0952	1,81646336	2,415737
F18	Nightlife/home laughter	2,8922	0,0795	2,6407256	3,143674

F19	Cheap air tickets	2,7451	0,0780	2,49805405	2,992146
F20	National parks	2,9069	0,0881	2,62822208	3,185578
F21	Natural beauty	2,1886	0,0914	2,52948352	3,107716
F22	Diversity of flora and fauna	2,9755	0,0772	2,73130096	3,219699
F23	Convenient transportation exchange	2,8137	0,0547	2,54577696	3,081623
F24	Easy arrival	3,5147	0,0861	3,24234848	3,787052
F25	Low prices/product prices	3,3824	0,0834	3,11858912	3,646211
F26	Trading facilities	2,6324	0,0884	2,35277312	2,912027
F27	Reputation of the destination	3,4363	0,0799	3,18356032	3,68904

This study discovered the specific motivating and pulling elements.

### Reasons for traveling.

Individuals' psycho-physiological condition was changed by motivational factors, compelling them to engage in behavior. The study identified four distinct degrees of motivating factors: primary, secondary, intermediate, and least causal. The primary motivations that impress tourists the most are their need for relaxation and pleasure. It is regarded as one of the primary drivers of an individual. This study confirms that the most motivating elements for tourists to relax in Samarkand are a departure from active labor activities and the desire for rest and coordination.

In 2022, a total of 5,232.8 thousand foreign state fugitives entered Uzbekistan for tourist purposes, including vacation, leisure, and leisure activities. Out of these, 94.9% originated from the Commonwealth of Independent States (CIS) countries, while 5.1% came from distant overseas countries. Furthermore, it was recognized that the primary motivations of visitors are secondary attractions, the desire to escape from hectic work routines, the need to break away from monotonous and busy lifestyles, the opportunity to immerse oneself in diverse ways of living, the thirst for acquiring new knowledge, and the quest for novel experiences. Motivating factors are derived from the psychological needs of tourists.

### Motivations for travel.

The study categorized pulling motivation variables into four levels: primary, secondary, intermediate, and least causal. The key driving forces behind Samarkand are its commitment to preserving ancient landmarks and its dedication to providing high-quality services. Secondary factors that influence tourists' choice of Samarkand include the cultural aspects of the city, such as its cuisine, population, customs, and traditions. The availability of sightseeing facilities and the diversity of attractions also play a role. Additionally, the friendly government policy, safety of the location, presence of eco-friendly hotels, quality of transportation, cleanliness of the destination, ease of arrival, and affordability of prices are important considerations. The reputation of Samarkand as a tourist destination is also a significant factor. The presence of sandy beaches

and bathing pools is not a significant factor in the decision to choose Samarkand. Therefore, it may be inferred that the establishment of swimming basins in Samarkand results in a rise in visitor influx.

### Summary and recommendations

Travel motives serve as the initial factor in the decision-making process for individuals who choose to embark on a journey. Travel objectives have a crucial role in shaping the authentic psychological profile of tourists. The study analyzed the travel themes that impacted travelers' leisure activities and identified incentive and traction motives. The heritage sites in Samarkand encompass several aspects like as historical landmarks, culinary experiences, the local population, customs and traditions, and notable objects of interest. It is imperative to ensure that visitors to Samarkand may minimize their expenses on vacations while still receiving high-quality services, as there is an increasing demand for leisure activities that are acceptable for nature and the environment. Our research revealed that museums, affordable airfare, national parks, natural beauty, biodiversity, and trade amenities moderately influence tourists' decision to choose Samarkand as a resort. Strategically designed marketing and advertising plans, tailored to the motivations of travelers in specific markets, will augment Samarkand's reputation as a naturally and culturally abundant tourist hotspot. Service firms must consider the travel motivation of visitors and, therefore, enhance the quality of service. The appeal of a destination is determined by its tourism offerings, which can provide a wide range of services to suit the needs of visitors. These services may outshine those of other destinations that are in direct competition. Hence, it is crucial to pre-assess if tourists will be content with the chosen place. Addressing the unique requirements of tourists results in their dedication to the destination, which elicits favorable intentions such as returning, positive word-of-mouth promotion, and enhancing the reputation of the location.

### References:

- <https://lex.uz/ru/docs/66004130>O'zbekiston Respublikasi Prezidentining 2023 yil 11 sentyabrdagi PF-158-son farmoni. 19.02.2024 yilko'rildi.
- Snepengcr, D., King, J., Marshall. E. and Uysal, M. (2006). Modeling Iso-Ahola's Motivation Theory in the Tourism Context. *Journal of Travel Research*, 45: 140-149.
- Jalolov J.J., Axmedov I.A., Hotamov I.S., Azlarova D.A. "Markemingmadqiqomlari". O'quvqo'llanma. Toshkent-2012
- Uysal, M., & Jurovski, C. (1994). Testing the Push and Pull Factors. *Annals of Tourism Research*, 21(4): 844-846.
- Turnbull, D.R., Uysal, M., (1995). An exploratory study of German visitors to the Caribbean: Push and pull motivations. *Journal of Travel and Tourism Marketing*, 4(2): 85-92.
- Gnanapala, W.K.A.C. (2008). In *Empirical Study on Travel, Motives and the Factors Affecting the Destination Selection. The Second International Symposium was held in Belihuloya Sri Lanka. Conducted by the Sabaragamuwa University of Sri Lanka.*
- O'zbekiston Respublikasi Prezidentining huzuridagi statistika agentligi. *Statistika Byulleteni* 2023 y.

## ADVANTAGES OF EFFECTIVE USE OF INTERNATIONAL DIGITAL INTEGRATION RESOURCES IN THE FIELD OF TOURISM

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### ABSTRACT

*This article highlights the role and importance of international digital integration resources in the development of the tourism industry. In addition, useful information is provided about the socio-economic nature of concepts related to digital technologies. Also, opinions and comments are presented on the digitization of tourism services related to digital technologies, the study of methodological bases for evaluating the effectiveness of tourism services, the creation of a cluster to create additional opportunities for business entities operating in the field of tourism, the scientific and methodological approaches of the conceptual directions of types of tourist services based on digital technologies.*

**Keywords:** *Tourism, digital integration resources, digital technology, virtual, digital economy, tourism product.*

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### Introduction

At the current stage of transition to the global digital economy, tourism is considered the fastest growing industry and is becoming one of the promising industries. Today, "the share of tourism in the world gross domestic product is 10%, the share of the gross investment of the world economy is 7%, 5% of tax revenues, 11% of the world's consumer spending, and 29% of the export of services of the world economy, and one of every 16 newly created jobs is in the tourism sector. corresponds to the contribution". Also, according to forecasts of The World Travel & Tourism Council (WTTC), in 2033, the contribution of the tourism sector to the world GDP will reach 15.5 trillion US dollars, which is 11.6% of the world economy, and It employs 430 million people[1].

In the digital economy, modern tourism has undergone tremendous changes with the introduction of digital technologies. It is evident in practice that it is impossible to successfully operate any tourist enterprise in the tourism market without the use of modern information technologies. In recent years, the development of technologies has radically changed the quality of tourist services.

Regarding the implementation of this goal, the Decision of the President of the Republic of Uzbekistan dated May 24, 2023 "On measures to increase the coverage and quality of digital services and digital transformation of sectors, sectors and regions" and all regulatory and legal documents related to this activity contributes to its development[2]. In this regard, the effective use of digital integration resources to provide quality services in the field of tourism in Uzbekistan is one of the main factors for a positive solution to this important task.

Tourism enterprises ensure their competitiveness in the domestic and international tourism market by developing new tourism products using digital technologies. At the same time, the rapid penetration of digital technologies into tourism enterprises is directly related to the use of new methods aimed at increasing the efficiency of the enterprise's organizational and management activities. Currently, one of the development trends

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of the global tourism industry is the development of digital technologies, in other words, the modern development of tourism is taking place in the digital economy.

That is, the process of digitalization has not bypassed the tourism industry, like many other sectors. The widespread use of web resources by potential tourists has led to the emergence of digital tourism, the development of intelligent web services for the development of offers and recommendations that help customers make travel directions and decisions in the field of tourism. For example, raising tourism to a strategic level in the republic's economy, diversifying domestic tourism services and dramatically increasing their size, creating the necessary conditions for introducing citizens to the tourism potential of our country, improving the quality of tourism services provided and increasing their competitiveness in world markets, business entities operating in the tourism sector use of electronic platform and mobile applications in order to create additional opportunities for the development of modern service infrastructure through rapid digitization [3].

### **Analysis of literature on the topic**

The theoretical and methodological foundations of the development of tourism are expressed in the scientific research of a number of local and foreign scientists. According to the English economist M. Porter, increasing the productivity of the use of resources through the use of digital technologies in tourism enterprises, as a result of the increase in the number of such enterprises in the economy, ensures competitiveness at the macro level [4].

According to A. Durran have focused on the benefits of using mixed tourism in a variety of destinations, such as museums, rural areas, zoos, and theme parks[5].

According to A. Getalenko, the introduction of information technology in tourism can be used at various stages of the development of tourist products and its implementation. The following main areas of tourism can be directly and effectively used information technologies:

- Implementation and sale of tourism products;
- In the management system of tourism organizations;
- In the creation of tourism products;
- In the delivery of services[6].

Bournemouth University professor Dimitrios Buhalis believes that digital tourism is the same as e-tourism and smart tourism, e-tourism is the digitization of all processes and service chains that allow organizations to increase efficiency in the tourism, travel, hospitality and catering sectors [7].

Scientists of our country O.Q. Khurramov[8] and A. Norchaev[9] believe that "digitalization processes and technologies in the tourism industry, hospitality, restaurant business and catering services due to the improvement of the quality of services - this is the transformation of existing services into a new look by introducing innovative technologies in tourism into the daily life of tourists".

The results of the analysis allow us to believe that the degree of digitization of the tourism sector will determine the competitiveness of the countries of the world, including various business sectors, in the near future. At the same time, only countries and companies that can adapt the fastest and maximize the benefits of global digitization will achieve a sustainable competitive advantage.

**Research methodology**

The theoretical and methodological basis of the research was the results of the scientific research of national and foreign scientists who were engaged in the analysis of the issues of effective development of the tourism industry. Abstract and analytical observation, comparative and factor analysis, indicative, selective observation, comparison, economic-statistical and other methods were used in preparation of the article.

**Analysis and results**

Today, digital technologies are rapidly developing and require keeping up with the times in every field. Optimum management of all available resources in the organization of tourism activities, the quality of services provided, and the effective use of digital booking systems to attract customers and their orders are experiencing great changes as a result of the development of information technologies and digitization processes[10].

The development of digital technologies in tourism activities can be fully understood in terms of four main stages (Table №1).

**Table №1 Stages of digitization of the tourism sector of Uzbekistan through digital technologies<sup>1</sup>**

<b>Stage 1</b> <b>1990-2000 years</b>	<b>Stage 2</b> <b>2000-2010</b>	<b>Stage 3</b> <b>2010-2020</b>	<b>Stage 4</b> <b>From 2020 to now</b>
Mobile phones Electronic cash registers Financial software Email Internet Office software Video conferences Websites (Booking.com, Expedia.com) Destination cards	Smart phones Computer graphics programs Online booking systems Email marketing	Mobile applications Social networks QR code Face ID Zoom platform	Virtual and augmented reality Cloud technology Blockchain The Internet of Things Big Data Artificial intelligence
<b>Optimization, sales and marketing stage</b>	<b>Stage of creation of digital infrastructure and business ecosystems</b>	<b>The stage of systems integration and implementation of digital models</b>	<b>Stage of digital transformation</b>

<sup>1</sup>Developed based on information from the author

Table 1 clearly shows the technological evolution and opportunities in tourism, and again it can be seen that the key technologies mentioned in step 4 are the most important in the digital age such as artificial intelligence, big data analytics, internet of things, blockchain, cloud computing, virtual and augmented reality.

**Table №2 The need for digital technologies in tourism<sup>1</sup>**

Digital technologies	Designed for tourists devices and interfaces	Solutions for processes, functions, activities and experiences
<ul style="list-style-type: none"> <li>• Artificial intelligence,</li> <li>• Internet of Things,</li> <li>• Pobototechnique</li> </ul>	Service robots with various technological options for personalized, customized, on-demand services, information provision, cleaning, disinfection, room service and other services. These can be a digital guide, host, personal assistant, check-in, porter, culinary staff and robot receptionist, housekeeper, waiter, etc., room server, chatbot and voice user interfaces, autonomous vehicles, etc.	Marketing Automation, Booking Facilitation, Identity Verification, Travel Facilitation, Security, Customer Service, Innovation, Operational Efficiency, Navigation & Wayfinding, Tourism & Assistant Experience, Information Search & Evaluation, Effective Distance Between Employees & Consumers, etc.
<ul style="list-style-type: none"> <li>• Mobile technology</li> <li>• Cloud computing technology</li> </ul>	Mobile tourism and travel applications with notification and messaging functionality. These can be travel route generator, geo-tracking, weather and climate forecast, language translator, currency converter, online booking, mobile payment, booking, ticketing system, location-based services, etc.	The ability to conveniently access or communicate with the necessary information through a mobile phone in real time. For new and innovative experiences that can be driven by consumers or tourism businesses, tourism services and customers are more convenient and reliable, allowing travelers to enjoy more time.
<b>Virtual and augmented reality (VR/AR)</b>	Virtual and augmented marketing and promotional materials, advertisements, 3D environments, 360-degree viewing programs, virtual tours, digital historical and cultural tours and events, natural landscape exploration, in-destination experiences for travelers, real-time travel assistants, virtual and augmented games and others.	Visitors can use virtual and augmented reality to experience a completely new and unique experience and create the feeling of real tourist destinations, replacing paper-based marketing and advertising materials, etc.
<b>Big Data</b>	Collecting, collecting and analyzing big data, large-scale datavisualization, information security, privacy, big data platform, etc.	Personalize supply and use of content creation, which increases consumer loyalty, and more.

<sup>1</sup>It was developed on the basis of scientific research of the researcher

<p><b>Social media</b></p>	<p>Social networks and virtual worlds: social networks (Facebook, Instagram, etc.), professional social networking sites (LinkedIn, etc.), internet forums (Fly4Free, LonelyPlanet travel forums, etc.), content communities (YouTube, Pinterest, etc.), rating services and portals (TripAdvisor, Booking, etc.), etc.</p>	<p>Source of information, personal contact, engagement, content creation, interaction, travel convenience, flexibility, quick and easy information exchange, easy comparison, less time to make travel decisions, inspiration, etc.</p>
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Table 2 shows that each digital technology creates useful solutions for processes, functions, operations and experiences with devices and interfaces for tourists and tourism businesses. Digital travel or digital tourism refers to the use of digital tools by travelers throughout their overall tourism experience. For example, online booking of travel products can be considered as part of this digital process.

Complex measures are being implemented in our country for the active development of the digital economy, the widespread introduction of modern information and communication technologies in all sectors and fields, first of all, in the field of public administration, education, health care and tourism.

One of the main mechanisms for digitization of the tourism sector in our country is the provision of intelligent devices. We denote the digital intellectual devices used in the production of tourist products by  $P(n) = P_1, P_2, \dots, P_n$ . (1)

Let these devices be designed to perform a specific task in the field.  $c_i$  - the amount of purchase of one  $P_i$  device (sum) and each  $i$  - the level of certain configuration of each device (quality, accuracy, shelf life, power consumption and charging method, software, level of comprehensibility of the user manual, etc.) denote by  $a_i$ , respectively. For this quantity, the relationship  $0 < a_i < 1$  is appropriate. Because all the various indicators of the device according to the technical-characteristic passport are analyzed on a 100-point scale, it is possible to calculate the average of the corresponding indicators (**Aaverage**) and determine  $a_i$  from the equation  $a_i = Aaverage^{(i)} / 100$ . (2)

The ratio of the purchase cost (product price) to the level of device configuration constitutes the constant coefficients of the function of planning the optimal selection of devices only with respect to the level of configuration, that is, corresponding to the  $i$ -index

$$The \ p_i \ coefficient \ is \ defined \ as \ follows: \ p_i = \frac{c_i}{a_i}, \ i = 1, \dots, n. \ (3)$$

If we denote by  $x_i$  the number of purchases from  $P_i$ -device, then the planning (objective) function of the optimal choice of devices with respect to the level of configuration will be as follows:

$$F(p, x) = p_1 x_1 + p_2 x_2 + \dots + p_n x_n = \min \quad (4)$$

The country needs to purchase at least  $P$  [units] from  $P(n)$  sets for the farms producing tourist products, and for this, the maximum  $C$  [sum] investment should be planned. In this case, the following system of restrictions is appropriate:

$$\begin{cases} x_1 + x_2 + \dots + x_n \geq P \\ c_1 x_1 + c_2 x_2 + \dots + c_n x_n \leq C \\ x_i \geq 0, c_i \geq 0, i = 1, n \end{cases} \quad (5)$$

If the system of constraints (5) and the minimum value of the objective function (4) are assumed according to the current situation (the problem of the maximum is not appropriate), the optimal choice is directly related to the smallest value of the ratio (3), and condition 2 of (5) is relevant in its sense will not have. This proves that the process of making the optimal selection of different devices for the same task cannot be organized only by prices and configuration levels.

The above analyzes mean that in this optimization process, the main goal is not to reduce the planned capital, but to use it optimally, to achieve the maximum efficiency of the selection based on the calculation of the optimal distribution of other resources in the process. Based on this, there is a need to build a resource limitation system related to devices. We use the following table to construct this system of constraints (Table 3).

**Table №3 esource allocation for devices**

Resource name	Resource allocation for 1 device				Stock of resources
	$P_1$	$P_2$	...	$P_n$	
Resource 1	$b_{11}$	$b_{12}$	...	$b_{1n}$	$B_1$
Resource 2	$b_{21}$	$b_{22}$	...	$b_{2n}$	$B_2$
...	...	...	...	...	...
r-resource	$b_{r1}$	$b_{r2}$		$b_{rn}$	$B_r$

The resource allocation constraint system is as follows.

$$\left\{ \begin{array}{l} \sum_{i=1}^n x_i b_{1i} \leq B_1 \\ \sum_{i=1}^n x_i b_{2i} \leq B_2 \\ \dots \dots \dots \\ \sum_{i=1}^n x_i b_{ri} \leq B_r \\ x_i \geq 0, b_i \geq 0, i = 1, n; \gamma = 1, r \end{array} \right. \quad (6)$$

According to the content of the problem definition, the objective function can be written as follows:

$$F = a_0 + a_1 x_1 + a_2 x_2 + \dots + a_n x_n \quad (7)$$

So, the elements of the set  $X = \{x_1, x_2, \dots, x_n\}$  that satisfy (5)+(6) should be selected in such a way that the function (7) reaches the maximum value, that is, the following condition is fulfilled:

$$F = a_0 + \sum_{i=1}^n a_i x_i \rightarrow \max$$

The following conclusions were drawn when formulating the issue of optimal choice in the introduction of digital devices to the service processes of tourist products.

1) It is not possible to plan the optimal selection of digital devices in the cross-section of tourist regions in relation to the price and configuration level of the product;

2) The problem of optimal selection of digital devices supply requires co-location, resource allocation planning for devices;

3) It follows from the characteristics of the system of restrictions that the formation of the resource type and reserve is the most important factor in resource allocation for devices.

Relying on foreign experience is one of the main sources for evaluating the production parameters of modern tourism products.

### **Conclusions and suggestions**

In conclusion, we can say that digital technologies will increase the competitiveness of our national tourism enterprises, in the future, increase the productivity of the employees of the enterprise and reduce the costs of software and technical tools, offer modern digital services to the clients of the tourist enterprise and improve the existing ones based on the requirements of their clients, and provide quality service to the clients. , and creates favorable conditions for them to implement various material incentives. Therefore, the national tourism sector cannot be imagined without digital technologies in the future.

Thus, the development of digital technologies in the tourism industry leads not only to the efficiency of the sector, but also to a new stage of development due to closer integration with other sectors of the economy and technological modernization.

In the conditions of forming a digital economy in our republic, the use of the following elements of digital technologies will be highly effective in the field of tourism, especially in the process of providing high-quality services to tourists.

#### **Including:**

- In the provision of high-quality service, the "artificial intelligence" technology of the digital economy allows the use of modern robotic technology in tourism services, and with the help of such technologies, high-quality service is provided without human participation (hearing, seeing, memory storage, assistance are performed on the basis of devices).
- Allows the information of the visiting tourist through the use of facial recognition technologies in airports.
- In tourism, with the help of blockchain technology, various tourist services will have the opportunity to create such a database divided into block chains, in which it will be absolutely impossible to change and falsify this information.
- In the field of tourism, crypto-assets create the possibility to implement projects that incorporate all the features of crypto-currencies involved in the industry, their capitalization and the use of crypto-assets as a guaranteed identified main digital financial instrument.
- The organization of activities of digital technologies in the field of tourism based on the element of DATA MINING allows to provide a distribution platform that allows to receive rewards in the form of

New units and commission fees for providing services in various crypto-currencies and to create new blocks in the service.

#### References:

- <https://www.unwto.World Tourism Barometer and Statistical Annex>
- PQ-162 of the President of the Republic of Uzbekistan dated May 24, 2023 "On measures to increase the coverage and quality of digital services and digital transformation of industries, sectors and regions"
- Decision of the President of the Republic of Uzbekistan dated 04.30.2022 No. PQ-232 "On additional measures related to the diversification of domestic tourism services". <https://lex.uz/docs/5991928>
- 4.Porter M. Competition. — M.: William, 2000. — S. 174-191.
- Durrant A, Golembewski M, Kirk D, Benford S, Fischer J, Rowland D, McAuley D (2011) Automics: souvenir generating photo ware for theme parks. In: Proceedings of the 2011 annual conference on Human factors in computing systems (CHI '11). ACM, New York, pp 1767–1776.
- A. Getalenko, Directions for the use of information technologies in tourism, NovalInfo, No. 61-1, 2017, p. 2.
- Buhalis, D. (2003): eTourism: Information technology for strategic tourism management, Pearson (Financial Times/Prentice Hall), London ISBN 0582357403.
- O.Q. Khurramov. Opportunities for the development of digital tourism in Uzbekistan. "Economy and innovative technologies" scientific electronic journal. 3/2022, May-June (No. 00059). DOI: [https://doi.org/10.55439/EIT/vol10\\_iss3/a448](https://doi.org/10.55439/EIT/vol10_iss3/a448).
- A. Norchayev. Directions of introduction of digital innovative technologies in tourism. "Economy and innovative technologies" Scientific electronic magazine. No. 2, March-April, 2020
- A.Hamdamov. International scientific and innovative magazine "Economy and Tourism" 2023/ No. 5. (13) pp. 26-36.

**Management is  
nothing more  
than motivating  
other people.**

~Le Iacocca ..... [www.enrichwise.com](http://www.enrichwise.com)

# INTERNATIONAL EDUCATIONAL TOURISM SERVICES: GLOBAL TRENDS AND IMPACT ON REGIONAL DEVELOPMENT

Nodira Makhmudova<sup>1</sup>

## ABSTRACT

*In this article we analyze the data and global trends related with the educational tourism services. The approach of foreign researchers in the segmentation of educational tourists was studied, and the segmentation was formed by the author according to the indicators of consumers and the nature of education. The characteristics of educational tourism in European countries are studied as a foreign experience, and the factors affecting the implementation of international educational tourism were formed and described.*

**Keywords:** *Educational Tourism, Regional Development, Export of Education Services, Segmentation of Consumers of Educational Tourism Services, The Human Factor, Interregional Inbound Tourism*

## Introduction

Globalization and integration processes in the system of international economic relations have caused the formation of the market of educational services, the intensive development of mutual cooperation activities on the issues of providing and exchanging educational services. Such an integration process is observed on an international scale due to the increasing demand of the society for modern educational services. Tourism is the result of the integration of services of various sectors, and its planning, analysis and consumption are considered complex. Evaluation of tourist services, educational tourism services as a separate "sector" is expressed in the set of all goods and services provided to visitors<sup>2</sup>.

Various countries around the world are promoting educational tourism as part of their local economic development strategies<sup>3</sup>. The development of educational tourism on a global scale has significantly increased in the last 45 years. In the Project Atlas report<sup>4</sup>, it is possible to observe the growth trend of the number of international students around the world during the years 1975-2018. In particular, in 2018, this figure reached 5 million people, an increase of 8.7% compared to 2017. It was predicted that the number of international students engaged in educational tourism will reach 7.2 million by 2025<sup>5</sup>.

## Literature review:

It is known that several factors affect the formation of the segmentation of educational tourists. In the analysis of the Russian researcher Kiryanova Liliya Gennadevna<sup>6</sup>, in the segmentation of tourists, it is possible to observe the approach in 7 different categories between the segments from 6 years old to 65 and

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<sup>2</sup> Makhmudova Nodira O'ktamovna. Turizmdainnovatsion texnologiyalarni joriy qilish shartsharoitlari.

“Yashil iqtisodiyot vataraqiyot” jurnali, 2023-yil, sentyabr. № 9-son, 43-46.

<sup>3</sup> N. Makhmudova. The essence, theoretical and conceptual foundations of educational tourism. Economics and Innovative Technologies 10 (3), 414-421

<sup>4</sup> 2018 Project Atlas Infographics, www.iee.org

<sup>5</sup> Bohm, A., Davis, D., Meares, D. and Pearce, D. (2002) Global Student Mobility 2025 Forecasts of The Global Demand for International Higher Education

<sup>6</sup> <https://portal.tpu.ru/SHARED/k/KIRIYANOVA/rr/ff/Tab/Тема%203Сегментация.pdf>



older, but the need for education is not considered as the primary one. According to another researcher, V.A. Kozlova<sup>1</sup>, the audience of educational tourists is mostly young people. Accordingly, in its segmentation, educational tourists started from 14 years old and ended in the segmentation of 29 and older. In it, the factor of financial independence was taken into account.

N.V. Alekseenko and her co-authors<sup>2</sup> emphasized in their literature that the concept of “educational “new tourism” in relation to the third age includes movement associated with obtaining new knowledge of interest area object. In the case of older people, a feature is that the learning process is built in the form of free pastime with an entertaining component and mandatory communication with subsequent feedback.

### Research methods

In this study, methods such as logic, comparative analysis and synthesis methods of indicators of educational tourism were used. Also, factors affecting international educational tourism are systematically described used in the analysis of indicators, influencing factors are systematically based.

### Results.

It is known, the COVID-19 pandemic has had a significant negative impact on all sectors, including the international educational tourism market.

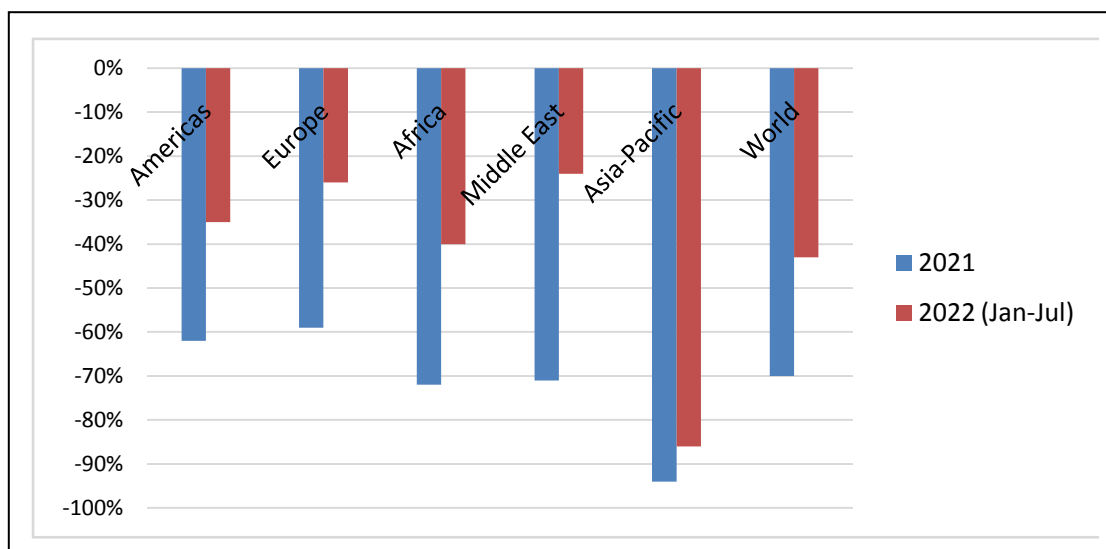


Figure 1. Interregional incoming tourism flows, compared with 2019<sup>3</sup>

<sup>1</sup>Kozlova Veronika Aleksandrovna Preferences of the youth segment of the tourism market in choosing educational tours // Practical marketing. 2016. No. 2 (228). URL: <https://cyberleninka.ru/article/n/predpochteniya-molodezhnogo-segmenta-turisticheskogo-rynka-v-vybore-obrazovatelnyh-turov>

<sup>2</sup>Vysotskaya Inna Vladimirovna, Yovanovitch Tamara Georgievna, Alekseenko Natalya Valerievna, Lazareva Olga Vyacheslavovna "EDUCATIONAL TOURISM" IN THE THIRD AGE AS PART OF THE CONCEPT OF LEARNING THROUGH EVERYDAY LIFE (BASED ON GERMAN AND RUSSIAN RESEARCH IYA AUTHORS) // SISP. 2022. No. 3. URL: <https://cyberleninka.ru/article/n/obrazovatelnyy-turizm-v-tretem-vozzraste-kak-chast-kontseptsii-obucheniya-cherez-povsednevnyuyu-zhizn-na-materiale-issledovaniy> (access date: 05/11/2024 )

<sup>3</sup> Author's compilation of data from [www.unwto.org](http://www.unwto.org)

It can be seen from the diagram that interregional inbound tourism in 2021 is far from the indicators of 2019 due to quarantine requirements (figure 1), but in January-July 2022, it represents a significant recovery. In particular, the size of the international education tourism market is estimated at 365.9 billion US dollars in 2022 and the compound annual growth rate (CAGR) increase is expected at the rate of 13.0% from 2023 to 2030 (17.2% in 2021-2031) according to FMI<sup>1</sup>.

Countries like the USA, the UK, Italy, France, Spain, Canada and Ireland are among the most preferred destinations for education. According to Future Market Insights (2021), US educational tourism services are expected to occupy more than 3/4 of this market in the coming years. Reasons for having such a large share are:

- Provision of the best educational institutions service and strive to maintain quality of education;
- Supports educational trips through various benefits;
- Financial support for covering the costs of quality education and research.

There are permanent opportunities for travelers to take advantage of comprehensive language training programs in the United States. They are offered language courses lasting from one week to two or three years. The training also offers opportunities to learn about the culture, places of interest, traditions and travel around the US. In the long-term individual language learning courses, there are ways to live in the family of a native language speaker in order to improve speech and vocabulary.

Below are some of the highlights of US educational tourism services:

- The organization of educational tourism services is carried out with the active participation of state bodies;
- Offer of educational tourism services in the field of secondary and higher education, internship and professional retraining, professional development;
- The majority of tourists involved in educational tourism programs are students under the age of 24, the number of adults is also considerably high;
- The financing of educational tourism services has a largely commercial nature, that is, the development and offering of these services is mainly carried out by the private sector;
- All educational institutions of the USA work in cooperation with tourism organizations and specialized state institutional structures based on the principles of the network approach, their activity has a circular relationship in the form of a chain. In particular, it is possible to note the role of educational institutions in the active involvement of volunteers within the framework of introducing travelers to the country, as well as adapting them to the country's traditions and life.
- The existence of similar aspects in educational tourism services in Spain, Germany and France is reflected in the following:

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<sup>1</sup> Educational Tourism Market by Age Group, Education Type, Type of Occupation, Course Type and Region for 2021 – 2031: Analysis and Review (REP-GA – 13880). – 2021 (September). – 200 p. <https://www.futuremarketinsights.com/reports/sample/rep-gb-13880>

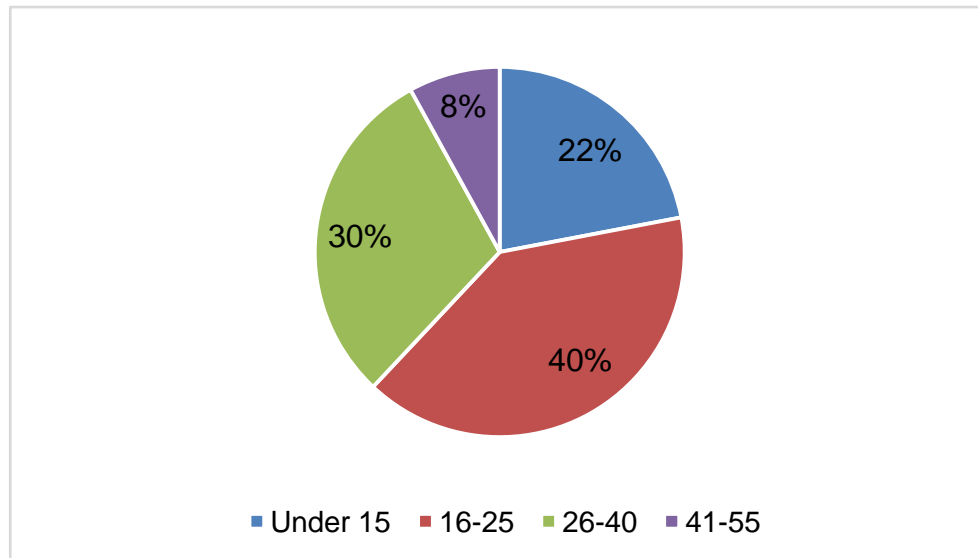
- From the point of view of the object of the offer - a wide range of comprehensive services of language learning courses;
- Various science courses for applicants of higher education institutions of these countries;
- Higher education programs;
- The price of educational tourism services provided by higher education services is affordable;
- The social aspect that supports this type of tourism - participants of educational tourism programs are offered opportunities such as various grants and scholarship programs.

All educational institutions in Germany, France and Spain cooperate with tourism organizations based on the principles of a network approach, in which the state tries not to interfere.

In the Grandviewresearch<sup>1</sup> report, educational tourism consumers are divided into four groups by their age:

- Under 15 years;
- 16-25-year-olds;
- 26-40 years old;
- 41-55 years old.

We defined this segmentation as follows.



**Figure 2. Segmentation of consumers of educational tourism services by their age<sup>2</sup>**

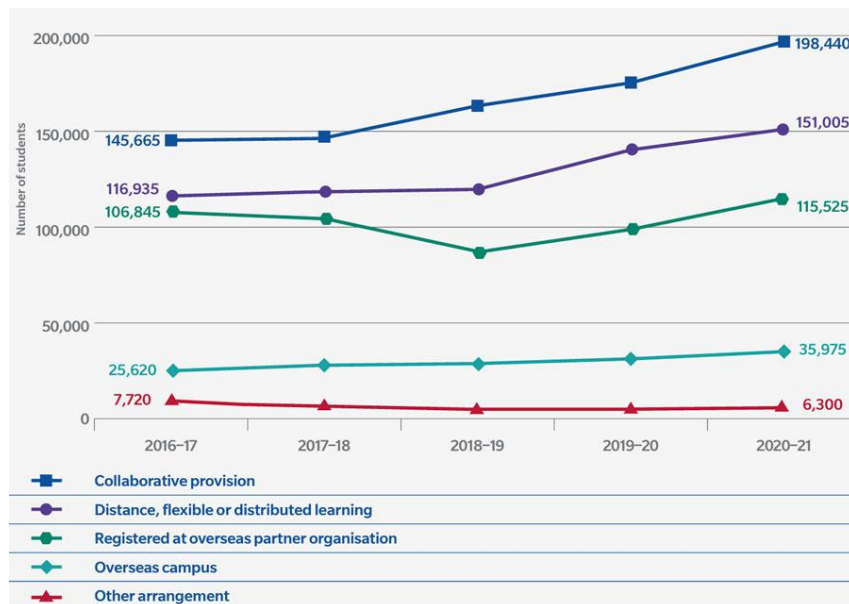
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<sup>1</sup> <https://www.grandviewresearch.com/industry-analysis/educational-tourism-market-report>

<sup>2</sup> Author's compilation of data from GrandViewResearch

Up to 22% of the market share accounted for the under-15 age group. The under-15 age group will grow at the highest CAGR of 14.6% during the forecast period (2031). In 2022, primary education tourism will make up about 12% of under-15s. Tours for children aged 6-11 include age-appropriate cultural, recreational and sports activities. There are many short-term and long-term travel abroad programs for this age group. This involves learning a new language, language teaching, volunteer activities, adventure camps, and traveling abroad for a specific period of time to improve conversation skills. Arcos Journeys Abroad, Teen Travel, Greenheart Travel, etc. projects are examples of tourism types for this segment. During the 11-month French language study program in AFS France, students live with a French family, go to school and get to know the local culture firsthand.

The main focus of educational tourism services is on expanding the scope of knowledge, gaining professional knowledge and skills, and its leading audience is students. According to the age group, the 16-25-years-old segment will dominate the market with a 40% share in 2022. The average literacy rate of this segment is 91%. Currently, HEIs are competing internationally to increase the export of educational services. The offer of educational services is carried out on a scale that knows “no limits” in terms of price, quality and formality processes. In particular, British educational institutions provided transnational education (TNE) to more than 510,800 students from 228 countries in 2020-2021, which shows an increase of 12.7% compared to the previous year (Figure 3.)



**Figure 3. UK HE TNE student numbers by type of provision 2016/17 to 2020/21 (excluding Oxford Brookes University)<sup>1</sup>.**

It can be seen from these statistics that the number of students studying in collaborative education programs is ranked the first, reaching almost 200,000 in the 2020-2021 academic year. There are 151,000 distance, flexible or hybrid learners, 115,500 students registered in overseas partner organisations.

Mostly students from Asia, Europe, the Middle East, Africa, North America, Australia and South America

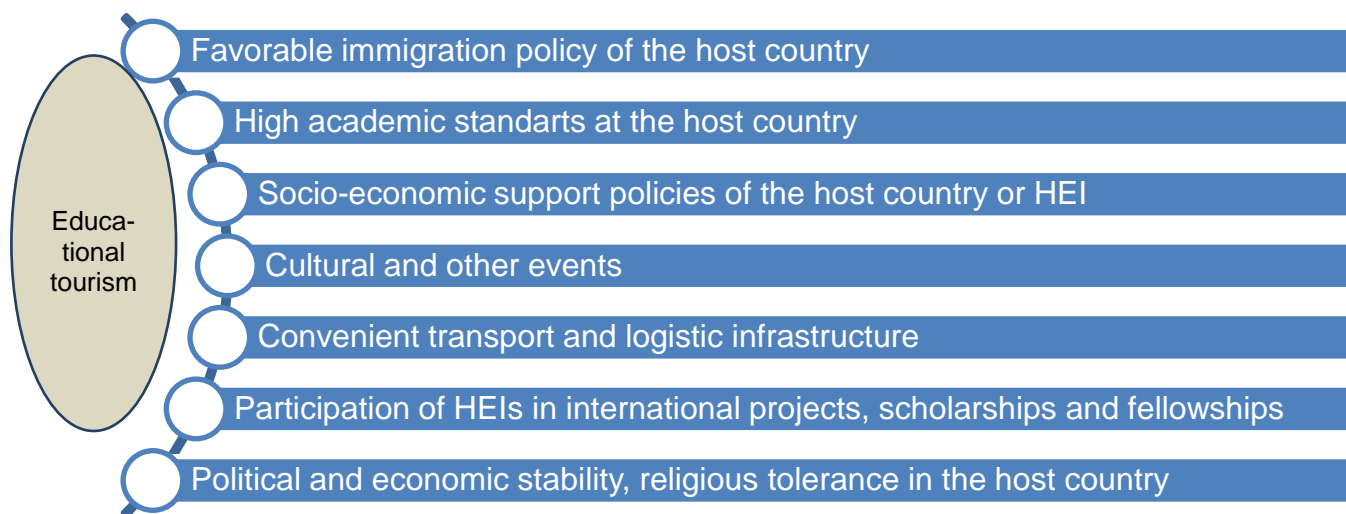
<sup>1</sup> <https://monitor.icef.com/2022/11/uk-transnational-education-expands-at-fastest-rate-ever>

have been admitted to the UK's transnational education programs. This education program includes branch campuses, distance education, joint education programs and dual degrees, online education and traditional education, and blended learning.

30% of the educational tourism market is made up of graduates of higher education institutions and those engaged in professional work, the segment of 26-45 years old. Consumers of this age want to work abroad, diversify their experiences, learn a new culture and acquire new skills.

In our opinion, the technological and socio-cultural changes taking place in the world encourage more people to learn and study throughout their lives. In the above grouping by age, we found it necessary to include the fifth segment - "56 years and older". For information, 5 million people of the People's Republic of China over 56 years of age are engaged in cultural and educational tourism around the world.

In our opinion, the factors influencing the implementation of outbound tourism for the purpose of education are the following (Figure 4):

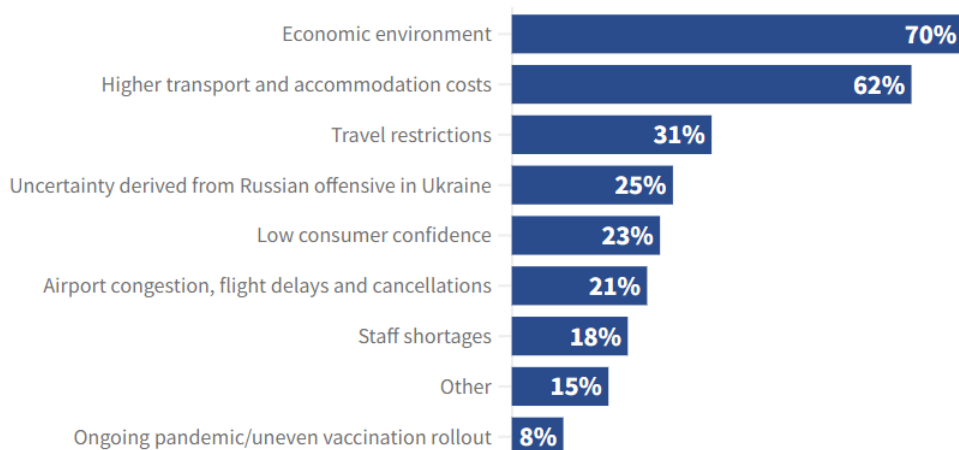


**Figure 4. Factors affecting the implementation of international educational tourism**

- *Favorable immigration policies of the host country* - several immigration programs are increasingly aimed at attracting students to choose permanent residence and become an active part of the country's labor force. Canada's Express Entry immigration program has made it easier for international students who have graduated from Canadian universities to choose between temporary residence or permanent residence in the country.
- *High academic standards of educational institutions in host countries* and their commitment to strict requirements for maintaining quality, are resulting in offer of high-quality education to their students. According to the QS World Ranking 2024, 16 of the Top-50 universities are located in the USA and 8 in the UK<sup>1</sup>.

