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DRIVING DIGITAL TRANSFORMATION IN UZBEKISTAN: THE ROLE OF IT PARK AND INNOVATION HUBS IN ENHANCING PRIVATE SECTOR COMPETITIVENESS

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O'ZBEKISTONDA RAQAMLI TRANSFORMATSIYANI RIVOJLANTIRISH: XUSUSIY SEKTOR RAQOBATBARDOSHLIGINI OSHIRISHDA IT-PARK VA INNOVATSION MARKAZLARNING O'RNI

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PAЗВИТИЕ ЦИФРОВОЙ ТРАНСФОРМАЦИИ В
УЗБЕКИСТАНЕ: РОЛЬ ІТ-ПАРКА И
ИННОВАЦИОННЫХ ХАБОВ В ПОВЫШЕНИИ
КОНКУРЕНТОСПОСОБНОСТИ ЧАСТНОГО
СЕКТОРА

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Abstract: Uzbekistan's ambitious Digital Uzbekistan 2030 strategy outlines the country's commitment to fostering a robust digital economy, aimed at enhancing productivity, promoting innovation, and positioning itself as a regional technology leader. Among its flagship initiatives is IT Park Uzbekistan, a government-backed innovation hub established to accelerate the development of the national IT sector by supporting startups, digital service exporters, and technological entrepreneurs. This paper analyses the role of IT Park Uzbekistan within the broader framework of digital transformation policies, using OECD assessments of the country's digital skills landscape and institutional framework as context.

**Keywords:** Digital economy, IT Park Uzbekistan, Innovation hubs, SME digitalisation, Digital skills, Government strategy, Digital transformation, Public-private collaboration, ICT sector, Economic diversification.

Annotatsiya: Oʻzbekistonning "Raqamli Oʻzbekiston — 2030" strategiyasi mamlakatning raqamli iqtisodiyotni rivojlantirish, ishlab chiqarish samaradorligini oshirish, innovatsiyalarni targʻib qilish va oʻzini mintaqaviy texnologik yetakchi sifatida pozitsiyalashga boʻlgan qat'iy intilishini aks ettiradi. Ushbu strategiyaning asosiy tashabbuslaridan biri sifatida tashkil etilgan "IT Park Uzbekistan" hukumat tomonidan qoʻllab-quvvatlanadigan innovatsion markaz boʻlib, startaplar, raqamli xizmatlar eksportchilari va

<sup>&</sup>lt;sup>1</sup> Mirziyoyev, Sh. M. (2023). *Raqamli iqtisodiyotsiz mamlakat iqtisodiyotining kelajagi yoʻq*. Tashkent: Oʻzbekiston Respublikasi Prezidenti Matbuot Xizmati. p. 4.

<sup>&</sup>lt;sup>2</sup> Olimov, A. A. (2024). Transformation of the economy in the digital era: Experience of Uzbekistan and development strategies. International Journal of Management and Economics Fundamental.

texnologik tadbirkorlarni qoʻllab-quvvatlash orqali milliy IT sohasini rivojlantirishni maqsad qilgan. Mazkur maqolada OECD tomonidan mamlakatdagi raqamli koʻnikmalar va institutsional muhitga berilgan baholardan foydalanilgan holda, IT Park Uzbekistan'ning raqamli transformatsiya siyosati doirasidagi oʻrni tahlil qilinadi.

Kalit soʻzlar: Raqamli iqtisodiyot, IT Park Uzbekistan, innovatsion markazlar, KOʻK raqamlashtirish, raqamli koʻnikmalar, hukumat strategiyasi, raqamli transformatsiya, davlat-xususiy hamkorlik, AKT sohasi, iqtisodiy diversifikatsiya.

Аннотация: Стратегия Узбекистана «Цифровой Узбекистан 2030» отражает твердую приверженность страны развитию цифровой экономики, повышению производительности, продвижению инноваций и позиционированию себя как регионального технологического лидера. Одной из ключевых инициатив этой стратегии является создание IT Park Узбекистана, поддерживаемого правительством инновационного центра, который направлен на развитие национального сектора ИТ путем поддержки стартапов, экспортеров цифровых услуг и предпринимателей в сфере технологий. В этой статье анализируется роль IT Park Узбекистана в рамках политики цифровой трансформации с использованием оценок ОЭСР цифровых навыков и институциональной среды страны.

**Ключевые слова:** Цифровая экономика, IT Park Узбекистан, инновационные центры, цифровизация МСП, цифровые навыки, государственная стратегия, цифровая трансформация, государственночастное партнерство, сектор ИКТ, диверсификация экономики.

