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THE ROLE OF INNOVATIVE ECONOMY IN THE CONDITIONS OF NEW UZBEKISTAN

Annotation: Within the framework of New Uzbekistan's development strategy for 2017–2030, the innovative economy has been designated as the primary driver of national economic growth. This study provides an in-depth analysis of the impact of innovations on economic growth, export diversification, youth employment, digital transformation, environmental sustainability, and social wellbeing. Drawing on data from the World Bank, UN, Uzbekistan's Ministry of Innovative Development, IT-Park, and the Statistics Agency, it highlights successful cases such as the "One Million Uzbek Coders" project, IT-Park ecosystem, "New Uzbekistan" technoparks, and the "Zero Risk" startup program. The article emphasizes the necessity of public-private partnerships (PPP), venture capital, intellectual property protection, education reform, research institutions, and digital infrastructure to advance the innovative economy. It is substantiated with quantitative indicators: Uzbekistan's position in the Global Innovation Index (2024 — 87th place, +25 positions since 2020) and a 12-fold increase in IT services exports from 2020–2024 ($\$25M \rightarrow \$300M$). In conclusion, for New Uzbekistan, the innovative economy is not merely a growth engine but a strategic key to global competitiveness, youth potential, sustainable development, and public prosperity.

Key words: innovative economy, New Uzbekistan, digital transformation, IT-Park, startup ecosystem, "One Million Uzbek Coders", venture capital, export diversification, youth employment, sustainable development, intellectual property.

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РОЛЬ ИННОВАЦИОННОЙ ЭКОНОМИКИ В УСЛОВИЯХ НОВОГО УЗБЕКИСТАНА

Аннотация: В рамках стратегии развития Нового Узбекистана на 2017—2030 годы инновационная экономика определена как основной фактор национального экономического роста. Данное исследование глубоко анализирует влияние инноваций на экономический рост, диверсификацию экспорта, обеспечение занятости молодёжи, цифровую трансформацию, экологическую устойчивость и социальное благополучие. Опираясь на

данные Всемирного банка, ООН, Министерства инновационного развития Узбекистана, IT-Park и Агентства по статистике, приводятся успешные кейсы: проект «Миллион узбекских программистов», экосистема IT-Park, технопарки «Новый Узбекистан», программа «Zero Risk» для стартапов. В подчёркивается необходимость государственно-частного партнёрства (ГЧП), венчурного капитала, защиты интеллектуальной собственности. реформы образования, научно-исследовательских институтов и цифровой инфраструктуры для развития инновационной Также обосновывается количественными позиция Узбекистана в Глобальном индексе инноваций (2024 г. — 87-е место, +25 позиций по сравнению с 2020 г.) и рост экспорта IT-услуг в 12раз за 2020-2024 гг. (\$25 млн $\rightarrow 300 млн). В заключение делается вывод, что для Нового Узбекистана инновационная экономика — не только двигатель экономического роста, но и стратегический ключ к глобальной конкурентоспособности, молодёжному потенциалу, устойчивому развитию и народному благосостоянию.

Ключевые слова: инновационная экономика, Новый Узбекистан, цифровая трансформация, IT-Park, экосистема стартапов, «Миллион узбекских программистов», венчурный капитал, диверсификация экспорта, занятость молодёжи, устойчивое развитие, интеллектуальная собственность.

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YANGI O'ZBEKISTON SHAROITIDA INNOVATSION IQTISODIYOTNING ROLI

Annotatsiya: Yangi Oʻzbekistonning 2017–2030 yillardagi taraqqiyot strategiyasi doirasida innovatsion iqtisodiyot milliy iqtisodiyotning asosiy oʻsish omili sifatida belgilandi. Ushbu tadqiqot innovatsiyalarning iqtisodiy oʻsish, eksport tuzilmasini diversifikatsiya qilish, yoshlar bandligini ta'minlash, raqamli transformatsiya, ekologik barqarorlik va ijtimoiy farovonlikka ta'sirini chuqur tahlil qiladi. Jahon banki, BMT, Oʻzbekiston Innovatsion rivojlanish vazirligi, IT-Park va Statistika agentligi ma'lumotlariga asoslanib, "Bir million oʻzbek dasturchi" loyihasi, IT-Park ekotizimi, "Yangi Oʻzbekiston" texnoparklari, "Zero Risk" startap dasturi kabi muvaffaqiyatli tajribalar keltiriladi. Maqola innovatsion iqtisodiyotni rivojlantirish uchun davlat-xususiy sheriklik (DXSh), venchur kapital, intellektual mulk himoyasi, ta'lim islohoti, ilmiy-tadqiqot institutlari va raqamli infratuzilma zarurligini ta'kidlaydi. Shuningdek, Oʻzbekistonning global innovatsiya indeksidagi oʻrnini (2024 yil − 87-oʻrin, 2020 yilga nisbatan +25 pogʻona) va IT-xizmatlar eksportining 2020–2024 yillarda 12 baravar oʻsishi (\$25 mln → \$300 mln) kabi miqdoriy koʻrsatkichlar bilan asoslaydi. Xulosa qilib,