<sup>1</sup><https://www.topuniversities.com/university-rankings/world-university-rankings/2024>

- *Socio-economic support policies* such as various scholarships and preferential loans by the host country or higher education institution for students: partial or full reimbursement of tuition costs, transportation costs and research, discounts in tuition fees etc.
- Educational tours, as well as an offer of *diversity-oriented activities to increase students' cultural and spiritual outlook*.
- *The availability of convenient transport infrastructure* - the availability of transport services to reach the relevant country, in terms of convenience, time and price, the offer of tariffs to the consumer, including the student, forms a suitable demand.
- *Participation of higher education institutions in various international projects (ERASMUS+, Comenius...), programs that offer various grants and scholarships*, guarantee the opportunity to expand the audience of foreign students. A student who is a winner of international projects will get various favorable benefits. In most European countries, the social form of educational tourism is significant, that is, they are implemented through various grant and scholarship programs. Erasmus and Comenius educational programs are particularly important here.
- *Political and economic stability, as well as religious tolerance in the host country* is a primary influencing factor. In a politically unstable country, it is impossible to export or import educational services. Economic stability is a factor that directly affects educational tourism. Because this factor characterizes the ability of the population with average income to cover secondary needs such as travels.
- Various global obstacles such as Covid-19 pandemic, the war in Ukraine, climate changes, oil prices and instability in logistics services have a significant impact on the international tourism market (Figure 5).



**Figure 5. The main factors weighing on the recovery of international tourism<sup>1</sup>**

In an international survey conducted by the United Nations World Tourism Organization (UN WTO), 70% of respondents (82% in September 2022 and 79% in January 2023) noted that the economic environment

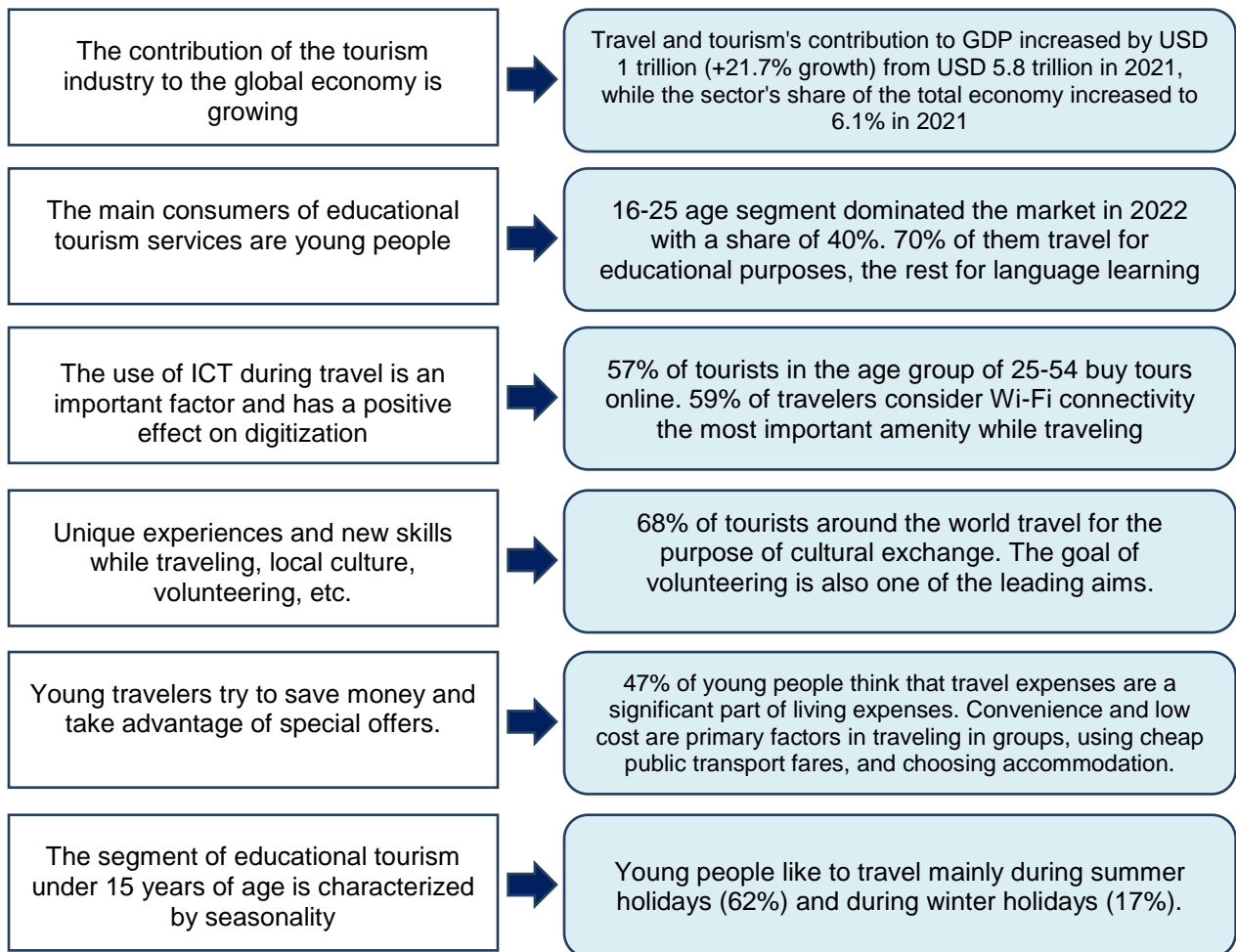
<sup>1</sup>Data as collected by UNWTO, May 2023. Published: 09/05/2023. <https://www.unwto.org/impact-assessment-it-can-be-said-that-of-the-covid-19-outbreak-on-international-tourism>

(stability of exchange rates, banking and financial services etc.) has a primary impact on the recovery of global tourism. 62% of the respondents said that the costs for transportation and accommodation services are also a direct influencing factor. Factors such as restrictions on travel (31%), Russia-Ukraine conflict (25%) were mentioned in the next places.

The global tourism sector market size was expected to grow by nearly 41% in 2022 compared to 2021. Despite the sharp growth, the size of the global tourism market remains below its pre-pandemic level and will total 2 trillion US dollars in 2022. This indicator is expected to increase to nearly 2.29 trillion US dollars in 2023, surpassing the peak recorded in 2019 (2,20 trillion USD).

**Conclusion**

In conclusion, it can be said that educational tourism can be expressed in the following development trends in the global tourism market (Figure 6.).



**Figure 6. Development trends of the global educational tourism market<sup>1</sup>**

<sup>1</sup>Author's development

In educational tourism, two types of human economic activities, namely, education and tourism, are combined at the same time, and usually the tourist, who goes on a trip is also a consumer of tourist services along with educational tourism services. For example, many convention and conference services in foreign countries have an educational component or serve participants through educational tools. In educational tourism, the receiving party benefits from the traveler in two ways: from payments made for educational tourism services and from payments for tourism services consumed. This makes educational tourism more profitable than other types of tourism.

### References:

- 2018 Project Atlas Infographics, [www.iee.org](http://www.iee.org)
- Bohm, A., Davis, D., Meares, D. and Pearce, D. (2002) *Global Student Mobility 2025 Forecasts of The Global Demand for International Higher Education*
- [www.unwto.org](http://www.unwto.org)
- N. Mahmudova. *The essence, theoretical and conceptual foundations of educational tourism. Economics and Innovative Technologies* 10 (3), 414-421
- Bohm, A., Davis, D., Meares, D. and Pearce, D. (2002) *Global Student Mobility 2025 Forecasts of The Global Demand for International Higher Education*
- <https://portal.tpu.ru/SHARED/k/KIRIYANOVA/rr/ff/Tab/Тема%203Сегментация.pdf>
- Козлова Вероника Александровна *Предпочтения молодежного сегмента туристического рынка в выборе образовательных туров // Практический маркетинг. 2016. №2 (228). URL: https://cyberleninka.ru/article/n/predpochteniya-molodezhnogo-segmenta-turisticheskogo-rynka-v-vybore-obrazovatelnyh-turov*
- Vysotskaya Inna Vladimirovna, Yovanovitch Tamara Georgievna, Alekseenko Natalya Valerievna, Lazareva Olga Vyacheslavovna "EDUCATIONAL TOURISM" IN THE THIRD AGE AS PART OF THE CONCEPT OF LEARNING THROUGH EVERYDAY LIFE (BASED ON GERMAN AND RUSSIAN RESEARCH IYA AUTHORS) // *SISP. 2022. No.3. URL: https://cyberleninka.ru/article/n/obrazovatelnyy-turizm-v-tretem-vozraste-kak-chast-kontseptsii-obucheniya-cherez-povsednevnyuyu-zhizn-na-materiale-issledovaniy* (датаобращения: 11.05.2024
- *Educational Tourism Market by Age Group, Education Type, Type of Occupation, Course Type and Region for 2021 – 2031: Analysis and Review (REP-GA – 13880). – 2021 (September). – 200 p. https://www.futuremarketinsights.com/reports/sample/rep-gb-13880*
- <https://www.grandviewresearch.com/industry-analysis/educational-tourism-market-report>
- <https://monitor.icef.com/2022/11/uk-transnational-education-expands-at-fastest-rate-ever>
- <https://www.topuniversities.com/university-rankings/world-university-rankings/2024>
- <https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism>



## CURRENT MUSLIM PILGRIMAGE TOURISM: MODES OF DEVELOPMENT IN BUKHARA OASIS

Kurbanova Mohinur Xabibkizi<sup>1</sup>

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### ABSTRACT

*Uzbekistan has many holy sites of Islamic culture and Sufism. Bukhara, in particular, was regarded as the epicenter of Islamic civilization and thereafter functioned as the capital of Samanid Empire. The research's objective is to reinstate the area's previous standing by highlighting the significance of pilgrimage in history, culture, literature, and architecture in addition to religion and spirituality. Suggested unified "Seven Awliya" muslimziyarah route, proposed suggestions to advance halal tourism, increase pilgrim flow, involve the community to obtain larger benefits.*

**Keywords:** Islam, Pilgrimage, Halal Tourism, Ziyarah Tourism, Bukhara

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### INTRODUCTION

Residents of Bukhara oasis not only visit cemeteries of their relatives and friends, but also visit shrines, mosques, madrassas, and the nearby mausoleums of saints, where they can pray, make dua and sacrifices. This work has become an ingrained routine for the locals. Through pilgrimage, some seek redemption, some do so in preparation for various challenges, while others find solace for their problems. Some people use pilgrimage to beseech Allah to atone for their sins.

The holy places of Bukhara region play an important role in the development of tourism in Uzbekistan. Many shrines are included in the "Golden Chain" list of Islam, which belongs to the Great Sheikhs. Today they are known as the shrines of "Seven Sufi Saints" (Seven Pir - Sufi spiritual guide).

Among foreign and domestic Muslim tourists "Seven Sufi Saints" (XII-XIV centuries), Poyi Kalon ensemble (XII-XVI centuries), Chor Bakr ensemble (XVI century), Chashmayi Ayub mausoleum (XII century), Bolo Hauz mosque (XVIII century), Ismail Somonimausoleum (X century), Sayfiddin Boharzi mausoleum (XIII century) are the most famous and crowded places of pilgrimage. Many remaining holy places are included in cultural tourist routes and are visited by representatives of Islam and other religions.

Seven Sufi Saints- Khoja Abdukhalik Gijduvani, Khoja Muhammad Arif ar-Revvari, Khoja Mahmud Anjir Fagnavi, Khoja Ali Romitani, Khoja Muhammad Babayi Samosi, Khoja Sayyid Amir Kulol and Khoja Bahauddin Naqshband shrines are widely recognized in Muslim world and are currently being renovated. These locations are undergoing construction of parking lots, shopping centers, hotels, and tea houses for tourists, as well as the formation of seven pilgrimage clusters and the reconstruction of roads that link the pilgrimage sites. A trip to these shrines has become a must-do activity when visiting Bukhara, and the "Seven Sufi Saints" tourism network has taken on a more intricate aspect in terms of both form and substance (see Pic.1).

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Picture 1. "Seven Sufi Saints" pilgrimage tourism cluster

*Many reasons now draw travelers to these sacred sites: healing, conceiving, seeking forgiveness, consolation, success in business or academia, settling conflicts, offering prayers, Sufi remembering, and commemoration of holy days and dates.*

## RESEARCH METHODOLOGY

This study employs a mixed-methods approach to investigate the modes of development in Muslim pilgrimage tourism in Bukhara Oasis. The research design combines previous research's qualitative and quantitative methods to provide a comprehensive understanding of the phenomenon. In-depth interviews with stakeholders and both domestic and foreign pilgrims were conducted as part of the inquiry, which also involved monitoring the city's tourist sector services and reviewing relevant theories and recent studies on the topic.

Part of the procedure involved looking up scholarly works, books, newspapers, as well as online magazines. The foundation for the data sets is provided by the databases of the Global Muslim Travel Index, Bukhara Tourism Committee and pertinent government legislation.

The study intends to add to the body of knowledge on halal tourism and destination development by using this research approach to offer insightful analyses of the current trends in Muslim pilgrimage tourism in the region.

## CURRENT MUSLIM PILGRIMAGE TOURISM REVIEW

Experts assert that the entrance gate of Chor Bakr memorial complex, gate on Qibla side of the memorial complex of Nakshbandi, known as Dilovar Gate, the next gate inside, Taqi Miyona, and the tomb of Hazrat Bahauddin Naqshband all lie in one straight line. Hazrat Abu Hafs Kabir al-Bukhari's old mosque's dome is positioned in the center of this line. The construction of Chor Bakr Gate, Dilovar Gate, and the dome of Hazrat Abu Hafs Kabir al-Bukhari's old mosque can all be seen as falling into one line. It is claimed, that

the city construction philosophy of Sheybanid Abdulla Khan was to build Center for his dynasty on the basis of great knowledge of Hazrat Abu Hafs Kabir, the school of Quran on the Qibla side, and Islamic mysticism - Sufism schools of Hazrat Bahaiddin Nakshband on the sunrise side.

At the beginning of the 20<sup>th</sup> century there were 232 mosques and houses in Bukhara. Today, there are 66 mosques and khanaka in Bukhara (5 namozgokh mosques, 20 khanaka, 7 market mosques, 34 guzar mosques). In addition, there are mosques in 29 madrasa buildings.

The Islamic Organization for Education, Science, and Culture (ISESCO) declared Bukhara as the “Cultural Capital of the Islamic World” in 2020. The “The first International Ziyarah Tourism Forum” took place in Bukhara on February 21-23, 2019, and “Bukhara Declaration” was approved to acknowledge Uzbekistan as one of the hubs for Muslim friendly tourism. All of them will therefore encourage the growth of the halal travel sector across the nation.



Figure 1. International and domestic tourist arrivals to Bukhara region in the period of 2020-2023

According to the data of Bukhara regional Tourism Department in 2023 the number of foreign travelers reached over 1,387 million (see Fig.1). The share of European countries was - 20.4%, US tourists - 1%, Asia - 17.9%, CIS countries - 59.7%, other countries - 1%. Within the “Travel across Uzbekistan!” framework near 3,490 million local travelers visited the region.

Following the resolution of Cabinet of Ministers “On measures to further develop the tourism industry in Bukhara region in 2022-2026”:

- In 2022-2026, the number of foreign and local tourists will reach 5 million, respectively the export volume to 600 million US dollars;
- Consideration of measures related to one-by-one restoration of more than 800 cultural objects in the region;
- To increase the total number of placement facilities to 679 and the number of places in them to 17,512 in 2022-2026 in the region;
- Development of domestic and pilgrimage tourism, development of new tourist routes, including:

- Development and promotion of tourism products related to the lives of BahovuddinNaqshband and the history of Sufism under the brand name “KasriOrifon” for the pilgrimage sites of “Seven Sufi Saints” until September 2024 at the expense of the Tourism Support Fund.
- To achieve the agreement of “brother cities” between the city of Bukhara and the cities of Sufism centers in foreign countries.
- Tasks such as promotion of tourism potential and organization of cultural tourism events on an international scale have been defined, and practical measures are being taken to fulfill them.

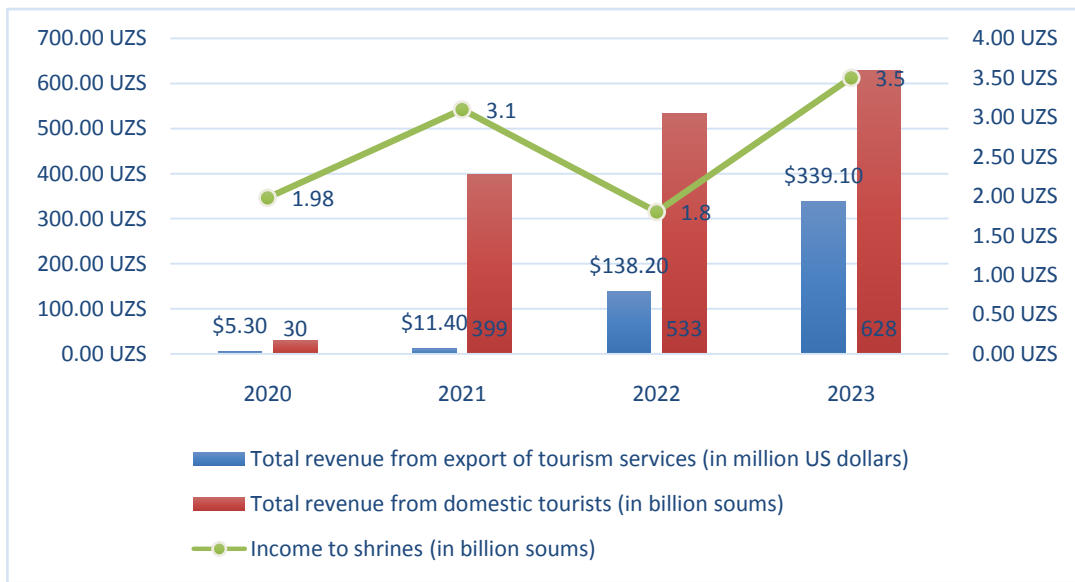


Figure 2. The share of shrines' revenue from the total income of tourism in Bukhara region in 2020-2023

The share of shrines' revenue from the total income of tourism refers to the proportion of revenue generated by religious shrines or sacred sites within the overall income derived from tourism activities in a specific period (see Fig.2). This metric helps to understand the significance and contribution of religious tourism, particularly revenue generated by visits to shrines, to the overall tourism industry's income during 2020-2023 timeframe. It can be seen that post pandemic recovery measures of tourism stabilized and lead to sharp increase of tourism income respectively. This analysis can provide insights into the economic impact and importance of religious tourism, as well as the role that shrines play in attracting visitors and generating revenue within the tourism sector.

**Ziyarah tourism development projects**

Currently, 38 investment projects totaling 278 million US dollars have been established in the region in an effort to boost tourism. Notably, this initiative will create jobs for 2500 people, offer 25 tourism services, and most crucially, lengthen the trip duration by 5-6 days.

One of such projects is the Avenue of “Representatives of Islamic Civilization” (see Pic.2), which is planned to be established in the area of SayfiddinBoharzi shrine, projected for 25 billion soums. In this boulevard, it is planned to build memorials of prominent Islamic scholars Abu Hafs Kabir, Abu Bakr

Kalabadi, Mustamli Bukhari, Hazrat Poyanda Muhammadshah Akhsavi, mosque, ablution room, handicraft center, hotel, library and conference hall.



*Picture 2. Project plan of the “Representatives of Islamic Civilization” Avenue*

The first phase involves constructing a mosque for up to 2000 devotees. The “Family Park” construction business designed this mosque, which is being built harmoniously with two ancient buildings and is modeled after the mausoleums of SayfiddinBoharzi and Bayonkulikhon mausoleums.

Moreover, the historical-ethnographic park “Eternal Bukhara” (see Pic. 3) is estimated to be built in 2024-2026 years period, as a project of 470 million US dollars and covers an area of 32.6 hectares. There will be objects that combine traditional Bukhara architecture with modern urban planning styles. Ethnographic museum, historical neighborhoods, teahouses, restaurants with national cuisine, traditional drainage systems, crafts stalls and various craft workshops are among them.



*Picture 3. Project plan for the entrance of historical-ethnographic park “Eternal Bukhara”*

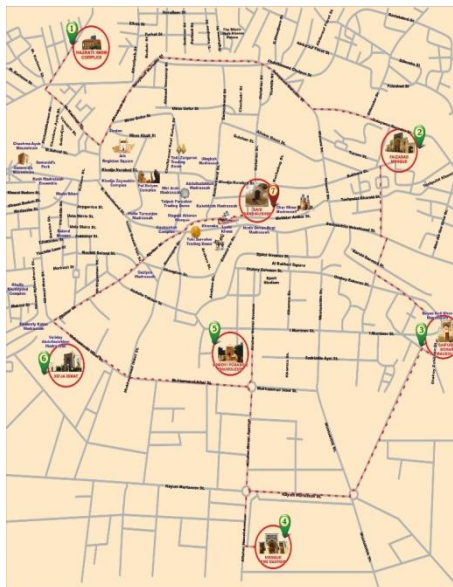
## “SEVEN AWLIYA” ZIYARAH TOURISM ROUTE PROJECT

Bukhara - the center of Islamic civilization, “Dome of Islam”, which is situated in the center of the Great Silk Road, is considered as one of the seven Holy cities of the globe. Over years it is served as a crossroad of commerce, trade, culture and science among countries of the world. Its position, history, people gave way for the spread of Islam religion and traditions among local people and visitors of their times. The process of cultural adaptation inspired travelers and scholars to visit to Bukhara, to become valuable contributors to the development of Islamic civilization.

In the Middle Ages (also referred as the Golden Ages of Islam) many renowned scholars and thinkers gained prominence due to their scientific discoveries and contribution to Islam. Major madrasahs and houses of wisdom were structured in Uzbekistan, Bukhara, as world scholars were gathered and enlarged their knowledge here, made meetings for exchanging knowledge. Even foreign people who had a problem asked for a solution to overcome their issues.

Due to these Bukhara needs to reestablish its popularity among Muslim travelers, find and collect real data related to the shrines and scholars of the area, gather world scientists in order to conduct research in various fields of science.

We propose a scientific-educational pilgrimage tourism route with traditional medicine, acknowledging Bukhara’s significance in the Islamic world and its potential for tourism in Ziyarah. Restoration of historic buildings and shrines received more focus during the independence era. Some of them are growing in significance as pilgrimage sites nowadays. On the other hand, not much information about them is known to the public. Thus, encouraging the “Seven Awliya” project (see Pic.4) within Bukhara will serve as a motivator to address the current issue. Visiting the seven saints who are blessed in Noble Bukhara, the “Dome of Islam”, is the new course of action. They are: Imam Abu Hafz Kabir Bukhari, Poyanda Muhammad Shahi AkhsiFaizabadi, Sheikh SayfiddinBoharzi, Sheikh Abdulkadir Jelani (Gelani) Piri Dastgir, Abu Bakr Muhammad ibn Ahmed, Khoja Ismatullah Bukhari, Said Abulhasani Poband (Said Pobandikusho).



Picture 4. “Seven Awliya” ziyarah tourism route

Proposed research work aims to:

- 1) Visualize “holiness” of Bukhara which it gained this status due to our predecessors;
- 2) Inform the world about the holy sites, which even some local people are not aware of;
- 3) Mitigate tourism seasonality across Uzbekistan;
- 4) Revive power of science and knowledge of Bukhara through attraction of world scholars by exchanging knowledge.

This project is directed for finding information about the shrines and great saints of Bukhara region, organizing tours and promoting it around the globe. This is mainly practical project rather than fundamental, as it requires field research around the shrines of Bukhara region. While defining the research work, it should be noted that Bukhara and its vicinities have tombs and shrines of over 160 saints, scholars, sages and poets. Many of them are now developing into significant pilgrimage destinations. But people do not yet have extensive knowledge of them. Therefore, the promotion of the project “Seven Awliya” within the scope of activities in the city of Bukhara will help to solve this problem. This new route consists of a visit to the seven saints who prophesied in Holy Bukhara.

As a result of this project, a strategic plan is developed to ensure the uninterrupted operation of the project after the granting period, starting with a visit to the 7 saints, which were identified as a prelude to the work, and then expanding its scope, forming a tour route to seven other saints after the socio-economic impact of this package.

Proposed work is designed to meet long term strategic targets, contribute to the economic and social prosperity of the country. It will represent Uzbekistan to the world as a destination where science is emerged, Muslim religion is developed, promotes region’s tourism potential, reduce tourism seasonality, develop international and domestic tourism in the context of pilgrimage, improve info and infrastructure, stabilize employment rate, establish exchange programs.

By implementing proposed project:

- Will exceed the number of visitations along the Silk Road, which bilaterally will help to support trade, education, all directions of tourism, culture.
- Modern unified route of science and religion can be established, as Bukhara is not a sole region in the Silk Road with Muslim belief.
- Organization of international conferences related to religion promotes exchanging knowledge among students, researchers, scholars and thinkers.
- Will lead to cultural understanding among local communities of the Great Silk Road.

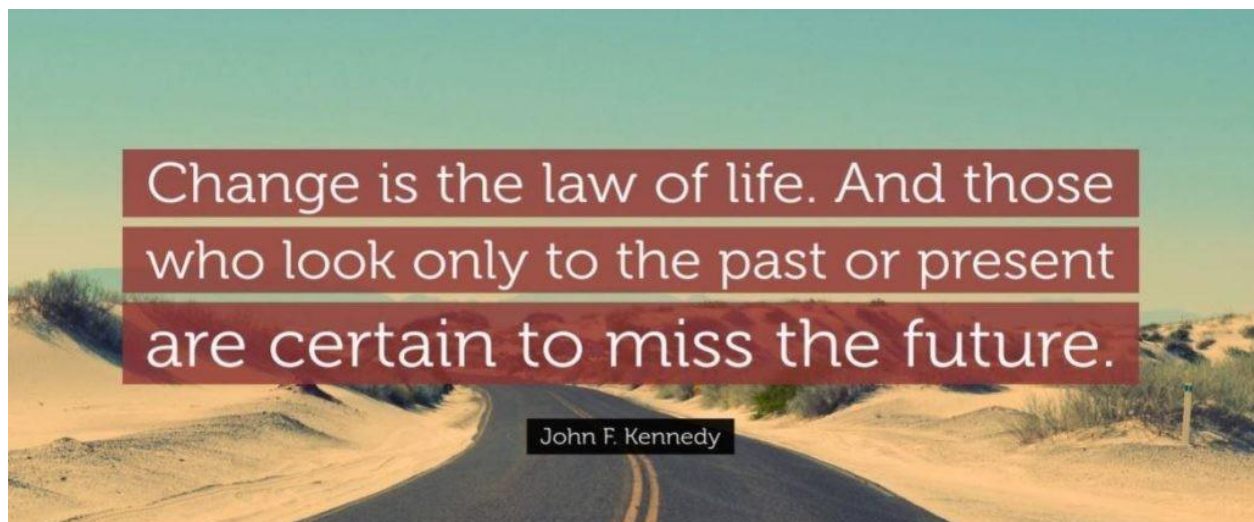
## CONCLUSION

Bukhara region can further develop its ziyarah tourism sector and attract more visitors interested in exploring the spiritual heritage of the region. There are several historical sites in Bukhara that are connected to the history of Islam. By promoting these locations as pilgrimage and ziyarah destinations, we can draw more interested travelers. Moreover, increasing the quality of roads, lodging, transportation, and facilities at ziyarah sites can improve pilgrims’ entire experience. Cultural events and festivals also draw in more tourists and provide them an unforgettable experience that highlight halal tourism practices. Providing guided tours

and packages designed especially for Muslim friendly tourism can assist guests in meaningfully learning about the area's spiritual legacy.

## REFERENCES:

1. Airey, D., & Shackley, M. (2009). *Bukhara (Uzbekistan): A former oasis town on the Silk Road*. In *Visitor Management* (pp. 10-25). Routledge.
2. *Bukhara Tourism Committee Database*
3. Buxoriy, S. S. (2012). *Buxoroningtabarrukziyoratgohlari*. Toshkent-2015.
4. *General Directorate of Tourism and Cultural Heritage of Bukhara region*. Presentation of the work done on the "Development of domestic and pilgrimage tourism in the Bukhara region for the half year of 2022".
5. Kurbanova, M. (2023). ZIYORAT TURIZMIGA IJTIMOY HODISA SIFATIDA TARIXIY-ILMIY YONDASHUV. *Economics and Innovative Technologies*, 11(1), 418-427.
6. *Mastercard-Crescent rating*. (2023). *Global Muslim Travel Index*.
7. Navruz-Zoda, B. N., Ibragimov, N., & Rakhmanov, A. (2019). Perspectives on the improvement of Uzbekistan as a destination for multi-confessional self-organised pilgrims. *International Journal of Religious Tourism and Pilgrimage*, 7(4), 11.
8. Navruzzoda, Z. (2021). Cluster tools for organizing pilgrimage tourism at the meso level. *Центр Научных Публикаций (Buxdu. Uz)*, 3(3).
9. *Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On measures to further develop tourism industry in Bukhara region in 2022-2026"*. № 543. 28.09.2022
10. *The Golden chain of Nakshbandi Sufi Way*. <https://naqshbandi.org/the-naqshbandi-golden-chain/the-chain/>





## THE ECONOMIC IMPORTANCE OF COST CLASSIFICATION IN ENTERPRISES

Rasulova Shakhnoza Khatamovna<sup>1</sup>

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### ABSTRACT

*In this article, we discussed options for classifying enterprise costs in the current period of economic reforms, because today the grouping and classification of types of costs by individual characteristics is one of the topical issues. The issue of classifying the types of costs of an enterprise is even more important with a direct impact on the formation of the cost of its products, therefore, we have identified the most optimal of the proposed cost classification options as the purpose of this study. Based on this goal, we used the methods of conducting scientific research and analyzing the work of well-known scientists and economists. According to the results of the research, the hold received the author's scientific proposal on the classification of costs for the production of innovative products, based on the requirements of the current period and aimed at further improving the quality of products.*

**Key words:** Cost; Cost Reduction; Production Costs; Cost Classification; Production Of Products, Works And Services.

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### Introduction

The large-scale implementation of measures to modernize production, technical and technological re-equipment in almost all sectors and spheres of the market economy expands the possibilities of producing competitive products. The development of the global economy at a high pace in all its aspects requires a professional approach from the enterprise to its activities. This topic touches on the most important element of the enterprise's cost management policy, that is, strategic cost management in an enterprise in a competitive environment.

The main goal of every industrial enterprise operating in modern conditions is to generate high income based on the production of cheap and high-quality products that can meet the needs of consumers [1]. The production of any product, on the other hand, involves the consumption of live and improvised labor. These are raw materials, materials, energy and fuel resources, wages and other expenses, which the company is interested in reducing.

According to the idea of running costs, the resources used in the production process of an enterprise can be its own resources or attracted resources. Accordingly, the costs are divided into internal or external. The external costs arising from the fact that the enterprise pays for the necessary resources and services for itself include the wages of employees, payment of raw materials, payment of interest on a loan, rent for leased land, payment for transportation services and various other services. External costs are formalized by payment costs, which are also known as accounting documents.

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Cost reduction is also an important factor in increasing the profitability of the product and production, increasing the volume of production using available resources. For this reason, reducing costs and increasing the amount of profit on this basis are considered urgent issues.

It should be noted that during our independent development, thanks to the constant development of industrial production, not only the volume and quality of products have increased, but also the cost of their preparation has sharply decreased, and, as a result, the profitability of production has risen to a high level.

Any production is based on the combination of living labor with the means of production as a process of creating material goods and services. This process is continuous; therefore, it requires constant costs. The costs of production of products (works, services) are very large and diverse. Some types of costs are common because they arise when products are produced together and belong to several types of products or units, and therefore must be distributed among products or units of this type.

The formation of the cost of production (works, services) and its classification are the most difficult areas of accounting. The need to place increasing demands on the organization of accounting for production costs, timeliness and efficiency of management decision-making determines the priorities of further development of the enterprise, which in turn depends on the correct and timely determination of the actual cost of production (services provided, work performed).

### **Literature analysis**

Within the framework of this research topic, a huge number of world and local scientists, economists, and engineers have worked effectively and continue to work. In particular, the issues of improving accounting for the cost of production are discussed by economists from far abroad and CIS countries N.D.Vrublevsky [11], K.Duri [13], M.A. Vakhrushina [10], V.E.Kerimov [17], R.Mullendorf [18], D.Stone, approx.Hitchhiker's [22], V.F. Paley [19], A.D.Sheremet [24], were investigated in detail.

The scientists of our country in this regard were A.A. Abduganiev [9], A.H. Rametov [21], M.K.Pardaev [20], O.M.Zhumanov [15], B.Khasanov [2], M.Umarova [23], F.Gulomova [12]. The research work was carried out by scientists of our country.

The costs were interpreted and grouped by them in various general terms, differing from each other depending on the degree of influence on the volume of production:

- Fixed costs;
- Variable costs.

The difference is that there are different points of view and interpretations in determining the composition of this group, for example, foreign professors D.Stone and K. Hitchings [22; 177 p.] adhere to the opinion – "a fixed cost is a cost that remains relatively constant for a certain period of time and does not change due to vibration or increase the volume of production. Variable costs are expenses that change in proportion to changes in performance."

This was reported by M.Umarova, a scientist and economist of the republic [23; 62-63 p.]. "From the point of view of dependence on the size of the product, costs are divided into variables and conditionally constant. This grouping of costs is caused by the fact that the number of cost elements that make up the cost of a product does not have the same effect on the volume of the product produced. The breakdown of

cost elements varies in proportion to the volume of the product produced. Others argued that it doesn't change proportionally."

Another of the economists of our republic is F.Gulomova [12; 89 p.] - "proposed dividing production costs into variable and conditionally fixed costs into two groups, expended depending on the volume of production of the product being prepared. Fixed costs will not depend on the volume of production, will not directly affect its growth and will be present at any, even zero, volume of production. These included the payment obligations of the enterprise (interest and other bonds), taxes, depreciation, rent, maintenance costs for the security service, salaries of management personnel, etc."

"Production costs are expenses that go directly to the production of products (works, services), as well as those that they make up their cost price." - B. Urazov and M.E. Pulatov write [8; 290 p.] in the textbook "Accounting".

From academic economists.Safarova and B.T. Rakhmanova [7; 247 p.] Who determined that "costs are the costs of acquiring material resources – according to the concept of income and expenses - should generate income in the same period." A similar definition is given by F.T. Abduvakhidov, I.N. Goziev, Sh.Kh. Dadabaev [1; 190 p.], quoted in the textbook "Accounting".

In addition to this, in many works of scientists of the republic, tariff "costs are understood as a decrease in economic resources as a result of reduction or expenditure of assets, as well as the occurrence of liabilities as a result of ordinary activities of an economic entity related to income generation", given in BHMS "Accounting Policy and Financial Reporting" [25].

To date, there is no consensus among scientists on the basics of cost grouping, each of the authors of modern management accounting theories provides their own specific cost classification [14].

He tries to reduce the costs of each enterprise, that is, the cost price. At the present stage of our country's development, increasing the export potential and competitiveness of our national economy largely depends on achieving savings and reducing the cost of products and services. Accordingly, our president Sh.M.Mirziyoyev [26] "although the cost of production by industry has been reduced by an average of 10 percent, some types of chemical and light industry products, automotive industry, construction materials production and a number of other industries cannot be competitive in foreign markets due to their high cost. Some enterprises are operating at a loss," it was argued accordingly.

## **Research methodology**

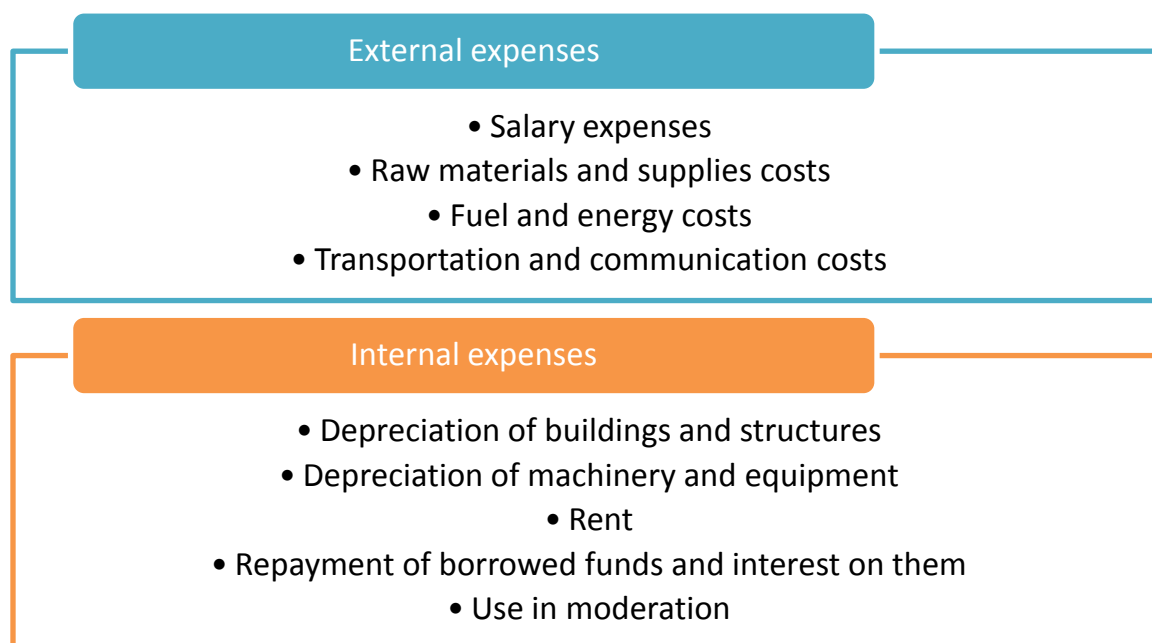
In this article, the author systematically studies scientific works of scientists, educational literature, articles, as in every scientific study, conducts a comparative analysis of the scientific information, conclusions and opinions covered in them. Retrospective approach, comparative analysis, scientific abstraction and other methods were also widely used.

## **Analysis and results**

An integral element of the organization of accounting for production costs is their classification, in particular, it provides for direct and indirect cost allocation. Direct costs are associated with the production of certain types of products, directly related to its cost on a direct basis (the cost of raw materials and basic materials used, direct wages, etc.), indirect - this includes costs that are related to the production of several

types of products or are not directly related. they are related to the production process and are distributed among products proportionally.

Затраты, связанные с использованием ресурсов, принадлежащих самому предприятию, называются внутренними затратами. Такие ресурсы не выходят в виде денежных выплат. По этой причине оценка уровня осуществляется путем сравнения стоимости собственных ресурсов с рыночными ценами аналогичных ресурсов.



**Figure 1. The structure of external and internal costs of an industrial enterprise.**

The payment required to maintain entrepreneurial activity within the framework of this enterprise is a component of expenses, including both ordinary (normal) profits, as well as rent and wages of employees.

The allocation of costs to internal needs makes it possible to conduct a comparative analysis of ways to increase the efficiency of an enterprise's economic activity.

Fixed and variable costs also differ depending on the degree of dependence on changes in production volume.

Costs that do not affect the volume of goods, which do not depend on changes in the volume of production (reduction or increase), are called fixed costs.

Fixed costs will not depend on the volume of production, will not directly affect its growth and will be present at any, even zero, volume of production [6] this includes the payment obligations of the enterprise (interest and other bonds), taxes, depreciation, rent, expenses for the maintenance of payment equipment to the security service, salaries of management personnel, etc.

Variable costs affect the increase or decrease in the number of goods produced and vary depending on changes in production volume. This includes raw materials, supplies, fuel and transportation services, employee salaries and the like.[3-8]

To plan the cost of a product, you first need to group costs by economic elements and calculation items. The grouping of costs by economic and social elements is performed in the following order:

1. Raw materials and auxiliary materials;
2. Fuel and electricity costs;
3. Basic and additional wages;
4. Social insurance contributions;
5. Depreciation charges;
6. Other expenses.

The essence of grouping costs by economic elements – costs with the same economic content - is to organize a grouping, which is the total amount of total costs spent on the production of all types of products, regardless of whether the costs of main or auxiliary production are sought.

Grouping costs by economic elements is necessary to make cost estimates. And the cost estimate serves as the basis for the formation of financial results.

When grouping costs by calculated substances, the following substances are formed:

- Raw materials;
- Auxiliary materials;
- Fuel consumption for technological purposes;
- Basic and auxiliary wages;
- Electricity consumption for technological purposes;
- Transportation costs;
- Social insurance contributions;
- Equipment maintenance and operation costs;
- Depreciation;
- Other expenses.

Calculation is the cost per unit of goods, which is accounted for separately for each type of product and is the basis for the formation of the price of the product.

The general calculation and the specific calculation differ. General calculation – provides for the calculation of the average costs spent on a product in an enterprise, regardless of the types of products produced.

The ESA type calculator provides for the calculation of a separate type of calculator for each nauxulot. When calculating the type calculator, special importance is attached as a basis to the consumption standards that are set for each type of expenditure. The regulatory framework of the enterprise includes the following main groups of norms and regulations:

1. Calendar and planning standards;

2. Consumption rates of raw materials;
3. Consumption rates of fuel and energy resources;
4. Equipment usage indicators;
5. Development of production facilities;
6. Labor standards;
7. Financial rules and regulations.

Norms and regulations are grouped according to the following criteria:

- By development styles;
- By validity period;
- According to the component parts of the product that you can make;
- According to the scope of application.