#### Introduction

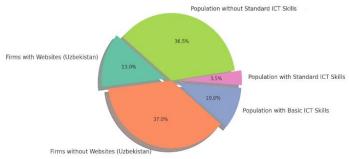
Uzbekistan's strategic focus on digital transformation reflects its broader goal of economic modernization and diversification. With the launch of the Digital Uzbekistan 2030 strategy and investments in digital infrastructure, the country aims to position itself as a regional IT powerhouse.<sup>1</sup> Key among its initiatives is the establishment of IT Park Uzbekistan, which serves as a catalyst for entrepreneurship. foreign investment, and technological innovation. Despite the progress, challenges remain: SMEs struggle with limited digital skills, public support mechanisms are fragmented, and awareness about digital opportunities is low. This paper investigates how innovation hubs like IT Park and supportive digital policies are reshaping Uzbekistan's economic landscape.<sup>2</sup>

# Background: From Reform to Digital Agenda

Uzbekistan has been pursuing an ambitious reform agenda since 2017 aimed at modernizing its economy and promoting private sector development. These reforms have included market liberalization, improved transparency, and efforts to enhance the

regulatory environment for businesses.<sup>3</sup> As part of its modernization trajectory, the government has increasingly prioritized digital transformation as a tool for economic resilience and diversification.





This transformation is anchored in the *Digital Uzbekistan 2030* strategy, which was officially launched in October 2020. This comprehensive national initiative outlines four strategic objectives: the development of digital government services, the advancement of digital education, the expansion of digital infrastructure, and the promotion of a robust

<sup>&</sup>lt;sup>1</sup>Mirziyoyev, Sh. M. (2023). *Raqamli iqtisodiyotsiz mamlakat iqtisodiyotining kelajagi yoʻq*. Tashkent: Oʻzbekiston Respublikasi Prezidenti Matbuot Xizmati. p. 5.

<sup>&</sup>lt;sup>2</sup> Karimov & Lee, 2023, p. 49

<sup>&</sup>lt;sup>3</sup> Abdullaev, R. (2022). Government Strategies for Digital Transformation: Lessons from Uzbekistan. Digital Policy, Regulation and Governance, 24(4), p. 49.

digital economy. Between 2020 and 2022, over 400 priority projects were planned under this framework, with more than half initiated by the time of reporting Here's the pie chart illustrating key statistics related to Uzbekistan's digital transformation:

- Only 26% of private firms have websites.
- 74% of firms lack an online presence.
- **20%** of the population possesses basic ICT skills.
- Just 7% meet standard ICT competency levels
- A significant **73%** of the population lacks standard digital skills.

Despite these institutional advances, digital uptake among Uzbekistan's private enterprises particularly small and medium-sized enterprises (SMEs)—remains relatively weak. As noted in the OECD report using World Bank data, just 26% of private companies in Uzbekistan maintained their own websites, significantly lower than the 63% average observed across Europe and Central Asia. This disparity reflects broader digital literacy challenges; for instance, only 20% of the Uzbek population demonstrated basic ICT competencies, and just 7% had standard-level skills as of 2018.<sup>4</sup> These figures highlight a significant digital skills gap that limits SMEs' capacity to adopt and leverage technologies. Moreover, digital fragmented institutional coordination and limited awareness of available digital tools further hinder the effectiveness of Uzbekistan's digital transformation agenda. While infrastructure improvements have enhanced access to broadband services, the private sector's ability to capitalize on these advances is still constrained by a lack of human capital and targeted policy support.

### Innovation Hubs and IT Park Uzbekistan

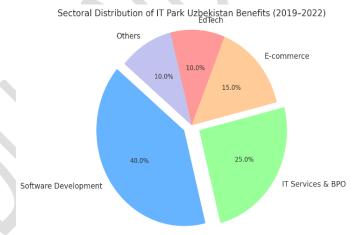
The flagship of Uzbekistan's digital transition is *IT Park Uzbekistan*, an innovation ecosystem created to support tech entrepreneurs, attract foreign professionals, and facilitate the export of digital services. IT Park offers resident companies a suite of benefits: tax exemptions, streamlined visa

procedures, infrastructure access, and support in obtaining international certifications.<sup>5</sup>

Between 2019 and 2022, IT Park's resident base expanded significantly, reflecting growing interest in Uzbekistan's IT sector. Yet, its impact is still uneven. The focus remains narrow, with benefits largely accruing to a few high-growth sectors. Expanding the Park's model to a wider set of industries and geographical areas is essential to harness its full economic potential.

