HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

THE IMPACT OF DIGITAL TRANSFORMATION ON THE ECONOMIC EFFICIENCY OF SMALL BUSINESS AND ENTREPRENEURSHIP IN UZBEKISTAN

Tojiboyev Shukurullo Sherali o'g'li

student, Fergana state university, faculty of economics

Email: shukurjontojiboy@gmail.com

Doi: https://doi.org/10.5281/zenodo.21283289

Abstract: This article examines the influence of digital transformation on the economic efficiency of small business and private entrepreneurship in the Republic of Uzbekistan over the period 2021–2026. Small enterprises and individual entrepreneurs generate more than half of national value added and remain the principal source of employment, yet their productivity has historically been constrained by limited access to finance, weak digital infrastructure in rural areas, and low technology adoption. Drawing on official statistics of the National Statistics Committee of the Republic of Uzbekistan, IT Park Uzbekistan, KPMG, and international trade data, the study documents the rapid expansion of the country's digital economy — including internet penetration, mobile connectivity, e-commerce turnover, and IT-service exports — and assesses how these trends correlate with indicators of small-business efficiency such as sectoral value added, export diversification, and investment in fixed capital. The findings indicate that digitalization has become a structural driver of small-business growth, particularly through e-commerce platforms, digital payment systems, and IT-outsourcing exports, while regional disparities and cybersecurity gaps continue to limit the sector's full potential. The article concludes with policy recommendations for accelerating inclusive digital transformation among micro, small, and medium-sized enterprises (MSMEs).

Keywords: digital transformation, small business, entrepreneurship, economic efficiency, e-commerce, IT Park, digital economy, Uzbekistan, MSME, digitalization.

Introduction

Over the past decade, digital transformation has evolved from a peripheral technological trend into a central determinant of national competitiveness and firm-level productivity. For transition economies such as Uzbekistan, where small business and private entrepreneurship constitute the backbone of employment and regional economic activity, the diffusion of digital technologies — e-commerce, mobile banking, cloud-based accounting, digital marketing, and IT outsourcing — offers a rare opportunity to leapfrog conventional stages of industrial development and directly integrate into global value chains.

Since the adoption of the "Digital Uzbekistan – 2030" strategy and the associated resolutions on e-government and digital economy development, the Government of Uzbekistan has pursued an ambitious agenda of infrastructural modernization, tax incentives for IT companies, and simplified digital business registration. These reforms coincide with a period of accelerated GDP growth: according to the National Statistics Committee, the economy expanded by 7.6 percent in the first nine months of 2025 alone, with the construction and services sectors — both heavily populated by small enterprises — acting as the principal engines of growth.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

Against this background, the present article investigates the extent to which digital transformation has translated into measurable improvements in the economic efficiency of Uzbekistan's small business sector. Economic efficiency is understood broadly here as the capacity of small enterprises to generate greater value added, exports, and investment per unit of resources employed, and to sustain this performance relative to the wider economy. The analysis is guided by three research questions: (1) How has the structure and scale of Uzbekistan's digital economy evolved in recent years? (2) What statistical relationship can be observed between digitalization indicators and small-business performance indicators? (3) What structural barriers continue to prevent small enterprises from fully capturing the benefits of digital transformation?

Literature Review

The relationship between digital technology adoption and firm-level efficiency has attracted extensive attention in development economics. Classical productivity theory suggests that information and communication technologies (ICT) reduce transaction costs, expand market access, and enable better inventory and customer-relationship management, thereby raising total factor productivity even among micro and small enterprises that lack the scale for capital-intensive automation.

For post-Soviet and Central Asian economies specifically, researchers have emphasized that digital transformation plays a compensatory role: because small firms in these markets historically suffered from underdeveloped logistics, fragmented distribution networks, and limited access to formal credit, mobile commerce and digital payment platforms have been able to substitute for missing physical and financial infrastructure rather than merely complementing it. Recent national studies on Uzbekistan's e-commerce sector similarly describe the emergence of integrated digital ecosystems — combining marketplace, fintech, and logistics functions — as a structural response to these historical constraints, with domestic platforms such as Uzum illustrating how a vertically integrated model can rapidly scale seller participation and consumer reach.

At the same time, the literature cautions against overstating the transformative effect of digitalization in the absence of complementary reforms. Studies on e-commerce development in Uzbekistan point to persistent barriers including low financial literacy, consumer trust deficits, cybersecurity and fraud risks, and uneven last-mile logistics outside major cities, all of which can blunt the productivity gains that digital tools would otherwise generate. This article positions itself within this debate, using the most recent available official statistics to assess whether the aggregate evidence in Uzbekistan supports the efficiency-enhancing hypothesis, and under what conditions.