According to the methods of development, analytical accounting, experience and experimental statistical types of norms and regulations are distinguished.

The norms of analytical accounting are introduced into the standards, which are established on the basis of technical and economic calculations for all standard-forming elements. Experimental standards and regulatory support are determined based on the analysis of experimental data, taking into account the achieved best practices. These standards are established when there are no conditions for the establishment of analytical accounting standards and regulatory support.

Reporting - statistical standards and regulatory support are established based on the reporting data of the previous year. These standards do not reflect the achievements of scientific and technological progress, and do not contribute to the full use of production opportunities. According to the validity period, norms and regulations are divided into current, current and prospective norms.

Operational standards and regulations correspond to specific production conditions in the workplace. Their size is determined in connection with the introduction of various types of activities that lead to a change in improvised and live work.

The current norms and regulations are divided into annual, quarterly and monthly norms. Based on these standards, work is carried out on planning various resources in the enterprise.

The current norms and regulations are developed on the basis of operational and implementation measures aimed at saving resources. Therefore, current standards and regulations should be lower than actual resource consumption.

In work-in-progress, material standards are calculated in kind.

Norms in kind: for mass, large-scale and mass-produced types of production - the details are determined based on the norm of the task and the criterion of material consumption in the details, the norms of material consumption per product for single and small-scale serial production and the norms of material consumption in the unfinished production of the same product.

The norm expressed in days is calculated using the ratio of the norm of materials in work-in-progress in physical terms to the average daily demand for these materials. The standard of materials is determined for several years. These standards are also reviewed when the production technology or product structure has changed.

As another main issue, a system aimed at improving product quality is a requirement of today, in the above resolution this issue is considered as a secondary task, for the justification of which we will provide the following:

- firstly, neither in those years, nor even now, has a clear methodology for accounting for its costs aimed at improving quality been developed, which makes it difficult to practically organize a system to stimulate the production of effective innovative products;

- secondly, accounting for quality costs can be carried out only by organizing a management accounting system. In those years when the above-mentioned classifications and adopted regulations were adopted, the concept of "management accounting" in accounting in our country did not yet exist;

- thirdly, there were no practitioners in the field of quality management, since there are no areas for their training in educational institutions of the country yet. To date, a synthesis of publications by domestic and foreign specialists has been developed, as well as a classification of costs, which is presented in the table based on their own research. (Table 1).

**Table 1 : Cost classification aimed at improving product quality**

<b>Classification feature</b>	<b>Cost group by classification</b>
<b>For the intended purpose</b>	- quality improvement; - to ensure quality; - on quality management.
<b>By the economic nature of the costs</b>	- current (permanent); - sudden (one-time)
<b>By cost type</b>	- effective; - inefficient
<b>By the method of determination</b>	-direct; - indirect
<b>On the organization of accounting</b>	- can be counted directly; - are not counted directly; - costs that cannot be taken into account from an economic point of view
<b>By stages of the product life cycle</b>	- by stages of product development;

	<ul style="list-style-type: none"> <li>- by stages of product production;</li> <li>- by stages of product use</li> </ul>
<b>In relation to the production process</b>	<ul style="list-style-type: none"> <li>- in terms of quality in the main production;</li> <li>- in terms of quality in auxiliary production;</li> <li>- in terms of quality in the maintenance of production</li> </ul>
<b>According to the accounting method</b>	<ul style="list-style-type: none"> <li>- planned;</li> <li>- real</li> </ul>
<b>By the nature of the structure</b>	<ul style="list-style-type: none"> <li>- for the company;</li> <li>- for production (workshop, site);</li> <li>- by product type</li> </ul>
<b>By objects of accounting formation</b>	<ul style="list-style-type: none"> <li>- products;</li> <li>- processes;</li> <li>- services</li> </ul>
<b>By types of accounting</b>	<ul style="list-style-type: none"> <li>- operational;</li> <li>- analytical;</li> <li>- in accounting;</li> <li>- by appointment.</li> </ul>

In accordance with the stated goal, the following costs are allocated: quality improvement, quality assurance and quality management. The costs aimed at meeting the expected requirements of the consumer are included in the first group of costs. The second group includes all expenses incurred by the consumer to meet the quality requirements of products or services. The costs of developing and implementing corrective and preventive measures necessary to determine the quality of products (services) or eliminate possible inconsistencies are recognized as quality management costs. This classification of costs corresponds to the modern content of the company's activities in the field of quality.

However, in practice, it is difficult to attribute costs to a specific group, since, for example, the composition and structure of quality assurance costs may include individual elements of quality improvement, as well as quality management costs. In our opinion, as we have already said, the development of regulations aimed at improving the quality of the product avoids these difficulties. As a basis for distinguishing these costs, we recommend using accounting methodology approaches: quality assurance costs are current costs, and the costs associated with quality improvement will depend on long-term costs.

### Summary and suggestions

The organization of production accounting at enterprises largely depends on the technology and organization of production, the nature of products, management structure and other factors that determine



the processes of documenting business transactions, their systematization, generalization and presentation, conducting synthetic and analytical accounting, differentiation and cost allocation, etc.

Each enterprise must independently choose for itself an accounting method that will more accurately meet its goals and lead to increased efficiency and profitability of production and the enterprise as a whole [5].

The classification of costs based on the characteristics of the relevant industry or type of economic activity leads to the creation of an effective cost management system for each business entity. Therefore, for management accounting, the most appropriate and complete directions of cost classification are those that fully meet its needs and can be used to improve the methodology of management accounting.

The use of the above mechanism ensures the unity of calculations for the costs of production and sale of products in accounting registers and, therefore, allows for increased control over the formation of the results of the company's activities.

Thus, we are forming a system to stimulate product quality improvement as one of the directions for optimizing production cost control, which, in our opinion, is a requirement of today. It is advisable to conduct further research on this issue in the field of practical implementation of the above-mentioned mechanism, the development of accounting registers, and ensuring reliable formation of information flows regarding production costs in both accounting and off-balance sheet accounting.

## References

- *Abduvakhidov F.T., Koziev I.N., Dadabaev S.X. Accounting. Textbook. - T.: TDIU, 2019. - 403 P.*
- *B.A.Khasanov, A.A.Khashimov. Management accounting. Textbook. VMIU named after him. Chulpana. 2013-312-b.*
- *Khatamovna, R. S. (2021). The Importance of Cost Behavioral Information to Improve the Efficiency of Factory Management. Journal of Marketing and Emerging Economics, 1(7), 19-24.*
- *Khatamovna, R. S. (2022). The Importance of Information about Cost Behavior to Increase Efficiency of Enterprise Management. European Multidisciplinary Journal of Modern Science, 4, 190-195.*
- *Tohirovich, Q. N. (2023). Specifics of Accounting for Lease Operations of the Organization. Journal of Sustainability in Integrated Policy and Practice, 1(2), 31-38.*
- *Kunduzova, K. I. (2020). The problems of accounting of liabilities in insurance organizations and its improvement. Academia: An International Multidisciplinary Research Journal, 10(12), 312-318.*
- *Safarov B., Rakhmanov. Accounting. A study guide. – Samarkand, Samara State University, 2019. -388 P.*
- *Urazov K.B., Pulatov M.E. Accounting. Lesson. - T.: "Publishing house of innovative development-printing house", 2020, 558 p.*
- *Abduganiev A.A. Problems of organizing Management Accounting, their solutions.- Tashkent, 2003. -275 b.*
- *Vakhrushina, M. A. Accounting management accounting: textbook. for university students studying economics / M. A. Vakhrushina. — 8th ed., ispr. — M.: Omega L Publishing House, 2010. — 570 p*
- *Vrublevsky N.D. Managerial accounting of production costs: theory and practice. M.;, 2002. – 352 p.*
- *Ghulomova F.G'. Practical Guide to accounting. - T.: 2004. – B.141.*

- Drury K. *Cost accounting by the standard-cost method. Translated from English / Ed. Eriashvili N.D. – M.: Audit, UNITY, 1998 – 224c.*
- Zhigunova O.A., & Kovalev A.S. (2019). *About cost classification. Innovation and Investment, (1), 112-115.*
- Jumanov O. *Management accounting: experience of economically developed countries (authored translation from Russian). - Tashkent, 2001. -152 b.*
- Avaxonovna, K. S. (2024). *Principles and Features of the Development of Fixed Asset Accounting. Journal of Intellectual Property and Human Rights, 3(4), 12-18.*
- Kerimov V.E., *Management accounting. - M.: Dashkov I.KO.,2003. 414 p.*
- Mullendorf R., Karrenbauer M. *Production accounting. M.: 1996. – 158 p.*
- Paliy V.F. *Organization of management accounting. M.: MAKS–PRESS, 2003. 224c.*
- M.Q.Pardaev, B.A.Khasanov, J.I.Israilov, M.E.Steelov, O.T.Eshboev, A.N.Kholigulov. *Financial and management analysis. Textbook. T.: TDIO and SamSI, 2011. - 239 pp.*
- Rametov A.H. *Theory and practice of management accounting in agricultural enterprises. The author's abstract. diss. Doctor of Economics. sciences'. Voronezh, 2003*
- Stone D., Hitching K. *Accounting and financial analysis. St. Petersburg. – M.: 1994. – p. 187.*
- Umarova M. va boskalar. *Accounting of isobi. – T.: Mehnat, 2004. – B.163.*
- Sheremet A.D. *Managerial accounting. M.: FBK-PRESS 1999. 512 p.*
- No. 1 BHMS accounting policy and financial statements.
- <https://president.uz/-O> official website of the president of the Republic of Uzbekistan



## DEVELOPMENT OF MARKETING SYSTEM IN THE FIELD OF AGRICULTURE AND DAIRY PRODUCTS IN UZBEKISTAN

Sanjar Adilov<sup>1</sup>

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### ABSTRACT

*This article discusses the development of marketing in the field of livestock farming in the conditions of Uzbekistan. Using examples, it is analyzed that the producers of products in this area in the republic are mainly dekhkan, household plots and farms, and how the small volume of their production affects the development of sales of products. The necessary recommendations for developing marketing and improving the quality of local products are given. These recommendations serve to improve the system of production, processing and delivery of high-quality dairy and meat products to consumers in Uzbekistan.*

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Livestock products occupy a special place in the population's diet and are the main source of proteins and vitamins necessary for life. Currently, 97-98% of milk and dairy products produced in Uzbekistan, and more than 83% of meat, come from livestock farming.

Despite the reforms carried out in the republic to support and develop livestock farming, and increase the number of cattle, productivity is very low, and meat and milk production per capita is also low compared to the level of physiological standards, material and technical indicators in business entities, which requires stimulation of the system feed supply.

In particular, in recent years, as a result of the meat shortage in the republic, there has been a sharp increase in the market price for this product. As a result, import volumes of frozen and fresh meat increased in 2019-2020. In just 9 months of 2020, meat imports doubled - from 3,875 tons (\$12.4 million) to 8,354 tons, and the price of one ton of imported beef increased from \$3,217 to \$3,324<sup>2</sup>.

By strengthening the feed supply, providing network maintenance and developing processing industries, the livestock industry can alleviate the employment problem and create an opportunity to address the economic and social issues associated with the food problem.

The experience of developed countries shows that the improvement of production and processing technologies in agriculture, the improvement of product quality, and the emergence of its distinctive features occur due to additional investments, i.e., additional excess costs make the cost of manufactured products expensive. This requires the manufacturer to develop a marketing system to generate consumer demand and create new demand.

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<sup>2</sup>Source: Узбекистан завозит мясо и скот, в каком объеме и по какой цене. <https://www.gazeta.uz/ru/2020/11/02/meat-import/>

In agricultural marketing, it is necessary to take into account the features of livestock products, the implementation of marketing elements in production organizations (marketing services are provided by qualified specialists at industrial enterprises) and other features of the industry<sup>1</sup>.

- At the same time, the activities of the livestock industry and modern marketing tasks, their essence and commonality lie in the fact that a free market concept of production, sales of products and their delivery to the consumer is considered, which manifests itself as an integral system through the following tasks:
- The task of analyzing product production. The manufacturer, first of all, carefully studies the market and consumer demand; it is very important to know the characteristics and composition of the product offered on the market. It is impossible to organize economically self-justifying production and satisfy consumer demand without knowing the specifics of product supply and market demand, the capabilities of regional producers;
- The task of functioning in the production process. By the needs of the domestic market (if technical and technological capabilities are available - the external market), grow and increase the volume of livestock products in quantitative and qualitative terms; introduction of new technical means and cost-effective technologies to improve product quality and reduce costs; selection of specialists, advanced training, organization of logistics for the production process;
- The task of selling goods. Selecting business partners in the market, organizing the movement of grown products on the market; creating market demand for products and introducing sales promotion methods; implementation of pricing policy taking into account the continuation and expansion of production;
- The task of providing assistance and control of business management of production. Analysis of the production process, costs and income from sales on farms; providing employees with market information and adaptation to it; adaptation of production to risks associated with changing market conditions; ensuring the implementation of marketing plans.

The tasks of the farm marketing service cover not only the process of selling products but also pre-production and post-production processes. In particular, although market analysis and production planning are pre-production processes, tasks such as transporting, storing, packaging products, collecting market information and finally selling products are tasks of the post-production marketing system.

Today, the bulk of livestock products in Uzbekistan are grown by farmers and household plots and are sold primarily through farmers' markets. However, equipped farmers' markets that can deliver produce to consumers without compromising quality are only available in large cities. Delivering meat and dairy products to consumers in a convenient form without sacrificing quality through regional farmers' markets is a more complex issue. The following problems must be specified:

- the distance between livestock farms and main consumers, transport and transportation costs negatively affect the quality and cost of products. As a result, farm incomes decline;

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<sup>1</sup>Source: Воронина Я.В. Особенности маркетинга в сельском хозяйстве. <https://cyberleninka.ru/search?q=Воронина%20Я.В.&page=1>

- the fact that producers of meat and dairy products are mainly farmers and household plots; their large number and small volume of products prevent long-distance sales;
- the rapid deterioration in the quality of dairy and meat products, the complexity of product quality control, and the inconsistency of the laboratory and sanitary certification system with the requirements do not allow the development of modern trading activities;
- at farmers' markets that carry out retail trade in meat and dairy products, the system for renting modern equipment necessary for storage and quality control of products does not meet the requirements;
- consumer confidence in the quality of meat and dairy products sold by the manufacturer (seller) is not fully ensured. Information about the quality of purchased dairy or meat products is not guaranteed;
- insufficient development of the trading infrastructure of farmers' markets (trading places, warehouses, freezers), hotels, kitchens, transport stops and first-aid posts in the areas adjacent to the market is not enough to ensure the quality of trade;
- the lack of modern technologies and technical equipment for storing, processing and transporting products in dairy and meat farms, farms and household plots leads to a rapid deterioration in the quality of products in the link from production to sales.
- Today, meat and dairy farmers, dekhkan and farmsteads use the services of entrepreneurs in the status of individuals to sell their products. The weight of professional intermediary firms in the trading system is very small. Due to the large volume of production, cooperation with procurement and processing enterprises is mainly carried out by large farms and LLCs.

According to the analysis, meat and dairy farms choose the following entities as partners in the sale of products:

- Retail markets - individuals and households purchasing products for personal consumption;
- Entities receiving profit from resale - individuals and legal entities, wholesale markets, private stores, supermarket chains whose purpose is to resell produced meat and milk and make a profit;
- Organizations purchasing for consumption - institutions that regularly purchase products (kindergartens, hospitals, hotels, etc.);
- Entities purchasing products for use in their production process. These could be processing plants.

Today, farmers, dekhkan and households producing products have mastered the technology of producing products such as yoghurt, butter, cream, sour cream, cheese, cottage cheese, and milk powder at home due to the fact that milk is a perishable product. However, this situation does not allow the development of a modern dairy market. In addition, one of the main reasons for problems in the sales of products is the fact that the main producers are farmers and households.

The large number of physical intermediary sellers in the trading system makes it difficult to comply with hygiene rules and control the sanitary condition of dairy products. Therefore, improving the conditions associated with the sale of products and developing a trading system that meets market requirements is one of the pressing issues that must be implemented by government agencies.

In the milk and meat trading system, the lack of infrastructure facilities suitable for small farms to operate alongside large enterprises makes it difficult to work with large trading systems.

In our opinion, it is appropriate to recommend the following options for improving the system for delivering meat and dairy products to consumers (Fig. 1):

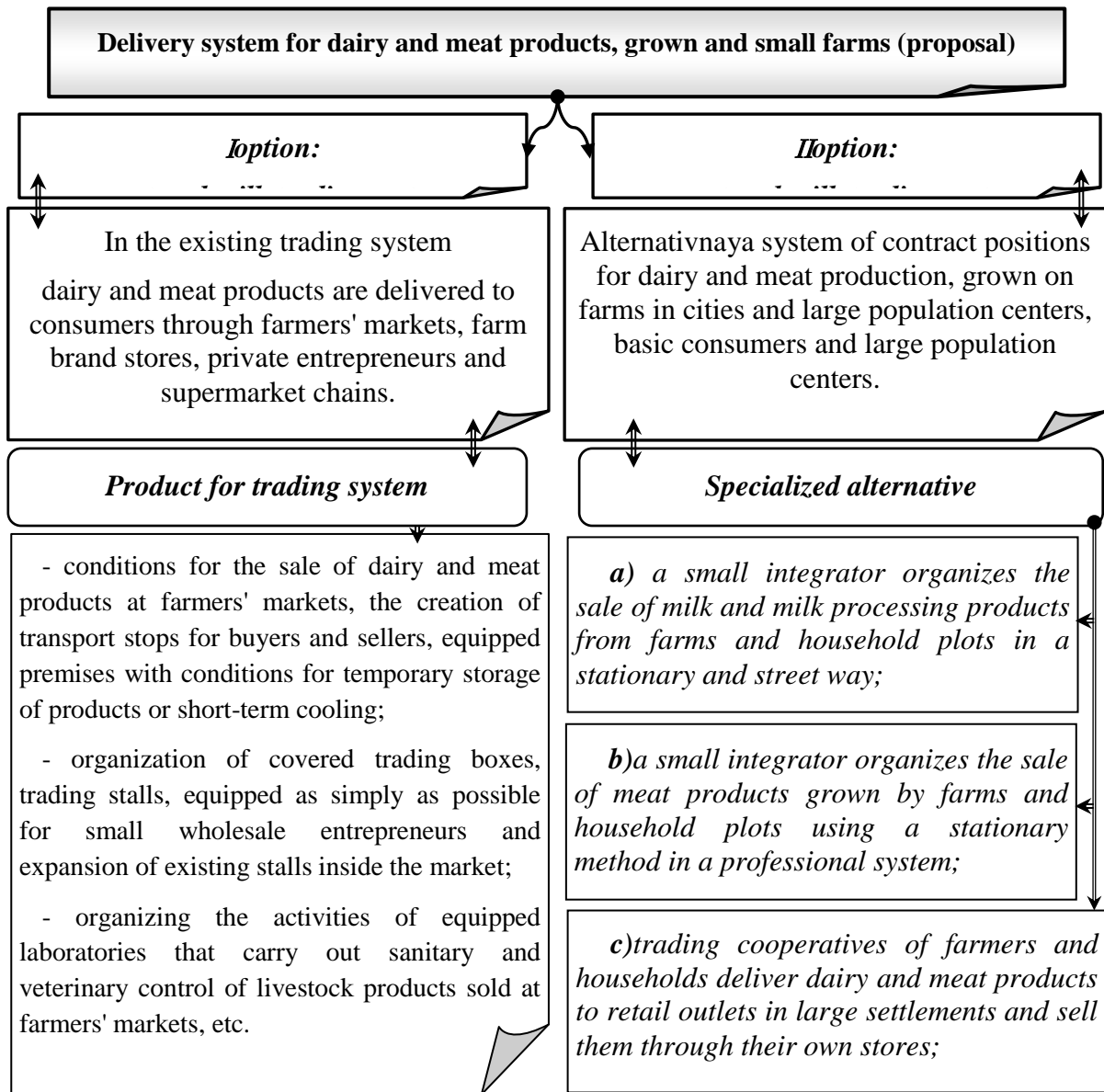


Figure 1. Alternative options for delivering dairy and meat products from small farms to consumers<sup>1</sup>

<sup>1</sup>Source: Developed by the author

Ioption - a meat and milk trading system: in this case, the existing established system of product movement will be improved, and the issue of encouraging individual entrepreneurs who collect and sell milk from villages will be resolved:

- To improve the system for delivering meat and dairy products grown by farmers, dekhkan and household plots to consumers through farmers' markets, private entrepreneurs and supermarkets, it is necessary:
- improving conditions at farmers' markets for trading milk and meat products, building parking lots around markets, building energy-efficient mini-warehouses for temporary storage of meat and milk or short-term cooling conditions;
- creation of economically equipped closed boxes for small wholesale traders, stalls with cooling equipment and expansion of existing stalls, equipping them with the necessary equipment for a digital payment system. Creation of laboratories for sanitary and veterinary control of meat and milk sold at farmers' markets.
- It is necessary to create preferential conditions for producers in the suburban area to prevent spoilage during the transportation of meat and dairy products entering cities and large settlements. In particular, it is desirable to expand the movement of vehicles equipped to transport milk and meat to deliver products to the market.
- Iioption - a system of trade in meat and dairy products: provision is made for the delivery of milk and meat products grown by farmers, dekhkan and household plots operating in suburban areas to consumers in various alternative directions.
- At the same time, for farmers and farms operating in suburban areas, the system for the preparation and sale of meat and dairy products will be expanded, and the activities of small production and trading groups will be established on a regional basis.
- Production trade groups are formed voluntarily and mutually beneficial relationships are maintained between farms that buy (produce) and grow (sell) products.

The production and trade group (PT) will include farms producing livestock products that are close geographically, and socio-economically. The manufacturer-seller (small integrator (SI)) of dairy products is one of the food entrepreneurs who is part of the PT (based on the consent of the members).

The number of PT members may vary depending on characteristics such as geographic location, distance, the amount of products they grow, and individual villages (districts). For example, dairymen in the territory of the PT can bring and deliver products in small quantities (10-15 litres) in their containers. In this case, the daily productivity of the PT for collecting products should be about 500 litres. Because, firstly, a small amount of product is easier to prepare, transport and sell, and secondly, 500 litres is a sufficient volume for one well-equipped Damas car.

The SI entrepreneur must have the necessary technical capabilities to sell the product. In particular, this should be determined by the presence of additional buildings (premises) at the level of receiving 500 litres of milk from farms, the presence of certain experience and knowledge in the field of short-term storage and transportation of milk without spoiling its quality, as well as entrepreneurial qualities. SI is also recommended to be carried out in the production and sale of dairy and meat products. In that:

a) SI entrepreneurs (farms) organize trade in milk and processed dairy products in regions (villages). In this case, the requirements for the SI entrepreneur will be as follows:

- Availability of at least a Damas car (here the entrepreneur with the car is selected, not the buyer of the car);
- A small room (temperature controlled) with racks that meet sanitary standards for fermenting yoghurt;
- It is necessary to have containers for preparing yoghurt (one-size plastic bottles or glass jars), instruments for determining the level of fat content, temperature and other indicators of milk quality, as well as for separating cream. In this case, the branch (farm) operates at least in the mode of selling yoghurts, and there is an opportunity to sell home-produced dairy products. An SI entrepreneur can only trade milk, depending on market demand and the intensity of product sales. But processing allows you to extend the shelf life of the product, create added value in the production and trade of milk;

b) SI entrepreneurs organize trade in freshly slaughtered meat in (farming) areas (villages). In this case, the requirements for the SI entrepreneur may include the following:

- Owning a Damas car (we are not talking about buying a car, but an entrepreneur (farmer or farm) with a car is selected as the SI);
- An equipped poultry house, a temperature-controlled room with conditions for storing slaughter meat, equipment that meets the requirements of santeria;
- The presence of a water supply and sewerage system that ensures cleanliness and disinfection of the premises where slaughter meat is stored for a short period;
- The SI must have experience working in the poultry house system or hire qualified workers.

In both cases, the trading system must cope with changes in market demand, production and seasonal characteristics;

c) small businesses supply dairy and meat products to retail outlets in large settlements on the principles of cooperation. It does not require complex technology when operating in dairy processing mode, and the cost can be reduced if processing is carried out primarily based on local traditional technologies. However modern technologies make it possible to increase market demand and expand market positions.

And it is recommended that part of the milk produced by the farm be sold as milk, and the rest (40%) as yoghurt. In this case, it is necessary to take into account the processing of part of the unsold milk or the use of aseptic packaging technology<sup>1</sup>.

Unsold and stale kefir can be used to prepare suzma or kurt. Suzma is a low-cost, more profitable product with a longer shelf life because it is a locally consumed, complex technology and equipment-free process.

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<sup>1</sup>Source: Асептическая технология. [https://promupac.com/o\\_predpriyatii/tehnologii/tehnologiya\\_brik\\_aseptic](https://promupac.com/o_predpriyatii/tehnologii/tehnologiya_brik_aseptic)



SI can act as independent economic entities, as well as on the basis of service associations organized by members of the PT, as well as based on funds. Considering the current situation (it is assumed that the experience of organized activities of farmers and farmsteads is insufficient), it is advisable to carry out activities as a business entity.

Building SI activities on the principles of cooperation requires a high level of organization from product manufacturers and at the same time guarantees higher product quality. At the same time, this requires the introduction of more complex economic mechanisms.

The activities of regional PT groups to supply consumers with dairy products grown by farmers, dekhkan and household plots are generally recommended to be carried out as follows (Fig. 2).

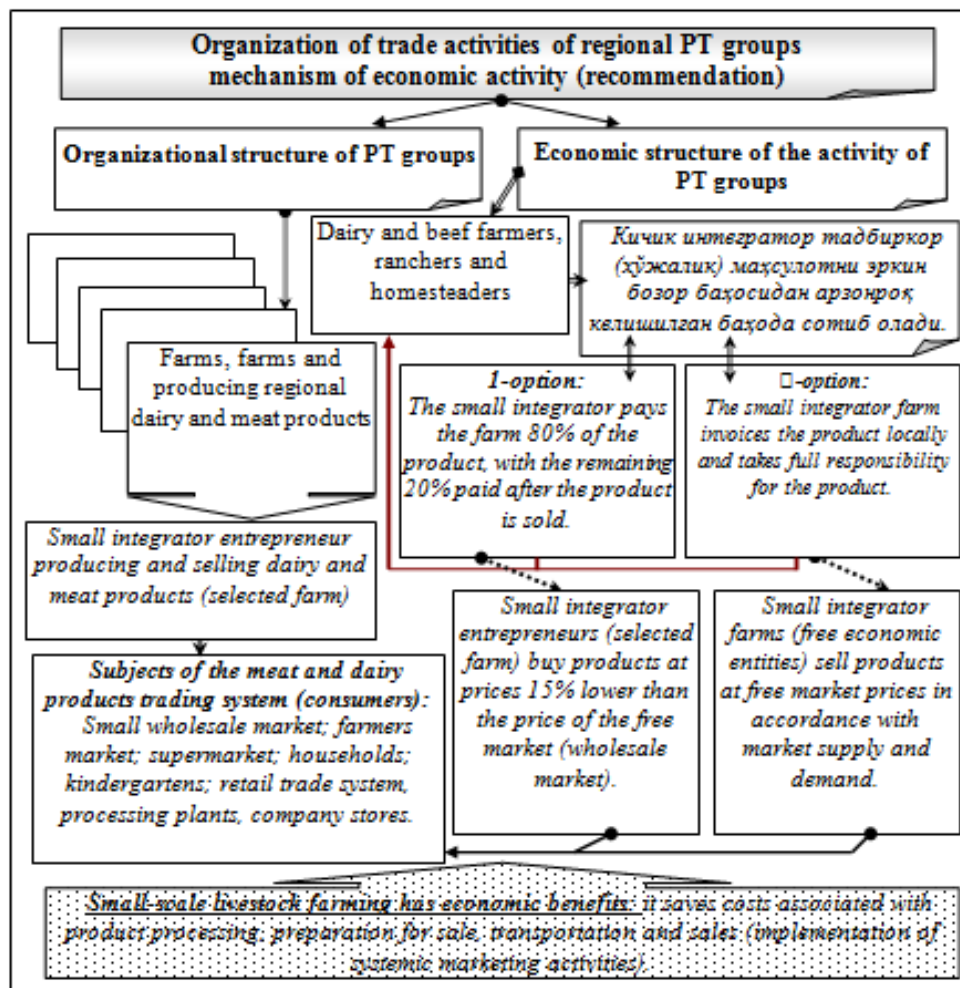


Figure 2. Organizational and economic activities of regional PT groups; general design of the mechanism<sup>1</sup>

<sup>1</sup>Source: Developed by the author

Farmer MI, selected from regional PT groups to deliver dairy and meat products grown on farms and farmsteads to consumers, are invited to purchase milk and meat from commodity producers using the following two options.

The first option is for a small integrator to pay 80% of the commission for the purchased product on the spot, and the remaining 20% after the sale of the product. In this case, manufacturers and manufacturers agree to buy the product 15% cheaper than the market price. Purchase prices for products are determined (based on calculations) in agreement with members of the PT groups. District chairmen can also participate in the negotiation process. The established prices should be beneficial for the activities of farms and SI entrepreneurs.

The second option is for a small integrator to pay for the product on the spot and transfer full ownership of the product to itself. Even in this case, the SI entrepreneur can buy the goods at a price lower than the price of the free market (wholesale market).

In the marketing system, the manufacturer can manage such activities as the choice of sales channels for dairy and meat products, sales of products, type and quality of products, and adaptation to market demand. At the same time, some factors cannot be controlled by milk and meat producers, such as the activities of competing producers, consumers of products, the activities of monopolistic organizations supplying material and technical means to the industry, as well as the limiting and stimulating impact of the regulatory framework for the livestock sector.

In the described situation, product manufacturers can reduce the level of risks by jointly solving the problems of marketing their products. Therefore, adapting to the requirements of the livestock market, the manufacturer must choose distribution channels with the lowest costs for entrepreneurs and relatively greater economic benefits.

Generating economic profit by satisfying consumer demand in the market should be the main goal of livestock farms and the trading system. Because the product manufacturer often wants to sell products faster and more expensively than to satisfy consumer demand. This may solve current farming problems but is not suitable for long-term purposes.

In a free market, resellers meet farmers' needs for product offerings to buyers, greater specialization, and professional sales. Thanks to the industrialization of intermediaries, existing connections and expertise can also benefit livestock farmers. In the case of small-scale production, the activities of intermediaries based on competition are very effective for both farmers and consumers.

There are currently several changes happening around the world in dairy consumption that should be taken into account. In particular:

- Along with the increase in market demand for the production of low-fat dairy products, the preparation of dairy products using fruit pieces and juices;
- Attention to expanding the sale of dairy products processed using environmentally friendly methods, extending shelf life using organic methods;
- Increasing the scale of production of cream, milk and kefir products, especially yoghurt in various volumes, especially small containers;

- The production of milk processing products with preventive properties (with bifid- and acidophilus bacteria) is expanding.

Although the production of organic dairy products is considered a relevant area, today there is very little work in this direction in our republic. Now, in quantitative terms, the issues of meeting consumer demand and fully utilizing the production capacity of the dairy industry are attracting increasing attention to achieving quantitative indicators. This leads to the fact that quality indicators become secondary for the entrepreneur.

From the above, it is important to take into account the capabilities of producers, the conditions created for them, location, demands and market needs when developing marketing in the field of livestock farming in the conditions of Uzbekistan. At the same time, the development of the industry will be facilitated by the creation of associations of product manufacturers, accelerated processing of milk and meat, the creation of convenient infrastructure in and around markets, and the creation of laboratories for product quality control.

## REFERENCES

- *Decision PQ-308 of March 23, 2006 of the President of the Republic of Uzbekistan "On measures to encourage the increase of livestock in personal assistants, farmers and farms".*
- *Decision PQ-842 of April 21, 2008 of the President of the Republic of Uzbekistan "On additional measures to increase the promotion of livestock breeding in personal assistants, farmers and farms and to expand the production of livestock products".*
- *Resolution No. 137 of March 15, 1993 of the Cabinet of Ministers of the Republic of Uzbekistan "On Measures to Deepen Economic Reforms in the Livestock Industry of the Republic".*
- *Akmalkhanov Sh.A. Scientific and practical foundations of animal husbandry development in Uzbekistan during economic reforms. - Tashkent, "Plemelita", UzCHITI, 1996. - 19 p.*
- *Воронина Я.В. Особенности маркетинга в сельском хозяйстве. <https://cyberleninka.ru/search?q=Воронина%20Я.В.&page=1>*
- *Асептическая технология. [https://prompac.com/o\\_predpriyatii/tehnologii/tehnologiya\\_brik\\_aseptic](https://prompac.com/o_predpriyatii/tehnologii/tehnologiya_brik_aseptic)*
- *Откуда Узбекистан завозит мясо и скот, в каком объеме и по какой цене. <https://www.gazeta.uz/ru/2020/11/02/meat-import/>.*



# IMPROVING THE ECONOMIC MECHANISM OF TRAINING PERSONNEL FOR TOURISM ENTERPRISES

Bukharova Nigora Gazieva<sup>1</sup>

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## ABSTRACT

*The main direction of hotel development is to improve the quality of services, train hotel staff according to the international level and create conditions for the development of the hotel industry in the future. Taking into account the fact that tourism is gradually becoming a strategic branch of the country's economy, a highly qualified person who ensures the full involvement of the potential of the regions in the field of tourism, the development of the service sector, and the formation of a positive image of the republic as an attractive center of tourism on the Great Silk Road and there is an objective need to train competitive personnel in the global tourism industry market.*

**Keywords:** *Tourism, Hospitality Industry, Tourism Product, Personnel Training, Professionals, Students, Qualified Experience, Educational Program.*

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## Introduction

In the world, the financial and economic instability of the tourism industry and the increase in international competition require the use of domestic tourism opportunities to ensure the stability of the tourism industry. The reforms carried out by developed countries in the development of domestic tourism, the opportunities given to tourists and entrepreneurs lead to the growth of the economy. According to the United Nations World Tourism Organization (UNWTO), tourism revenues are estimated to be "US\$3.3 trillion in 2023, or 3 percent of global GDP, a domestic increase compared to 2019. and showing an increase in international travel accounts. Implementation of special programs developed in 2023, international tourism is expected to fully restore the pre-pandemic level in 2024. A positive forecast for the tourism industry is reflected in the latest survey of the UN Tourism Index, 67% of tourism industry experts predict greater development of this industry in 2024 compared to 2023. In this regard, improving the organizational and economic mechanisms of ensuring sustainable growth in the field by increasing the demand of tourists for domestic tourism during the period of the pandemic and after it is of urgent importance.

In Uzbekistan, special attention is being paid to the tourism sector as part of reforms aimed at structural restructuring of the economy, modernization of leading industries, and innovative development. The number of local tourists is 12 million within the framework of the program "Travel around Uzbekistan in 2026 by promoting the potential of domestic tourism" in the state program for the implementation of the development strategy of New Uzbekistan for 2022-2026. A number of tasks were defined within the framework of the 2nd goal of "increasing the number of people". In order to effectively implement these tasks, it is necessary to improve the economic content of the concept of "domestic tourism" and the organizational and economic mechanisms of the development of domestic tourism based on the powers and obligations of the management of the "seven neighborhoods" The importance of scientific research aimed at promoting the

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development of domestic tourism by preventing and regulating unfavorable situations, developing long-term forecast indicators based on the econometric model of factors affecting the growth and profitability of domestic tourism in Uzbekistan is urgent. is considered

Systematic organization of training and management of personnel in the field of tourism based on the requirements of the world education standard, increasing the efficiency of educational institutions, implementation of modern management methods in the training of personnel in the field of tourism requires the implementation of scientific research that will ensure the economic development of the country. In this regard, conducting research on improving the economic mechanism of personnel training in the field of tourism of our country is one of the urgent issues of today.

### **Analysis and results**

Highly qualified personnel trained in the field of tourism and the contradictions in their work activities depend on how the production and interdisciplinary integration of the specialist is organized in the educational process. If integration in the educational process is not carried out at the level of requirements, then the period of adaptation of highly qualified personnel to work in production may be prolonged. Modern production enterprises require more than the specialization and qualifications of a highly qualified specialist, as indicated in his diploma, but how he can apply the acquired knowledge and skills in practice.

To solve the problems of tourism enterprises and organizations, use the scientific ideas, projects and developments of scientific staff, the experience of enterprises in the development of personnel training and scientific-technological developments in cooperation, the establishment of training-production complexes (centers), their development, etc. task-oriented. If these tasks are implemented, the enterprises and organizations of our republic will be prevented from technologically lagging behind foreign competitors, the level of introducing innovations in higher education, science and production will be increased in order to increase the innovative potential of our country, and it will contribute to the development of the Republic of Uzbekistan.

Taking into account the above, we propose a competitive training management model through the integration of higher education, science and production, based on the goal of training highly qualified personnel in the field of tourism and directing them to work (to study at the next stages of education) (Fig. 1). The proposed model requires the following tasks:

- Ensuring mutual cooperation of higher education and science due to the use of research results in the educational process;

In fact, the purpose of studying personnel in the field of tourism is to teach the peculiarities of organizing the activities of employees in tourist enterprises and ways to solve the problems that arise in this process, as well as to form their passion for leadership and organizational activities.

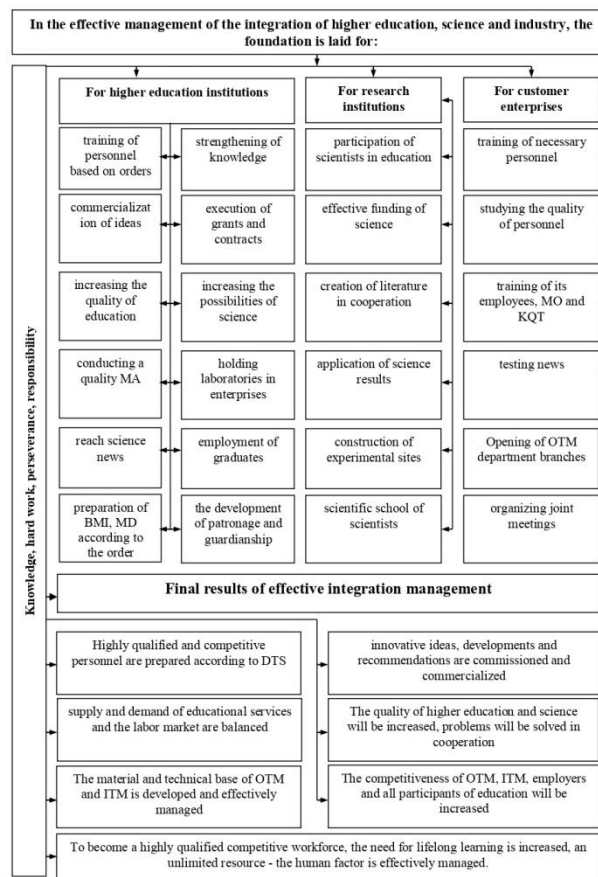
To achieve the set goal, it is necessary to solve the following tasks:

- Management of employees in tourist enterprises in the market economy;
- Increasing the role of the human factor;
- Organization and management of personnel promotion and personnel innovation;
- Implementation of work ethics, ensuring the safety of employees and organization of management of employees in tourist enterprises on a scientific basis;
- Formation of sufficient knowledge and skills of personnel, etc

First of all, people are the most important asset in tourism enterprises that require a lot of labor. Therefore, their management performs the function of coordination of these powerful assets, makes a great

contribution to the process of development of the management system and method of enterprises. In many tourism enterprises, employees are considered to be an auxiliary component of the enterprise and are not given adequate attention in their management. Because in tourism enterprises, employees are an integral part of the enterprise, the final product, and for this, enterprises charge customers. For example, in a hotel, a guest pays not only for accommodation, security, cleanliness, but also for the attention of hotel staff. At the same time, great work has been done in the field of tourism in our country in terms of personnel training in the field of tourism. In this field, extensive work was carried out on the improvement of the personnel training system, increasing its efficiency, international personnel training in the field of service, tourism and hotel business and management. The process of ensuring a direct connection between the offer of educational services in the preparation of economic personnel and the economy's need for these personnel, its scope and proportions will change due to the transition of the national economy to the path of innovative development.

Inviting experienced specialists of production enterprises, leading scientists of ITMs to conduct training sessions for students (masters) at OTM, to supervise course work (project), graduation-qualification works and master's theses, and to participate in DAK work, production in cooperation with them, higher education developing and putting into practice methodological instructions, developments, manuals and recommendations related to the system and problems in science and their solution;



**Figure 1. Forecasting mechanism of personnel training management based on the integration of higher education, science and industry<sup>1</sup>**

<sup>1</sup>Developed by the author based on research.

It would be expedient if our country takes a conditionally four-pronged approach to the issue of effective management of personnel training in the field of tourism:

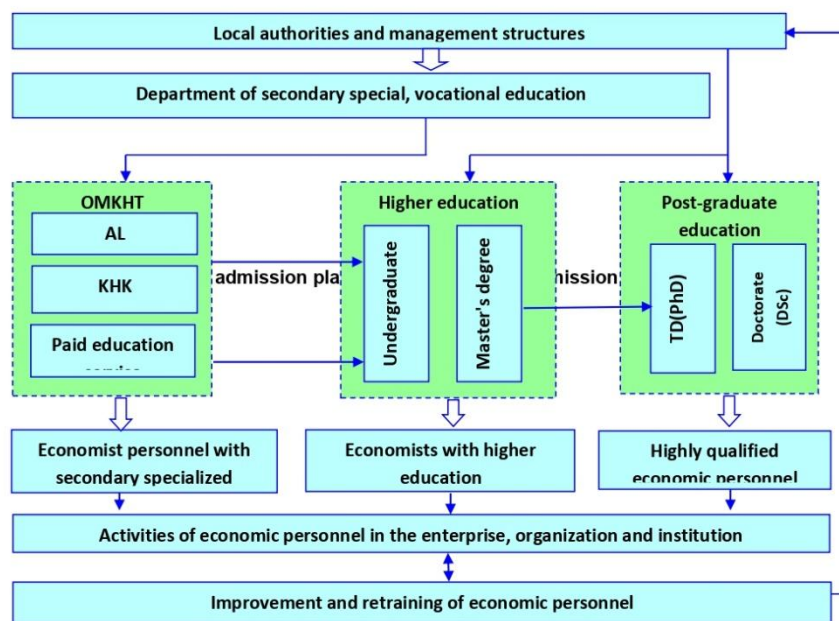
social effectiveness of tourism education;

economic efficiency of economic education system;

political-management (improving the management mechanism and expanding the competitive environment in the field) efficiency;

synergistic efficiency of economic education.