# **Institutional Frameworks and Policy Gaps**

The OECD highlights a critical weakness in



Uzbekistan's digital transition: the institutional framework does not sufficiently reflect private sector needs. Responsibilities for digital upskilling and strategy implementation are dispersed across ministries, with overlapping mandates and limited inter-agency coordination. For example, while the Ministry of Digital Technologies (MDT) leads the National Digital Strategy (NDS), it lacks clear jurisdiction over SME digital training.<sup>8</sup>

public-private Moreover. dialogue is underdeveloped. While organizations such as the Chamber of Commerce and Industry have participated, a structured mechanism for ongoing feedback between the business sector and policymakers still lacking. Incorporating is educational stakeholders industry and

economy in Uzbekistan. International Journal of Education, Social Science & Humanities, p. 59.

<sup>&</sup>lt;sup>4</sup> Karimov & Lee, 2023, pp. 45–47

<sup>&</sup>lt;sup>5</sup> Maxmudov, T. O. (2022). Digital transformation in Uzbekistan and new opportunities for small business. Journal of Law and Economics. p. 8

<sup>&</sup>lt;sup>6</sup> Olimov, 2024, p. 22

<sup>&</sup>lt;sup>7</sup> Saitkamolov, M. S., & Markabaeva, J. A. (2024). The role of innovations and startups in the development of the digital

<sup>&</sup>lt;sup>8</sup> Ismail, N., & Ahmad, N. (2021). The Role of Innovation Hubs in Emerging Economies: Case of Central Asia. Journal of Innovation & Knowledge, 6(3), p. 129.

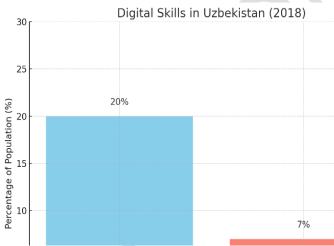
representatives into policy planning would improve alignment between digital training and market demand.

## Digital Skills and the SME Challenge

Digital skills deficits are a major barrier to SME competitiveness in Uzbekistan. Only 20% of the population possesses basic ICT skills, with just 7% exhibiting standard digital proficiency. Among SMEs, this gap is more acute, limiting their ability to adopt digital tools or compete globally.<sup>9</sup>

Despite government-supported training programs and IT centers, awareness and accessibility remain low, particularly outside urban areas. SMEs often lack the internal capacity to invest in training or recognize its strategic value. <sup>10</sup>Furthermore, many of the available trainings do not offer practical, sector-specific competencies required by small firms. <sup>11</sup>

To overcome these challenges, targeted skills development initiatives must be embedded into broader economic and industrial policy. Uzbekistan could benefit from a modular training system that provides basic, intermediate, and advanced digital skills tailored to different industries.



Here's a bar chart visualizing the digital skills gap in Uzbekistan based on the 2018 data: only 20% of the population had basic ICT skills, and just 7% possessed standard ICT proficiency. This gap highlights a critical challenge for SME digital competitiveness in the country. Let me know if you'd

like a version comparing urban vs rural data or international benchmarks.

## **Public Support Mechanisms and Incentives**

Uzbekistan has taken steps to incentivize digitalization—especially in the IT and BPO sectors—through tax breaks, subsidized training, and financial grants. However, support remains fragmented across multiple agencies, and SMEs outside of the IT Park often lack access or awareness of these incentives. 12

The OECD recommends creating a *digital one-stop shop* where firms can access all available tools, training programs, and financial incentives. This model would simplify the user experience and increase program uptake. Expanding financial support mechanisms to non-IT sectors is also crucial, particularly for agriculture, manufacturing, and tourism, which are strategically important for economic diversification.<sup>13</sup>

## **Gender and Inclusivity in Digital Transformation**

A persistent gender digital divide threatens to undermine Uzbekistan's digital ambitions. Women are underrepresented in tech education and careers, often due to social norms and unequal access to resources. Programs like Tumaris. Tech and the Centre for Digital Skills for Women and Youth are important steps forward, but broader reforms are needed.

Embedding gender targets into all digital programs, offering scholarships for women in STEM, and supporting female-led digital enterprises can enhance inclusivity. Integrating gender considerations into policy formulation is crucial for building a fair and inclusive digital future.<sup>14</sup>

# International Cooperation and Knowledge Transfer

Uzbekistan's digital development has been supported by strong international partnerships. The OECD-led Working Group, supported by the EU, and collaborations with Estonia, Korea, and Latvia

<sup>&</sup>lt;sup>9</sup> Karimov & Lee, 2023, p. 46

<sup>&</sup>lt;sup>10</sup> Lokuge, S., & Duan, S. X. (2021). Towards understanding enablers of digital transformation in small and medium-sized enterprises. In Proceedings of the 32nd Australasian Conference on Information Systems (ACIS 2021). p. 3

<sup>&</sup>lt;sup>11</sup> Rakhmatullaeva, D. O. (2022). Analysis of digital transformation of the Republic of Uzbekistan. Spectrum Journal of Innovation, Reforms and Development, p. 380.