Research Methodology and Data Sources

The study employs a descriptive-analytical and comparative-statistical methodology. Quantitative indicators were compiled from publicly available official sources, including the National Statistics Committee of the Republic of Uzbekistan, IT Park Uzbekistan, the U.S. International Trade Administration's country commercial guide, KPMG's e-commerce market assessments, and specialized digital-marketing market reports. Data span the period 2021–2026 (including preliminary first-quarter 2026 figures) and cover four analytical dimensions:

- Structural indicators of the small business sector (number of active entities, sectoral GDP share, investment in fixed assets);
- Digital infrastructure indicators (internet penetration, mobile connectivity, smartphone usage);
- Digital-economy output indicators (ICT/IT-service exports, IT Park resident growth);

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

●E-commerce market indicators (market size, platform-level gross merchandise value, forecast scenarios).

Because Uzbekistan's statistical releases are produced by different agencies with slightly different sampling frames and reporting periods (quarterly versus cumulative annual data, national accounts versus sector-specific registries), figures are presented with their reporting period explicitly stated, and, where estimates diverge across sources, both figures are disclosed to preserve analytical transparency rather than being artificially reconciled.

Results and Discussion

As of 1 October 2025, Uzbekistan had approximately 1.21 million active small business entities, comprising 479,000 small enterprises and microfirms, 281,900 individual entrepreneurs, 422,300 dehkan (household) farms, 5,800 family businesses, 22,100 artisans, and 900 registered import-goods sellers. Business density reached 32.1 entities per 1,000 inhabitants nationally, with the highest concentrations recorded in Khorezm (43.5), Tashkent city (43.4), Syrdarya (37.7), and Bukhara (37.5) regions. During January–September 2025 alone, 62,200 new small enterprises and microfirms were registered, concentrated primarily in trade, industry, and agriculture.

Table 1 summarizes the structure of active small business entities as of the most recent reporting date.

Table 1.

Structure of Active Small Business Entities in Uzbekistan, as of 1 October 2025.

Category of entity	Number of units	Share of total, %
Small enterprises and microfirms	479,000	39.6
Individual entrepreneurs	281,900	23.3
Dehkan (household) farms	422,300	34.9
Family businesses	5,800	0.5
Artisans (craftsmen)	22,100	1.8
Registered import-goods sellers	900	0.1
Total active entities	1,212,000	100.0

Source: National Statistics Committee of the Republic of Uzbekistan.

The contribution of small business to GDP fluctuates by reporting period owing to agricultural seasonality but has remained consistently above 45 percent since 2023. For the full year 2024, small enterprises and private entrepreneurship generated 54.3 percent of GDP according to registry-based estimates; for the first quarter of 2025 the share stood at 45.6 percent (unchanged from Q1 2024); by January–September 2025 the cumulative share reached 51.5 percent, equivalent to 638,221.7 billion

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

soums of value added; and preliminary full-year 2025 data place the share at 52.2 percent, or 923,514.6 billion soums, representing nominal growth of 114.8 percent relative to 2024.