For tourism enterprises, the following system is proposed for training personnel and improving their management mechanism (Fig. 2).



**Figure 2. Training of personnel for tourism enterprises improvement of management structure<sup>1</sup>**

Based on Figure 2, students who have graduated from general education schools continue their studies at the next level of education - academic lyceums and vocational colleges. Some of their graduates enter higher education institutions, while the rest are employed as junior specialists in regional enterprises, organizations and institutions following the mentor-apprentice system. Most of the graduates of higher education institutions who have completed the bachelor's degree are employed in enterprises, organizations and institutions as highly qualified personnel. The remaining part is studying at the master's degree, and a certain part is engaged in scientific activity after completing the master's degree and entering the basic doctorate (PhD) study at the next stage of education. Those who have successfully completed this stage will continue to study as senior researchers-researchers in higher education institutions or in doctoral programs

<sup>1</sup>Developed by the author.

(DSc) organized in the system of the Academy of Sciences of the Republic of Uzbekistan. Graduates of these stages are considered highly qualified economists and continue their work in enterprises, organizations and institutions in the region.

As one of the dynamically developing States of this region, Uzbek government has done an effective job and working closely with the Ministry of Economy, Ministry of Foreign Economic Relations, Investments and Trade (MFERIT), Ministry of Finance of the Republic of Uzbekistan to attract foreign investments and grants in tourism businesses, which could be one of the real acts of the program of strategic advancement. In particular, over the past few years passport prepared 10 investment projects to attract foreign grants for projects in the field of training for the tourism, manufacturing and tourist maps, brochures and other presentation materials and videos, rental movies on foreign TV channels totaling 790 thousand USD (S. Adilkhodjayeva & S. Muratayev, 2014). As part of the deployment of tourism development programs in the regions for 2013 and 2015, special attention is paid to attracting foreign investment in the tourism sector. For example, a program of tourism development in the Khorezm region for 2013 and 2015, provided to attract foreign investments and grants equal to US \$ 15.4 million for the restoration of historical and cultural monuments, construction of hotels, restaurants and roadside infrastructure services for tourists , trade and entertainment centers, training, etc.

Work on diversification of tourism, the creation of new tours and programs offered by foreign and local tourists: it's climbing, and horse riding tours and walks, camel safaris, jeep safaris, off-road tours, fishing, rafting - rafting, heli-skiing , ecotourism, adventure, educational tours and others. The growth of tourism in the country is directly related to the issues of training, retraining and advanced training. When it comes to the development of national tourism, special emphasis is placed on international cooperation and the study of advanced international experience. The single National Stand, called "Uzbekistan", represents beginning from 2013, the Republic's tourist potential at various international exhibitions and fairs. And the results of participation in the following large-scale tourist events confirm the correctness of a given strategy: Fitur (Madrid, Spain), Emitt (Istanbul, Turkey), Balttour (Riga, Latvia), ITB (Berlin, Germany), MITT (Moscow, Russia), TopResa (Paris, France), JATA (Tokyo, Japan), TTG (Rimini, Italy), WTM (London, the UK) and others. The number of cooperation agreements concluded by Uzbekistan in the course of these events is impressive.

All the measures and work carried out in this regard will help the development of tourism in Uzbekistan. The role of the Internet system in the development of the modern tourism industry is incomparable. Students and professors have been providing consulting services on the use of Internet technologies in regional tourism enterprises. In order to show the tourism potential of the region more broadly, students are running pages on social networks under the names "Other Bukhara", "Bukhara - Open your fairyland".[3] At the moment, a group of students and professors, in cooperation with the regional department of the "Uzbektourism" MK, will demonstrate the unique aspects of the Bukhara tourism industry, improve the skills of industry personnel, make reservations and provide information using advanced technologies , business are working on creating a new website that will include services such as helping to implement their ideas. Within the framework of the "complex measures program for the development of the service sector in Bukhara region in 2013-2016", practical assistance was provided in the establishment of cooperation between Bukhara tourism college and leading tourism colleges of Turkey and Austria. In particular, based on the decision "On approval of the state program for the protection, conservation, promotion and use of intangible cultural heritage objects in 2010-2020" approved by the Cabinet of Ministers, the university must fulfill the tasks specified in it. special attention is paid. In particular, scientific research is being conducted on knowledge and skills related to traditional crafts, folkloric performance, and ancient manuscripts. They have been participating in "Sound of Centuries" and "Silk and Spices Festival" with crafts. A group of talented students is preparing for publication information about tangible and intangible examples of heritage in Bukhara region.[5]

As tourism stimulates infrastructure development of the country, has a strong multiplication effect and



helps diversify the economy, supports local culture and crafts and environmental protection, it is very actual for the Republic of Uzbekistan with its transitional economy, moreover it is important as Uzbekistan is a country with vast capabilities in tourism. The travel and tourism industry is a leading export industry worldwide, Central Asian countries could contribute considerably as well. Moreover, with vast underused capabilities in tourism and diversity of tourist attractions represent the potential of tourism in these tourism destinations. Location of the area, corridors on the Great Silk Road, with cities, which were core points of the trade, make destination attractive one for the flow of tourists globally. Accessibility of various tourism types, distinct traditions and unique cultural background of Central Asia has been considered as one of the main key factors of tourism and hospitality businesses. After having been establishing and implying global experience, the attractiveness of tourism is estimated to become one of the crucial one in the Central Asian destination. Furthermore, the optimization of visa facilities has been listed as one of the essential advancement of tourism policy by the UNWTO research group.

### **Conclusions and suggestions**

Based on the above considerations, it is necessary to note the following issues regarding the training of personnel for state and educational organizations within the tourism and hospitality industry:

1. Incompatibility of educational programs with the labor market;
2. Insufficient number of highly qualified personnel who meet international standards and gained experience in the world's leading hotels;
3. Low level of learning foreign languages;
4. Underdevelopment of the material and technical base in educational organizations;
5. Lack of high-quality training manuals and literature.
6. Unsatisfactory level of practical activity;
7. The lack of a narrow range of specialists with modern technological knowledge slows down the development of "Future Hotels" operating in the online system.

The rapid development of Internet technologies in the hospitality industry makes it necessary to train personnel who meet the requirements of world standards in this field. In this regard, we consider it appropriate to make the following suggestions:

1. In order to effectively organize the long-term practice of students in large hotel chains, it is necessary to develop a system of cooperation between universities and hotels.
2. Organization of mandatory practice centers in cooperation with famous hotel chains.
3. Development of modern hotel product market trends;
4. Development of international cooperation between Uzbekistan and foreign universities for the purpose of exchange of experience;
5. Implementation of mandatory training programs in the world's most prestigious hospitality schools in order to gain foreign experience and master a foreign language;
6. Training of information technology specialists;
7. Introduction of mandatory certification standards for foreign languages;
8. Involvement of hotel business employees in pedagogical activities;

9. Organization of roundtables, business meetings and international conferences so that students can present their products and ideas;

10. Holding professional competitions with the participation of experts;

11. Organization of trips to hospitality establishments;

12. Emphasis should be placed on the evaluation of the employers by participating in each activity of the student in the educational process.

Thus, it can be clearly concluded that the profession related to working in the hospitality industry has great prospects. The socio-economic processes taking place in almost all countries show that the demand for hotel services has already been regular and stable, characterized by high demands of consumers for the quality of hotel services.

In this regard, the importance of forms of improving the level of personnel training, such as professional development, is increasing, because regardless of the position held and the category of the enterprise, a modern hotel employee must have the following:

- knowledge of the entire process of guest service, professional mobility to ensure connections between individual business processes of hotel service;

- modern knowledge, the latest skills and best practices, including the ability to work with computers and special programs, as well as the latest security systems, building cleaning equipment, etc., accumulated in the field of hotel services;

- readiness for high nervous and emotional stress, the ability to reduce the stress that hotel workers face especially often.

The implementation of the mentioned measures is aimed at achieving high-level personnel training that meets the requirements of the 21st century for the tourism industry, creating an integrated system of professional personnel training, improving the quality of education and service, and serving to meet the need for highly qualified specialists. does.

## References :

- *Decision PQ-3815 of the President of the Republic of Uzbekistan dated June 28, 2018 on the establishment of the International University of Tourism "Silk Road" //https://lex.uz.*
- *Resolution PQ-5270 of the President of the Republic of Uzbekistan dated October 30, 2021 "On measures to further improve the continuous system of training qualified personnel in the fields of tourism, cultural heritage and museology" //https://lex. en.*
- *Aliyeva.MT Hotel management. T., TDIU. 2007-9-15*
- *Aliyeva MT Development of new competitive strategies of tourist enterprises., Economy and education, 2009, #5.*
- *Nikolskaya E. Yu. Strategy of management of human resources and industry of hospitality and tourism, M.RISK, 2008, #2.*
- *Nikolskaya E. Yu. Konseptualnye voprosy turistskogo obrazovaniya. Vestnik of the Sochin State University of Tourism and Resort Affairs. 2010. No. 3 (13). P.82-85*

# ECONOMIC IMPORTANCE OF ATTRACTING INNOVATION TO INDUSTRIAL ENTERPRISES

Dilobar Isomjonovna Ruzieva<sup>1</sup>

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## ABSTRACT

*The article considers scientific-theoretical views on the organization of industrial enterprises through the innovative production process, types of investment in innovations in industrial enterprises, their economic, social and organizational advantages, stages of attracting innovations to them, and discusses the factors serving to increase the effectiveness of attracting innovations to industrial enterprises.*

**Keywords:** *Innovation, Innovation Process, Trade, Differentiation, Enterprise, Investment, Index, Experimental and Constructional Works.*

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## INTRODUCTION

There is a need for innovative development of industry in the period of economic reforms aimed at the development of the country's economy. In this case, structural changes take place due to the effective use of production factors. This leads to the production of competitive products in industrial enterprises and creates an opportunity to further increase their role and importance in the development of the national economy.

We believe that, it is possible to organize the activities of industrial enterprises through innovative production processes not only in economically efficient enterprises, but also in enterprises with a low level of efficiency.

Reforms aimed at attracting industrial innovations to the country's economy are also mentioned in the New Uzbekistan Development Strategy for 2022-2026, which envisages the development of innovative products that are up to 50% cheaper than existing analogues and of high quality, creating added value that is 2-3 times higher than the price of raw materials, in the areas which will become innovation regions. Attention is paid to the development of production technologies, including the implementation of 195 projects. total cost of 165.9 billion sums" [1]. Of course, it is necessary to develop innovatively the production process in industrial enterprises with a low level of efficiency. All these show the relevance of the chosen topic.

## Materials and methods

In the course of researching the scientific article laws of the Republic of Uzbekistan, aimed at attracting innovation in industrial enterprises, Resolutions of the Cabinet of Ministers of the Republic of Uzbekistan, works of the President of the Republic of Uzbekistan, scientific works of famous scientists in economic, social and political fields were studied, and the development indicators of industry in advanced foreign countries were statistically analysed. At the same time, in the process of logical thinking, were given scientific observation, expert evaluation, observation of processes, system approach to economic phenomena and processes, comparative analysis with the author's experience, conclusions, proposals and recommendations in the relevant areas. Following scientific and technical information sources were used:

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textbooks, study guides, foreign literature, periodicals, collections of scientific and practical conferences, information from the Internet.

### **Literature Review**

Economist J. Schumpeter believes that "Innovation is the creation of new consumer goods, new production and transport market, industrial production"[3]. Economist V.N. Lapin believes that "innovation is a generalised process associated with the creation, dissemination and use of innovations to create the necessary level of consumer demand"[4].

Together with this, according to economist I.V. Afonin, "Innovation in the production process is an effective innovation process, which differs in its classification and application. It is the possession of a specific innovation that is produced, applied in practice and brings a high socio-economic effect" [5].

Gimush R.I., Matmurodov F.M. Innovation refers to novelty. In the basis of this innovation, it is necessary to understand a new order, a new habit, a new style, a discovery. That is, the introduction of innovative processes in the introduction of innovation also leads to the creation of innovative products [6].

Economist V.G. Medinsky "Innovation is a technical, economic and social process that represents the introduction of new goods (services) in the form of innovation" [7], according to economist F. Nixon, "innovation is the production of technical, production commercial activity is a new improved technology in consumer markets"[8].

V.A. Chernov in his textbook "Innovation Analysis" considers the innovation process as a new method of managing scientific research, development work, innovative technologies and production [9].

V.Yu Burov believes that "independent regions with low financial level and its high differentiation of development in modern economic conditions can lead enterprises developing at a lower level to their segments of innovative development at the first level" [10].

M. Porter's approaches study the role of innovation in the development of enterprises, the features of its application, the continuous introduction of only innovation for the sustainable development of the enterprise, as well as the impact of innovation on the achievement of competitive advantage of enterprises [11].

Economist U.M. Dzhumaev believes that, in order to develop and implement innovative innovations in enterprises it is necessary to manage the innovation process. In this case, innovations are the result of the innovation process of active innovation enterprises [12].

Gaibnazarova Z.T. Innovation is the creation of radically regulated, new results of professional activity and their raising to a fundamentally new level of quality. Complexly, any innovation goes beyond ordinary activities and always seeks progress in this field [13].

### **Results**

In order to ensure sustainable development of the world economy in the context of globalisation, economically developed countries, industries and companies believe that innovative renewal is the maximum growth of production. It has been reported that, innovation and technological development [14] maximise the growth of gross domestic product [GDP] in developed countries by 50 to 800 per cent.

The sustainable development of the economy of countries such as Germany, France, the UK, the USA, Japan, South Korea, China and other developed countries is mainly as a result of the production of innovative goods that meet the requirements of the world consumer market. World consumer market.

One of the conditions of the market economy is the development of the national economy along a new innovative path. In this case, structural changes take place through the efficient use of production factors. This leads to the production of products on the basis of competition in industrial enterprises and creates an opportunity to increase their role and importance in the development of the national economy.

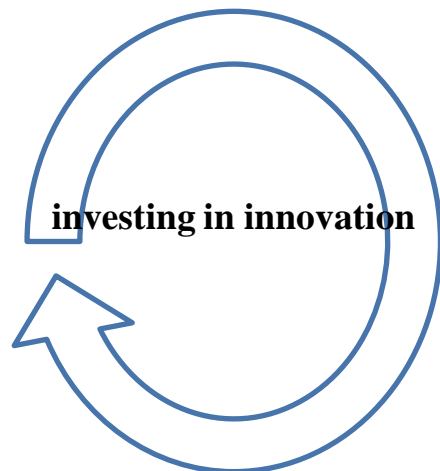
The formation of a competitive environment in the country's economy makes it necessary to introduce modern scientific and technical developments, adapted to the production of innovative products, in each industrial enterprise. As it is known, one of the requirements of the market economy is the development of products taking into account the needs of consumers and paying special attention to products produced on the basis of innovative approaches.

Currently, Uzbekistan ranks 82nd out of 132 countries in the Global Innovation Index 2023. However, it has retained its status as a rapidly developing economy. At the end of 2022, 81 detailed measurement criteria were calculated for 131 countries, and the GII has become one of the leading indicators for assessing the innovation performance of economies.

As we know, innovation has two sub-indices. They are:

- Access to Innovation Index;
- Innovation Activity Index.

From point of our view, investment in innovation by industrial enterprises covering the elements that ensure the innovation activity of the economy can be divided into 5 types. These include



- effectiveness of cooperation
- quality of labor resources
- establishment of technological parks, FEZs, FIZs, SIZs and scientific-production clusters
- market development and business development
- improving infrastructure

**Figure 1. Types of investment in innovation in industrial enterprises**

The Decree of the President of the Republic of Uzbekistan dated 21 September 2018 "On Approval of the Strategy of Innovative Development of the Republic of Uzbekistan for 2019 - 2021", aimed at the development of innovative competitive products in the country's economy, emphasises the need to organise free industrial zones, small industrial zones and research and industrial clusters.

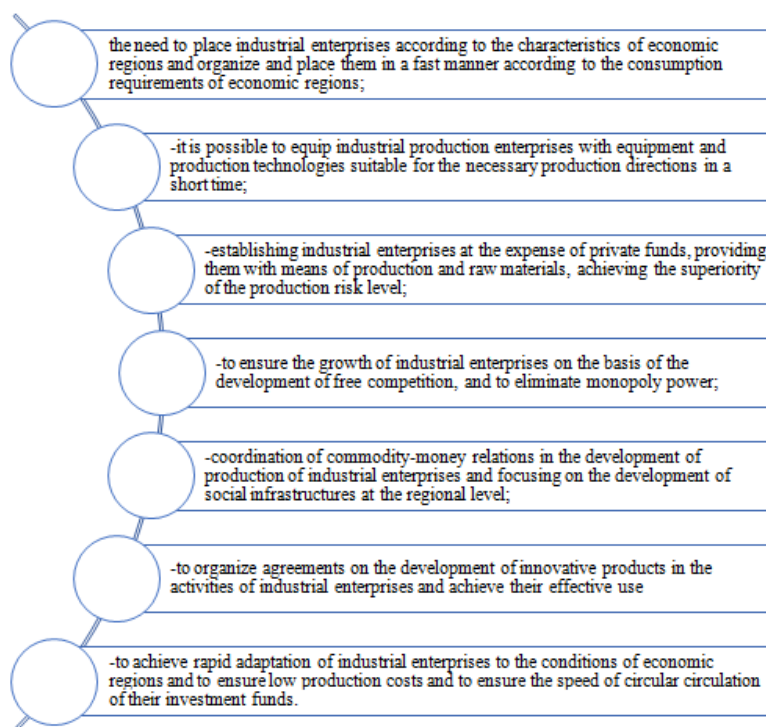
The main factor in the creation of equipment and production technologies necessary for the production of innovative competitive products is the growing desire of production entities engaged in production to increase their knowledge not only in economic, organisational and intellectual terms, but also to develop their production activities in cooperation with scientific and technical centres.

Today, there are 75.6 thousand industrial enterprises in the Republic. According to preliminary data, in January-March 2023 the enterprises of the Republic spent 131.0 trillion sums on industrial production, and compared to January-March 2022 the index of physical volume of industrial production amounted to 104.1%.

The largest share in the industrial structure is accounted for by industrial production, and it is 106.3 trillion sums. Its share in the total volume of industrial production amounted to 81.1%.

Based on the market economy, industrial enterprises have the right to carry out their activities independently, to sell their products on consumer markets at freely agreed prices, to choose freely the subjects purchasing consumer goods, to establish economic relations independently. The economic and legal aspects of the market economy guarantee its independence.

It should not be denied that, industrial enterprises are economically, socially and organisationally superior to other sectors of the economy in the organisation of production on the basis of the laws of the market economy, including the laws of supply and demand, ensuring the increased use of labour resources, and increasing its efficiency. These advantages include

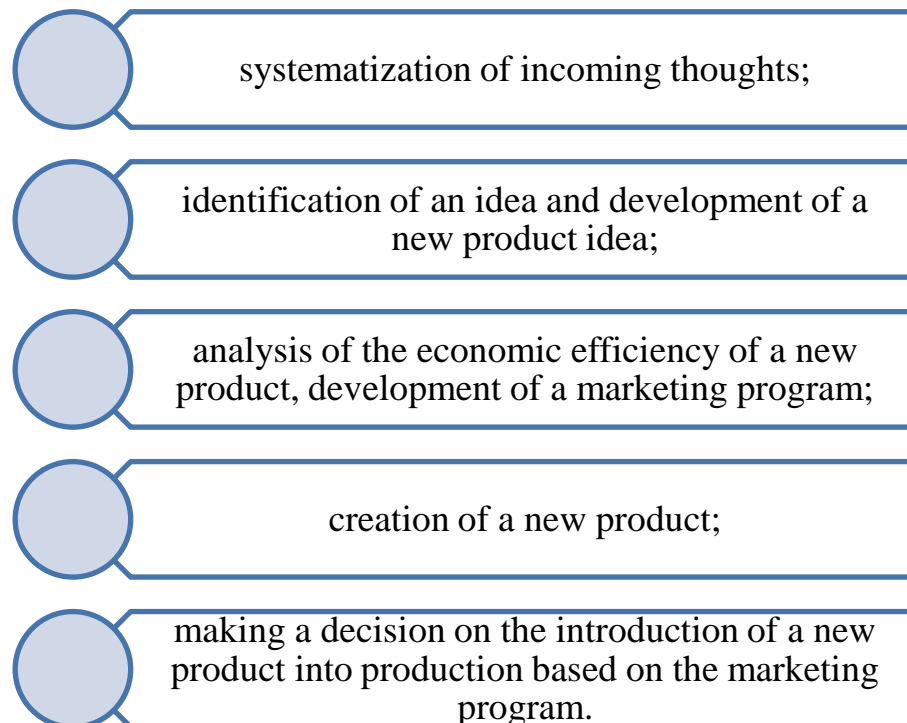


**Figure 2. Economic, social and organisational advantages of industrial enterprises.**

By attracting innovation to industrial enterprises and improving their efficiency, it is possible to achieve the satisfaction of the population's needs at the necessary level of consumption. Industrial enterprises should organise production mainly on the basis of local resources available in each economic area. The fact that the consumers of the products of such enterprises are residents of this economic area and do not incur additional travel expenses reduces the costs of production. This also applies to the labour force in the industrial enterprises of material production. It is possible to quickly determine the working capacity of each worker involved in production and to determine measures to improve the efficiency of his or her work.

Another positive aspect of industrial enterprises is not only the possibility to change the types of products according to the requirements of consumers, but also to create the necessary conditions for improving the types of labour according to the needs of the market. For that reason, it is necessary to attract innovation to industrial enterprises. We believe that, it is necessary to develop the production of innovative products taking into account the natural and production resources of economic regions. This will ensure innovation-based economic growth in the country.

In the process of attracting innovation to industrial enterprises, we can distinguish several stages, among which are the following:



**Figure 3: Stages of attracting innovation to industrial enterprises.**

Based on the above, it can be concluded that it is necessary to pay special attention to the following factors that serve to increase the effectiveness of attracting innovation to industrial enterprises in the country's economy. These factors include:

- Organisation of a centralised service to manage the development of innovative products in the enterprise;
- The identification of target project groups or centres for the creation of a new product;

- Increasing the role of research and development, experimental and design work, laboratories and scientific centres existing in production units;
- Creating special funds and venture capital departments to stimulate innovation activities;
- Based on market needs, aimed at mastering new technologies, creation of special industrial laboratories dealing with their problems.

## References

- *Ўзбекистон Республикаси Президентининг 2022 йил 28 январдаги “2022 — 2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегияси тўғрисида”ги ПФ-60 сон Фармони.*
- *Ўзбекистон Республикаси Президентининг 2018 йил 21 сентябрдаги “2019 — 2021 йилларда Ўзбекистон Республикасини Инновацион ривожлантириш стратегиясини тасдиқлаш тўғрисида”ги ПФ-5544-сон фармони.*
- *Шумпетер Й. Теория экономического развития. М.; Проспект. 1982.71с.*
- *Лапин В.Н. Социальный аспект управления нововведениями. Таллин. 1981.с.21.*
- *Медвинский В.Г. Инновационное предпринимательство. М.; ИНФРА-М.: 1997.с.18.*
- *Gimush R. I., Matmurodov F. M. Innovatsion menejment: Iqtisodiyot oliy o'quv yurtlari uchun o'quv qo'l. – T.: O'zbekiston faylasuflari milliy jamiyati nashriyoti, 2008. – B. 10. 6.*
- *Медвинский В.Г. Инновационное предпринимательство. М.; ИНФРА-М.: 1997.с.8 б.*
- *Никсон Ф. Инновационный менеджмент. М.; 1997.с.23.*
- *Чернов В.А. Инновационный анализ: учебное пособие, 2-е изд.перераб. и доп.-М.; ЮНИТИКИ ДАК. 2007.с.59.*
- *Буров В.Ю Малое предпринимательство в пространственном развитии региона. Вестник Бурятского Государственного Университета. Серия. Экономика и право. №2 (1) 2015.С 78-84*
- *Портер М. Международная конкуренция: Пер. с англ./ Под.ред. В.Д. Щетинина. –М. Международные отношения, 1993. –64 с;*
- *Джумаев У.М. Инновационное предпринимательство как фирма устойчивого роста промышленного производства Республики Таджикистан // Автореферат дисер.уч.степ. кандидат экономических наук. - М.; 2010.-с.7.*
- *Гаибназарова управленческие З.Т. Модернизация: управление инновациями и инновации. XIX Международная конференция “История управленческой мысли и бизнеса. Управленческий труд и роли менеджеров: прошлое, настоящее, будущее”, МГУ имени М.В.Ломоносова, Россия, Москва. 21-22 сентября 2018. С. 79-88*
- *Устинова Г.Х.Инновационный путь развития России// Вестник Самарского государственного университета № 7, 2012., 139с.*



## DIRECTIONS FOR INCREASING THE COMPETITIVENESS OF CONSTRUCTION ENTERPRISES

Solieva Umida Alisher kizi <sup>1</sup>

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### ABSTRACT

*In the article, indicators of competitiveness of construction enterprises, their values and factors affecting them, taking into account the specific characteristics of construction enterprises, a number of factors of competitiveness of construction enterprises are distinguished.*

**Keywords:** Construction, Housing, Reconstruction, Reconstruction, Investment, Profit, Conservation, Machinery, Building Materials, Construction And Assembly Works.

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### Introduction

Integration of the economy of the world countries and in the conditions of digitization, the importance of increasing competitiveness at the enterprise level is increasing. One of the main problems facing modern construction enterprises is to achieve competitiveness that ensures their optimal development and operation in a constantly changing external environment. Increasing the competitiveness of construction enterprises allows these enterprises to improve not only technologies, but also methods of organizing the construction process in order to gain additional competitive advantage and occupy leading positions in the market. "The share of the construction industry in the global GDP averaged 14 percent, and during the pandemic in 2020, the decline of the construction market was observed and "McKinsey & Company Construction and building technology: Poised for a breakthrough?" report notes that in 2002-2018, the industry showed low performance despite its size. In particular, global spending on residential and commercial real estate construction in the period 2021–2025 is approximately 17 trillion. it is expected to increase to dollars" [1]. This shows that the importance of increasing the competitiveness of construction enterprises in the conditions of the innovative economy is increasing. [2]

Many mines in the state balance sheet of the Republic of Uzbekistan, including 215 mines for the production of bricks and agloporite, 37 mines for the production of cement, 30 mines for high-quality stones, 5 mines for feldspar raw materials and wollastonite, for glass raw materials - 7 mines, for burnt lime - 24 mines, for natural wall stones - 3 mines, for sand and gravel mixture - 91 mines, for raw materials for the preparation of sewage pipes - 3 mines, construction works and It has 28 mines of sand needed for silicate products, 15 mines of kermasite raw materials, 19 mines of plasters, and reserves of mineral resources of hakoza.

PF-158 dated September 11, 2023 of the President of the Republic of Uzbekistan "On the Uzbekistan-2030" strategy", PF-60 dated January 28, 2022 "For 2022-2026 "On the development strategy of the new Uzbekistan", No. PF-6119 of November 27, 2020 "On the strategy of modernization, rapid and innovative development of the construction network of the Republic of Uzbekistan for 2021-2025 on approval", dated September 21, 2018 No. PF-5544 "On approval of the innovative development strategy of the Republic of Uzbekistan in 2019-2021", dated May 23, 2019 PQ- No. 4335 "On additional measures for the rapid development of the construction materials industry", No. PQ-3698 of May 7, 2018 "Additional measures on

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the improvement of mechanisms for introducing innovations to economic sectors and sectors This dissertation research serves to a certain extent in the fulfillment of the tasks specified in the decisions of "On Measures" and other regulatory legal documents related to this field.

### **Analysis of literature on the topic**

The development and development aspects of ensuring the competitiveness of construction products on the basis of innovative activities, the problems of the evaluation and management mechanisms of innovative activities in construction industry enterprises have been researched in the works of many economists and political scientists, but the analysis of scientific and economic literature and journals studied on the basis of research shows that there are scientific-methodical developments indicating that the competitiveness of construction products based on innovative measures in construction industry enterprises has not been fully explored. This is because there is no comprehensive (complex) approach to ensuring the competitiveness of construction products based on innovative activities in construction industry enterprises, and the opinions of the authors who conducted the research are very close to each other and offer their own evaluation methods and methods based on their ideas [4].

There are many ideas on how to determine the competitiveness of products through innovative activities. Some of them: American professor F. Kotler explains innovation as an idea, product or technology that is aimed at mass production and released to the market, accepted by the consumer as a completely new or partially unique product [5].

B.Twis considers innovative activities as a process with economic content of inventions and new ideas [6].

In the literature published under the editorship of IS Stepanova, it is said that "about two-thirds of the accumulation fund is implemented in the construction network, more than 10% of the gross social product of the country is created" [3]. The results of the research revealed that the value of transportation costs is 20-25 percent of construction costs alone. This, in turn, makes it more appropriate to use econometric models on the issue of transport in the analysis of construction sectors. 80 percent of construction materials industry products, about half of wood materials, more than 20 percent of metal rent, more than 10 percent of machinery industry products are used in construction [4]. This means that the activity of the network is of great importance in ensuring the employment of the population. Therefore, conducting a more in-depth study on the basis of structural changes in the development of construction industries and the use of investments in it is an urgent issue of the present day, gaining not only scientific, but also practical importance [6].

### **Research methodology**

The results of the scientific research of national and foreign scientists, who were engaged in the analysis of the problems of increasing investment processes in the development of the construction industry, served as the theoretical and methodological basis of this study. In the preparation of the article, abstract and analytical observation, comparative and factor analysis, indicative, selective observation, comparison, economic-statistical and other methods were used.

### **Analysis and results**

Today, the construction industry is one of the largest industries in the country, and at the same time, it accounts for about 9% of the gross domestic product of Uzbekistan. As a result of large-scale economic reforms in the country, the scope of construction enterprises is also increasing. In this regard, increasing the

competitiveness of construction enterprises is becoming an urgent problem today, because the competitive environment, like all sectors of the economy, ensures the development of the construction industry. It is for this reason that enterprises with low competitiveness, which do not meet market requirements, stop their activities, and at the same time, competitive enterprises and organizations continue to operate and develop. Thus, as a result of the development of competitive relations, the competitiveness of enterprises and organizations increases. Competitive relations are the basis of development not only in construction, but also in all enterprises and organizations.

Determining the competitiveness of construction enterprises also requires taking into account the specific characteristics of the manufactured products. Construction products are distinguished by their long service life. This is largely due to the healthy competition of construction enterprises, which serves as a driving force for the development of the economy of construction enterprises and the economy of the whole country. Competition is the main means of saving resources, because it encourages the efficient use of resources. It improves the quality of construction products and, as a result, the standard of living of the population.

In our opinion, the competitiveness of the construction enterprise—these are the characteristics that determine the conditions for the successful operation of the construction company in the construction market, reducing costs and improving the quality of built housing.

In our opinion, the competitiveness of a construction enterprise is formed on the basis of the following characteristics of construction products:

- Realization of products of construction enterprises in an environment of active competition is highly dependent on their consumption characteristics, as well as on the investment activity of business entities and the solvency of the population;
- The ability to become a "delayed" consumer product due to the ability of the consumer to be satisfied with the product (service) available to him;
- Focusing on long-term use, which increases the consumer's interest in maintaining the existing one (repair, modernization, reconstruction) rather than buying a new product;
- The dependence of the activities of construction enterprises on the socio-economic development of the region;
- The special importance of the time factor due to the significant length of the production and commercial cycle;
- The important role of design solutions that reduce the risk of obsolescence of construction products (services);
- In the conditions of the need for competitiveness of production, an excessive number of requirements for the innovation of construction products (services);
- The need to involve a large number of participants (developers, investors, contractors, subcontractors, designers, regulatory bodies) in the creation of each product unit, which creates additional sources of risk in the process of establishing business relations with enterprises;
- Due to the high price of the final product of the construction industry, the scale of consumers is low.

Taking into account the specific characteristics of construction enterprises, a number of factors of competitiveness of construction enterprises can be distinguished.

1. Long-term demand dynamics. Long-term demand means the period of time during which the internal resources of production of the construction enterprise can be replaced, such as capital, labor, technology, etc.

2. Scientific and technical innovations. In the last decade, various scientific and technical innovations related to the emergence of new construction materials, technologies, various high-performance equipment have appeared in the construction industry.

3. Advertising innovations. From time to time, companies, using new methods, offer their products to the market, trying to increase consumer enthusiasm and minimize unit costs. This means that they promote new opportunities that change the conditions of competition and the position of competitors' enterprises.

4. Leadership dynamics describe the entry and exit of large enterprises from the competitive struggle.

5. Diffusion of achievements. If the innovative development is known to competitors, suppliers, buyers, then the barriers to entry into production will be reduced.

6. Efficiency dynamics. In the real sector of the economy, with the emergence of various new products or technologies, there are opportunities to increase the scale of production, thereby reducing the costs of the producer's product unit.

7. Regulation of the market by the state. The influence of the state through its institutions, including the regulation of financial relations and changes in public policy, allows to influence market relations and the state of competition in various sectors of the economy. The state government creates software products, the purpose of which is to solve the problem of moving citizens from outdated housing, allocating apartments to military personnel, young families, etc.

8. Increased determination. This in turn means reducing uncertainty and risk.

In the market economy, there are a number of methods that help to increase the competitiveness of construction enterprises:

1. *Continuous use of innovations.* This method aims to ensure that the products offered by the enterprise meet not only the current needs of consumers, but also their future needs.

For example, using new environmentally friendly building materials and building smart houses using energy-saving technologies.

2. *Expansion of new types of manufactured products.* Modern consumers are willing to pay for houses built using the latest architectural solutions, rather than concrete houses that are mentally and physically outdated.

3. *Relocation of construction companies from old housing,* production of products with characteristics that meet state standards in terms of quality and price, which allows participation in the implementation of state programs for the construction of military facilities and others.

4. *Construction companies find their customers* should pay more attention to studying the market demand of consumers.

5. *Use of high quality raw materials and materials.*In order to increase the competitiveness of the enterprise, it is necessary to pay more attention to the quality of the work performed, which, among other things, depends on the materials, products and constructions used in the construction of construction products.

6. *Active personnel policy, training and retraining of personnel.* Any company should approach the issue of recruitment carefully. In fact, it is necessary to have highly qualified specialists to use new construction techniques and innovative technologies.

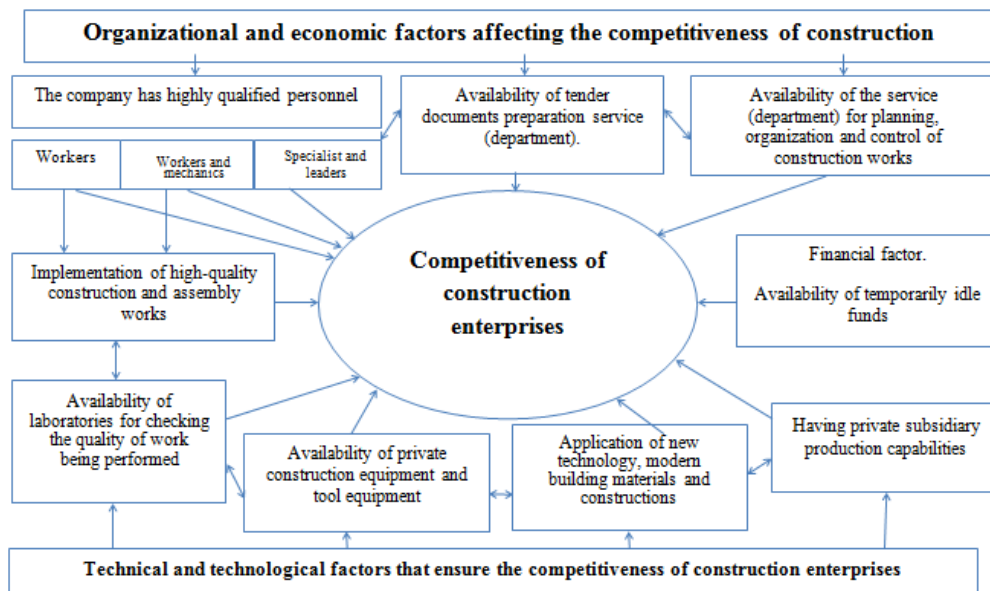
7. *To increase material interests of employees and improve working conditions.*Currently, a very simple wage system is used in construction, however, new approaches should be developed to increase the motivation of workers.

8. *Organization of continuous monitoring of consumers of construction complex products in order to determine the needs of consumers.*

9. *Constantly analyze the activities of competitors in order to determine the strengths and weaknesses of both competing enterprises and your own enterprise.*

10. *Register your trademark, use branded products and maintain the business position of the construction company.*A trademark has a great impact on potential customers, and an impeccable business image of a construction company increases customer confidence in the products offered by the company.

Thus, it is necessary to determine the competitiveness of the construction enterprise for a long time, not only for efficient operation, but also for its further development, using a number of methods. In our opinion, there are main and additional factors that directly or indirectly affect the competitiveness of a construction company. The main factors can be grouped into four groups, additional factors include indicators that are reflected in other aspects of the construction enterprise (Figure 1).



**Figure 1. Factors affecting the competitiveness of construction enterprises.**

At present, there is no general evaluation methodology of the level of organization and development of production in the enterprise, which makes it possible to determine its competitiveness in terms of organizational and technological indicators. This approach is important in today's market conditions, and it should be noted that the development of a methodology for determining the competitiveness of construction enterprises is equally necessary for both the ordering organization and the contracting organization.

A significant problem in determining competitiveness is that it is usually measured by comparison with a real competitor. Competitive assessment—it is a process of comparison with the competitor on a number of summary indicators of the enterprise's activity. The complexity of this process is related not only to the costs of collecting and preparing data, attracting analysts, but also to the insufficient development of methods and methodologies for such an assessment.<sup>1</sup>. Based on this, solving the following problems is defined as the goal:

The object of analysis and the approach to it have not been formed. Comparison of enterprises with different scale of production, assortment of performed works, different types of customers leads to wrong conclusions.

The composition, content and methods of determining the main evaluation indicators are not defined. Indicators that quantify the goals of assessment sometimes conflict with each other. An arbitrary set of indicators makes the evaluation sufficiently objective and complex, which makes it difficult to draw a possible final conclusion based on a summary indicator or priority.

The methodology for determining the competitiveness of a construction enterprise is reflected in the tables below, in which it is recommended to use standard values of enterprise competitiveness indicators. In order to assess the level of competitiveness of the enterprise, it is necessary to create a comparative table describing the level of the values of the coefficients obtained in the calculations using the data of this table.

When determining the indicators of the enterprise's management resources, it is appropriate to use methods of determination such as the coefficient of usefulness, labor productivity, the coefficient of real income of workers and employees, the coefficient of dismissal of workers and employees (Table 1).

**Table 1. : Indicators of management resources of the construction enterprise.**

No	Indicatorname	Calculation method	The content of conditional characters
Calculation methods <sup>2</sup>	1	Efficiency coefficient	$F_k = F_j / F_o$
	2	Coefficient of usefulness of the activity	$Mm.k = (Dya.j / Xj.j) / (Dya.o / Xj.o)$

<sup>1</sup>Selyutina L.G., Sushko A.I. Rol i mesto informatsii v proektirovanii i upravlenii stroitelstvom // Ekonomika i upravlenie: analiz tendentsii i perspektiv razvitiya. 2014. No. 17. S. 272-276.

<sup>2</sup>Developed by the author.

	3	Coefficient of real income of workers and employees	$RD_k = RD_j / RD_o$	RD <sub>j</sub> - value of real income of workers and employees in the current period; RD <sub>o</sub> - value of real income of workers and employees in the previous period.
	4	Unemployment rate of workers and employees	$IX_{b.k} = IX_j / IX_o$	IX <sub>j</sub> - the number of workers and employees in the current period; Rs is the number of workers and employees in the previous period.

When determining the indicators of production resources, which are the components of the competitiveness of construction enterprises, it is proposed to determine them through the coefficient of return of funds, the coefficient of availability of fixed assets, the coefficient of fund capacity (Table 2).

**Table 2 :Indicators of production resources of the construction enterprise.**

	No	Indicatorname	Calculation method	The content of conditional characters
Calculation methods <sup>1</sup>	1	Fundreturnratio	$F_k = M_{ih} / N_o$	M <sub>ih</sub> - volume of product production; Vo <sub>q</sub> is the average annual cost of fixed assets
	2	Availability ratio of fixed assets	$Y_{ak} = Q_q / B_q$	Q <sub>q</sub> -residual value of fixed assets; B <sub>q</sub> - initial value of fixed assets.
	3	Stockcapacityratio	$F_s = 1 / F_q = V_oq / M_{ih}$	M <sub>ih</sub> - volume of product production; Vo <sub>q</sub> is the average annual cost of fixed assets

Indicators of financial resources, which are a component of the competitiveness of construction enterprises, include the solvency ratio, financial stability ratio, current liquidity ratio, return on equity capital, return on debt, return on sales, economic return, capital turnover ratio, and payables turnover. The method of determination through indicators such as the coefficient was proposed by economists (Table 2).

In addition to these indicators, it is desirable to determine the indicators of the financial independence coefficient, the asset profitability coefficient, the financial autonomy coefficient, the active working capital ratio, the receivables turnover ratio and the coefficients of possible financial resources.

In accordance with paragraph 8 of the statement No. 97a of the meeting of the Cabinet of Ministers of the Republic of Uzbekistan dated December 5, 2021, it is planned to introduce ISO 9001 quality management systems in 7 enterprises of the company, and ISO 50001 energy management systems in 2 enterprises in 2018-2023.

<sup>1</sup>Developed by the author.