<sup>&</sup>lt;sup>12</sup> Abdullaev, 2022, p. 327

<sup>&</sup>lt;sup>13</sup> Olimov, 2024, p. 24

<sup>&</sup>lt;sup>14</sup> Mirziyoyev, 2023, p. 7

have brought valuable expertise and policy models.<sup>15</sup> The IT relocation visa and residency programs also attract international IT talent, fostering cross-border innovation and knowledge exchange.

To fully leverage the advantages of international collaboration, Uzbekistan needs to formalize these partnerships by establishing joint research and development initiatives, fostering connections between universities, and supporting startup accelerator programs. Establishing sustainable and impactful partnerships will enhance the nation's digital ecosystem.

Conclusion. Uzbekistan's digital transformation is gaining momentum through ambitious initiatives such as the Digital Uzbekistan 2030 strategy and IT Park Uzbekistan. <sup>16</sup>These efforts signal a clear intent to position the country as a regional digital leader. However, the full potential of these programs can only be realized if persistent structural challenges are addressed. Chief among these are the fragmented institutional framework, limited public-private coordination, and a significant digital skills gap particularly among SMEs. IT Park Uzbekistan has emerged as a promising innovation hub, yet its benefits remain largely concentrated within the IT sector. Expanding its reach to non-IT industries and underserved regions is essential for inclusive digital growth. Moreover, the development of an integrated ecosystem for digital upskilling—tailored to industry needs and accessible nationwide—is critical for competitiveness. enhancing **SME** Α more coordinated policy approach, gender-inclusive programming, and enhanced international cooperation will further reinforce Uzbekistan's digital ambitions. To ensure sustainable economic diversification and global integration, Uzbekistan innovation scale efforts must infrastructure—embedding digital capacity-building and cross-sectoral support at the core of its development strategy.

#### References

1. Mirziyoyev, Sh. M. (2023). Raqamli iqtisodiyotsiz mamlakat iqtisodiyotining kelajagi

- yoʻq. Tashkent: Oʻzbekiston Respublikasi Prezidenti Matbuot Xizmati.
- 2. Abdullaev, R. (2022). Government Strategies for Digital Transformation: Lessons from Uzbekistan. Digital Policy, Regulation and Governance, 24(4), 321-340.
- 3. Ismail, N., & Ahmad, N. (2021). The Role of Innovation Hubs in Emerging Economies: Case of Central Asia. Journal of Innovation & Knowledge, 6(3), 123-135.
- 4. Lokuge, S., & Duan, S. X. (2021). Towards understanding enablers of digital transformation in small and medium-sized enterprises. In Proceedings of the 32nd Australasian Conference on Information Systems (ACIS 2021). Sydney, Australia. research.usq.edu.au
- 5. Maxmudov, T. O. (2022). Digital transformation in Uzbekistan and new opportunities for small business. Journal of Law and Economics.
- 6. Nazarov, A. (2024). Legal and economic mechanisms for ensuring security and conditions for digital transformation in the Republic of Uzbekistan. Multidisciplinary Journal of Science and Technology.
- 7. OECD. (2023). Digital skills for private sector competitiveness in Uzbekistan. OECD Publishing.
- 8. Olimov, A. A. (2024). Transformation of the economy in the digital era: Experience of Uzbekistan and development strategies. International Journal of Management and Economics Fundamental.
- 9. Karimov, A., & Lee, J. (2023). Digital Skills Gap in Uzbekistan: Implications for SMEs. Information Technology for Development, 29(1), 45-62.
- 10. Rakhmatullaeva, D. O. (2022). Analysis of digital transformation of the Republic of Uzbekistan. Spectrum Journal of Innovation, Reforms and Development, 9, 378–385.
- 11. Saitkamolov, M. S., & Markabaeva, J. A. (2024). The role of innovations and startups in the development of the digital economy in Uzbekistan. International Journal of Education, Social Science & Humanities, 59(5).

the Republic of Uzbekistan. Multidisciplinary Journal of Science and Technology. p. 8

<sup>&</sup>lt;sup>15</sup> Nazarov, A. (2024). Legal and economic mechanisms for ensuring security and conditions for digital transformation in

<sup>&</sup>lt;sup>16</sup> Abdullaev, 2022, p. 329