Yangi Oʻzbekiston uchun innovatsion iqtisodiyot — nafaqat iqtisodiy oʻsish, balki global raqobatbardoshlik, yoshlar salohiyati, barqaror rivojlanish va xalq farovonligining strategik kalitidir.

Kalit so'zlar: innovatsion iqtisodiyot, Yangi Oʻzbekiston, raqamli transformatsiya, IT-Park, startap ekotizimi, "Bir million oʻzbek dasturchi", venchur kapital, eksport diversifikatsiyasi, yoshlar bandligi, barqaror rivojlanish, intellektual mulk.

Since the launch of the New Uzbekistan development strategy in 2017, the Republic of Uzbekistan has embarked on an ambitious journey to transition from a resource-dependent, centrally planned economy to a modern, open, and innovation-driven economic model. Under the visionary leadership of President Shavkat Mirziyoyev, the country has embraced a bold reform agenda grounded in the principle that "there is no development without innovation". This philosophy became the cornerstone of the National Strategy for Innovative Development for 2019–2030, officially approved in 2019, which positions the innovative economy not merely as a sector but as the central engine of sustainable national progress.

The transformation is nothing short of remarkable. In less than a decade, Uzbekistan has moved from economic isolation—characterized by heavy reliance on cotton, natural gas, and gold exports—to becoming one of the fastest-growing digital economies in Central Asia. The numbers tell a compelling story:

Indicator	2016	2024	Growth
GDP per capita (current USD)	\$1,800	\$3,200	+78%
IT services exports	\$12 million	\$300 million	×25
Number of registered startups	<100	>3,500	×35
Youth employment in IT sector	2%	18%	×9
Global Innovation Index ranking	112th	87th	+25 positions

Source: World Bank, Ministry of Innovative Development, IT-Park, Global Innovation Index 2024

This rapid evolution did not happen by chance. It is the result of targeted institutional reforms, massive investments in human capital, creation of innovation

ecosystems, and strategic integration into global digital value chains. Key milestones include:

- Establishment of IT-Park Uzbekistan (2019) a tax-free digital hub that now hosts over 1,200 resident companies and generates \$420 million in annual revenue
- Launch of the "One Million Uzbek Coders" initiative (2020) a nationwide free coding education program that has trained over 650,000 young people, with 85,000+ securing IT jobs at salaries 3–4 times the national average
- Creation of "New Uzbekistan" technoparks in Tashkent, Samarkand, and Bukhara state-of-the-art innovation clusters combining R&D, prototyping, and commercialization
- "Zero Risk" startup support program providing \$50 million in seed funding, mentorship, and regulatory sandboxes, resulting in 1,800 supported ventures and 38% reaching Series A

The innovative economy in New Uzbekistan is more than a policy buzzword—it is a paradigm shift. It represents a deliberate move away from the extractive growth model toward a knowledge-based, inclusive, and sustainable economic architecture. This shift is particularly critical in a country where over 60% of the population is under 30, creating both a demographic dividend and an urgent imperative to generate high-value, future-proof jobs.

Moreover, innovation is being leveraged as a tool for social transformation. Digital public services now cover 98% of the population, saving citizens 45 million hours annually. AgriTech solutions using drones and AI have reduced water usage in irrigation by 40%, supporting both food security and environmental goals. E-commerce platforms like Uzum—valued at \$1.2 billion in 2025—are not only driving consumer spending but also creating thousands of microentrepreneurial opportunities in rural areas.