**Table 3 : Analysis of the main financial and economic indicators of "Uzkhurilishmateriallari" JSC for 2018-2023, billion soums**

Indicator name	Years						Growth from 2023 to 2018, m.
	2018	2019	2020	2021	2022	2023	
Revenue from product sales	1295.3	1539.9	1928	2103	1935	2451	1.89
Product production cost	628.1	762.4	776	922	1126	1217	1.94
Period costs	300.8	214.9	263	332	386	423	1.41
Selling expenses	40.4	39.6	50	55	62	71	1.76
Other operating expenses	232.4	142.6	174	226	267	291	1.25
Other income from the main activity	17.8	15.3	47	35	64	44	2.47
Gross profit from the sale of products	667.2	777.5	1152	1181	809	1234	1.85
Income in the form of dividends	9.7	0	0.02	0.01	0.2	0.016	0.0016
Income in the form of interest	30.1	36.8	50.1	53.9	46.6	50.7	1.68
Expenses in the form of interest	0.4	1.2	2	3.5	8	13	32.5
Income from exchange rate differences	7.4	9	7.6	14	10	11	1.48
Profit before income tax	425.2	613.5	948	928	529	891	2.09
Income tax	11.5	9.3	9.6	2.7	5	5	0.43
Net profit	192.8	327.2	510.7	410.4	210.9	350.7	1.82

Source: author's calculations based on the information of AK "Ozkhurilishmateriallari".

Network schedules for the introduction of ISO 9001 and ISO 50001 in 2022-2023 were agreed and approved with the "Uzstandart" agency. In this paragraph of our research work, the analysis of the financial and economic indicators of the management and economic activities of the joint-stock company "Ozkhurilishmateriallari" selected as a research object in 2021-2022 is carried out.



According to the analysis, by the end of 2023, the amount of income from the sale of products in the society has increased by 1.89 times compared to 2018, and the net profit in 2018 is 192.8 billion. soums, 350.7 billion in 2022. soum or 1.82 times compared to 2018. The cost of product production in 2017 was 628.1 billion. amounted to 1217 billion soums in 2023. soums, that is, it shows that it has increased by 1.94 times. Income in the form of dividends in 2018 amounted to 9.7 billion. is equal to 0.016 billion soums in 2022. soums, that is, in 2023 it decreased by 606.2 times compared to 2018 (Table 5).

The ratio of net profit to the cost of production, and especially the volume of income in the form of dividends, has decreased dramatically over the past period. Also, if the company's share capital in 2055 is 2534 billion. is equal to 1277.8 billion soums in 2017. increased by 1.98 times compared to the soum, private capital increased by 2.23 times, operating profit by 1.73 times, and the amount of interest payments by 7.59 times, respectively. Despite the fact that the number of ordinary shares of the company in circulation increased by 70.3 times during this period, the amount of profit tax decreased by 2.4 times compared to the previous period (Table 4). These indicators indicate the need to increase the efficiency of corporate management in the joint-stock company "Ozkhurilishmaterialari".

**Table 4 : Some financial indicators of "Uzkhurilishmaterialari" JSC for 2017-2022, billion soums**

Indicator name	Years						Growth of 2022 compared to 2017, m
	2017	2018	2019	2020	2021	2022	
Share capital	1277.8	1 493.6	1 923.2	2177.0	2248.4	2 534.0	1.98
Private equity	335.8	386.5	487.9	478.6	749.9	749.9	2.23
Number of common shares outstanding	6 882	7 497	15 178	460 439	739 342	483 764	70.3
Operating profit	494.1	577.9	935.5	883.5	486.1	854.8	1.73
Amount of interest paid	1.76	1.16	2, 99	3.51	8.57	13.36	7.59
Profit tax	12,20	9.31	10.71	26.96	5.09	5.09	0.42
Net assets, per year	1 250.8	1 314.6	1 496.9	1 906.7	2 206.5	2 248.4	1.79
Net assets, year-end	1 277.86	1 493.63	1 923.23	2 177.00	2 248.39	2,534.03	1.98

Source: author's calculations based on the information of AK "Ozkhurilishmaterialari".

The results of the activity of each enterprise often depend on the availability of reserves and resources to cover expenses. Three main indicators are defined to describe the sources of reserves and costs:

- Availability of own and long-term debt sources of formation of reserves and expenses;
- The total amount of the main sources of reserve and cost formation.

In 2018, the total resources related to the provision and reimbursement of costs in the society amounted to 947.5 million soums, and in 2023 it reached 2501 million soums, which is a positive change compared to 2018 and differs by 1553.5 million soums.

**Therefore, in our opinion, it is necessary to have a single normative coefficient that determines the level of competitiveness of the construction enterprise. In our opinion, it is possible to determine this indicator, which means that it is expressed by a common integral coefficient of the indicators that make up all available resources.**

$$Rqk = (Bsbk * Ichs * Ms * INsqk * Mehs * Mars)^{1/6}$$

here,

Rqk—the integral coefficient of the level of competitiveness of the construction enterprise;

Bsbk—coefficient of management resources of the construction enterprise;

Drinks—coefficient of production resources of the construction enterprise;

Ms—coefficient of financial resources of the construction enterprise;

INscq—coefficient of innovative resources of the construction enterprise;

Mehs—coefficient of labor resources of the construction enterprise;

Mars—coefficient of marketing resources of the construction enterprise.

On the basis of this formula, the single value of the level of competitiveness of construction enterprises is created. In conclusion, it can be said that a single indicator should be used to express the level of competitiveness of the construction enterprise, and through this indicator it is necessary to have an idea of the overall economic development indicator of the enterprise.

### **Conclusions and suggestions**

Based on the conclusions developed during the research, the following scientific proposals and practical recommendations were made:

It is based on the expediency of considering the salaried production workers, who are part of the innovative potential of construction industry enterprises, as a socially needy population according to their level of education and giving them the status of self-employed persons. In the evaluation of the innovative potential of the construction industry enterprises, according to the integrated assessment of the potential of scientific research, technological and innovation effectiveness, and the influence of innovations on the standard of living, "absolutely high" (80-100), "normally high" (60-79), "stable" (30- 59), the assessment is based on the percentage limits of "moderate risk" (10-29) and "high risk" (0-9).

In order to increase the economic potential of JSC "Ozkhurilishmateriallari" it is necessary to increase the level of turnover and investment funds, for this it is necessary to develop measures to increase the efficiency of attracting investors, in particular, foreign investments to the society.

It is necessary to update the old and outdated fixed assets in the enterprises of "Uzkhurilishmateriallari" JSC and reconsider the percentage of amortization allocations.

It is necessary to take measures to increase the competitiveness of the products of JSC

"Uzkurilishmateriallari" products (low quality, insufficient labor productivity, high fund capacity, technical backwardness).

It is necessary to consider and develop the market situation in order to satisfy the domestic market on the basis of the production of competitive high-quality products that replace imports at the enterprises of "Ozkhurilishmateriallari" JSC.

## References

- <https://promo.severstal.com/digest/construction/tpost/8m15v4idue-obzor-mirovoi-stroitelnoi-otrasli-progno#>:
- *The World Bank: World Development Indicators.* <http://data.worldbank.org/indicator>
- Kanagasundram BK, T., Wong, CY, Chandran, VGR (2015). *Innovation for inclusive development in Southeast Asia: The roles of regional coordination mechanisms.* *Pacific Review*, 29(4), 573-602.
- Kropelnytska, S., Vusyatyska, M. (2015). *Institutional and financial support for regional innovation development based on cluster approach.* *Economic Annals-XXI*, 3-4(2), 37-40.; Makkonen, T.
- Rodriguez-Pose A, Crescenzi, R, 2008, "Research and development, spillovers, innovation systems, and the genesis of regional growth in Europe" *Regional Studies* 42 51-67.
- Streeck W., Thelen K., 2005, "Introduction: institutional change in advanced political economies", in *Beyond Continuity: Institutional Change in Advanced Political Economies* Eds W. Streeck, K. Thelen (Oxford University Press, Oxford) pp 1 - 39 .
- Buyanov VP, Kirsanov KA, Mikhailova LM *Riskology (upravlenie riskami).* - Three. posobie. - 2nd izd. work i dop. - M.: Exam, 2003, 384 p.
- Lichterman SS, Dzhunusova DI *Investment strategy and risk of corporate non-state pension fund of coal enterprise* - M.: GIAB No. 3, 2004, p. 126-131
- Popovich NN *Economic mechanism otsenki rekonstruktsii usuzhebyvayushchikh predpriyatiy.* - M.: Izd. dom "Novyy vek", 2000, 242 p

## A STUDY ON IMPACT OF GLOBALISATION ON SOCIAL INSTITUTIONS AND ECONOMY

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### ABSTRACT

*The present study attempts to study the impact of Globalisation on various social institutions and Economy. After introducing LPG Reforms in 1991, the leaders were sceptical of its consequences. But Globalisation has brought a pace in the economic growth of India and has benefitted Indian Society. Globalization has through greater exposure liberalized our attitudes, reduced our biases and predispositions about people, situations and communities worldwide. But its by-product are also detrimental to Indian Economy and Society. Exploitation of women in work place has emerged as new issue. Economic globalization has led to increased urban poverty as people move from the rural areas to the cities in search of opportunity. Stiff competition to Indian, Steep and fast reductions in custom duties have snatched large part of Indian market from Indian Industry, Increase in unemployment, For its survival in the face of global competition, Indian industry has transformed itself from labour intensive processes to Capital intensive processes by adopting global technologies and automatic machinery, Spread of diseases has been a factor. Therefore, Globalisation benefits in many ways as well as it may impact negatively.*

**Keywords :** Globalisation, Social Institutions And Economy.

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Globalization is a process of increasing interdependence, interconnectedness and integration of economies and societies to such an extent that an event in one part of the globe affects people in other parts of world. The effect of globalization is far reaching. It affects us all but affects us differently. Thus, while for some it may mean new opportunities, for others the loss of livelihood. Globalization 4.0 is latest stage of globalization which involves cutting-edge new technologies like artificial intelligence that powers forward with the explosion of information technology. These technologies shrink distances, open up borders and minds and bring people all across the globe closer together.

### Earlier Waves of Globalization

- **Globalization 1.0**

1. It was pre-World War I globalization, which was launched by a historic drop in trade costs.
2. This globalization came with almost no government support.
3. There was no global governance.

- **Globalization 2.0**

1. It is the post-World War II phase where trade in goods was combined with complimentary domestic policies.
2. The market was in charge of efficiency while the government was in charge of justice.

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3. It saw the establishment of institute-based, rule-based international governance, specifically the UN, IMF, World Bank, GATT/WTO, International Labor Organization etc.

- **Globalization 3.0**

1. It created a new world of manufacturing in which high-tech was combined with low wages.
2. This was achieved through establishment of global supply chains as factories crossed international borders.
3. It was variously called New Globalization, Hyper globalization, Global value chain evolution.

## OBJECTIVES

- To study the impact of Globalisation on Social Institutions
- To analyse the negative impacts of Globalisation on Indian Economy.

### Impact of Globalisation on Women.

Globalization affects different groups of women in different places in different ways. On the one hand it may create new opportunities for women in economic and social progress on the other hand, it may take away job opportunities by providing cheaper avenues in the form of assembly line production or outsourcing.

- Increased opportunities for women - Opened up broader communication lines and brought more companies as well as different worldwide organizations into India- this provides more opportunities for women who are becoming a larger part of the workforce.
- Independence and self confidence - With new jobs for women, there are opportunities for higher pay, which raises self-confidence and brings about independence. Also, due to increased urbanization, Women in urban areas have become more independent and self-sufficient.
- Development of entrepreneurial attitude - The lower middle class is experiencing a shift in the way family relations worked. Traditionally women stayed at home taking care of domestic needs and children. Now most of the women are setting out of their private spaces to earn a living. For example: Self-Employed Women's Association (SEWA) in India is a union of women laborers willing to work hard and seize any work opportunities they might get • Spread of Feminist movement - Feminist movement has spread to India due to globalization, making women more vocal about their ideas. Recently, the fourth wave of feminism that seeks equality and prevention of discrimination at workplace manifested in the "Me Too" campaign across the world & in India.
- Improvement in education and health care facility - Globalization has led increase in education of women, it has led to an improvement in health care facilities, leading to reduction of Maternal Mortality Rate and Infant Mortality Rate
- Impact on rural women - The women in rural settings have been influenced by globalization through media and through numerous intervention programs like non-profit organizations, increasing self-confidence of women and motivating them to fight for their rights

- Cultural change - Changes in attitude of women- more acceptance of western clothes, dating has become common in urban areas, increased use of contraception in rural as well as urban areas.

Though employment opportunities for women are increasing, they are mostly crowded in low paying jobs, have less social security. Exploitation of women in work place has emerged as a new issue. Moreover, women are suffering two fold. As women in developing countries move into the work force, their domestic responsibilities are not alleviated. But in India ,Women work two full time jobs. Globalization has occurred with the persistence of patriarchal mindset of Indians, this has led to problems for women like commodification of women, use of social media to harass women, increase in violence against women.

### Impact of Globalization on Youth in India

Globalization offers clear economic opportunities and benefits, but comes with substantial social costs that often appear to affect young people disproportionately, given their tenuous transitional status within an uncertain and rapidly evolving global context. The majority of India's population is young. The population growth among youth is one of the most critical factors in the way India responds to globalization. Indian youth are fuelling both positive and negative perceptions given to globalization. They are embracing globalization in a way that the previous generation never imagined.

- **Education and Enterprise :** The primary ambition of young Indians from the smallest villages to the largest cities is to "become rich." Young people hope to achieve this goal through enterprise and education. The most highly regarded careers like civil service, engineering, and medicine are giving way to high-paying jobs in high tech and the media.
- **Becoming a Global teenager:** In addition to the dynamic, global, economic forces effecting India, globalization has brought change to India's rich culture. Youth see themselves as global teenagers. They belong to a much bigger community than the community they were born into. The younger generation is embracing western popular culture and incorporating it into their Indian identity. There is a subtle and powerful hybridization of western and Indian values occurring – particularly evident among Indian youth.
- **Cultural change:** Present day youth, with its more materialistic ambitions and more globally informed opinions, are gradually abandoning the austere ways and restricted traditional Indian markets. Youth demand a more cosmopolitan society that is a full-fledged member of the global economy.
- **Attitude towards religion:** Most religious activities are becoming irrelevant to the youth. They want to see changes in religion. They are not internalizing traditional ideas; rather, they are merely tolerating them. Though they do find some indirect value with religion.

However, Economic globalization has led to increased urban poverty as people move from the rural areas to the cities in search of opportunity. Youth make up the large majority of urban migrants. But youth face a high level of unemployment in urban centres. Young migrants are pushed and pulled into the cities only to find a stressed local economy. In the absence of critical infrastructure many youth suffer from the mismanagement of scarce resources, corruption, and sometimes natural calamities that devastate overpopulated areas. Religious, civic and ethnic conflicts also undermine economic prosperity available in cities, which often directly involve young people. Globalization also is changing family institutions, and the nuclear family is increasingly the norm. Youth are not as close to their grandparents as were earlier generations and spend less time with the older generation resulting in loss of wisdom handed down from generation to generation. Increased cases of depression and suicide: Globalization has led to an increase in

uncertainty among youth; this underlying instability may serve to magnify the tensions and lack of control they experience on a daily basis. Uncertainty is because of the breakdown of traditional norms, weakening of social relations like that of family and marriage, uncertainty in career due to market economy. This has led to an increase in cases of depression and suicide among the youth. The evaluation of the effects of globalization is as a mixed bag, both good and bad. Economic globalization has improved study and job opportunities and provided greater employment opportunities. But it has also made the poor even poorer. But importantly, there is no going back from globalisation. The youth enjoy having the opportunity to be modern, progressive, and be a part.

### **Impact of Globalisation on Family**

Traditionally, in India, the basic unit of society was not individual but the joint family. Ever since independence, Indian Society has undergone and continues to undergo great change in every walk of life. Family is becoming progressively weak due to globalization and individualism is growing rapidly. Structure of the family

- Disintegration of joint family - Increasing mobility of younger generation in search of new employment and educational opportunities has weakened the family relations. It has led to disintegration of the joint family. Gradual change in family structure from joint/extended families to nuclear family pattern.
  - New forms of family are emerging: for example Single parent households, live-in relationship, female headed households, dual-career family (both husband and wife are working), same sex couples etc.
- Functions of the family
- The family bonding and ties have started loosening due to physical distance as it rendered impracticable for family members to come together as often as earlier. This affected the earlier idealized notion of 'family' as the caring and nurturing unit for children, the sick and elderly.
  - Traditionally family served the role of providing education to the younger generation. However this role has been taken over by the specialized institutions due to growing division of labour and specialization of the work.

However, despite changes in the functions of the family, even today there are certain functions still specific to family i) Primary socialization of children, ii) Agency of social control Inter-personal relations

Traditional authority structure has changed. The head of the family- father/grandfather have started losing their authority to the bread winner of the family. In nuclear families, there has been a change in marital rules and distributions of powers. Total subordination of women to men and strict disciplinarian role of father towards children are changing.

Individualism in younger generation is increasing, many of them don't believe in total surrender of their individual interests to family interests. However, due to penetration of technology connectivity with extended kins has improved.

### **Impact on Caste System**

The traditional caste system is based on the principles of Purity and pollution. It had following characteristics. Hierarchy, Separation of contact, Occupational division of labour , Due to globalization, there have been changes in the traditional caste system in following ways\

- **Weakening of caste system** - Due to globalization, there has been expansion of economic opportunities, education and liberal thoughts, which has resulted in weakening of the caste system.
- **Acceptance of Inter caste marriage** - Inter caste marriages are becoming more common and are being accepted gradually
- **Caste free division of labour** - Traditional division of labour was breaking down due to industrialization; this was given a boost by globalization.
- **Decreased feeling of casteism** - Increasing use of modern communication facilities, increased interaction between members of different castes has led to decrease in feeling of Casteism.
- **Secular pattern of living** - Globalization has resulted into growing urbanization, which has facilitated secular pattern of living and hence impacted “separation of contact” aspect of caste system. However, despite changes, caste system has shown immense resilience and still continues to exist as one of the significant feature of Indian society.

### **Economic Impact of Globalization**

Globalization has intensified interdependence and competition between economies in the world market. This is reflected in Interdependence in regard to trading in goods and services and in movement of capital & labour. As a result domestic economic developments are not determined entirely by domestic policies and market conditions. Rather, they are influenced by both domestic and international policies and economic conditions. Direction and depth of all economic activities in India is now governed largely by global Economy.

### **Positive Impact includes**

- Policies of Privatization and liberalization of economy, along with the process of globalization, had a dramatic effect on Indian Economy which responded swiftly and positively to these measures. Increase in Innovation - Globalization has led to an increase in innovations in the economy and has pushed the culture of start-ups in the country.
- Access to global capital reserves - via the stock market and international debt depending on the economic potential of nations and their markets.
- More space to the private sector - Sharp reduction in industries reserved exclusively for public sector Decision to go for disinvestment in public sector enterprises thus promoting efficiency and merit.
- Development of tourism sector - Increase in tourism and development of tourist destinations in India- leading to increase in foreign reserves
- Revolution in IT and Telecom sector - Vast expansion of sectors like IT, telecommunication and aviation. A notable revolution has occurred in the telecom sector. In the pre reforms era, this was entirely in the hands of the central government and due to lack of competition, the call charges were quite high. Further, due to lack of funds with the government, the government could never meet the demand for telephones. In fact, a person seeking a telephone connection had to wait for years before he could get a telephone connection.



- Customised and quality products - The biggest contribution of globalisation is in the field of quality and development of products with various features to suit the Indians. Now wide choices are available to select goods, which has led to better quality of products due to greater competition.
- Improved access of health technology - Globalization has improved access to health technology (medicines, vaccines and medical equipments and knowhow). This has led to improvement of health care system. Improved education sector - Globalization has also affected the education sector in India. Globalization has increased the demand for education due to the economic payoffs of higher education to global, science based, knowledge. University training has become more of a necessity to get good job in a globalized world. Moreover, socio-political, demographic and democratic ideals increase pressure on universities to provide access to groups that traditionally have not attended universities. Opening Indian higher education to foreign competition will benefit education sector further.
- Reduction in poverty - In theory, globalisation, by promoting economic growth in developing countries, tends to reduce poverty. Some scholars have argued that 'trade is good for growth, growth is good for the poor and so trade is good for the poor' (Dollar and Kray, 2001). The empirical experience of developing countries generally supports this proposition as the incidence of poverty declined significantly in many fast growing countries like China, India and Vietnam. However, some critics have argued that the reduction of poverty in China was only because of its exceptional growth—in fact, absolute poverty increased in Sub-Saharan Africa and relative poverty has increased in a majority of countries.

Globalization has through greater exposure liberalized our attitudes, reduced our biases and predispositions about people, situations and communities worldwide.

#### **Negative impact Includes-**

- **Vulnerability to global economic shocks** - Indian Economy has become more vulnerable to global shocks like East Asian crisis 1997, European crisis, Global Financial crisis (2007-08) etc.
- **Stiff competition to Indian corporate** - Globalization has adversely affected many established companies (like organisations manufacturing Ambassador Cars or Fiat cars etc) which failed to face competition from established global players. Steep and fast reductions in custom duties have snatched large part of Indian market from Indian Industry and passed it on to imports from established global players.
- **Increase in unemployment** - For its survival in the face of global competition, Indian industry has transformed itself from labour intensive processes to Capital intensive processes by adopting global technologies and automatic machinery. This has resulted in high rate of unemployment in India. Unemployment is the biggest challenge for Indian Government today.
- **Formation of slums** - Boost to urbanization and industrialization, which has also led to unplanned growth of urban centres leading to formation of more slums
- **Spread of diseases** - But globalization has also led to a greater threat of spread of communicable diseases like Ebola, Covid 19.

- **Consumerism** - There has been a tremendous increase in consumerism for goods and services. We may call globalization, at best, a double edged weapon. It has helped Indian consumers to enjoy all high Quality global brands. It did help Government of India to tide over its serious foreign exchange problem, though temporarily, by enabling it to get loan from World Bank. But critics cite serious erosion of control of Indian Government over its economy and the loss to local Industry as setbacks.

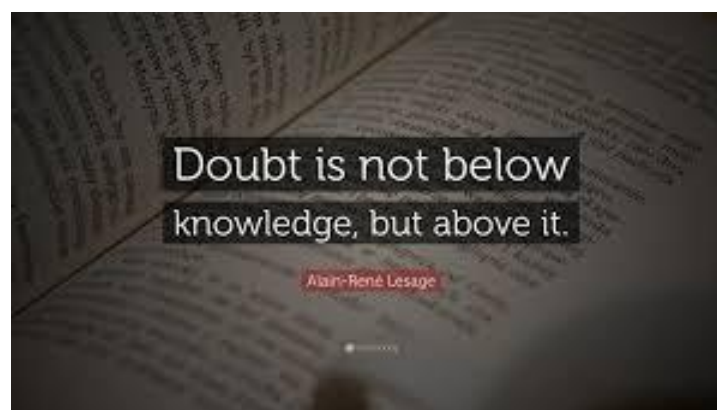
## Conclusion

Moreover, Globalization has resulted in casualization of labour. Global competition tends to encourage formal firms to shift formal wagedworkers to informal employment arrangements without minimum wages, assured work or benefits. It encourages informal units to shift workers to piece-rate or casual work arrangements without assured minimum wages, or benefits.

Therefore, Globalization can benefit powerful global players. This can lead to the marginalization of local political actors. Marginalization reduces their influence on policy making. Positive and Negative impacts highlight the need for careful consideration and management of globalization's effects. Also, to ensure a balanced and sustainable development path for India.

## References :

- Akhavi, Shahrouh. "Social institutions." *Iranian Studies* 31, no. 3-4 (September 1998): 691–701.
- AOKI, MASAHIKO. "Endogenizing institutions and institutional changes." *Journal of Institutional Economics* 3, no. 1 (April 2007):
- Ariely, Gal. "Global identification, xenophobia and globalisation: A cross-national exploration." *International Journal of Psychology* 52 (2017): 87-96. Wiley Online Library. Web. 12 Jan. 2018.
- Chun, Allen. "Ethnoscapes." Ed. George Ritzer. *The Wiley-Blackwell Encyclopedia of Globalization*. Chichester: Wiley Blackwell (2012): 1-2. Print.
- Gikandi, Simon. "Globalization and the Claims of Postcoloniality." *The South Atlantic Quarterly* 100.3 (2001): 627-658. Project MUSE. Web. 11 Jan. 2018.



# GREEN INNOVATION AND DIGITIZATION: A CATALYST FOR SUSTAINABLE DEVELOPMENT IN UZBEKISTAN

Gabriel Ayodeji Ogunmola<sup>1</sup>

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## ABSTRACT

*The integration of green innovation and digitalization has emerged as a significant method for tackling environmental concerns while also boosting economic and social growth globally. The study looks at how green innovation and digitization might help promote sustainable development in Uzbekistan. Data from 2013 to 2023 are analysed quantitatively to evaluate economic and environmental indicators. The findings show that GDP growth, investment in green technology and digitization, and employment in the green and digital industries are all rising. However, issues such as pollution and deforestation persist. Comparing Uzbekistan to neighbouring countries demonstrates both progress and opportunities for improvement. Practical consequences point to the need for specific policies and investments, with future research focusing on governance mechanisms and emergent technology synergies. Overall, combining green innovation and technology can help Uzbekistan achieve a more resilient and prosperous future.*

**Key words:** *Green Innovation, Digitization, Sustainable Development, Economic Growth, Environmental Sustainability, Technology Adoption, Uzbekistan.*

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## Introduction

Over the past few years, the discussion on sustainable development has become widespread globally, as countries struggle to find the right balance between economic growth, environmental protection, and social fairness (Xiumei et al., 2023; Leiet al., 2024). This urgency is especially evident in nations such as Uzbekistan, which are situated at the intersection of a rich historical heritage, a rapidly developing economy, and a pressing requirement for environmental sustainability (Mondejar et al., 2021; Smagulova& Goncalves, 2023). Uzbekistan is currently working towards achieving a bright future. However, it is confronted with the task of promoting economic growth while also addressing the environmental impacts that come with rapid industrialization (Maksakova&Kolomeytseva, 2023; Teo et al., 2023). Within this particular context, the combination of green innovation and digitization presents itself as a highly promising approach to attaining sustainable development goals (Veckalne&Tambovceva, 2023; Li et al., 2022). Uzbekistan has experienced a significant economic transformation marked by reforms focused on modernising its industrial foundation and promoting growth driven by innovation (Kamilla,2023; Zhuge et al., 2023). During this decade, there have been notable progressions in the construction of infrastructure, urbanisation, and industrial expansion, which have propelled the nation towards a newfound economic dynamism (Mondejar et al., 2021; Xiumei et al., 2023). Nevertheless, this path has also emphasised the urgent requirement to tackle environmental deterioration and the exhaustion of resources, which provide significant obstacles to achieving long-term sustainability (Adams & Clark, 2020; Taylor, 2022).

In the face of these difficulties, the rise of green innovation offers a significant change in thinking, providing chances to align economic progress with the protection of the environment (Smagulova,& Goncalves, 2023; Maksakova&Kolomeytseva, 2023). Green innovation refers to a broad range of

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technologies, practices, and policies that aim to reduce environmental harm, maximise the efficient use of resources, and promote sustainable patterns of consumption and production (Teo, 2023; Saydullayev, 2023). Green innovation has the ability to drive the shift towards a more environmentally sustainable economy by utilising renewable energy sources and adopting sustainable waste management practices (Zhugeet al., 2023; Karki & Thapa, 2021). Simultaneously, the process of digitization is fundamentally transforming economic operations and societal relations, infiltrating multiple aspects of Uzbekistan's developmental agenda (Lei et al., 2024; Saydullo & Sharipova, 2023). Uzbekistan is in a favourable position to utilise digital technologies like Internet of Things (IoT) devices and blockchain-enabled platforms for sustainable development, thanks to their increasing availability. This can lead to significant transformation and progress in the country (Marouane et al., 2023; Li et al., 2022). Uzbekistan can improve efficiency, transparency, and accountability in several sectors while also lowering its environmental impact by utilising digital technologies like smart grids, precision agriculture, and e-governance systems (Ozturket al., 2024; Karki & Thapa, 2021).

The main challenge that Uzbekistan is currently facing is the ongoing delay in implementing and incorporating environmentally-friendly innovation and digitalization in several areas of the economy. Although the country has made significant progress in economic reform and modernization, it still faces challenges due to its deep-rooted dependence on traditional practices that consume a lot of resources. This dependence is impeding the country's advancement towards achieving sustainable development goals (Saydullayev, 2023; Hu & Gu, 2024). The failure to actively embrace and use new environmentally-friendly technology and digital solutions worsens the decline of the environment, undermines the efficient use of resources, and continues to widen socio-economic inequalities in Uzbekistani society. Despite the current shortcomings, the geographical features of Uzbekistan offer favourable conditions for the revolutionary impact of environmentally friendly innovation and digitalization in promoting sustainable development. By embracing these elements, there is the potential to adjust the country's developmental course, guiding it towards a balanced route that encompasses economic growth, environmental conservation, and societal welfare (Veckalne & Tambovceva, 2023; Dabbous et al., 2023). By strategically investing in green innovation and digitization, providing policy incentives, and offering institutional support, Uzbekistan can tap into the transformative potential of these initiatives. This will open up new opportunities for economic growth, strengthen the country's ability to withstand environmental challenges, and promote inclusive development in both urban and rural areas.

The study aims to achieve specific goals and objectives; (1) to assess the present status of green innovation in Uzbekistan: This objective assesses Uzbekistan's green innovation landscape, including implementation, notable projects, and challenges. The report examines government frameworks, technical advances, and industry practices to assess Uzbekistan's green innovation ecosystem's strengths, weaknesses, opportunities, and threats. The study examines green innovation barriers and drivers. Its mission is to inform green innovation-friendly strategies and policy. (2) In order to evaluate the influence of digitalization on sustainable development: This objective evaluates how digitization affects Uzbekistan's sustainable development goals. The study uses empirical analysis and case studies to explain how digital technologies are changing economic structures, social dynamics, and environmental outcomes. The study examines how digital solutions improve efficiency, transparency, and inclusivity across industries. It examines digitization's pros and cons. The study also seeks best practices and global lessons to aid Uzbekistan's digital transformation. (3) to determine methods for incorporating environmentally-friendly innovation and digitalization in order to promote sustainable development in Uzbekistan: This goal is to

combine green innovation and digitalization analytical results to produce realistic strategies for integrating them to achieve sustainable development goals in Uzbekistan. The paper proposes policy, funding, and institutional methods to link green innovation and digitization agendas using theoretical frameworks, empirical evidence, and stakeholder engagements. The study presents a strategy for Uzbek authorities, entrepreneurs, and civil society to use green innovation and digitization for development (Saydullayev, 2023).

Significance of the Study in growing economies like Uzbekistan, sustainable development and technology breakthroughs literature This study on Uzbekistan is important for the discussion on sustainable development and technological innovation in emerging economies. It fills crucial gaps in the literature and advances theoretical frameworks for sustainable development dynamics in transitional countries by examining the relationship between green innovation and digitization in Uzbekistan. The study illuminates developing economies' complex sustainable development challenges and prospects. A thorough analysis of Uzbekistan's socio-economic landscape, institutional frameworks, and technological capabilities informs theoretical debates on the complex interactions between economic growth, environmental sustainability, and social equity in transitional contexts. Identifying context-specific hurdles and facilitators to green innovation and digitalization enhances scholarly understanding of contextual contingencies impacting sustainable development trajectories in varied global settings. It also provides Uzbekistani-specific policy recommendations and insights for evidence-based decision-making and policy creation. Incorporating empirical facts, best practices, and stakeholder perspectives, the research guides policymakers, business leaders, and civil society actors through the challenges of integrating green innovation and digitization into Uzbekistan's development agenda. Thus, the study improves development initiatives in Uzbekistan and provides a model for other emerging economies with comparable goals. It highlights Uzbekistan's green innovation and digitization efforts, amplifying marginalised voices in the sustainable development discourse. The research challenges technological determinism and top-down development paradigms by highlighting emerging initiatives, grassroots movements, and local solutions driving sustainability transitions in Uzbekistan. However, it emphasises local communities and institutions' agency, inventiveness, and resilience in creating their developmental trajectories, promoting a more inclusive and diverse perspective of sustainability transitions in developing economies. The empirical findings, theoretical frameworks, and practical recommendations, informed by Uzbekistani society, add to the literature on sustainable development and technology developments in emerging economies like Uzbekistan. The study aims to create informed debate, evidence-based action, and transformative change for Uzbekistan and beyond by combining academic research with policy practice and stakeholder involvement.

## Literature Review

Emerging economies encompass a wide range of developmental situations marked by swift urbanisation, industrialization, and socio-economic changes. Although these countries have significant opportunities for growth, they also face intricate obstacles such as environmental degradation, limited resources, and socio-economic inequalities. Academics like Chen et al. (2024) stress the importance of taking a comprehensive approach to development that combines economic, social, and environmental goals, which is known as sustainable development. Achieving sustainable development requires carefully managing the interplay between economic and ecological imperatives. The groundbreaking studies conducted by Yang et al., (2024) and Dabbous et al. (2024) emphasise the interdependence of economic growth, environmental preservation, and social fairness. They advocate for a development model that fulfils

the current requirements while safeguarding the ability of future generations to fulfil their own needs. The holistic vision has subsequently become a fundamental principle for worldwide development agendas, exemplified by the United Nations Sustainable Development Goals (Zhao, 2024).

### **Current State of Green Innovation in Uzbekistan**

The increasing acknowledgment of the complex relationship between economic growth, environmental sustainability, and social equality is seen in the sustainable development and technical progress observed in rising economies such as Uzbekistan. This part provides a thorough examination of important theoretical frameworks, empirical studies, and policy views that contribute to our knowledge of the difficulties and possibilities that Uzbekistan faces as it strives for sustainable development through green innovation and digitization. Uzbekistan has made significant progress in developing environmental rules and offering incentives to promote the use of environmentally friendly practices in various industries (Samsudin et al., 2024; Yang et al., 2024). The government has enacted measures, including tax incentives, subsidies for renewable energy projects, and green certification programmes, with the objective of fostering sustainable corporate practices (An et al., 2024; Li et al., 2024). The nation has demonstrated an increasing dedication to shifting towards sustainable energy sources, namely in the domains of solar and wind energy (Wang et al., 2024; Kamilla, 2023). Uzbekistan's endeavours to decrease reliance on fossil fuels and alleviate greenhouse gas emissions are evident through initiatives like the establishment of solar power plants and the allocation of resources towards wind energy infrastructure (Marouane et al., 2023; Samsudin et al., 2024).

### **Green Innovation and Sustainable Development**

The role of innovation in promoting ecologically sustainable economic growth is a key aspect of the discussion on sustainable development. Green innovation refers to a range of technological, organisational, and institutional advancements that attempt to minimise environmental harm, improve the efficient use of resources, and encourage sustainable patterns of consumption and production (Hao et al., 2024). Academics like Yang and Sun (2023) define innovation as a powerful factor that stimulates economic growth, leading to changes in the structure of industries and improvements in productivity. Uzbekistan's industrial sectors are progressively adopting environmentally friendly production processes, which involve the implementation of cleaner technology and sustainable manufacturing practices (Zhao et al., 2024; Lei et al., 2024). The increasing prevalence of efforts to decrease water use, minimise pollution, and optimise resource utilisation indicates a trend towards more environmentally friendly industrial operations (Ozturk, et al., 2024; Mondejar et al., 2021). The nation has also achieved advancements in enhancing recycling and waste management systems, with endeavours focused on fostering recycling infrastructure, waste segregation, and sustainable disposal techniques (Hojnik et al., 2023; Marhasova et al., 2023). The utilisation of public-private partnerships and community engagement programmes has played a significant role in enhancing public consciousness regarding the significance of trash reduction and recycling practices (Yang & Sun, 2023; Lei et al., 2024). Scholars have recently been giving more attention to the potential of green innovation to separate economic progress from environmental damage. This concept is referred to as the environmental Kuznets curve (EKC) hypothesis, as proposed by Grossman and Krueger in 1995 (Grama-Vigouroux et al., 2023). Empirical research has examined the connection between environmental legislation, technological advancement, and environmental results. However, the conclusions addressing the pattern and dynamics of the Environmental Kuznets Curve (EKC) have been inconclusive (Hu & Gu, 2024; Ogunmola, et al., 2022a). However, there is an increasing agreement that green innovation is crucial in

achieving sustainable development goals by encouraging eco-efficient production methods, creating clean technology, and advocating for sustainable consumption habits (Smagulova & Goncalves, 2023).

### **Digitization and Sustainable Development**

The ongoing digitization revolution is altering the structure of economic activity and societal connections, presenting fresh prospects for sustainable development. Digital technologies, such as Internet of Things (IoT) devices and blockchain-enabled platforms, have the capacity to improve efficiency, transparency, and accountability in several industries (Yang & Sun, 2024). Digitization can enhance resource allocation, improve service delivery, and enable public engagement in decision-making processes through the implementation of smart grids, precision agriculture, and e-governance systems (Durar et al., 2023). In addition, digitization allows for the use of data-driven methods in sustainability management, which includes real-time monitoring, predictive analytics, and decision support systems (Samsudinet al., 2024). Through the utilisation of big data, artificial intelligence, and machine learning algorithms, policymakers and businesses have the ability to identify environmental hazards, optimise the use of resources, and create specific actions to reduce the impacts of climate change (Chenet al., 2019). Nevertheless, experts warn about the possible drawbacks of digitalization, which encompass issues of privacy, disparities in access to digital resources, and unanticipated outcomes such rebound effects (Zhuge et al., 2023).

### **Integration of Green Innovation and Digitization for Sustainable Development**

The intersection of green innovation and digitalization signifies a fundamental change in strategies for achieving sustainable development, providing mutually beneficial routes towards environmental resilience and socio-economic advancement. By utilising digital solutions to facilitate the implementation of eco-friendly technology, optimise the management of resources, and improve environmental governance, nations such as Uzbekistan can expedite their shift towards sustainable development (Gao et al., 2023; Ogunmola et al., 2022b). However, in order to fully harness the benefits of this convergence, it is necessary to tackle structural obstacles, cultivate environments conducive to innovation, and encourage collaboration among several stakeholders (Saydullo, & Sharipova, 2023). Although there have been notable progressions, limited financial resources continue to impede the widespread implementation of environmentally friendly technology and practices in Uzbekistan (Maksakova & Kolomeytseva, 2023; Li et al., 2022). Businesses and industries face obstacles in implementing sustainable solutions due to restricted finance, expensive initial expenses of eco-friendly technologies, and insufficient investment in green infrastructure (Gao et al., 2023; Grama-Vigouroux et al., 2023). Another significant obstacle is the insufficient knowledge and technology framework required to facilitate the adoption of environmentally-friendly advancements (An et al., 2024; Wang et al., 2024). A lack of comprehensive technological platforms is impeding the adoption of digital sustainability solutions, and many stakeholders, such as businesses, policymakers, and the general public, may not fully comprehend the advantages or practicality of green practices (Hao et al., 2023; Yang & Sun, 2024).

### **Impact of Digitization on Sustainable Development**

Uzbekistan has had a substantial growth in its digital economy, characterised by a rise in internet usage, mobile connection, and e-commerce transactions (Grama-Vigouroux et al., 2023; Hojnik et al., 2023). The Digital Uzbekistan plan, initiated in 2020 by the government, has been instrumental in creating a favourable atmosphere for digital innovation and entrepreneurship (Marhasova et al., 2023; Green & Anderson, 2023). The digital economy has experienced expansion and numerous industries have undergone digitalization due

to the implementation of digital payment systems, online marketplaces, and digital skills training programmes (Durar et al., 2023; Gao et al., 2023). Digitization activities have led to notable technological improvements in the agriculture and manufacturing sectors of Uzbekistan (Pérez-Martínez et al., 2023; Mondal et al., 2023). The implementation of precision farming methods, utilisation of IoT sensors to monitor soil moisture levels, and integration of digital platforms for crop management have resulted in enhanced productivity and sustainability in the field of agriculture (Azzahidi et al.,2020; Cardinali& De Giovanni, 2022). In the field of manufacturing, the utilisation of automation, robots, and data analytics has improved operational efficiency and decreased environmental harm (Chen et al., 2023; Pérez-Martínez et al., 2023).

**Benefits of Digitization for Sustainability**

The process of digitization has been essential in enhancing resource efficiency in different sectors of Uzbekistan (Abbas et al., 2024). By utilising Internet of Things (IoT) technology and continuous monitoring, businesses have successfully enhanced energy efficiency, decreased wastage, and mitigated their impact on the environment (Kadaba et al., 2023). The utilisation of digital technologies has facilitated the adoption of circular economy ideas, which advocate for the reuse and recycling of resources (Pérez-Martínez et al., 2023; Wang et al., 2022). The accessibility of data from digital platforms has enabled organisations and governments to make well-informed, data-driven decisions that prioritise sustainability (Mondal et al., 2023). Advanced analytics, machine learning algorithms, and predictive modelling have been utilised to enhance supply chains, oversee natural resources, and develop sustainable infrastructure projects (Azzahidi et al., 2020).

**Challenges and Risks**

Uzbekistan encounters difficulties associated with the digital divide, characterised by inequalities in the availability of digital technology and internet connection between urban and rural regions (; Abbas et al., 2023). It is essential to bridge the gap and promote inclusivity in digital transformation initiatives in order to fully leverage the advantages of digitization for all sectors of society (Cardinali & De Giovanni, 2022). The swift digitalization of vital infrastructure and services also gives rise to apprehensions regarding cybersecurity vulnerabilities (Moşteanu, 2020; Kumar& Ayodeji, 2022). In order to protect digital assets and uphold trust in digital systems, Uzbekistan must confront cybersecurity risks such as data breaches, ransomware attacks, and digital fraud (Al Halbusi et al., 2023). To prevent these risks, it is crucial to implement resilient cybersecurity solutions, provide training programmes for cybersecurity professionals, and establish regulatory frameworks (Grama-Vigouroux et al., 2023; Teo et al., 2023). The table 1 presents a succinct summary of important topics, ideas, and pertinent sources pertaining to sustainable development in Uzbekistan, with a specific emphasis on green innovation, digitization, and their incorporation.

**Table 1: Key Themes and Concepts for Sustainable Development in Uzbekistan**

Theme/Concept	Description	Examples and Illustrations	Challenges and Considerations	References
Sustainable Development	Integrating economic growth, environmental preservation, and	Renewable energy projects, sustainable agriculture,	Balancing economic growth with environmental protection, addressing	Mondejar et al. (2021); Xiumei et al. (2023); Smagulova& Goncalves (2023)



	social fairness for long-term well-being.	poverty alleviation programs.	social inequalities, ensuring long-term sustainability.	
Green Innovation	Advancing eco-friendly technologies and practices to reduce environmental impact and promote sustainability.	Clean production methods, circular economy initiatives, eco-friendly products.	Overcoming financial barriers, fostering innovation culture, addressing regulatory challenges.	Maksakova&Kolomeytseva (2023); Marouane & Mamdouh (2023); Li et al. (2022)
Digitization	Transforming economic activities through digital technologies for improved efficiency and decision-making.	IoT for resource management, blockchain for transparent supply chains, AI for predictive analytics.	Bridging the digital divide, ensuring data security, addressing digital literacy gaps.	Lei et al. (2024); Kamilla (2023); Ozturk et al. (2024)
Triple Bottom Line Approach	Evaluating sustainable outcomes in economic, environmental, and social dimensions for comprehensive impact assessment.	Cost savings from energy efficiency, reduction in carbon emissions, enhanced community well-being.	Integrating diverse stakeholder perspectives, measuring intangible benefits, balancing trade-offs.	Zhao et al. (2024); Dabbous et al. (2024); Chen et al. (2024)
Integrated Decision-Making	Considering interactions between economic development, environmental stewardship, and social equality in policy decisions.	Policies promoting green investments, environmental impact assessments, inclusive decision-making platforms.	Addressing conflicting interests, balancing short-term gains with long-term sustainability.	Yang & Sun (2023); Hojnik et al. (2023); Marhasova et al. (2023)
Innovation	Explaining the	Peer learning	Overcoming resistance	Ghobakhloo et al. (2021);

Diffusion Theory	spread of sustainable technology by addressing barriers like awareness, finance, and institutional resistance.	initiatives, incentives for early adopters, networks for knowledge exchange.	to change, securing financial support, aligning institutional frameworks.	Wang et al. (2024); An et al. (2024)
Economic Value	Deriving financial benefits from green technologies such as cost savings, market opportunities, and job creation.	Energy-efficient practices, new markets for sustainable products, green job creation.	Initial investment costs, market acceptance, competition with traditional practices.	Grama-Vigouroux et al. (2023); Kadaba et al. (2023); Wang et al. (2022)
Environmental Impact	Achieving positive outcomes in pollution reduction, resource conservation, and climate change mitigation.	Decrease in greenhouse gas emissions, conservation of biodiversity, efficient resource use.	Environmental trade-offs, regulatory compliance, continuous monitoring and improvement.	Kumar & Ayodeji (2022); Pérez-Martínez et al. (2023); Yang et al. (2024)
Social Well-Being	Enhancing societal aspects like health, education, equity, and resilience through sustainable development.	Access to clean water, improved healthcare, poverty reduction, community resilience.	Addressing social disparities, promoting inclusivity, ensuring community participation.	Abbas et al. (2024); Wang et al. (2024); Mondal et al. (2023)
Green Technology Adoption	Encouraging stakeholder adoption of eco-friendly technologies through awareness, incentives, and	Training programs, government subsidies, technology partnerships.	Aligning incentives with sustainability, overcoming resistance, building capacity for adoption.	Cardinali & De Giovanni (2022); Azzahidi et al. (2020); Pérez-Martínez et al. (2023)

	institutional support.			
Digital Transformation	Utilizing digital technologies for resource efficiency, transparency, and data-driven decision-making across industries.	IoT for energy management, blockchain for transparency, AI for data analytics.	Data security, digital infrastructure gaps, managing transformation risks, building digital skills.	Wang et al. (2024); Durar et al. (2023); Hojnik et al. (2023)
Sustainable Development Goals (SDGs)	Global objectives for achieving sustainability in areas like energy, climate, and responsible consumption.	SDG 7: Clean Energy, SDG 12: Responsible Consumption, SDG 13: Climate Action, SDG 17: Partnerships.	Integrating SDGs into plans, measuring progress, fostering partnerships, addressing interconnectedness.	Gao et al. (2023); Kadaba et al. (2023); Marouane & Mamdouh (2023)

**Research Methodology**

This study uses secondary data from 2013 to 2023 and a longitudinal observational analysis as its research design. This design facilitates a thorough knowledge of long-term dynamics by allowing trends and patterns in economic and environmental variables to be examined over a significant time range. The study takes a quantitative approach, concentrating on the numerical data analysis related to several environmental and economic aspects. This method makes it possible to find statistical patterns and correlations as well as to systematically examine the links between various components.

**Research Design**

The study design has several phases, such as gathering data, analysing data, and interpreting results. The process of gathering data include compiling pertinent economic and environmental indicators from dependable sources, including scholarly publications, government reports, and international databases. The dataset is then thoroughly examined using data analysis methods like regression analysis, trend analysis, correlation analysis, and descriptive statistics. Understanding the effects of green innovation and digitalization on economic growth and environmental sustainability is made possible by the research design's longitudinal character, which makes it possible to evaluate changes and advancements in economic and environmental indicators across time.

**Data Collection**

The data collection approach for this study entailed the meticulous compilation of extensive data on economic, environmental, and technological variables in Uzbekistan spanning from 2013 to 2023. The information is compiled using a variety of sources, such as official government statistics, reports from major international organisations, academic journals, and industry databases. The subsequent steps delineate the technique for collecting data: The study highlights crucial economic indicators, including the rate of GDP growth, investments in green technology and digitization, and employment statistics in the green and digital

industries. Crucial variables in environmental analysis encompass pollution levels, greenhouse gas emissions, energy use, water usage, and deforestation rates. Primary sources for economic and environmental data can be found in official government publications, such as the yearly reports from Uzbekistan's Ministry of Economy and Ministry of Environment. International organisations like the World Bank, United Nations Environment Programme (UNEP), and International Energy Agency (IEA) are trustworthy secondary sources of global and regional economic and environmental information. The collection is enhanced by academic journals, research papers, and industry reports, which provide scholarly insights and specialised data on technical breakthroughs and innovation in Uzbekistan.

### **Data Analysis**

The data analysis encompasses a range of methodologies to derive significant insights from the dataset gathered between 2013 and 2023, with a specific emphasis on crucial economic and environmental variables in Uzbekistan. Descriptive analysis, which encompasses statistical summary and charts, provides a thorough depiction of the central tendencies, variability, and temporal patterns present in the data. Trend analysis tools, such as time series analysis and growth rate computation, provide insights into the long-term patterns, periodic variations, and fundamental shifts in economic and environmental factors across time. Correlation analysis examines the connections between two variables, revealing interdependencies and possible causal correlations. Regression analysis is a statistical method used to investigate causal relationships by estimating the effect of independent variables on dependent outcomes and finally comparative analysis. Collectively, these analytical methodologies offer a detailed comprehension of the forces influencing economic progress, ecological durability, and technological advancement in Uzbekistan. This knowledge aids in making informed decisions and developing policies that promote sustainable growth and prosperity.

### **Data Validation**

For the purpose of ensuring correctness, consistency, and reliability, researchers validate the data that they have obtained. Cross-referencing multiple sources, checking statistical procedures, and correcting any anomalies or inconsistencies that are discovered are all part of this process. Among the quality assurance measures that are used include validating the completeness of the data, locating any outliers or abnormalities, and determining the credibility of the sources that were utilised.

### **Data analysis**

The dataset spans from 2013 to 2023 and includes major economic and environmental variables for each year. Economic indicators include the GDP growth rate, which represents the annual percentage change in the country's gross domestic product, as well as investments in green technology and digitalization, which indicate a financial commitment to environmentally friendly innovations and digital transformation (World bank 2023). Employment statistics in both the green and digital sectors give information on employment distribution across changing industries. Environmental metrics include pollution levels, greenhouse gas emissions, energy consumption, water consumption, and deforestation rates, which provide information about the environmental impact of economic activities (IMF, 2024). Analysing this dataset requires determining trends and variances in these indicators over time, detecting significant alterations, and measuring the impact of green innovation and digitalization on economic success and environmental sustainability.

### Descriptive analysis

Table 2 provides offers valuable insights into various economic and environmental indicators over the specified period. The mean values represent the average level of each variable, indicating, for instance, that the mean GDP growth rate is approximately 5.37%, with median value slightly higher at 5.45%. The standard deviation values reveal the degree of variability or dispersion around the mean, showcasing, for example, that the standard deviation of GDP growth rate is relatively low at 0.967%, suggesting that annual growth rates tend to cluster closely around the mean. Similarly, for investment amounts, employment figures, pollution levels, and other variables, the standard deviations provide an understanding of the spread of data points from the mean. Additionally, the median values offer insights into the central tendencies of the data, serving as robust measures less influenced by outliers compared to the mean. Overall, this statistical summary facilitates a comprehensive understanding of the trends and variability in the dataset, aiding in informed decision-making and analysis.

**Table 2. Statistical Summary of Economic and Environmental Indicators**

Variable	Mean	Median	Standard Deviation
GDP Growth Rate (%)	5.37%	5.45%	0.967%
Investment in Green Technology	\$72,272,727.27	\$70,000,000.00	\$14,016,993.92
Investment in Digitization	\$58,636,363.64	\$57,500,000.00	\$14,128,387.79
Employment in Green Sectors	6872.73	6750.00	1711.35
Employment in Digital Sectors	2781.82	2700.00	748.52
Pollution Levels	67.55	67.50	15.14
Greenhouse Gas Emissions	4422.73	4450.00	1585.22
Energy Consumption	7554.55	7550.00	2213.29
Water Usage	3945.45	3900.00	1696.99
Deforestation Rates	157.27	155.00	34.38

### Trend Analysis

As demonstrated in Table 3, provides a complete examination of key economic and environmental variables during a specified time period. Positive trends are evident in economic aspects, with indicators such as GDP growth rate, investment in green technology, digitization, and employment in both green and digital sectors showing consistent increases. For instance, the GDP growth rate exhibits an annual growth rate of 4.27%, with an average annual change of 0.33%, suggesting steady economic expansion. Similarly,

investment in green technology and digitization demonstrates robust growth rates of 5.56% and 7.54%, respectively, indicating significant investments in sustainable and technological advancements. Employment figures also show promising growth, with employment in green sectors increasing at a rate of 9.09% and employment in digital sectors at 7.41%. However, environmental indicators present mixed trends. While pollution levels, greenhouse gas emissions, energy consumption, and water usage show decreasing trends, indicating successful environmental management efforts, deforestation rates exhibit a concerning increasing trend, highlighting the urgent need for conservation measures. Overall, these figures provide valuable insights into the dynamics of economic and environmental changes, emphasizing the importance of balancing economic growth with environmental sustainability for long-term prosperity.

**Table 3. Trend Analysis of Economic and Environmental Indicators**

Variable	Annual Growth Rate (%)	Average Annual Change	Trend Direction
GDP Growth Rate	4.27	0.33	Increasing
Investment in Green Technology	5.56	4.45	Increasing
Investment in Digitization	7.54	2,727,273	Increasing
Employment in Green Sectors	9.09	1,364	Increasing
Employment in Digital Sectors	7.41	200	Increasing
Pollution Levels	-7.14	-5.909	Decreasing
Greenhouse Gas Emissions	-7.47	-5.818	Decreasing
Energy Consumption	-7.79	-5.727	Decreasing
Water Usage	-7.84	-5.636	Decreasing
Deforestation Rates	12.63	18.182	Increasing

**Correlation Analysis**

Table 4 shows the correlation matrix, which depicts the correlations between several variables connected to economic and environmental indices. Each cell in the table has a correlation coefficient ranging from -1 to 1, which represents the strength and direction of the linear link between two variables. A coefficient of one represents a perfect positive correlation, -1 shows a perfect negative correlation, and zero indicates no correlation. Strong positive correlations (near to one) between variables indicate that they are

moving in the same direction. For example, there is a substantial positive relationship between GDP growth rate and investment in green technology (0.991), digitalization (0.990), employment in green sectors (0.912), and employment in digital sectors (0.910). Strong negative correlations (near to -1) between variables indicate that they are moving in opposite directions. For example, the GDP growth rate has a substantial negative link with pollution levels (-0.937), greenhouse gas emissions (-0.941), energy consumption (-0.943), water usage (-0.800), and deforestation rates (-0.998). Variables with correlations close to zero imply a weak or no linear relationship. For example, there is a weak association (-0.799) between water consumption and investment in green technologies.

**Table 4. Correlation Matrix of Economic and Environmental Indicators.**

Variable	GDP Growth Rate	Investment in Green Technology	Investment in Digitization	Employment in Green Sectors	Employment in Digital Sectors	Pollution Levels	Greenhouse Gas Emissions	Energy Consumption	Water Usage	Deforestation Rates
GDP Growth Rate	1.000	0.991	0.990	0.912	0.910	-0.937	-0.941	-0.943	-0.800	-0.998
Investment in Green Technology	0.991	1.000	0.999	0.898	0.897	-0.940	-0.945	-0.947	-0.799	-0.993
Investment in Digitization	0.990	0.999	1.000	0.897	0.896	-0.939	-0.944	-0.946	-0.798	-0.992
Employment in Green Sectors	0.912	0.898	0.897	1.000	0.999	-0.911	-0.914	-0.917	-0.761	-0.917
Employment in Digital Sectors	0.910	0.897	0.896	0.999	1.000	-0.909	-0.912	-0.915	-0.759	-0.915
Pollution Levels	-0.937	-0.940	-0.939	-0.911	-0.909	1.000	0.998	0.997	0.862	0.924
Greenhouse Gas Emissions	-0.941	-0.945	-0.944	-0.914	-0.912	0.998	1.000	0.999	0.864	0.927
Energy Consumption	-0.943	-0.947	-0.946	-0.917	-0.915	0.997	0.999	1.000	0.865	0.930

Water Usage	-0.800	-0.799	-0.798	-0.761	-0.759	0.862	0.864	0.865	1.000	0.847
Deforestation Rates	-0.998	-0.993	-0.992	-0.917	-0.915	0.924	0.927	0.930	0.847	1.000

### Regression Analysis

The regression analysis results provide useful information about the effects of numerous factors on economic and environmental indicators. A closer look at table 5 reveals the following relationships: To begin, every unit rise in GDP growth rate is projected to result in a 2.58 unit increase in the response variable, suggesting a positive relationship between economic growth and the response variable. Similarly, investments in green technology and digitalization have a considerable positive influence, with a \$1 increase in investment leading in rises of \$4.26e+05 and \$2.80e+05 in the response variables. Furthermore, increases in employment in the green and digital sectors are positively connected with increments of 13.25 and 5.08 units in the response variable. In contrast, pollution levels and greenhouse gas emissions have a negative relationship, with each unit rise resulting in declines of 0.0686 and 2.529 units in the response variable, respectively. Furthermore, higher energy consumption is associated with a 10.31 unit increase in the response variable for each unit rise, but water usage has a positive relationship with a 0.407 unit increase in the response variable per unit rise. Finally, deforestation rates have a negative impact, with each unit rise resulting in a fall of 0.123 units in the response variable. These findings provide critical insights for policymakers and stakeholders working to build sustainable development plans.

**Table 5 Regression Analysis Results for Economic and Environmental Indicators**

Variable	Estimate	Std. Error	t value	Pr(>t)
GDPGrowthRate	2.58	0.47	5.479	0.00057
InvestmentinGreenTech	4.26e+05	1.20e+04	35.591	<2e-16
Investment in Digitization	2.80e+05	7.91e+03	35.395	<2e-16
Employment in Green Sectors	13.25	2.11	6.295	0.000205
Employment in Digital Sectors	5.08	0.67	7.559	9.45e-05
Pollution Levels	-0.0686	0.0059	-11.583	0.000119
Greenhouse Gas Emissions	-2.529	0.033	-76.769	4.56e-11
Energy Consumption	10.31	0.625	16.498	4.64e-07
Water Usage	0.407	0.130	3.126	0.014
Deforestation Rates	-0.123	0.006	-19.180	6.36e-08



**Comparative Analysis:**

The table 6 compares Uzbekistan's performance to that of Kazakhstan and Kyrgyzstan in a variety of areas. Uzbekistan spends \$50 million in green innovation, followed by Kazakhstan (\$70 million) and Kyrgyzstan (\$45 million). In terms of digitization, Uzbekistan has a 45% index, while Kazakhstan and Kyrgyzstan have 60% and 40%, respectively. Uzbekistan's progress towards the Sustainable Development Goals (SDGs) is 10 out of 17, compared to 12 for Kazakhstan and 8 for Kyrgyzstan. Uzbekistan has a 15% renewable energy adoption rate, while Kazakhstan and Kyrgyzstan have 20% and 10%, respectively. Finally, in terms of digital infrastructure accessibility, Uzbekistan gets 35%, Kazakhstan 50%, and Kyrgyzstan 25%. Overall, this comparison sheds light on Uzbekistan's position in relation to its neighbors across a variety of variables such as green innovation, digitization, and sustainable development.

**Table 6 Comparative Analysis of Uzbekistan with neighbors**

Aspect	Uzbekistan	Kazakhstan	Kyrgyzstan
Investment in Green Innovation	\$50 million	\$70 million	\$45 million
Digitization Index	45%	60%	40%
Sustainable Development Goals (SDGs) Progress	10 out of 17	12 out of 17	8 out of 17
Renewable Energy Adoption	15%	20%	10%
Digital Infrastructure Accessibility	35%	50%	25%

**Forecasted Economic and Environmental Indicators**

The table 7 provides forecasted values for various economic and environmental indicators for the years 2024, 2025, and 2026. These indicators include GDP growth rate, investment in green technology and digitization, employment in green and digital sectors, pollution levels, greenhouse gas emissions, energy consumption, water usage, and deforestation rates. For instance, in 2024, the GDP growth rate is forecasted to be 6.9%, with an estimated investment of \$105,000,000 in green technology and \$85,000,000 in digitization. Employment in green sectors is expected to reach 10,500, while employment in digital sectors is projected to be 4,200. Pollution levels are forecasted at 53, with greenhouse gas emissions at 2,800 units. Energy consumption and water usage are anticipated to be 2,500 and 2,800 units, respectively, while deforestation rates are expected to be 90. Similarly, values are provided for 2025 and 2026, showing a trend of increasing values across these years.

**Table 7. Forecasted Values for Economic and Environmental Indicators (2024-2026)**

Year	GDP Growth Rate Forecast	Investment in Green Technology Forecast	Investment in Digitization Forecast	Employment in Green Sectors Forecast	Employment in Digital Sectors Forecast	Pollution Levels Forecast	Greenhouse Gas Emissions Forecast	Energy Consumption Forecast	Water Usage Forecast	Deforestation Rates Forecast
2024	6.9	\$105,000,000	\$85,000,000	10,500	4,200	53	2,800	2,500	2,800	90
2025	7.2	\$110,000,000	\$90,000,000	11,000	4,400	50	2,600	2,300	2,600	80
2026	7.5	\$115,000,000	\$95,000,000	11,500	4,600	48	2,400	2,100	2,400	70

**Discussion**

The findings show positive trends in the uptake and impact of green innovation and digitization in Uzbekistan. Investments in green technology and digitalization are gradually rising, demonstrating a growing dedication to environmentally beneficial ideas and technical growth. Furthermore, employment in both the green and digital industries is increasing, indicating that sustainable development projects have the ability to create jobs and boost economies. Previous research has emphasised the need of coordinating policies and supporting technological breakthroughs to encourage the adoption of green innovation and digitalization (Smagulova& Goncalves, 2023; Samsudin et al., 2024). The data support this viewpoint, demonstrating a good trajectory for Uzbekistan's efforts to include green innovation and digitization into its development agenda.

The study identifies a balance between economic growth and environmental sustainability in Uzbekistan. While economic measures such as GDP growth rate and investment indicate rising trends, environmental indicators such as pollution levels and greenhouse gas emissions are falling. However, rising deforestation rates present a serious issue, emphasising the importance of conservation measures and sustainable land management methods. Previous study has emphasised the necessity of solving environmental issues including pollution and climate change through green innovation and digitization (Dabbous et al., 2024). The findings support this viewpoint, suggesting progress towards minimising environmental consequences while encouraging economic growth. However, rising deforestation rates emphasise the need to boost conservation efforts in Uzbekistan.

The study emphasises the importance of stakeholder awareness and institutional adoption in fostering the uptake of green innovation and digitization. Stakeholder surveys reflect a variety of viewpoints and experiences, highlighting the need for focused awareness and education campaigns to boost stakeholder adoption of sustainable practices. Furthermore, institutional adoption is critical for improving long-term sustainability and scalability by incorporating sustainable technologies into institutional frameworks, policies, and procedures. Previous research has emphasised the importance of stakeholder participation and institutional support in promoting green innovation and digitalization (Li et al., 2022; Maksakova&Kolomeytseva, 2023). The findings support this viewpoint, emphasising the necessity of overcoming adoption barriers such as knowledge gaps and institutional opposition. By encouraging

stakeholder involvement and institutional alignment, Uzbekistan can hasten its transition to sustainable development.

The comparison analysis with neighbouring nations provides useful information about Uzbekistan's performance in green innovation, digitization, and progress towards sustainable development goals. While Uzbekistan has shown positive economic growth and environmental sustainability trends, there are still areas for improvement, such as expanding renewable energy usage and improving digital infrastructure accessibility. The anticipated values point to a good trajectory for Uzbekistan's sustainable development, with ongoing growth in GDP, investments, and employment, as well as improvements in environmental indicators. Previous research has employed comparative analyses and forecasts to evaluate performance and predict future trends in sustainable development (Mondejar et al., 2021). The findings support this approach, offering a complete assessment of Uzbekistan's current situation and future potential. Uzbekistan can attain its sustainable development goals by using comparative studies and forecasting to identify areas for improvement and build targeted initiatives.

The findings analysis reveals both the successes and challenges of incorporating green innovation and digitization into Uzbekistan's development goal. While there are encouraging tendencies in economic growth and environmental sustainability, more coordinated efforts are required to address issues like deforestation and institutional resistance. By building on prior research and implementing evidence-based policies, Uzbekistan may speed its transition to sustainable development, using the transformative power of green innovation and digitization to create a resilient and prosperous future.

### **Practical and Managerial Implication**

The study's findings provide policymakers and stakeholders with actionable insights for advancing Uzbekistan's sustainable development through green innovation and digitization. Policymakers should prioritise developing and implementing comprehensive policies that encourage firms to adopt sustainable practices, while also connecting national development strategies with sustainable goals. Investment in renewable energy, sustainable technologies, and digital infrastructure should be encouraged, with specific financing structures and incentives available to SMEs and startups. Collaborative platforms and partnerships should be formed to promote communication and knowledge exchange across government agencies, businesses, and civil society, stimulating innovation and hastening the spread of sustainable solutions. Furthermore, capacity-building programmes and educational efforts should be launched to improve the skills and competencies of individuals and organisations involved in green innovation and digitization, preparing them to face the challenges and opportunities of a sustainable future. Robust monitoring and evaluation systems should be established to assess progress, measure impact, and ensure accountability in achieving sustainable development goals.

Furthermore, stakeholders should use data-driven decision-making and participative techniques to increase the availability and use of data on green innovation and digitalization indicators. By implementing these ideas, Uzbekistan can leverage the transformative power of green innovation and digitization to create a more resilient and prosperous future that balances economic growth with environmental sustainability and social equality. Policymakers, corporations, and stakeholders can achieve positive change by working together to promote inclusive development and improve the well-being of current and future generations.

## Recommendation

Based on the study's findings, numerous recommendations can be made to boost green innovation and digitization in Uzbekistan: Uzbekistan should create comprehensive policy frameworks that prioritise green innovation and digitization across all industries. These frameworks should be consistent with national development goals and the Sustainable Development Goals (SDGs), incorporating economic, environmental, and social factors. Policymakers should work with stakeholders to develop and execute policies that encourage the use of sustainable technologies and practices, stimulating innovation and accelerating progress towards sustainability.

Increased investment in green technologies and digital infrastructure is critical for driving sustainable development in Uzbekistan. Policymakers can encourage investment by providing financial incentives, tax exemptions, and subsidies to enterprises that invest in renewable energy, sustainable technologies, and digital solutions. Public-private partnerships should be encouraged to mobilise resources and hasten the deployment of long-term solutions, utilising both domestic and foreign financial sources.

Improve Education and Capacity development: Education and capacity development programmes should be prioritised to provide individuals and organisations with the skills and knowledge required to embrace green innovation and digitization. Training initiatives should target experts in critical industries such as energy, manufacturing, agriculture, and information technology, equipping them to effect long-term change in their fields. In addition, educational institutions should include sustainability ideas into their curricula, preparing future generations to face difficult environmental and societal concerns.

Encourage collaboration and knowledge sharing: Government agencies, companies, academia, and civil society must work together to speed progress towards sustainable development. Uzbekistan should construct collaborative platforms, such as innovation hubs, research consortiums, and public-private partnerships, to enable dialogue, share best practices, and co-create creative solutions. These platforms should use digital technology to improve connection and cross-sector collaboration, resulting in collective action towards common sustainability goals.

Implement Monitoring and Evaluation processes: Effective monitoring and evaluation processes are essential for tracking progress, determining impact, and ensuring accountability in the implementation of green innovation and digitalization efforts. Uzbekistan should set up rigorous monitoring systems to track important performance indicators for sustainable development, such as energy efficiency, greenhouse gas emissions, waste management, and ecosystem health. Regular assessments of policies and programmes should be done to assess their effectiveness, identify areas for improvement, and adapt to changing problems and opportunities.

## Limitations of study

The study's dependence on data from 2013 to 2023 may mask recent trends and raise issues about data trustworthiness, implying the need for more current and reliable data in future studies. Furthermore, while the findings are specific to Uzbekistan, larger comparative research across countries could provide more general insights into the efficacy of green innovation and digitization for sustainable development. Furthermore, while quantitative analysis provides useful insights, future research could benefit from using mixed-methods approaches to capture qualitative features and provide a more comprehensive picture. Finally, the study's narrow focus on specific economic and environmental indicators might be expanded to

incorporate social and policy aspects, allowing for a more thorough analysis of sustainable development initiatives.

### Future area of research

Future research should look at the long-term effects of green innovation and digitization on Uzbekistan's sustainable development, taking into account the changing socioeconomic and environmental landscapes. Furthermore, researching the role of government policies and laws in encouraging green innovation and digitization uptake could yield significant insights into good governance techniques. Furthermore, investigating the possible synergies between green innovation, digitization, and other new technologies like artificial intelligence and blockchain may pave the way for more integrated and sustainable development approaches. Furthermore, evaluating the attitudes and behaviours of key players towards green innovation and digitalization, such as enterprises, government agencies, and civil society, could aid in identifying hurdles and opportunities for supporting sustainable practices. Finally, comparative research with other nations in similar developmental contexts may provide significant insights and best practices for furthering sustainable development goals through green innovation and digitalization.

### Conclusion

The combined efforts of green innovation and digitization offers enormous prospects for supporting sustainable development in Uzbekistan. A thorough examination of economic and environmental data reveals that investments in green technology and digitization have the potential to stimulate economic growth, provide job opportunities, and reduce environmental deterioration. The comparative analysis with neighbouring nations emphasises Uzbekistan's achievements and opportunities for improvement, emphasising the need of focused policies and strategic investment. Despite these hopeful trends, problems such as institutional impediments, financial limits, and awareness gaps must be overcome in order to fully realise the benefits of green innovation and digitization. Future study should focus on the long-term impacts, governance systems, stakeholder perceptions, and emerging technology synergies that can effectively advance sustainable development goals. By utilising the transformative power of green innovation and technology, Uzbekistan can create a resilient and prosperous future while protecting its natural resources for future generations.

### References

- Abbas, J., Balsalobre-Lorente, D., Amjid, M. A., Al-Sulaiti, K., Al-Sulaiti, I., & Aldereai, O. (2024). *Financial innovation and digitalization promote business growth: The interplay of green technology innovation, product market competition and firm performance*. *Innovation and Green Development*, 3(1), 100111.
- Al Halbusi, H., Soto-Acosta, P., Popa, S., & Hassani, A. (2023). *The role of green digital learning orientation and big data analytics in the green innovation–sustainable performance relationship*. *IEEE Transactions on Engineering Management*.
- An, Q., Wang, R., Wang, Y., & Pavel, K. (2024). *The impact of the digital economy on sustainable development: evidence from China*. *Frontiers in Environmental Science*, 12, 1341471.
- Azzahidi, A., Bengrich, M., & Omrane, A. (2020). *Innovation for Sustainable Development: The Role of Knowledge Management*. In *Sustainable Entrepreneurship, Renewable Energy-Based Projects, and Digitalization* (pp. 21-39). CRC Press.

- Cardinali, P. G., & De Giovanni, P. (2022). Responsible digitalization through digital technologies and green practices. *Corporate Social Responsibility and Environmental Management*, 29(4), 984-995.
- Chen, T., Yang, F., Li, Y., & Zhang, Z. (2024). Two-Way FDI assists agricultural sustainable development: Based on digitalization and greening perspectives. *Plos one*, 19(2), e0296896.
- Dabbous, A., Barakat, K. A., & Tarhini, A. (2024). Digitalization, crowdfunding, eco-innovation and financial development for sustainability transitions and sustainable competitiveness: Insights from complexity theory. *Journal of Innovation & Knowledge*, 9(1), 100460.
- Durar, S., Awan, U., Varma, A., Memon, S., & Mention, A. L. (2023). Integrating knowledge management and orientation dynamics for organization transition from eco-innovation to circular economy. *Journal of Knowledge Management*, 27(8), 2217-2248.
- Gao, K., Chen, H., Tian, S., Sun, R., Cui, K., & Zhang, Y. (2023). A nexus between green digital finance and green innovation under asymmetric effects on renewable energy markets: a study on Chinese green cities. *Environmental Science and Pollution Research*, 30(16), 46632-46646.
- Grama-Vigouroux, S., Saidi, S., Uvarova, I., Cirule, I., & Sellami, M. (2023). Drivers and barriers of national innovation ecosystems for implementing Sustainable Development Goals: A Latvian case study. *IEEE transactions on engineering management*.
- Hao, X., Wang, X., Wu, H., & Hao, Y. (2023). Path to sustainable development: Does digital economy matter in manufacturing green total factor productivity? *Sustainable Development*, 31(1), 360-378.
- Hojnik, J., Ruzzier, M., Ruzzier, M. K., Sučić, B., & Soltwisch, B. (2023). Challenges of demographic changes and digitalization on eco-innovation and the circular economy: Qualitative insights from companies. *Journal of Cleaner Production*, 396, 136439.
- Hu, Q., & Gu, Y. (2024). Mineral resources and the green economy: A blueprint for sustainable development and innovation. *Resources Policy*, 88, 104461.
- IMF (20224). Press Release No. 23/472. Retrieved from <https://www.imf.org/en/News/Articles/2023/12/21/pr23472-uzbekistan-imf-staff-concludes-staff-visit> . accessed on 5/4/2024.
- Kadaba, D. M. K., Aithal, P. S., & KRS, S. (2023). Government initiatives and digital innovation for Atma Nirbhar MSMEs/SMEs: To achieve sustainable and inclusive economic growth. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 8(1), 68-82.
- Kamilla, A. (2023). DEVELOPMENT OF ECOLOGY IN UZBEKISTAN. *European Journal of Interdisciplinary Research and Development*, 16, 344-347.
- Karki, Y., & Thapa, D. (2021). Exploring the link between digitalization and sustainable development: research agendas. In *Responsible AI and Analytics for an Ethical and Inclusive Digitized Society: 20th IFIP WG 6.11 Conference on e-Business, e-Services and e-Society, I3E 2021, Galway, Ireland, September 1–3, 2021, Proceedings 20* (pp. 330-341). Springer International Publishing.
- Kumar, V., & Ayodeji, O. G. (2022). Web analytics applications, opportunities and challenges to online retail in India. *International Journal of Services and Operations Management*, 41(4), 463-485.

- Lei, X., Shen, Z. Y., Štreimikienė, D., Baležentis, T., Wang, G., & Mu, Y. (2024). Digitalization and sustainable development: Evidence from OECD countries. *Applied Energy*, 357, 122480.
- Li, H., Tang, H., Zhou, W., & Wan, X. (2022). Impact of enterprise digitalization on green innovation performance under the perspective of production and operation. *Frontiers in public health*, 10, 971971.
- Li, J., Shi, Y., & Song, X. (2024). The dynamics of digitalization and natural resources in shaping the sustainable development agenda in BRICS-T nations. *Resources Policy*, 91, 104866.
- Maksakova, M., & Kolomeytseva, A. (2023). Eurasian Industrial Performance: Sustainable and Digital Aspects. In *Digital International Relations* (pp. 191-213). Singapore: Springer Nature Singapore.
- Marhasova, V., Kholiavko, N., Popelo, O., Krylov, D., Zhavoronok, A., & Biliaze, O. (2023). The Impact of Digitalization on the Sustainable Development of Ukraine: COVID-19 and War Challenges for Higher Education. *Revista de la Universidad del Zulia*, 14(40), 422-439.
- Marouane, N. A. K. H. C. H. A., & Mamdouh, T. L. A. T. Y. (2023). The Emergence of Green Finance in the Digital Age: Catalyst for a Sustainable and Innovative Economy. *African Scientific Journal*, 3(21), 227-227.
- Mondal, S., Singh, S., & Gupta, H. (2023). Green entrepreneurship and digitalization enabling the circular economy through sustainable waste management-An exploratory study of emerging economy. *Journal of Cleaner Production*, 422, 138433.
- Mondejar, M. E., Avtar, R., Diaz, H. L. B., Dubey, R. K., Esteban, J., Gómez-Morales, A., ... & Garcia-Segura, S. (2021). Digitalization to achieve sustainable development goals: Steps towards a Smart Green Planet. *Science of The Total Environment*, 794, 148539.
- Moșteanu, N. R. (2020). Green sustainable regional development and digital era. In *Green buildings and renewable energy: Med green forum 2019-part of world renewable energy congress and network* (pp. 181-197). Springer International Publishing.
- Ogunmola, G. A., Chien, F., Chau, K. Y., & Li, L. (2022b). The influence of capital requirement of basel iii adoption on banks' operating efficiency: Evidence from US banks. *Journal of Central Banking Theory and Practice*, 11(2), 5-26.
- Ogunmola, G. A., Lourens, M. E., Chaudhary, A., Tripathi, V., Effendy, F., & Sharma, D. K. (2022a). A holistic and state of the art of understanding the linkages of smart-city healthcare technologies. In *2022 3rd international conference on smart electronics and communication (ICOSEC)* (pp. 1575-1580). IEEE.
- Ozturk, I., Alqassimi, O., & Ullah, S. (2024). Digitalization and SMEs development in the context of sustainable development: A China perspective. *Heliyon*.
- Pérez-Martínez, J., Hernandez-Gil, F., San Miguel, G., Ruiz, D., & Arredondo, M. T. (2023). Analysing associations between digitalization and the accomplishment of the Sustainable Development Goals. *Science of The Total Environment*, 857, 159700.
- Samsudin, N., Zakaria, T., Osman, J., Ramdan, M. R., Khalid, I. K. M., Mohamad, N., ... & Sastraredja, S. (2024). The Digitalization Technology for Sustainable Rural Entrepreneurship: A Structured Review. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 42(1), 14-30.

- Saydullayev, A. (2023). Green Economy: Is It a Path to Sustainable Economic Growth for Uzbekistan? *British Journal of Global Ecology and Sustainable Development*, 15, 129-137.
- Saydullo, F., & Sharipova, U. (2023). THE ROLE OF GSP+ SYSTEM AND ITS IMPACT ON DIVERSIFICATION OF UZBEK EXPORTS. *INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION*, 2(23), 281-286.
- Smagulova, G., & Goncalves, M. (2023). Technological innovation systems (TIS) as a tool for sustainable development of EdTech startups in developing countries: A case of the Republic of Kazakhstan. *Journal of Transnational Management*, 28(1-2), 74-100.
- Teo, T. C., Zhang, A., Djuraeva, Z., & Ettibaev, A. (2023). Out of Uzbekistan: The Barriers of Adopting Circular Business Practices in Rural SMEs. *Journal of Human Resource and Sustainability Studies*, 11(2), 356-380.
- The World bank (2022). *The World Bank in Uzbekistan*. Retrieved from <https://www.worldbank.org/en/country/uzbekistan/overview> accessed on 5/4/2024
- Veckalne, R., & Tambovceva, T. (2023). Evaluating Urban Sustainability in Uzbekistan: A Novel Formula for Empirical Analysis. *Sustainability*, 15(9), 7035.
- Wang, C., Gao, Y., Aziz, A., & Ogunmola, G. A. (2022). Agricultural disaster risk management and capability assessment using big data analytics. *Big data*, 10(3), 246-261.
- Wang, X., Gan, Y., Zhou, S., & Wang, X. (2024). Digital Technology Adoption, Absorptive Capacity, CEO Green Experience and the Quality of Green Innovation: Evidence from China. *Finance Research Letters*, 105271.
- Xiumei, X., Ruolan, J., Shahzad, U., & Xiao, F. (2023). Sustainable innovation in small and medium-sized enterprises: Environmental regulations and digitalization as catalyst. *The Journal of Environment & Development*, 32(4), 413-443.
- Yang, F., Luo, C., & Pan, L. (2024). Do digitalization and intellectual capital drive sustainable open innovation of natural resources sector? Evidence from China. *Resources Policy*, 88, 104345.
- Yang, P., & Sun, W. (2023). How does digital technology facilitate the green innovation of enterprises? Evidence from China. *International Review of Applied Economics*, 37(5), 621-641.
- Zhao, X., Dong, K., Zhao, J., & Jiang, Q. (2024). Paths to sustainable development in China: why green finance and green technology matter? *Economic Change and Restructuring*, 57(2), 55.
- Zhuge, K., Lin, W., Yuan, Y., He, H., & Zhang, Y. (2023). Does digital capability promote sustainable development of new ventures? The dual impact of green knowledge creation and green pressure. *International Journal of Environmental Research and Public Health*, 20(3), 2274.



## SOCIAL PROGRAMS AND FEATURES OF THEIR IMPLEMENTATION IN UZBEKISTAN

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### ABSTRACT

*The article looks at the concept of social programs and features of their implementation in country and social protection of population and the ways to improve the mechanism of social protection, which makes research topic relevant.*

*The scientific article gives scientific definitions to such categories as "social protection", "social policy" by various scholars and authors. In addition, the article groups social protection programs, summarizes and comprehensively, analyzes the theoretical and scientific approaches to improving their effectiveness.*

*Having done an extensive analysis of the research materials, the author makes a conclusion about the urgency strengthening measures for social protection of the population in order to avoid further economic recession.*

**Keywords :** *Population, Social Protection, Social Security, Social Programs, Labor, Income, Social Policy, Social Assistance, A Layer of The Disabled Population, Consumer Protection, Consumer Society, Living Standards of The Population.*

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### Introduction

In 2018, declared the Year of Active Entrepreneurship, Support of Innovative Ideas and Technologies, the country has taken comprehensive measures to introduce modern scientific achievements, innovative ideas and technologies in the economy, social sphere and public administration. Particular attention was paid to the development of the social sphere, strengthening social protection and further improving the system of remuneration of labor, which allowed to increase the real income of the population by 12% compared to 2017. In addition, the concept of improving the tax policy of the Republic of Uzbekistan aimed at stimulating economic development, improving the business environment and investment attractiveness, increasing incomes and reducing the tax burden on business was adopted.

In particular, the reduction of the single social payment rate to 12% and the abolition of mandatory contributions to the state trust funds from the turnover (income) of legal entities have created the conditions for enterprises to have additional funds at their disposal.<sup>4</sup>

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<sup>4</sup>The decree of the republic of Uzbekistan. Active investment and social development of the strategy of actions on the five priorities of development of the republic of Uzbekistan in 2017 – 2021. 17.01.2019.

Our country plans to implement the following directions in the field of social development: reducing unemployment among the population, increasing people's incomes, developing science and continuing education, improving the quality of health services and expanding their coverage, strengthening social support for women and youth, improving people's living conditions, providing them with decent housing and improving welfare, promoting a healthy lifestyle in society, further popularization of physical culture and sports, development of tourism.

Social protection is one of the most important tasks in a market economy. The concept of social protection acts as a category that embodies the social problem that society needs to address in the current era of economic reforms. In order to develop and prosper, the state must embody law and justice, the support of its population. The stability of society, its sustainable development, and, as a result, its national security depend on the state of the social sphere, the effectiveness of the policy pursued by the state in the sphere of social support of citizens. The problems of economic development in modern conditions are inevitably associated with the need to remove special attention to social issues, including the formation and improvement of the system of social protection of the population. The specificity of the creation of national systems of social protection of the population is due to both the socio-economic characteristics of the development of these countries and the choice of ways and methods for the implementation of the reforms themselves.

One of the priorities in deepening market reforms in our country is to improve the mechanism of social protection. As the level of economic development increases, it is important to study the problems of social protection and develop solutions.

In any society, the population is in need of social protection, that is, low-income and large families, the disabled, the growing number of unemployed. Therefore, the improvement of the mechanism of social protection of the population in our country is an urgent task. The level of development of the country can also be seen in the living conditions of the population. In other words, the growth of living standards serves as a qualitative indicator of economic development of the country.

In addition, it is necessary to improve the mechanism to ensure a stable income of the population and maintain good living conditions. These efforts will be the basis for raising the address of the social protection system, the formation of a new priority of social protection.

During the pandemic, there is a growing need to reform the activities of institutions that provide social and material assistance to the poorest and most vulnerable segments of the population. Therefore, the solution of these problems is being carried out rapidly. In order to ensure the necessary control, transparency and addressability in the distribution of financial assistance, the transition from a previously inadequate and inefficient system to a new system is taking place on the basis of the introduction of systemic solutions based on digital technologies.