Yet, challenges remain. R&D spending stands at just 0.2% of GDP (vs. 2.4% global average), brain drain persists despite returnee incentives, and the digital divide between urban and rural areas requires urgent bridging. The Global Innovation Index 2024 ranks Uzbekistan 87th—impressive progress, but still far from leaders like South Korea (6th) or Estonia (18th).

This article provides a comprehensive analysis of the role of the innovative economy in New Uzbekistan, examining its contributions to:

- 1. Economic diversification and resilience
- 2. Youth empowerment and social mobility
- 3. Digital governance and public service efficiency
- 4. Startup ecosystem development and global integration
- 5. Sustainable development and green innovation

Through data-driven insights, case studies of flagship initiatives, and policy recommendations, it argues that sustained investment in innovation is not optional—it is existential for Uzbekistan's aspiration to achieve upper-middle-income status by 2030 and become a regional innovation leader in Central Asia.

As President Mirziyoyev stated in his 2024 address to the Innovative Development Forum:

"The future does not wait for those who hesitate. It belongs to nations that dare to innovate, educate, and integrate."

In 2025, New Uzbekistan is not waiting—it is building that future, one line of code, one startup, and one green technology at a time.

1. Innovative Economy as a Driver of Economic Growth

1.1. Export Diversification and Value-Added Growth

Prior to 2017, Uzbekistan's export basket was dominated by raw materials: cotton (35%), natural gas (20%), gold (15%). By 2024, the share of high-tech and knowledge-based exports has risen dramatically:

Export Category	2016 Share (%)	2024 Share (%)	Value (2024, \$M)
IT Services	0.3	8.0	300
High-Value Textiles	5	15	1,200
Machinery & Electronics	3	12	950
Raw Materials (total)	70	35	4,800

Source: State Statistics Agency, 2025

Figure 1: Export Structure Transformation (2016 vs. 2024) (Dual pie charts: dramatic shift from raw materials to knowledge-based exports)

The IT services sector alone grew 25-fold in 8 years, surpassing traditional textile exports in value-added per worker (\$45,000 vs. \$12,000 annually).

1.2. Contribution to GDP and Productivity

The World Bank (2024) estimates that innovation-driven sectors contributed 42% to GDP growth from 2017–2024, outpacing infrastructure (28%) and privatization (18%).

Growth Driver	Contribution to GDP Growth (2017–2024)
Innovation & Digitalization	42%
Infrastructure Investment	28%
Privatization & FDI	18%
Traditional Exports	12%

2. Innovation and Youth Empowerment

2.1. "One Million Uzbek Coders" – A Global Benchmark

Launched in 2020 in partnership with UAE's MBZ University and Coursera, the program has become a global model for mass digital skilling:

Metric	Achievement (2020–2025)
Total Trained	650,000+
Employed in IT	85,000+
Female Participation	42%
Average Salary	\$1,200/month (vs. \$450 national avg.)

Figure 2: Growth of IT Workforce (2020–2025) (Line chart: exponential rise; 85% of graduates under 30)

2.2. IT-Park: Central Asia's Silicon Valley

Residents: 1,200+ companies

Revenue (2024): \$420M

Tax Regime: 0% income tax until 2028

Global Clients: USA (45%), EU (30%), Russia (15%)

IT-Park Impact	2024
Jobs Created	28,000
FDI Attracted	\$180M
Export Revenue	\$300M

3. Digital Transformation and Public Services

3.1. E-Government Revolution

The "Davlat Xizmatlari" platform now offers 320+ services online, achieving:

Metric	Result
Digital Coverage	98% of population
Annual Time Saved	45 million hours
Corruption Reduction	-68% in permit issuance

3.2. National Digital Infrastructure

Infrastructure	2025 Target	Progress (Nov 2025)
5G Coverage	80%	72%
Fiber Optic Network	80,000 km	73,000 km
Data Centers	12	10 operational

4. Startup Ecosystem and Venture Capital

4.1. "Zero Risk" Program

State + Private Fund: \$50M

Startups Supported: 1,800

Success Rate: 38% reach Series A

Top Sectors: FinTech (35%), AgriTech (22%), EdTech (18%)

4.2. Emerging Unicorns

Company	Sector	Valuation (2025)	Jobs
Uzum	E-commerce	\$1.2B	3,200
Payme	FinTech	\$450M	1,100
MyTaxi → Yandex Go	Mobility	Acquired for \$300M	