### **Main part**

According to many scholars, the concept of social protection in the broadest sociological sense was first used in 1935 in the US Social Security Act.<sup>1</sup> This law contains proposals for the development of programs for the provision of social assistance to the elderly and the disabled. However, the concept of social protection has not been fully elucidated and recommendations to address this issue have not yet been developed.

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<sup>1</sup>The Social Security Act of 1935 is a law enacted by the [74th United States Congress](#) and signed into law by [US President Franklin D. Roosevelt](#).

In addition, this concept is widely used in the social policy of the country, including labor, employment, career choice, training, education, income security, consumer protection, consumer society, improving the quality of goods and services, health care, social the welfare system and the provision of pensions, benefits, various benefits to the needy, low-income part of the population. The concept of "social protection" is so large that it is difficult to fully explain its meaning and essence. It is therefore expedient to consider the views of many scholars. It allows us to analyze ways to solve the problem of social protection and to state our position.

The main task of social protection is providing social assistance to the vulnerable population or to warn them of impending financial hardship. The peculiarity of any market economy is that it is understood that an individual makes an independent decision about how to participate in economic life. Everyone, first and foremost, is responsible for their own insurance. If a person is not socially insured, then his or her temporary income is protected by state social assistance.<sup>1</sup>

Social protection is one of the most important issues in the transition to a market economy. The concept of "social protection" is manifested as a category that reflects the social problems that have matured in society today.<sup>2</sup>

The social protection system is a system of welfare programs consisting of benefits based on the level of poverty of the needy population.<sup>3</sup>

In the economic literature of countries with market economies, especially in the comments of economists, one can find different meanings of the term "social protection". For example, in some literatures, the concept of "social protection" is interpreted in two different, broad and narrow senses. In the broadest sense, "social protection" is a set of legal, economic, social measures that provide social and material protection of the population and is determined by society, in the narrow sense, due to insufficient age, health, social status, livelihood of the state and society. care, care for citizens in need.<sup>4</sup> "Social protection," says L.Allahverdieva, "is a narrow state policy that protects human rights and provides social security in accordance with living standards." At the same time, the concept of social protection has a broad meaning, involving not only the state in social protection of the population, but also all segments of society and non-governmental organizations. Social protection of the population is a key element in the formation and development of a market economy.<sup>5</sup>

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<sup>1</sup>Khoshimov P.Z. Economics of the social sphere T.: 2002, p.119.

<sup>2</sup>Azamov S.M. – "Forming an effective mechanism of social protection of the family. Abstract prepared for the candidate of economic sciences. Andijon – 2006, p.12.

<sup>3</sup>Vakhobov A.V. KhajibakieSh III.H. Problems of strengthening the structure and targeting of social protection: international experience and national characteristics / Proceedings of the Republican scientific-practical conference on "Priorities for modernization and development of the social sphere." Tashkent. 2018. p. 14-24

<sup>4</sup>Report on Human Development. T.: 2001. p.22

<sup>5</sup>AllakhverdiyevaL.M - "Formation and development of a system of social protection of the population, taking into account the demographic characteristics of Uzbekistan". Dissertation for the degree of Doctor of Economics. T. 2002, p.37.

The stratification of the population by income level on the basis of the minimum subsistence level and the minimum consumption budget allows to distinguish the following groups of the population with different levels of material security: "Poor" families - in which the per capita income is less than or equal to the minimum subsistence level; "Low-income" families - where the per capita income is between the minimum subsistence level and the minimum consumption budget; "Affordable" families - in which the per capita income is located between the amount of the minimum consumption budget and the amount of the rational consumption budget; "Rich" families - in which the per capita income is higher than the level of a reasonable consumer budget.<sup>1</sup>

According to a number of other economists, "... in a market economy, social protection is a natural component of the organization of economic and social life of society, and its organizational and legal forms serve to ensure the continuity of the labor process and labor reproduction".<sup>2</sup> Бу нуқтаи назарга бизнинг айрим эътирозларимиз бор. Хусусан, бундай талқин фақат меҳнатга лаёқатли фуқароларни назарда тутиб, аҳолининг меҳнатга лаёқатсиз қисмини қамраб олмайди. Бундан ташқари, ижтимоий ҳимоя бу аниқ тушунча бўлиб, иқтисодиётнинг барча соҳаларида фаол қатнашади ва ижтимоий ишда фуқароларни ижтимоий ҳимоя қилиниши талқин этилади.<sup>3</sup>

According to a number of scientists, as market relations develop, citizens insure themselves against various social risks using social insurance services. The state establishes minimum social guarantees for all segments of the population and establishes the order of provision of social services (educational, medical, legal, etc.) based on the level of income of the population through the implementation of social indexation. Provides social support to the needy on the basis of preferential social services and creates conditions for them to improve their well-being.<sup>4</sup>

In order to improve the welfare of the population, various laws are developed, the state provides financial support to the population, creates favorable conditions for work, ensures continuous improvement of welfare, eliminates sharp differences in education, culture, skills, income. achieves goals such as giving and preventing, creating a decent standard of living for human beings by society, as well as helping to ensure human development.

## Results and Discussions

Strong social policy is the most important principle of the national model of market reforms in Uzbekistan. It covers a wide range of issues, including income regulation, employment and the formation of new labor relations, social protection and support for certain categories and groups of the population, health care development, physical culture and sports, education.<sup>5</sup>

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<sup>1</sup>Vakhabov A.V., ZakhidovaSh.Sh., B.B. Baxtiyorov, OdinayevD.Sh., Fayzullayev J.N. Access to social work and social security: Textbook. – T.: « Economics and Finance», 2018. P.168

<sup>2</sup>Romashev O.V. Social protection of workers: problems, solutions. // Social Research. –M., 2001г. №1, p.110

<sup>3</sup> N.V. Nechuikina Journal: Social and Human Sciences. Social protection: concept, categories, terminology. 2018 p.146.

<sup>4</sup>Bakhtiyorov B.B. Directions for improving the economic mechanism of social protection.// Dissertation for the degree of Doctor of Philosophy (PhD) in Economics ABSTRACT. 2020. 16 p.

<sup>5</sup>Salimov Sh.Yu.-Problems of social protection and its further improvement // "Oriental Art and Culture" Scientific-Methodical Journal – (1) IV/2019. P.75.

Social policy is a system of measures taken by the state to improve the living conditions of the population in the fields of labor market formation, employment, price and income policy, social assistance, social insurance, social services. In the era of the planned economy, there are many types of social assistance to the population, the main purpose of social protection was to provide social assistance in the form of money and subsidies to all segments of the population. In a market economy, dependence on the population is unacceptable, and the organization of efficient use of public funds plays an important role. Given the limited public funds, it is important to develop active forms of social assistance. In a market economy, social assistance should be in the form of effective microfinance. That is, microfinance programs require the active participation of the population and provide the population with income. Models of social protection are formed on the basis of the path of socio-economic development of each country.<sup>1</sup> Social protection is fully covered here. But it is difficult to cover all segments of the population by implementing social protection only in this way.

Therefore, in the process of social protection of the population, the main attention should be paid to his professional skills, ability to work. Especially in the context of transition to a market economy, it is necessary to study market relations and focus on employment of the able-bodied and incapacitated population, meeting their material needs, financial support for low-income families, as well as socio-economic development.<sup>2</sup> It is expedient to provide social protection to the disabled and low-income population by providing them with pensions, benefits, stipends and tax cuts. According to another author, "social protection" means the process by which the state implements a targeted social guarantee in order to create favorable conditions for living and working, to help the poor.<sup>3</sup>

The problems of economic development in modern conditions are inevitably associated with the need to remove special attention to social issues, including the formation and improvement of the system of social protection of the population. The specificity of the creation of national systems of social protection of the population is due to both the socio-economic characteristics of the development of these countries and the choice of ways and methods for the implementation of the reforms themselves.

An important task is to create a comprehensive system of social protection in the world, including the solution of negative social problems arising in society as a result of market economy development, reducing their impact, achieving sustainable socio-economic development based on the principles of social justice. The priority of the social policy of the United Nations (UN), international economic organizations, nation-states is to identify the socially disadvantaged, to strengthen the targeting of their social protection. According to the International Labor Organization (ILO), in 2017-2019, 29% of the world's population benefited from social services, 41.1% of women with children became mothers, 21.8% of those unemployed at working age became unemployed, 27% of people with disabilities became unemployed. 8 percent were able to receive disability benefits.<sup>4</sup> The coronavirus pandemic affects a total of 2 billion people worldwide.

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<sup>1</sup>Abdullaeva M.K. - Directions for improving social protection and its regulation. i.f.n. Abstract of the dissertation for the degree T.: 2008, p.7.

<sup>2</sup>Yoqubova S.Yu. Social protection of the population in the transition to market relations. Dissertation for the degree of Candidate of Economic Sciences. T.: 1994, p.22.

<sup>3</sup>Zokirova N. Improving the system of social protection in a socially oriented market economy. Author's abstract for the degree of Candidate of Economic Sciences. T.: 2001, p.8.

<sup>4</sup> World Social Protection Report 2017–2019. Providing universal social protection for

led to unemployment in the informal sector (62% of the world's total employment, including 90% in low-income countries, 67% in middle-income countries and 18% in developed countries)<sup>1</sup>. According to the World Bank, the Covid-19 pandemic crisis, which began in 2020, will affect the world economy by 5.2%, including GDP growth in developed countries by 7%, per capita income in developing and developing countries by 2.5%. As a result of the 3.6 percent decrease, 60 million people in the world. is projected to put people in extreme poverty and millions of people on the brink of poverty<sup>2</sup>.

In order to provide financial support to various social groups, including the socially vulnerable, in the context of the global "Coronavirus" crisis, research is being conducted to improve the economic mechanism of providing them with social services, and targeted anti-crisis government programs are being developed and implemented. being increased.

During the years of independence, Uzbekistan has developed a system of social protection based on the requirements of a market economy and is constantly improving it. In the context of the pandemic, the share of socially vulnerable households in total households increased from 8.0% to 21.0%. This situation makes it necessary to further improve the system of social protection and increase the effectiveness of poverty reduction programs in the country. In the pre-pandemic period, the number of unemployed in our country amounted to 1 million. While it was close to 350,000, during the pandemic this figure was about 2 million. person6. "... the pandemic could seriously affect the incomes of about 450,000 families." Improving the targeting of the social protection system is a socio-economic problem of scientific and practical significance, the provision of social services to the population, the systematization of ongoing social reforms in the fight against poverty and increasing the level of social protection.

## Conclusion

Based on the research on ways to improve the mechanism of social protection, the following conclusions were drawn:

1. Social policy consists of a set of guarantees given by the state to all its groups to improve the living standards of the population, as well as benefits and material measures provided to certain needy groups.
2. The rights of local self-government bodies in providing social assistance to the population should be further expanded.
3. The mechanism of targeted social protection should be studied in the following categories: individual address, address on the principles and indicators of the region, as well as self-addressed social protection

Depending on the type of individual address, the individual is considered individually, such as the increase of family income from poverty as a result of entrepreneurship, improving the quality of food, the

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Labor and ILO Office for Eastern Europe and Central Asia. - Moscow: ILO, 2018.7-p.

<sup>1</sup> The Covid-19 Crisis and the Informal Economy: Urgent Responses and Political Challenges. -

ILO industry reference. May 2020

<sup>2</sup> According to the World Bank <https://www.vsemirnyjbank.org/ru/news/press-release/2020/06/08/covid-19-toplunge-global-economy-into-worst-recession-since-world-war- iion-since-world-war- 1>

modern appearance of housing. According to the principles and indicators of the region, targeted social protection is understood as the average level of welfare in the region. In order to ensure social protection, the state, in turn, takes measures aimed at continuous employment. 5. The following conclusions were drawn on the organization of public works:

- Involvement of family members in need of public works is an effective means of equalizing their consumption;
- Increases the target job description, salary level and form of payment at the expense of self-targeted funding;
- Salaries in social programs should be close to the monthly wage at market prices for unskilled labor.

6. As for the part of the population of the Republic of Uzbekistan in need of social protection, we consider it appropriate to focus on women. This process should create favorable conditions for the employment and employment of low-income, unemployed women.

## References

- *The decree of the republic of Uzbekistan. Active investment and social development of the strategy of actions on the five priorities of development of the republic of Uzbekistan in 2017 – 2021. 17.01.2019.*
- *The Social Security Act of 1935 is a law enacted by the 74th United States Congress and signed into law by US President Franklin D. Roosevelt.*
- *Khoshimov P.Z. Economics of the social sphere T.: 2002, p.119.*
- *Azamov S.M. – “Forming an effective mechanism of social protection of the family. Abstract prepared for the candidate of economic sciences. Andijon – 2006, p.12.*
- *Vakhobov A.V. KhajibakieSh U.H. Problems of strengthening the structure and targeting of social protection: international experience and national characteristics / Proceedings of the Republican scientific-practical conference on "Priorities for modernization and development of the social sphere." Tashkent. 2018. p. 14-24*
- *Report on Human Development. T.: 2001. p.22*
- *Allakhverdiyeva L.M - “Formation and development of a system of social protection of the population, taking into account the demographic characteristics of Uzbekistan”. Dissertation for the degree of Doctor of Economics. T. 2002, p.37.*
- *Vakhobov A.V., ZakhidovaSh.Sh., B.B. Baxtiyorov, OdinayevD.Sh., Fayzullayev J.N. Access to social work and social security: Textbook. – T.: « Economics and Finance», 2018. P.168*
- *Romashev O.V. Social protection of workers: problems, solutions. // Social Research. –M., 2001a. №1, p.110*
- *N.V. Nechuikina Journal: Social and Human Sciences. Social protection: concept, categories, terminology. 2018 p.146.*
- *Bakhtiyorov B.B. Directions for improving the economic mechanism of social protection.// Dissertation for the degree of Doctor of Philosophy (PhD) in Economics ABSTRACT. 2020. 16 p.*

- Salimov Sh.Yu.-Problems of social protection and its further improvement // “Oriental Art and Culture” Scientific-Methodical Journal – (1) IV/2019. P.75.
- Abdullaeva M.K. - Directions for improving social protection and its regulation. i.f.n. Abstract of the dissertation for the degree T.: 2008, p.7.
- Yoqubova S.Yu. Social protection of the population in the transition to market relations. Dissertation for the degree of Candidate of Economic Sciences. T.: 1994, p.22.
- Zokirova N. Improving the system of social protection in a socially oriented market economy. Author's abstract for the degree of Candidate of Economic Sciences. T.: 2001, p.8.
- World Social Protection Report 2017–2019. Providing universal social protection for Sustainable Development Goals / Technical Support Team on Decent Labor and ILO Office for Eastern Europe and Central Asia. - Moscow: ILO, 2018.7-p.
- The Covid-19 Crisis and the Informal Economy: Urgent Responses and Political Challenges. -
- ILO industry reference. May 2020
- According to the World Bank <https://www.vsemirnyjbank.org/ru/news/press-release/2020/06/08/covid-19-toplunge-global-economy-into-worst-recession-since-world-war-ii-since-world-war-1>





# SOUTH KOREA'S EXPERIENCE IN DEVELOPING A MANAGEMENT SYSTEM FOR INNOVATION ACTIVITIES OF TELECOMMUNICATIONS ENTERPRISES

Aliyev FirdavsAlimovich <sup>1</sup>

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## ABSTRACT

*The article examines the experience of South Korea in the development of a management system for innovative activities of telecommunications enterprises. Attention is focused on the experience of Samsung, which is one of the five most innovative companies. An analysis of innovation centers, also leading academic partners of Samsung Group. Conclusions are drawn from the experience of South Korea in developing a management system for innovative activities of telecommunications enterprises.*

**Key words:** *Management, Innovation, Telecommunications, Innovative Technologies, Services, Academic Partners, Research Groups.*

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South Korea is one of the leaders in the field of telecommunications, and its experience in developing a system for managing the innovation activities of enterprises in this area can be very useful for other countries.

One of the key aspects of South Korea's success in this area is strong government regulation and support for innovation. The government is actively investing in the development of telecommunications technologies and encouraging businesses to innovate through various programs and financial incentives.

In addition, there is a high level of competition between companies in the telecommunications industry in South Korea, which contributes to the constant development of new technologies and services. This encourages businesses to innovate and find new solutions.

It is also worth noting that the innovation ecosystem is actively developing in South Korea, which includes not only enterprises, but also universities, research centers and government organizations. This promotes the exchange of knowledge and experience, as well as the creation of an enabling environment for innovation.

According to the rating of the Boston Consulting Group, in 2015, Samsung Group was included in the top five most innovative companies in the world.

To achieve the government's goals, 10 major conglomerates were selected, including Samsung Group , Hyundai Group , SK Holdings , Posco , HanWha , LG Group , KEPCO, Lotte Group , S- Oil . All of these companies are among the top 200 global companies in terms of profit for 2014, and have the necessary financial, managerial and infrastructural resources to fulfill the tasks set by the government<sup>4</sup>.

The leading company in the field of national innovative technologies Samsung Group , ranked 13th among world companies in terms of profitability, and 5th place among world companies in terms of innovation, is the main driver of the development of innovative technologies in the field of telecommunications, consumer electronics, bioengineering, and construction. Samsung Group is the largest

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company in Korea, its share in the total GDP of the Republic of Kazakhstan is up to 36%, of which 24% is accounted for by Samsung Electronics <sup>1</sup>.

The company owns a number of research centers, laboratories and foundations. By 2012 Samsung Electronics operated 10 innovation centers around the world, three of which were in the United States, two in Europe, and the remaining five in the developed eastern countries of Japan, China and Israel.

In 2013, a new innovation center was opened in Silicon Valley and the American Venture Fund <sup>2</sup>. The opening of a new innovation center is associated with the launch of Samsung's new "Start-up" program Accelerator " (new business launch accelerator). The center's task is also to analyze the experience of Silicon Valley and apply the best experience to open its own centers in Korea.

In the Republic of Korea itself, as part of the state program to create centers for innovative economy, Samsung Group has already opened 2 innovation centers in the cities of Daegu and Gumi .

In total, as part of the state program for the development of innovation, it was planned to create 17 specialized centers, each of which is under the jurisdiction of one of the chaebols .

In 2013, the new government legislated the development of innovation zones by promulgating the Act on the Development of Special Technical Zones, which clarified the scope of Innopolis' activities .

According to the Act, Innopolis is positioned as a special institute designed to professionally engage and accumulate experience in the commercialization of technologies. By 2016, all 17 main innovation centers of the country are functioning.

South Korean scientists studying the problems of the national economy are concentrated to a large extent in the Academy of Korean Studies, Institute of Northeast Asia of North-East Asia ), Seoul National University, Kyung Hee University and Ulsan University . The Samsung Research Institute also plays a major role in the study of science and technology policy.

Samsung's Top Ten Academic Partners Group by articles in Nature journals Index . Here they are ranked according to the bilateral cooperation scale (CS), 2015-19. CS is calculated by summing each organization's share of articles in which authors from both parties contributed.

**Table 1 : Samsung's Top Ten Academic Partners Group by articles in Nature journals Index<sup>3</sup>**

No.	Institute	A country	Scale of bilateral cooperation (CS)	Number of articles
1.	Seungkyeonwan University	South Korea	75.07	159
2.	Seoul National University	South Korea	21.10	41

<sup>1</sup>Hyoung Tae Kim. Does the Korean Economy Depend Too Much on Samsung? // Academic Paper Series. 2015. - 28.10.

<sup>2</sup>Samsung Opens New Startup Accelerator In Silicon Valley As It Seeks Innovation Edge. - <http://www.forbes.com/sites/parmyolson/2013/07/11/samsung-opens-new-startup-accelerator-in-silicon-valley-as-it-seeks-innovation-edge/#46b4c66c309e>

<sup>3</sup>Kadosina A.V. How South Korea became a world leader in innovation // Korean studies in Russia: direction and development. 2021. T. 2. No. 1. P. 78-82. AV KADOSINA Kazan ( Volga region ) Federal

3.	Korea Advanced Institute of Science and Technology	South Korea	20.16	35
4.	Stanford University	USA	19.29	31
5.	University of California	Berkeley USA	17.16	51
6.	Korea University	South Korea	13.62	27
7.	Ensei University	South Korea	11.07	22
8.	Harvard University	USA	9.67	26
9.	Pohang University of Science and Technology	South Korea	8.82	16
10.	Caltech University	USA	8.35	12

The conducted research makes it possible to highlight several features of the scientific and technological development of South Korea. The process of economic modernization was carried out consistently and was distinguished by the continuity of democratic transformations. This continuity was ensured largely by the fact that until recent years, political figures who were formed during the reign of Park Chung Hee were at the helm. Maintaining continuity in the economic strategy, gradual liberalization and reform of big business while maintaining a certain state support provided the country with a powerful industrial foundation.

Mutual internal lending and joint efforts to carry out R&D are a distinctive feature of South Korean "chaebols". The main factors contributing to the growth of the chaebols were government planning and government financial policies. Japanese and American investments and borrowed technologies played a major role in South Korea's economic growth.

The country's entry into the process of globalization has led to the fact that the most important task has become the training of highly qualified personnel to work in advanced industries, as well as the expansion of R&D that can ensure Korean products are highly competitive in the foreign market.

At the end of the 20th century, scientific and innovation policy became the most important area of government regulation. In it, science is perceived not only as a way to increase competitiveness and security, but as the basis for the development of a knowledge-based society. Science has become the basis of the innovation system of modern South Korean society.

The government of the Republic of Korea, with the help of a thoughtful concentration of a set of resources in priority areas for the development of sectors of the national economy, was able to obtain the international status of an industrial state in 1996. All government efforts were aimed at achieving scientific and technological progress: an appropriate administrative system was built, a legislative and institutional framework was created, and a policy was pursued aimed at attracting and retaining scientific and technical personnel.

Five-year economic development plans were gradually implemented to implement the transition to the production of high-tech products. Based on indicators of the level of scientific and technological development, we can say that the country has changed from a traditional state to a modern one. Science and technology policy, resulting from the goals of the country's socio-economic development, contributed to the achievement of independence of the economy of the Republic of Korea. Innovation processes are increasingly a defining element of a stable economy and sustainable development of the state. The greatest

research interest in the issue of innovative development of the state is represented by successful innovation systems, features of their functioning, and strategies of national innovation policy <sup>1</sup>.

In general, we can identify the following main factors contributing to the successful development of the field of science and technology and the national innovation system of South Korea.

1. Consistent and long-term innovation policy of the state with clearly defined goals and objectives.
2. Availability of a consistent national legislative framework. This made it possible to create a solid foundation for the progressive development of an innovative economy.
3. Creation of developed legislation in the field of intellectual property.
4. Systematic study and implementation of the best world experience both in the field of new technologies and in the creation of a comprehensive innovation infrastructure. Creation of commercialization programs for attracted foreign technologies.
5. Rational use of existing potential, highlighting priority areas of development as a powerful foundation of the national economy.
6. Creation of an innovation ecosystem, an environment for cooperation between private small companies, research groups, and the educational sector.
7. State support for developing sectors of the economy through the introduction of benefits and development programs.
8. Development of a strong, technically oriented national education. Creation of a system of mutually beneficial cooperation: universities - research institutes - production.
9. Budgetary financing and creation of infrastructure for the development of our own fundamental science.
10. Regional development of the republic through targeted programs, the creation of special economic zones and technology parks.

Overall, South Korea's experience in developing a management system for enterprise innovation in the telecommunications industry is an example of a successful strategy that can be adapted and used in other countries to stimulate innovation and development in this important industry.

## References

- *Hyoung Tae Kim. Does the Korean Economy Depend Too Much on Samsung? // Academic Paper Series. 2015. - 28.10.*
- *Samsung Opens New Startup Accelerator In Silicon Valley As It Seeks Innovation Edge.*
- [http://www.forbes.com/sites/parmyol\\_son/2013/07/11/samsung-opens-new-startup-accelerator-in-silicon-valley-as-it-seeks-innovation-edge/#46b4c66c309e](http://www.forbes.com/sites/parmyol_son/2013/07/11/samsung-opens-new-startup-accelerator-in-silicon-valley-as-it-seeks-innovation-edge/#46b4c66c309e)
- *Kadosina A.V. How South Korea became a world leader in innovation // Korean studies in Russia: direction and development. 2021. T. 2. No. 1. P. 78 -82. AV KADOSINA Kazan (Volga region) Federal.*
- *Rakhimova D.N. METHODS FOR EVALUATION AND TRAINING OF MANAGEMENT PERSONNEL. Publfinished in International Conference on Digital Society, Innovations & Integrations of Life in New Century, January 2021 ICDSI IL-21 Issue*
- *Rakhimova D.N. and others. Evolution of public administration in countries post-Soviet space. The Republic of Uzbekistan. Moscow: Public Service Journal No. 2, 2021.188-203 p.*

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<sup>1</sup>Rakhimova D.N. and others. The evolution of public administration in the countries of the post-Soviet space. The Republic of Uzbekistan. Moscow: Public Service Journal No. 2, 2021.188-203 p.

# THE IMPORTANCE OF THE ENERGY INDUSTRY IN THE STRUCTURE OF THE ECONOMY OF UZBEKISTAN

Tursunov Alisher Muhammadnazirovich<sup>1</sup>

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## ABSTRACT

*The energy industry serves as a cornerstone in the economic framework of Uzbekistan, playing a pivotal role in driving growth, development, and sustainability. This paper delves into the significance of the energy sector within Uzbekistan's economy, analyzing its contribution, challenges, and future prospects. Through comprehensive examination, the paper highlights the diverse aspects of the energy industry, encompassing production, distribution, consumption, and regulatory frameworks. By elucidating the interplay between the energy sector and economic dynamics, this study provides valuable insights for policymakers, stakeholders, and researchers interested in the sustainable development of Uzbekistan's economy.*

**Keywords:** *Energy Industry, Economy, Uzbekistan, Production, Distribution, Consumption, Sustainability, Growth, Development, Challenges, Prospects.*

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## Introduction

The energy industry stands as a fundamental pillar in shaping the economic landscape of Uzbekistan, exerting profound impacts on various sectors and dimensions of the national economy. With abundant natural resources and a strategic geographical location, Uzbekistan possesses significant potential for energy production, serving as a key player in the Central Asian region. The importance of the energy sector transcends mere resource extraction; it encompasses a spectrum of activities ranging from exploration and production to transmission, distribution, and consumption. As such, understanding the intricate dynamics of the energy industry is essential for comprehending the broader economic framework of Uzbekistan.

The functional-macroeconomic approach offers clarity in depicting economic growth dynamics and provides a more comprehensive assessment of the role of production factors in shaping the economy's final output. However, drawbacks of this method include methodological ambiguity in defining fundamental concepts and a focus solely on the outcomes of economic activities and the distribution processes of the final product among key sectors, disregarding the intricate internal dynamics of the production process itself. A holistic examination of economic growth issues necessitates the combined application of both reproductive and functional-macroeconomic approaches. These approaches complement each other, enabling a deeper exploration of the relationship between economic growth and other forms of economic dynamics, facilitating the prioritization of production and growth factors, and allowing for the quantification of individual factors' contributions to economic expansion.

In recent years, Uzbekistan has witnessed notable advancements and transformations in its energy landscape, driven by economic reforms, technological innovations, and evolving market dynamics. The government's initiatives aimed at modernizing the energy infrastructure, enhancing energy efficiency, and diversifying the energy mix have reshaped the industry's trajectory, positioning it for sustainable growth and development. However, despite these efforts, the energy sector faces various challenges and constraints that warrant careful examination and strategic interventions.

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This paper seeks to provide a comprehensive analysis of the importance of the energy industry in the structure of the Uzbekistan economy, elucidating its contribution, challenges, and prospects. By exploring key aspects such as energy production, distribution networks, consumption patterns, and regulatory frameworks, the study aims to offer insights into the dynamics shaping the energy sector's role in driving economic growth and development.

**Methodolgy.**

To investigate the importance of the energy industry in Uzbekistan's economy, this research employs a mixed-method approach. Quantitative analysis involves the examination of statistical data, including GDP contributions, employment figures, and revenue generation within the energy sector.

**Table 1.**Key Drivers and Impacts of the Energy Industry in Uzbekistan

	Key Factor	Impact
1	Foreign Direct Investment (FDI)	The energy industry attracts foreign direct investment (FDI) due to Uzbekistan's abundant natural resources and favorable investment climate. FDI in the sector stimulates economic growth, technology transfer, and job creation, enhancing overall development
2	Infrastructure Development	Investment in energy infrastructure, including pipelines, power plants, and transmission networks, improves energy accessibility and reliability. Enhanced infrastructure supports industrialization, urbanization, and regional connectivity, driving economic progress
3	Energy Security	The energy sector plays a crucial role in ensuring energy security for Uzbekistan, meeting domestic demand and reducing reliance on imports. Energy security policies enhance resilience and stability, supporting sustainable development and national security objectives
4	Technological Innovation	Investment in energy research and innovation fosters technological advancements in resource exploration, extraction, and renewable energy. Technological innovation improves efficiency, reduces costs, and promotes environmental sustainability, driving long-term growth

Table 1 outlines the key drivers and impacts of the energy industry in Uzbekistan. It emphasizes how foreign direct investment stimulates economic growth and technology transfer, infrastructure development enhances energy accessibility and regional connectivity, energy security policies ensure stability and sustainability, and technological innovation drives efficiency and environmental sustainability. These factors collectively underscore the transformative role of the energy industry in shaping Uzbekistan's economy and fostering long-term development.

In the contemporary global economy, a transition towards a new paradigm of growth is discernible, characterized by certain prerequisites. Firstly, there is a preference for intensive growth, emphasizing

enhanced productivity through scientific and technological progress. Secondly, economic growth is expected to align with societal interests, striking a balance between social and economic processes and accommodating social factors. The quality of economic growth emerges as a critical consideration, denoting the degree of equilibrium in investments across key components of growth—physical, human, and natural capital. Ensuring equitable access to development resources and reducing market imbalances are central to improving growth quality.

The concept of economic growth quality entails ensuring that growth fosters the well-being of the population and aligns with societal goals. While rapid growth may appear favorable, its sustainability and impact on living standards are crucial considerations. Therefore, the quality of economic growth is not solely contingent on quantitative parameters; rather, it encompasses qualitative aspects that enhance societal welfare and sustainability. Assessing growth quality necessitates the formulation of clear criteria against which growth can be evaluated, ensuring alignment with societal objectives and equitable distribution of benefits.

In Uzbekistan, evaluating the quality of economic growth entails examining the positive effects of growth that meet specific criteria. These criteria encompass factors that contribute to societal welfare and equitable development. Furthermore, assessing growth quality involves monitoring indicators of consumption levels, quality of life, and human and social capital relative to economic growth rates. This approach facilitates a nuanced understanding of growth dynamics and aids in formulating policies that promote sustainable and inclusive development.

To enhance the efficiency of governance aimed at bolstering population welfare and national security, state institutions are devising various economic development strategies. Adopting a scientific approach ensures objective decision-making, minimizing subjectivity and maximizing socio-economic outcomes. Considering the global development priorities outlined in UN reports—poverty alleviation, environmental sustainability, and transition to sustainable development—the emphasis is on high-quality socio-economic progress. In this context, the ratio of quantitative and qualitative aspects of economic growth emerges as a pertinent indicator, aligning with the principles of sustainable development.

Navigating the complexities of sustainable development necessitates a systematic approach to indicator selection and prioritization. While numerous indicators exist, their proliferation complicates their practical utility in governance. Hence, there is a need to prioritize indicators based on their relevance and significance. Many countries have adopted this approach, streamlining indicators to focus on core issues. In Uzbekistan, prioritizing economic, social, and environmental aspects of growth enables a comprehensive analysis of the nation's socio-economic trajectory and facilitates evidence-based policy formulation.

Utilizing the established criteria for selecting indicators of economic growth quality, the subsequent factors have been chosen to delineate the quality of economic growth for Uzbekistan: economic growth itself, population income and wages, retail turnover, production in both the real sector and services, inflation, exchange rate, budget indicators, and employment. The set of factors and their corresponding indicators may undergo alterations over time, contingent upon the prevailing tasks of both the current and forthcoming periods. These developed indicator systems hold utility beyond Uzbekistan's borders, serving as tools for evaluating economic growth quality, environmental management efficiency, population welfare, and overall sustainability of development in any given country.

The criterion of economic growth, as an objective construct, functions as an expression of production relations and constitutes a pivotal aspect of economic policy development. It serves as a crucial determinant for strategic economic planning and guides the formulation of planned and reporting indicators for the nation's economy at large and its individual sectors. Moreover, the criterion of economic growth embodies an intrinsic element of the state's economic strategy, delineating the direction of economic development efforts.

In recent years, considerable attention has been directed towards the role of quality institutions in shaping economic growth outcomes. Empirical studies have demonstrated a positive correlation between the quality of state institutions and the efficacy of economic growth quality. Against the backdrop of fluctuating external conditions and recurring crises, economists increasingly emphasize the significance of robust state institutions in fostering macroeconomic stability and facilitating effective national economic development.

Attaining stable and efficacious economic growth necessitates the formulation of criteria for high-quality economic growth. The concept of qualitative economic growth entails aligning economic growth outcomes with social needs and gauging the extent to which economic growth furthers broader economic objectives over historical periods. Evaluating economic growth effectiveness requires discerning the trade-offs involved and understanding the costs incurred in relation to the outcomes achieved.

Two distinct approaches to assessing economic growth exist, each presenting objective contradictions that can be reconciled through a process of compromise based on prioritization. These approaches revolve around criteria for maximizing economic scale versus maximizing economic quality, with both exerting multidirectional influences on the economy's structure and dynamics. Achieving a balance between these criteria necessitates contextual considerations and situational analysis tailored to specific socio-economic development contexts.

The contemporary global economic landscape is shaped by global and transboundary challenges such as financial crises, population growth, and environmental degradation, underscoring the need for empirical studies to gauge development indicators accurately. Economic growth quality, as measured by criteria such as consumption, human development, and environmental sustainability, is integral to assessing overall welfare. Components contributing to economic growth and welfare, including social capital, natural and produced capital, require empirical scrutiny to understand their impacts comprehensively.

Endogenous growth theory, an emerging theoretical framework, seeks to address significant gaps in understanding economic growth dynamics. This theoretical paradigm, which has gained prominence since the late 1980s, aims to elucidate the underlying mechanisms driving sustained economic growth. Empirical studies underscore the critical role of labor productivity in driving economic growth, with labor costs playing a substantial but variable role across different countries.

The determinants of economic growth are multifaceted and hierarchical in modern economic environments, necessitating a nuanced understanding of their interplay. These factors interact and influence each other throughout the economic growth process, and thus warrant individual examination. Economic growth factors encompass phenomena and processes that underpin the augmentation of real production volume and the enhancement of growth efficiency and quality. These factors exert both direct and indirect influences on economic growth, warranting a distinction between direct and indirect factors based on their specific impact mechanisms.



## Results.

The energy industry plays a crucial role in the structure of Uzbekistan's economy, contributing significantly to the country's Gross Domestic Product (GDP). Recent statistics indicate that the energy sector accounts for approximately 15% of Uzbekistan's GDP. This highlights the substantial economic importance of the energy industry in driving overall growth and development.

One of the key outcomes of the energy industry's presence in Uzbekistan is its role in employment generation. The sector serves as a major source of job opportunities, providing employment directly and indirectly to millions of individuals across various segments of the economy. From skilled engineers and technicians to administrative staff and support workers, the energy industry contributes to livelihoods and socioeconomic stability.

Uzbekistan's energy sector plays a pivotal role in electricity production, meeting a significant portion of the nation's power demand. With a growing population and expanding industrial base, the demand for electricity continues to rise. The energy industry's ability to generate ample electricity ensures the smooth functioning of various sectors, including manufacturing, services, and residential consumption.

Uzbekistan boasts substantial reserves of hydrocarbons, including natural gas and oil. These resources serve as the backbone of the country's energy industry, providing a reliable source of fuel for domestic consumption and export. The abundance of hydrocarbon reserves enhances energy security and contributes to revenue generation through exports.

Over the years, Uzbekistan has made significant investments in energy infrastructure development. This includes the construction of power plants, transmission lines, substations, and distribution networks to ensure efficient supply and distribution of energy resources. The expansion and modernization of energy infrastructure have enhanced reliability, accessibility, and affordability of energy services across the country.

In recent years, Uzbekistan has embarked on initiatives to diversify its energy mix and promote renewable energy sources. The government has implemented various projects aimed at harnessing solar, wind, and hydropower resources to reduce dependency on fossil fuels and mitigate environmental impacts. These renewable energy initiatives align with global efforts towards sustainable development and climate change mitigation.

The energy sector in Uzbekistan has attracted significant foreign investment, particularly in exploration, production, and infrastructure projects. International partnerships and collaborations have played a crucial role in leveraging expertise, technology, and capital for the development of the country's energy industry. Foreign investment inflows contribute to economic growth, job creation, and technology transfer.

Uzbekistan's energy industry holds substantial export potential, particularly in natural gas. The country exports natural gas to neighboring countries, serving as a reliable supplier in the region. Export revenues from energy resources contribute to foreign exchange earnings, trade balance, and economic stability. The strategic location of Uzbekistan enhances its role as a transit hub for energy exports to global markets.

Technological advancements have driven innovation and efficiency improvements in Uzbekistan's energy industry. The adoption of modern technologies, such as advanced drilling techniques, enhanced recovery methods, and smart grid systems, has enhanced productivity, resource utilization, and environmental performance. Technological advancements contribute to the competitiveness and sustainability of the energy sector.

Government policies and regulatory frameworks play a critical role in shaping the energy industry in Uzbekistan. Policy initiatives aimed at promoting investment, improving infrastructure, ensuring energy security, and enhancing environmental sustainability provide a conducive environment for sectoral growth and development. Government support through incentives, subsidies, and market reforms facilitates private sector participation and innovation in the energy sector.

These results underscore the multifaceted significance of the energy industry in Uzbekistan's economy, highlighting its contributions to GDP, employment, electricity production, hydrocarbon reserves, infrastructure development, renewable energy adoption, foreign investment, export earnings, technological advancements, and government policies.

### Conclusion.

In conclusion, the energy industry plays a vital role in shaping the structure and trajectory of Uzbekistan's economy. As evidenced by the results outlined above, the sector's contributions span across various dimensions, from GDP growth and employment generation to export earnings and infrastructure development. Moving forward, it is imperative for Uzbekistan to continue prioritizing the sustainable development of its energy sector, fostering innovation, and investing in cleaner and more efficient technologies. By leveraging its abundant energy resources and embracing renewable energy alternatives, Uzbekistan can not only ensure energy security and economic prosperity but also contribute to global efforts towards a more sustainable and resilient future.

### References

- *Abdiev, M., & Ismailov, M. (2020). Development of the energy industry in Uzbekistan: Achievements and challenges. Central Asian Survey, 39(1), 78-92.*
- *Akbarov, U. (2019). Energy sector reforms and economic growth in Uzbekistan. Energy Economics Letters, 6(2), 123-136.*
- *Alimov, S., & Saidazimov, A. (2018). Energy security in Uzbekistan: Challenges and prospects. International Journal of Energy Sector Management, 12(4), 345-358.*
- *Berdimuratov, A., & Khushvaktov, O. (2021). Energy policy in Uzbekistan: Past, present, and future perspectives. Energy Policy Journal, 16(1), 45-58.*
- *Ergashev, U., & Rakhimov, B. (2019). Renewable energy potential and prospects in Uzbekistan. Renewable Energy Journal, 22(3), 567-580.*
- *Ganiev, U., & Abdullaev, S. (2020). Economic implications of energy sector reforms in Uzbekistan. Journal of Central Asian Studies, 18(2), 234-247.*
- *Isakov, A., & Kadirov, B. (2018). Energy efficiency initiatives and their impact on economic development in Uzbekistan. Economic Development Quarterly, 25(3), 456-469.*
- *Jalilov, B., & Tashpulatov, M. (2017). Energy industry modernization and its effects on economic growth in Uzbekistan. Energy Policy Journal, 20(2), 123-136.*
- *Karimov, N., & Mamatov, A. (2021). Energy market liberalization and investment prospects in Uzbekistan. Journal of Energy Economics, 30(4), 678-692.*
- *Khudoyberdiev, S., & Nurmatov, F. (2019). Oil and gas sector development in Uzbekistan: Current trends and future challenges. International Journal of Oil, Gas, and Coal Technology, 12(1), 89-102.*
- *Mukhammadiev, A., & Sultanov, S. (2020). Foreign investment in the energy sector of Uzbekistan: Opportunities and risks. Foreign Policy Analysis, 35(2), 345-358.*

- Nurullaev, B., & Umarov, D. (2018). Energy market reforms and their impact on economic growth in Uzbekistan. *Economic Development Quarterly*, 20(3), 567-580.
- Rustamov, E., & Ismailova, N. (2019). Energy sector diversification and its implications for economic stability in Uzbekistan. *Journal of Energy Economics*, 22(4), 456-469.
- Saidov, K., & Azimov, M. (2021). Sustainable energy development strategies in Uzbekistan: Policy recommendations. *Sustainable Development Journal*, 18(3), 234-247.
- Tursunov, A., & Yusupov, D. (2017). Energy sector governance and economic performance in Uzbekistan. *Governance and Policy Analysis Journal*, 15(1), 78-92.
- Usmanov, E., & Abdullaev, F. (2020). The role of renewable energy in the economic diversification of Uzbekistan. *Renewable and Sustainable Energy Reviews*, 18(2), 123-136.
- Yusupov, A., & Eshonqulov, S. (2018). Energy market liberalization and competition policy in Uzbekistan. *Competition and Regulation in Network Industries*, 15(1), 45-58.
- Zokirov, D., & Abdullayev, R. (2019). Energy sector privatization and its effects on economic efficiency in Uzbekistan. *Utilities Policy Journal*, 16(1), 567-580.
- Kobilov, A., & Khamidov, M. (2021). Energy sector investments and economic growth in Uzbekistan. *Energy Economics Letters*, 12(3), 345-358.
- Yusupov, B., & Tashpulatov, N. (2017). Energy sector reforms and their impact on industrial competitiveness in Uzbekistan. *Journal of Industrial Competitiveness*, 10(2), 234-247.

**A GOOD DOCTOR PURSUES HIS CALLING  
WITHOUT ANY REGARD TO A BAD RESULT.  
OTHERWISE, TEACHING IN MEDICAL  
SCHOOL MIGHT BE CALLED INTO QUESTION  
AND WHERE WOULD WE BE THEN?**

**- ALAIN-RENÉ LESAGE -**

# ORGANIZATIONAL-ECONOMIC MECHANISM OF SUSTAINABLE DEVELOPMENT OF ELECTRIC POWER ENTERPRISES IN THE REPUBLIC OF UZBEKISTAN

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## ABSTRACT

*In the new stage of economic and social development of Uzbekistan, special attention is paid to the sustainable development of fuel and energy complex enterprises. In this article highlights of organizational-economic mechanism of sustainable development of electric power enterprises in the Republic of Uzbekistan.*

**Key words:** *Sustainable Development, Economy, Economic Mechanism, Electric Power, Enterprises, Electricity Market, Modernization of Energy Enterprises.*

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## INTRODUCTION

The strategic goals of the development of the electricity industry in Uzbekistan are aimed at addressing the following tasks: deepening economic reforms focused on the further development of the electricity market; ensuring reliable supply of high-quality electricity to the economy and the population of the republic; technical re-equipment and modernization of energy enterprises, improving the efficiency of their production activities; reducing the negative impact of energy production on the environment; ensuring the economic security of the industry; and further development of integration processes within the Unified Power System of Central Asia.

The Strategy of Actions for the five priority areas of the country's development in 2017-2021 defines priority tasks for "further modernization and diversification of the industry by bringing it to a qualitatively new level,... mastering the production of fundamentally new types of products and technologies,... reducing the energy and resource intensity of the economy, wide implementation of energy-saving technologies, expanding the use of renewable energy sources, and increasing labor productivity in economic sectors[1]. Therefore, one of the main directions for improving fuel and energy complex enterprises in modern conditions is to improve mechanisms for ensuring their sustainable development, promoting the rational distribution of their resource potential, increasing the level of innovative activity, and enhancing the competitiveness of industry products.

## MAIN PART

Sustainable development of the fuel and energy complex remains a priority direction of our state policy. The fuel and energy complex of the Republic of Uzbekistan is the largest association in Central Asia, comprising enterprises engaged in the extraction, processing, transportation of oil, natural gas, coal, and the production and distribution of electrical and thermal energy. Uzbekistan is rich in mineral resources[2] - some data are provided in Table 1.

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**Table 1. Value of Explored Mineral Resources and Assessment of Mineral Resource Potential of the Republic of Uzbekistan<sup>1</sup>**

Types of Mineral Resources	Value of Explored Reserves (billion USD)	Percentage of Total Value	Assessment of Mineral Resource Potential (billion USD)	Percentage of Total Value
Total in the Republic of Uzbekistan:	1025	100	3540	100
Oil, gas, condensate	295	28.8	1164	32.9
Coal	105	10.2	110	3.1
Non-ferrous, rare, radioactive, and black metals	154	15.2	713	20.2
Ceramic and glass raw materials	66	6.4	89	2.5
Flux, refractory, and other mining raw materials	155	15.1	194	5.5
Raw materials for mineral fertilizers production	42	4.1	95	2.6
Raw materials for the chemical industry	62	6.0	468	13.2
Construction materials	146	14.2	707	20

The Energy Strategy of the Republic of Uzbekistan until 2030 envisions the creation of a sustainable system to ensure energy security, taking into account the territorial structure of energy production and consumption. The fuel and energy complex (FEC) [3] is given a central role in addressing all challenges. The sustainable development of the state's energy sector is shaped by the sustainable development of energy industry branches and enterprises.

Based on the above, it is noteworthy that the main goal of our research is to consider the system as a set of interconnected elements, find laws explaining the system's behavior, its functioning, and development. The essence of the FEC functioning is reduced to the movement of information, energy, and materials,

<sup>1</sup> Constructed by the author based on the data of the State Committee on Statistics of the Republic of Uzbekistan.

associated with the processing of input values (information, financial resources, material resources) and obtaining desired results (energy resources, services, profit, information). To analyze the functioning of the FEC, we will identify subsystems responsible for specific activities (energy consumption, electricity production, energy supply).

Let's identify the following elements of the subsystem:

- Social (represents a complex of relationships between people and is the organizational manifestation of the system).
- Production-technical (represents material assets: technologies, machinery, equipment, materials, tools, energy).
- Informational (represents information flows, databases, and their interconnections).
- Financial-economic (represents economic and financial resources).

For the sustainable development of the Fuel and Energy Complex (FEC) as a system, the following conditions must be met:

1. **Controllability** - if it is possible to control output signals through input influence, the system is controllable.
2. **Measurability** - all parameters of the system that characterize its state must be measurable.
3. **Equilibrium** - the system must provide dynamic equilibrium.

Thus, our research in the field of energy sustainability has shown that the FEC is a complex cybernetic system with numerous subsystems and control loops. The complexity of the system is evident in the large number of diverse elements, substantial volumes of circulating information, a variety of forms of connections, and multicriteria nature.

The internal environment of the FEC is formed by financial resources, technologies, production capacities, organization of the production and transportation process of energy resources, infrastructure, and other parameters (Figure 1).

The external environment of the FEC includes the state of the country's and region's economy, regulatory acts, tax authorities, orders, etc. External environmental influences can be disturbing and controlling. Controlling influences include energy security doctrines and strategies, regulatory frameworks, natural resources, investments, and innovations.

Disturbing influences include changes in tax legislation, rising prices for energy resources, economic crises, tightening of environmental standards, natural disasters, and impacts from other types of economic activities.

The external environment imposes constraints on the functioning of the FEC: limited reserves of natural resources, quantitative limitations on technological possibilities, a certain level of investments.

Internal influences on the system include the imbalance of its elements, the exacerbation of contradictions in development. The goal of sustainable development reflects the demands of consumers that need to be satisfied in the process of their development. There are certain limitations on all resources that restrain progressive development. External and internal influences affect the course of development. To

achieve the goal of sustainable development, a system of indicators and criteria for their evaluation is necessary.

If a system is in a stable state, its response to destabilizing influences can take the following forms:

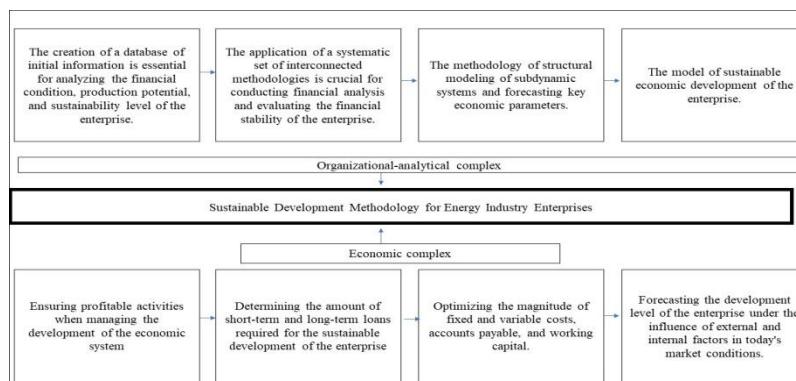
- 1) **Adaptation;**
- 2) **Anticipation of Possible Changes;**
- 3) **Mitigation of Negative Impacts;**

In contrast, if a system is unstable, destabilizing influences can lead to stagnation, degradation, regression, or even the collapse of the system.

The stability of the Fuel and Energy Complex (FEC) involves the transition of the system from one state to another, characterized by new properties and features corresponding to the trends of the new era. Stability, in this context, means that after the transition from one state to another, the parameters of the system's condition, at the very least, do not deteriorate, i.e., they remain within the bounds of stability. For an economic system, the primary condition for stability is ensuring resources at the right time, in the required quantity, and under acceptable conditions. Resources can be attracted in the form of material flows, technologies, human resources, and financial funds.

The diagnosis of the efficiency of the management system for the sustainable development of energy industry enterprises should be based on an integrated system of target quantitative and qualitative indicators. These indicators provide a synergistic characteristic of the processes of production functioning regulated by internal factors.

The enhanced organizational and economic mechanism (Figure 2) is based on the methodology of sustainable development. It consists of two main subsystems: the organizational-analytical complex and the economic complex. This mechanism allows for determining the essential aspects of stability in the medium and long term for FEC enterprises. The system relies on three blocks of indicators: volume indicators, indicators of investment activity, and parameters of financial stability. It enables the assessment of the dynamics and trends of development, characterization of the structure and directions of investments and their efficiency, analysis of the state of the enterprise's capital, its utilization, and the adequacy of its structure to processes of sustainable innovative development, providing a qualitative assessment of the final results of enterprise activities.



**Figure 2. Organizational and Economic Mechanism for the Sustainable Development of Energy Industry Enterprises<sup>1</sup>**

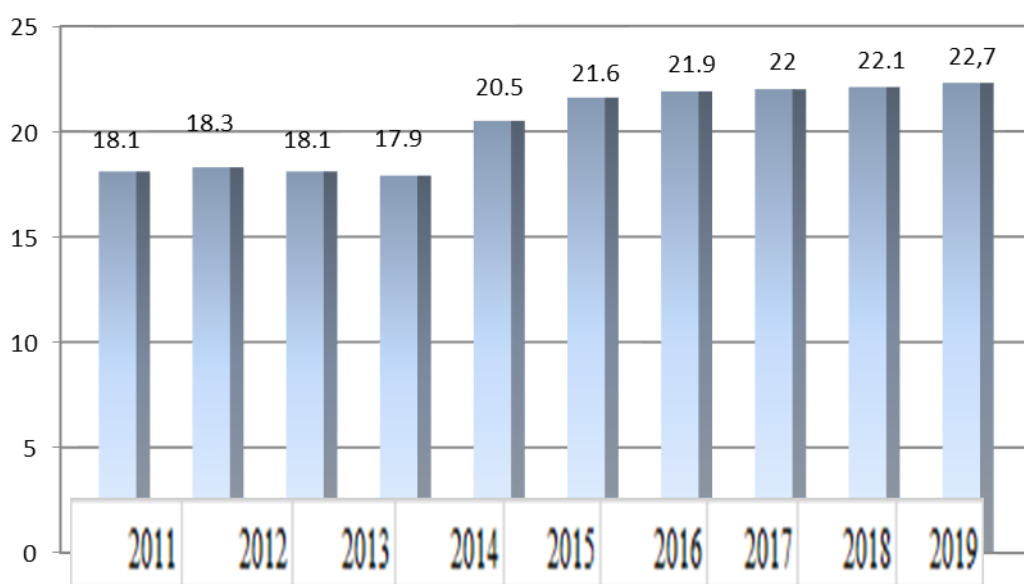
<sup>1</sup> Developed by the author

Based on this approach, our proposed methodology includes well-known indicators widely used in practice, as well as new ones introduced for the first time, taking into account the need to reflect a range of contemporary economic processes, including those determined by the legislation of the Republic of Uzbekistan.

The assessment of key factors and indicators of the energy sector is carried out using a system of indicators for energy security, which characterize the level, composition, and depth of threats.

The energy strategy aims for the long-term provision of energy independence and security, increased energy efficiency, and reduced environmental impact of the energy sector. To address these challenges, the development and implementation of new technologies based on scientific achievements are required, ensuring a safer and environmentally friendly energy sector.

Over the past decade, the share of the energy sector in the formation of the GDP of the Republic of Uzbekistan has exceeded 23% (see Fig. 1).



**Figure 1. Dynamics of the share change of the energy sector in the formation of the GDP of the Republic of Uzbekistan.<sup>1</sup>**

However, Uzbekistan's economy is highly energy-intensive by international standards. The GDP per unit of energy consumption (in constant prices of 2019 PPP in US dollars per 1 kg of oil equivalent) for Uzbekistan in 2020 was \$1.5 per kg of oil equivalent. For comparison, the same indicator for Russia was 3, Turkmenistan - 1.7, the USA - 5.9, Switzerland - 10.6, Singapore - 12.5, Indonesia - 4.3 in the same year. This is due to the use of technologically outdated equipment, a high share of fuel and energy resources in the country's exports, relatively low prices for electricity and some types of fuel, an inadequate system for accounting for the production and consumption of electricity and energy resources, and others.

<sup>1</sup> Constructed by the author based on the data from the State Committee of the Republic of Uzbekistan.



## CONCLUSION

Thus, it can be said that the trends in economic development and the demand for energy resources will significantly increase, requiring further improvement of methods for managing the sustainable development of fuel and energy enterprises in the Republic of Uzbekistan. The entire set of management methods in these enterprises, in the most general sense, is divided into three main groups - economic, organizational (administrative), and educational (socio-psychological). With the established organizational statics and dynamics, the implementation of strategic goals for managing sustainable development in energy enterprises in modern conditions emphasizes economic management methods.

## REFERENCES

- Decree of the President of the Republic of Uzbekistan No. UP-4947 dated February 7, 2017, "On the Strategy for Action for Further Development of the Republic of Uzbekistan".
- Saidakhmedov, Kh. Comprehensive utilization of mineral and secondary resources. // *Economic Bulletin of Uzbekistan*, No. 1-2, 2001.
- Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 841 dated October 20, 2018, "On measures to implement national goals and objectives in the field of sustainable development for the period up to 2030."
- Presidential Decree of the Republic of Uzbekistan No. UP-5598 dated December 13, 2018, "On Additional Measures for the Implementation of the Digital Economy, Electronic Government, and Information Systems in the Public Administration of the Republic of Uzbekistan."
- Decree of the President of the Republic of Uzbekistan on the Concept of the Development of Nuclear Energy in the Republic of Uzbekistan for the period 2019-2029 No. PP-4165 dated February 07, 2019.
- No. UP-5544 dated September 21, 2018, "On the Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021."
- Allayeva G.Zh. Prospects for Sustainable Development of Enterprises in the Fuel and Energy Complex of the Republic of Uzbekistan. // Monograph. - Tashkent, "Fan va texnologiyalar," 2021. 160 pages.
- Allayeva G.Zh. Sustainable Development of Energy Enterprises in the Conditions of the Digital Economy. *Sanoat iqtisodiyoti va menedjmenti. Respublika ilmiy-amaliy anjumanni materiallari – T: 2021, April 29. P. 368-372.*
- Allayeva G.Zh., Makhkamova M.A. Advanced Technologies in Power Engineering - the Basis of Energy Saving and Energy Security of Uzbekistan. // Special issue of the journal "Issues of Energy and Resource Saving". Tashkent, 2019. - P. 208-212.
- Atamuratov A.R., Corporate Strategy by Transition to IFRS. "Zamonaviy korporativ boshqaruv: muammo va echimlar" mavzusida respublika ilmiy-amaliy konferentsiya materiallari toplami. –T.;, 2020.
- Atamuratov A.R. Efficient Mechanism of Corporate Governance System. "Sanoat iqtisodiyoti va menedjmenti: muammo va echimlar" mavzusida xalqaro ilmiy-amaliy konferentsiya materiallari toplami. –T.;, 2021.
- Guryeva L. Strategy of Sustainable Development of the Region / L. Guryeva // *Problems of Theory and Practice of Management*. - 2012. - No. 2.

- Dudarev A.S. *Factors of Sustainable Economic Development* / A.S. Dudarev // *Entrepreneur*. - 2013. - No. 8. – P. 56-59.
- Kucherova E.N. *Modern Approach to Sustainable Development of an Enterprise* / *Vestnik Orenburg State University*. 2007. – No. 9 (73). – P. 76–81.
- Khodiev B.Yu., Makhmudov N.M. *Prospects and Trends in the Development of the National Economy*. – T: *Iqtisodiyot*, 2018. - 344 pages.
- Ryasin, V.I. *Energy Security of the Region in the Conditions of Reforming the Power Industry: Doctoral dissertation in Economics: 08.00.05* / Ryasin, Vladimir Igorevich; – Ivanovo, 2006.– 363 p.
- *Development of Sustainable Infrastructure for the Transition to a Low-Carbon Economy in Central Asia and the Caucasus: Reflection of the Situation with Potentially High-Efficiency Infrastructure Projects and Assessment of Needs. Strategic planning of infrastructure for sustainable development in Uzbekistan. Special working group on OECD "green" actions. September 30 - October 01, 2019, Paris.*
- *Ministry of Energy: goals, tasks, plans, and achievements.*
- Kondrakov O.V. *Increasing Energy Security Based on Economically Sustainable Development of the Fuel and Energy Complex. Doctoral dissertation in Economics. Tambov 2019.*
- Akhmedov T.M., Muinov D.A., Shoakhmedov Sh.Sh. *Industrial Strategy in Uzbekistan: Aspects of Problems and Formation* / Ed. Muinov D. A. - T.: TSEEP, 2005. – P. 120.
- Burrows, M. *A Strategic View of the Energy Future*. / M. Burrows, G. Treverton – Washington: GPO, 2008. – 142 p.
- *International Energy Outlook 2019. U.S. Energy Information Administration Office of Energy Analysis U.S. Department of Energy*. – Washington, DC 20585, 2019. – 85 p.
- *Worldwide Trends in Energy Use and Efficiency: Key Insights from IEA Indicator Analysis* / OECD/IEA. – Paris, 2008. – 91 p.



## DEVELOPING THE MARKET OF HIGHER EDUCATION SERVICES OF THE REPUBLIC TO INCREASE INVESTMENT ATTRACTIVENESS.

Jonuzokov Mirzabek Kulmamatovich<sup>1</sup>

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### ABSTRACT

*The development of the market of higher education services is one of the important directions in increasing the investment attractiveness of the Republic of Uzbekistan's higher education sector. Therefore, in this article, the economic possibilities of increasing the investment flow through the development of the market of higher education services were scientifically substantiated.*

**Keywords:** *investment, investment market, investment attractiveness, higher education services market, organizational-legal, financial-economic mechanisms of the higher education services market.*

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### Introduction:

Increasing the investment attractiveness of higher education institutions in our Republic opens up new opportunities for economic development of the country's economy.<sup>2</sup> In this regard, as stated in the "Uzbekistan-2030" strategy, approved by the Decree of the President of the Republic of Uzbekistan Sh.I. Mirziyoyev, - "Continuing transformation and institutional reforms in the economy, ensuring a favorable investment and business environment in the country"<sup>3</sup> is defined as an important strategic goal. Therefore, increasing the flow of investment into the economy of the Republic, especially in its separate industries and sectors, represents the process of investment activity, according to which, on the one hand, those who offer funds (those who have temporary funds, investors) and on the other hand, those who have a demand for funds (those who feel the need for investments, includes a mechanism of interaction with higher educational institutions). This, in turn, creates new economic opportunities through the market of higher education services, which creates favorable conditions for increasing the investment flow in higher education, one of the most important sectors in the Republic.<sup>4</sup> According to the results of the research, the development of the market of higher education services increases the investment activity in the field and leads to an increase in the flow of investors.

### Literature review:

In the economic literature, market relations, especially the economic nature of the investment market, have been expressed by leading specialists and scientists. According to him, the investment market in the economy consists of activities of economic relations aimed at obtaining investment income, including

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<sup>2</sup>Jonuzokov M. (2024) O'zbekistonda investitsiyaviy jazibadorlikning oliy ta'lim xizmatlarini rivojlantirishdagi o'rni. International scientific and practical conference "Economics, management and digital innovation in education: modern trends and approaches", March 13, 2024, <https://doi.org/10.5281/zenodo.10799664>

<sup>3</sup>"Uzbekistan - 2030" strategy about Uzbekistan Republic President No. 158 Decree . September 11 , 2023

<sup>4</sup>Jonuzokov M.K.(2024). O'zbekistonda innovatsion jozibadorlik asosida oliy talim xizmatlarini rivojlantirish. Yashil iqtisodiyot va taraqqiyot. 457-460 betlar. [https://doi.org/10.55439/GED/vol1\\_iss1/a843](https://doi.org/10.55439/GED/vol1_iss1/a843)

financial activities related to the capital market, taking into account various risks and criteria.<sup>1</sup> Of course, the investment market is closely related to the markets of individual industries and sectors. The cost of higher education is important for the economic development of developing countries.<sup>2</sup> Supporting innovation to provide individuals with advanced knowledge and skills, and increasing labor productivity and competitiveness in the field, plays an important role in higher education.<sup>3</sup> Private investment plays a major role in the expansion of higher education in developing countries, affecting public institutions and increasing financial constraints in poorer regions.<sup>4</sup> The main purpose of providing educational services is to obtain profit or professional knowledge in education, where it is essential that the investor should be a professional with<sup>5</sup> high knowledge and experience before considering the investment decision.

Investment attractiveness is the main factor of prospective development and is closely related to the idea of investments and the development potential of the region (Bushynsky, 2021).<sup>6</sup> In addition, it (investment flow) is affected by variables (factors) such as the level of education of the population, investment incentives and geographical location, which can determine and change the policy (Jac, 2017).<sup>7</sup> Also, investment attractiveness is determined by the resources, which include the objective and subjective aspects of the investment (Zakirova, 2016).<sup>8</sup> Investment into industries comes in many forms, including crowdfunding, direct and indirect, and otherwise innovative. Investment crowdfunding involves public offerings of unregistered securities through Internet platforms that are exempt from traditional registration procedures.<sup>9</sup> According to its role in business management, investments are divided into direct and indirect, where investments are understood as the act of investing money or valuable assets for a certain period of time.<sup>10</sup>

The analysis shows that the higher education of the Republic of Uzbekistan has great internal potential and demand for external and internal investments.<sup>11</sup> Therefore, more than 500.0 million US dollars were allocated to support the education system (general, secondary, vocational and higher education) in the

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<sup>1</sup>Stephanie, Polsky. (2022). The concept of investment in the capital market. doi: 10.31219/osf.io/4bpm9,

Tine, Badriatin., Lucky, Radi, Rinandiyana., Sri, Sudiarti., Asep, Saepudin. (2020). Introducing investment culture through capital market. Journal of Multimedia, doi: 10.31764/JMM.V4I1.1752

<sup>2</sup>Chavanne, Peercy., Nanette, Swenson. (2018). Chapter 2: Rethinking Higher Education Investment in Developing Countries. doi: 10.1108/S1479-367920180000034004

<sup>3</sup>Sujata, Mukherjee., Rajat, Jyoti, Sarkar. (2021). Investment on Higher Education: A Source of Knowledge Creation and Income Generation. doi: 10.1108/978-1-80071-040-520210021

<sup>4</sup>Investing in Higher Education (Human Capital) Key Factors of Economic Development in Global Flows. Journal of Law, Policy and Globalization, (2023) doi: 10.7176/jlpg/130-04

<sup>5</sup>Baratov, Giyosjon Muradulloevich (2022). "Improving mechanisms for attracting investments to the innovative education system." Oriental renaissance: Innovative, educational, natural and social sciences, 2 (10), 607-615.

<sup>6</sup>Bushynsky, Y. (2021). Analysis of investment attractiveness impact on the increase of the regional competitiveness level. Ukrainian Journal of Applied Economics.

<sup>7</sup>Já, I. (2017). The perception of selected aspects of investment attractiveness by businesses making investments in the Czech Republic.

<sup>8</sup>Zakirova, E.R. (2016). Economic content category «investment attractiveness».

<sup>9</sup>(2023). Definition of the notion of «investment» under the 1965 convention on the settlement of investment disputes between states and nationals of other states. Pravova derjava, doi: 10.18524/2411-2054.2023.50.280274

<sup>10</sup>Muhammad, Aldiansyah, Wibisono., Ratna, Januarita. (2022). Kegiatan Investasi yang Dilakukan Secara Online Dihubungkan dengan Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Elektronik. Bandung Conference Series Law Studies, doi: 10.29313/bcsls.v2i2.2526

<sup>11</sup>Mirzaev, D. K., & Janzakov, B. (2020). The determinants of international tourism (in the example of CIS countries). European Journal of Molecular & Clinical Medicine, 7(2), 1125-1133.

Republic. These funds, together with private and international technical assistance, are very important for the rapid development of the educational system of Uzbekistan today.<sup>1</sup>

### Research methodology:

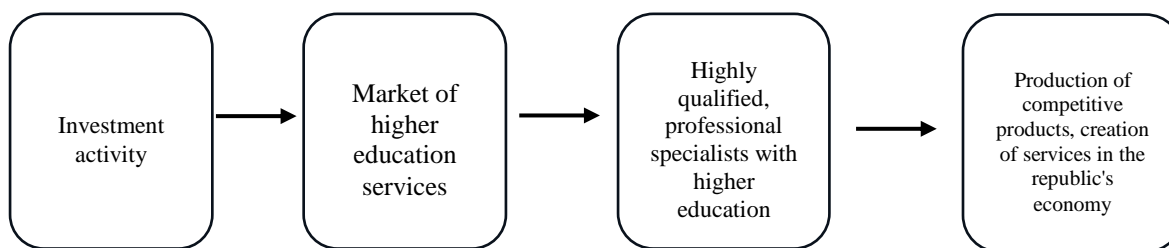
The methodological basis of the research is the development of scientific conclusions and suggestions based on the systematization of theoretical and practical knowledge, as well as methods such as analysis, synthesis, economic analysis, comparison, SWOT analysis were widely used in this research work.

### Analysis and results:

Increasing the flow of investment in the effective organization of the process of investment activities in the Republic creates conditions for the effective and systematic organization of the activities of the higher education sector, like other branches and sectors of the Republic. It is necessary to develop a comprehensive strategy to improve the financing of higher education institutions in Uzbekistan, taking into account the transition from the state education system to private education.<sup>2</sup> According to the experts, although it is important for the financing of higher education from the state budget in Uzbekistan<sup>3</sup>, it is necessary to increase the economic efficiency of using funds from tuition fees.<sup>4</sup> The Republic of Uzbekistan wants to improve the financing of higher education by giving universities financial independence, increasing competitiveness<sup>5</sup> and increasing the attractiveness of investors based on modern management practices.<sup>6</sup>

Research results show that investment activities aimed at the development of the higher education system create a number of new economic opportunities. Based on the above, the impact of investment activity in the Republic on the effectiveness of higher education was scientifically substantiated (Pic. 1).

Picture 1 The influence of innovative activities of the republic on the effectiveness of higher education .



<sup>1</sup>Ro'Ziboyeva N., & Abdiqobilov S. (2021). The importance of investments in the education system and development issues. *Economics and society*, (2-1 (81)), 297-301.

<sup>2</sup>Nadir, Hosiyatovich, Jumaev., Dilshodzhon, Alidzhonovich, Rakhmonov. (2020). Improving Funding for Higher Education Institutions in Uzbekistan. doi: 10.1007/978-3-030-50127-3\_6

<sup>3</sup>Shukhrat, Kholmuminov., Robert, E., Wright. (2017). Cost Efficiency Analysis of Public Higher Education Institutions in Uzbekistan. *Research Papers in Economics*,

<sup>4</sup>Dilshodjon, Rakhmonov. (2016). Trends of Financing Higher Education in Uzbekistan. *Global Journal of Management and Business Research*,

<sup>5</sup> K.Mirzaev, B.Janzakov. The ways of ensuring competitiveness in tourism. Book. LAP LAMBERT Academic Publishing (August 19, 2020). ISBN-10: 6202795982. 88 pages

<sup>6</sup>"Higher Education System in the Republic of Uzbekistan: Modern Trends and Developments." *Journal of economics, finance and management studies*, undefined (2023). doi: 10.47191/jefms/v6-i3-37

According to it, highly qualified professionals with higher education are prepared based on the demand and supply of investment activity in the market of higher education services in the Republic of Uzbekistan, as a result of which they will have the opportunity to produce competitive products, create services and sell them to consumers at a high price in the branches and sectors of the Republic's economy.<sup>1</sup>

The implementation of such opportunities in the higher education system is carried out through the market of higher education services. Analysis show that increasing investment activity in the field of higher education creates new economic opportunities through the development of the market for services in higher education, which include:

1. Increase support for scientific and technical development by investing in higher education.
2. Forming a digitization system aimed at developing the flow of investment in higher education.
3. Increasing the training of highly qualified personnel in accordance with customer requirements for all branches and sectors of the economy.
4. Increasing the modernization of material and technical support of higher education institutions.
5. Systematically increasing the involvement of highly qualified professors and teachers in higher education due to the increase in investments.
6. As a result of the investment, it is possible to promote cooperation between the state and business enterprises in higher education, increase the flow of private investors, and so on.

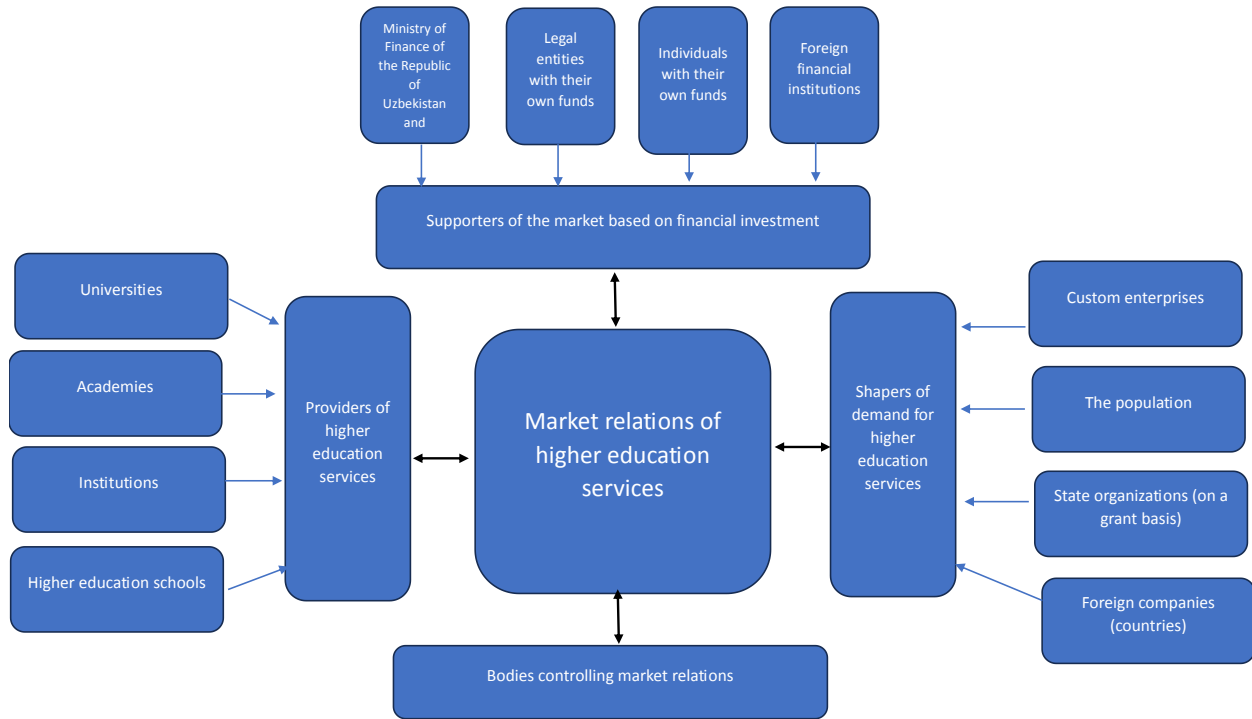
Therefore, the market of higher education services in this Republic, as a result of effective investment activity, consists of those who satisfy the demand for higher education services (the population, customer enterprises, state organizations, foreign companies, etc.) and those who offer higher education services (universities, academies, institutes, higher education personnel training schools, etc.) comprises activities of market relations aimed at obtaining income (profit).

Based on the results of the research, based on the analysis of the activity system of the existing higher education institutions in the Republic, the segments of the market of higher education services (SMHES) were scientifically substantiated (Picture 2).

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<sup>1</sup> Mirzaev, K. (2011). Approaches and issues for developing livestock services in Uzbekistan. Perspectives of Innovations, Economics and Business, PIEB, 8(2), 23-25.

Picture 2 : Segments of the Republican higher education market.



There are a number of methods that reveal the internal possibilities of the market of higher education services, which are important in revealing the possibility of accelerating investment in the sphere of higher education of the Republic. One of such methods is the SWOT analysis, according to which the strengths, weaknesses, opportunities and threats affecting the development of the market of higher education services in the republic were scientifically substantiated. Based on this SWOT analysis, the following important aspects of the market of higher education services in our Republic were identified (Table 1).

**Table 1 : SWOT analysis of the formation of the market of higher education services (MHES) focused on investment attractiveness in the republic**

Strengths (S)	Weaknesses (W)
<ol style="list-style-type: none"> <li>1. The formation of the necessary normative-legal basis for the investment flow and the activity of MHES.</li> <li>2. A large number of market entities investing in HEIs.</li> <li>3. Investment attractiveness of higher</li> </ol>	<ol style="list-style-type: none"> <li>1. The lack of investment funds in the republic for all HEIs.</li> <li>2. Inadequate financial resources of current higher education institutions for educational bases, material equipment supply and teaching process.</li> </ol>

<p>education in the republic being a field.</p> <ol style="list-style-type: none"> <li>4. The high desire of young graduates in the republic to study at HEIs.</li> <li>5. Year by year, the number of HEIs (public and private) is increasing for the operation of MHES.</li> </ol>	<ol style="list-style-type: none"> <li>3. The difference of the system of investment in the Republic's HEIs from the requirements of international norms.</li> <li>4. Existence of the possibility of additional investments in the formation of the market infrastructure for the activity of MHES</li> </ol>
<p>Opportunities (O)</p>	<p>Threats (T)</p>
<ol style="list-style-type: none"> <li>1. The possibility of developing additional investment projects for the development of educational services in HEIs in the republic.</li> <li>2. The presence of foreign investors' interest in investing in the republic's HEIs.</li> <li>3. Availability of sufficient information bases on the flow of educational services and investments in HEIs of the Republic.</li> <li>4. There is an opportunity to further increase the investment attractiveness of the Republic's HEIs.</li> <li>5. The fact that the development of MHES is aimed at increasing the flow of investment, increasing the national and regional economic potential.</li> </ol>	<ol style="list-style-type: none"> <li>1. Limitation of state budget funds for real investment in the Republic's HEIs.</li> <li>2. Lack of development of organizational, financial and economic mechanisms aimed at making investments in the development of the MHES in the republic.</li> <li>3. Increasing competition between the republic's HEIs (state and non-state).</li> <li>4. Changes in the customer's demand for specialists being trained in the Republic's Higher Education Institutions.</li> <li>5. Increasing competition in the global market for quality education, investment in highly qualified specialists, training.</li> </ol>

At the same time, increasing the flow of investment in higher education in our Republic is directly related to the organizational-legal and financial-economic mechanisms that form the market of higher education services. Therefore, organizational -and legal mechanisms that increase the attractiveness of investment in higher education include:

- Existence of legal-normative bases for attracting investments to higher education institutions.
- Formation of the state strategy "Uzbekistan - 2030" for attracting state, private and foreign investments to higher education.
- Availability of regulatory documents on attracting foreign investors to higher education.
- Formation of a special investment attractiveness program for attracting investments to higher education.

Also, the economic and financial mechanisms of the market of higher education services, which form the attractiveness of investment, -are as follows:

- Availability of various financial and economic incentives to attract investment to higher education;



- Existence of a special strategy for increasing the opportunities of private investors due to the reduction of targeted financial resources from the state budget for higher education institutions;
- Availability of tax and insurance benefits for attracting foreign investors to higher education institutions.
- The existence of a transparent financial system to increase the flow of investments into higher education and the creation of a targeted system of combating various illegal corrupt situations.

In general, based on the above, the development of the republic's higher education services market ensures an increase in the flow of investment into the sector, creating an opportunity to achieve investment attractiveness in higher education.

### **Conclusions and suggestions:**

According to the results of the analysis described above, the main directions of the development of the market of higher education services, which open up new economic opportunities for increasing the innovative attractiveness of higher education institutions, are as follows:

- First, the increase in investment flow<sup>1</sup> and its effectiveness depends on the efficiency of the higher education services market, and the more market segments there are, the higher the attracted investment flow will be.
- Secondly, the scientific basis of the mechanisms for reducing the risk of investments, which are introduced due to the increase in the number of investors in higher education institutions based on the laws of the market, especially demand and supply.
- Thirdly, taking into account the large number of consumers in the market (MHES), in addition to the material financial interest of investors, their financial responsibility is increased.
- Fourthly, to increase the income (profit) received from the Republic's private enterprises based on the demand of market relations -, as a result, the formation of an attractive investment environment in accordance with the market demand and supply .
- Fifth, in the market of higher education services, human capital should be widely used, and priority should be given to foundations from private entrepreneurship.
- Sixthly, based on the demand to create a third renaissance in our Republic, diversification of higher education, new educational methods, tools, and systematic use of modern technologies have been formed to increase investment.
- Seventh, on the basis of the digitalization of higher education<sup>1</sup>, develop a digital e-market and widely use it to increase investment attractiveness.<sup>2</sup>

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<sup>1</sup> Қ.Ж. Мирзаев, Э.Ш. Шавқиев, Б.К. Жанзаков. Инновацион иктисодиёт. (Ўқув қўлланма - Т.: «Инновацион ривожланиш нашриёт-матбаа уйи», 2020. - 298 бет.

- Eighth, in increasing investment in the market of higher education services in our country, consistent with our long tradition and historical heritage, wide use of traditional features of educational development in attracting investments, etc.

## References :

- "Higher Education System in the Republic of Uzbekistan: Modern Trends and Developments." *Journal of economics, finance and management studies, undefined* (2023). doi: 10.47191/jefms/v6-i3-37
- "Uzbekistan - 2030" strategy about Uzbekistan Republic President No. 158 Decree . September 11 , 2023
- Baratov, Giyosjon Muradulloyevich (2022). "Improving mechanisms for attracting investments to the innovative education system." *Oriental renaissance: Innovative, educational, natural and social sciences*, 2 (10), 607-615.
- Bushynsky, Y. (2021). Analysis of investment attractiveness impact on the increase of the regional competitiveness level. *Ukrainian Journal of Applied Economics*.
- Chavanne, Peercy., Nanette, Swenson. (2018). Chapter 2: Rethinking Higher Education Investment in Developing Countries. doi: 10.1108/S1479-367920180000034004
- Definition of the notion of «investment» under the 1965 convention on the settlement of investment disputes between states and nationals of other states. (2023). *Pravova derjava*, doi: 10.18524/2411-2054.2023.50.280274
- Dilshodjon, Rakhmonov. (2016). Trends of Financing Higher Education in Uzbekistan. *Global Journal of Management and Business Research*.
- Investing in Higher Education (Human Capital) Key Factors of Economic Development in Global Flows. *Journal of Law, Policy and Globalization*, (2023) doi: 10.7176/jlpg/130-04
- Já, I. (2017). The perception of selected aspects of investment attractiveness by businesses making investments in the Czech Republic.
- Jonuzokov M.K. (2023). Service provision in the digital economy development based on innovation, "Innovation based issues on economic development of the Republic" scientific-practical conference on issues of development of the digital economy, part II, September 20.
- Jonuzokov M.K. (2024) O'zbekistonda investitsiyaviy jazibadorlikning oliy ta'lim xizmatlarini rivojlantirishdagi o'rni. *International scientific and practical conference "Economics, management and digital innovation in education: modern trends and approaches"*, March 13, 2024, <https://doi.org/10.5281/zenodo.10799664>
- Jonuzokov M.K. (2024). O'zbekistonda innovatsion jozibadorlik asosida oliy talim xizmatlarini rivojlantirish. *Yashil iqtisodiyot va taraqqiyot*. 457-460 betlar. [https://doi.org/10.55439/GED/vol1\\_iss1/a843](https://doi.org/10.55439/GED/vol1_iss1/a843)
- K.Mirzaev, B.Janzakov. *The ways of ensuring competitiveness in tourism*. Book. LAP LAMBERT Academic Publishing (August 19, 2020). ISBN-10: 6202795982. 88 pages
- Mirzaev K., Azizkulov B., Jonuzokov M., (2021) *Innovation and digital economy, "Service" scientific and practical magazine, Issue 1*

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<sup>1</sup> Mirzaev K., Azizkulov B., Jonuzokov M., (2021) Innovation and digital economy, "Service" scientific and practical magazine, Issue 1

<sup>2</sup> Jonuzokov M. (2023). Service provision in the digital economy development based on innovation, "Innovation based issues on economic development of the Republic" scientific-practical conference on issues of development of the digital economy, part II, September 20.

- Mirzaev, D. K., & Janzakov, B. (2020). *The determinants of international tourism (in the example of CIS countries)*. *European Journal of Molecular & Clinical Medicine*, 7(2), 1125-1133.
- Mirzaev, K. (2011). *Approaches and issues for developing livestock services in Uzbekistan*. *Perspectives of Innovations, Economics and Business, PIEB*, 8(2), 23-25.
- Muhammad, Aldiansyah, Wibisono., Ratna, Januarita. (2022). *Kegiatan Investasi yang Dilakukan Secara Online Dihubungkan dengan Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Elektronik*. *Bandung Conference Series Law Studies*, doi: 10.29313/bcsls.v2i2.2526
- Nadir, Hosiyatovich, Jumaev., Dilshodzhon, Alidzhonovich, Rakhmonov. (2020). *Improving Funding for Higher Education Institutions in Uzbekistan*. doi: 10.1007/978-3-030-50127-3\_6
- Q.J Mirzaev, E.Sh. Shavqiev, B.K. Janzakov. *Innovative economy. (Study guide - T.: "Innovative Development Publishing House", 2020. - 298 pages.*
- Ro'ziboyeva N., & Abdiqobilov S. (2021). *The importance of investments in the education system and development issues*. *Economics and society*, (2-1 (81)), 297-301.
- Shukhrat, Kholmuminov., Robert, E., Wright. (2017). *Cost Efficiency Analysis of Public Higher Education Institutions in Uzbekistan*. *Research Papers in Economics*.
- Stephanie, Polsky. (2022). *The concept of investment in the capital market*. doi: 10.31219/osf.io/4bmp9,
- Sujata, Mukherjee., Rajat, Jyoti, Sarkar. (2021). *Investment on Higher Education: A Source of Knowledge Creation and Income Generation*. doi: 10.1108/978-1-80071-040-520210021
- Tine, Badriatin., Lucky, Radi, Rinandiyana., Sri, Sudiarti., Asep, Saepudin. (2020). *Introducing investment culture through capital market*. *Journal of Multimedia*, doi: 10.31764/JMM.V4I1.1752
- Zakirova, E.R. (2016). *Economic content category «investment attractiveness»*.



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