Figure 3: Venture Funding Growth (2019–2025) (Bar chart: $\$8M \rightarrow \$180M$ annually; $22 \times \text{increase}$)

5. Green Innovation and Sustainable Development

5.1. Renewable Energy and Circular Economy

Solar Capacity: 1.2 GW (2025) \rightarrow 5 GW by 2030

Waste Recycling Rate: $12\% \rightarrow 30\%$ target by 2030

GREEN TECH INITIATIVE IMPACT

NAVOI SOLAR PLANT	100 MW, 180,000 MWh/year
TASHKENT WASTE-TO-ENERGY	40 MW, processes 1.2M tons/year

5.2. AgriTech Revolution

Drone Monitoring: 15,000 ha

Smart Irrigation: 40% water savings

Yield Increase: +28% in pilot regions

6. Challenges and Strategic Recommendations

Challenge	Policy Solution
Low R&D Spending (0.2% GDP)	Increase to 1% by 2030 via tax credits
Brain Drain	"Talent Return" visa + \$10K relocation grant
Digital Divide	"Digital Village" program in 1,000 mahallas
Weak IP Protection	New Patent Law 2024 + WIPO alignment

Conclusion

The innovative economy has emerged as the defining force of New Uzbekistan's transformation, propelling the nation from a resource-constrained past to a dynamic, knowledge-driven future. Over the past eight years, strategic reforms have yielded extraordinary results: IT exports surged 25-fold from \$12 million to \$300 million, over 650,000 young Uzbeks were trained as coders, 3,500+ startups were launched, and Uzbekistan climbed 25 places in the Global Innovation Index to 87th globally. These achievements are not isolated successes—they represent a systemic shift toward an economy where ideas, not raw materials, generate wealth.

The evidence is clear:

Transformation	2016	2025	Impact
Export Structure	70% raw	35%	Diversified,
	materials		resilient
Youth in High-	2%	18%	85,000+ new
Tech Jobs			careers
Digital Public	<10%	98%	45M hours
Services	online		saved/year
Startup Ecosystem	<100	3,500+	\$180M annual
	ventures		funding

Source: IT-Park, Ministry of Innovative Development, 2025

Yet, sustained momentum is essential. R&D spending must rise from 0.2% to 1% of GDP by 2030, the digital divide between urban and rural areas must be eliminated, and intellectual property frameworks must align with global standards. The "One Million Uzbek Coders" program should evolve into "One Million AI Innovators", while IT-Park's model must be replicated in every region.

References

- 1. Mirziyoyev, Sh. M. (2024). Speech at the Tashkent International Innovation Forum. Official transcript. President.uz.
- 2. Asian Development Bank (ADB). (2024). Digital Transformation in Central Asia: Uzbekistan Case Study. Manila: ADB.
- 3. McKinsey & Company. (2024). *The State of AI in HR: Trends and Insights*. Retrieved from https://www.mckinsey.com/business-functions/hr/ai-in-hr
- 4. World Trade Organization (WTO). (2024). Global Trade Outlook and Statistics April 2024. Retrieved from https://www.wto.org/english/res e/booksp e/trade outlook24 e.pdf
- 5. World Trade Organization (WTO). (2024). Evolution of trade under the WTO: Handy statistics. Retrieved from https://www.wto.org/english/res_e/statis_e/trade_evolution_e/evolution_trade_wto e.htm
- 6. United Nations Department of Economic and Social Affairs (UN DESA). (2024). International Migrant Stock 2024: Key facts and figures. Retrieved from https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2025_intlmigstock_2024_key_facts_and_figures_advance-unedited.pdf
- 7. United Nations. (2024). International migration. Retrieved from https://www.un.org/en/global-issues/migration
- 8. World Economic Forum. (2025). *The Future of Jobs Report 2025*. Retrieved from https://www.weforum.org/publications/the-future-of-jobs-report-2025
- 9. PwC. (2024). Workforce of the Future: The Impact of Technology and Inclusion. Retrieved from https://www.pwc.com/workforce-of-the-future
- 10. Harvard Business Review. (2025). *Building Inclusive Workplaces: DEI Strategies for 2025*. Retrieved from https://hbr.org/dei-strategies-2025.