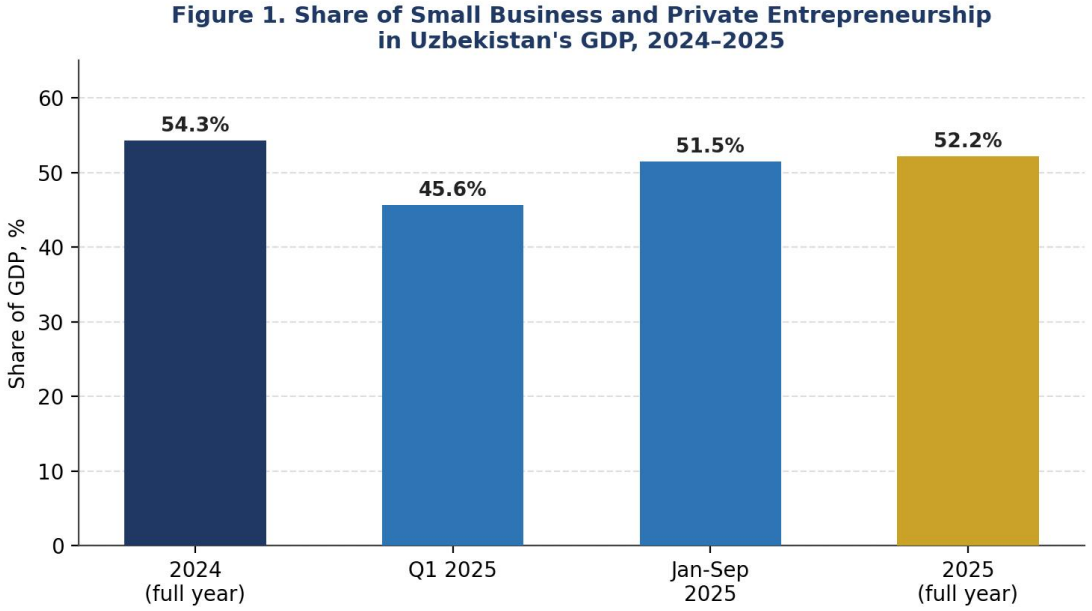


Figure 1. Share of small business and private entrepreneurship in Uzbekistan's GDP, by reporting period, 2024–2025. Source: National Statistics Committee of the Republic of Uzbekistan; INVEXI Investment Consulting.

The sectoral breakdown for January–September 2025 shows that small business dominates agriculture, forestry, and fisheries (96.9 percent of sectoral value added), construction (77.6 percent), and the services sector (45.1 percent), while its share in industry remains comparatively lower at 26.4 percent — reflecting the continued capital intensity and scale requirements of manufacturing relative to trade and service activities.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

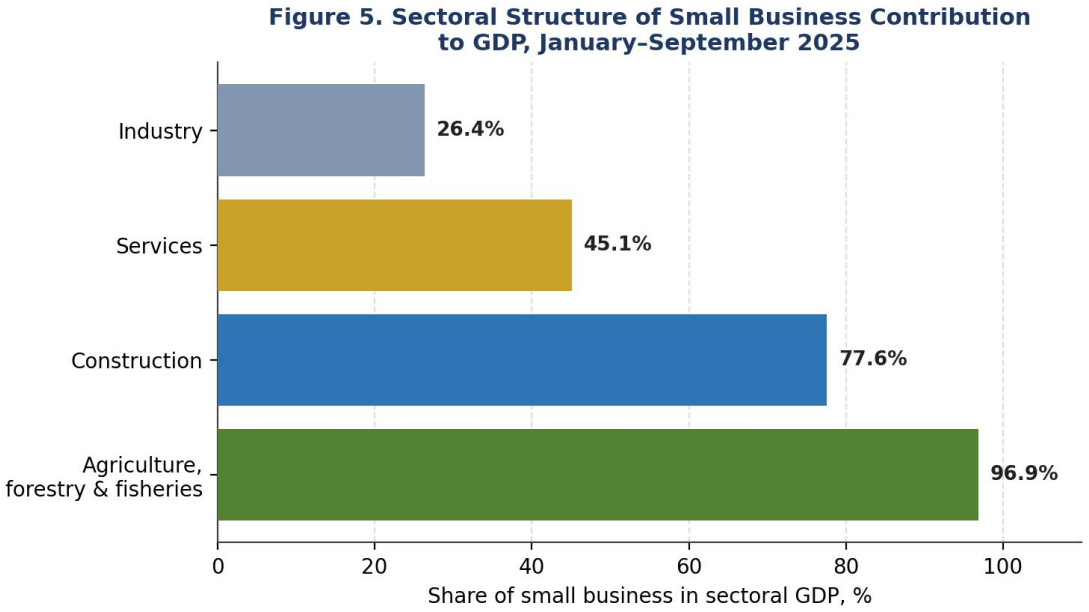


Figure 2. Sectoral structure of small business contribution to GDP, January–September 2025.
Source: National Statistics Committee of the Republic of Uzbekistan.

Investment activity provides a further efficiency signal: in January–December 2025, small business entities accounted for 362,910.0 billion soums of investment in fixed assets, or 61.4 percent of the national total, growing 129.9 percent relative to the corresponding period of 2024. This suggests that small enterprises are not merely maintaining their share of output but are actively reinvesting at a pace exceeding that of large enterprises, a pattern consistent with digitally enabled firms scaling operations, warehousing, and logistics capacity.

Digital transformation in Uzbekistan rests on a rapidly expanding connectivity base. Internet penetration rose from approximately 55 percent in 2020 to a range of 83–87 percent by 2025–2026, depending on methodology, with the number of internet users estimated between 29.5 million and 32.7 million. Mobile-centric usage dominates: roughly 89 percent of internet users access the web via smartphones, and cellular mobile connections reached approximately 33.9 million by early 2025 — exceeding the resident population, reflecting multi-SIM usage. Telecom operators have expanded 4G coverage to 92 percent of the country, 5G networks became operational in all regional centers by the end of 2025, and international data-transmission capacity has been expanded to 4,200 Gbit/s.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

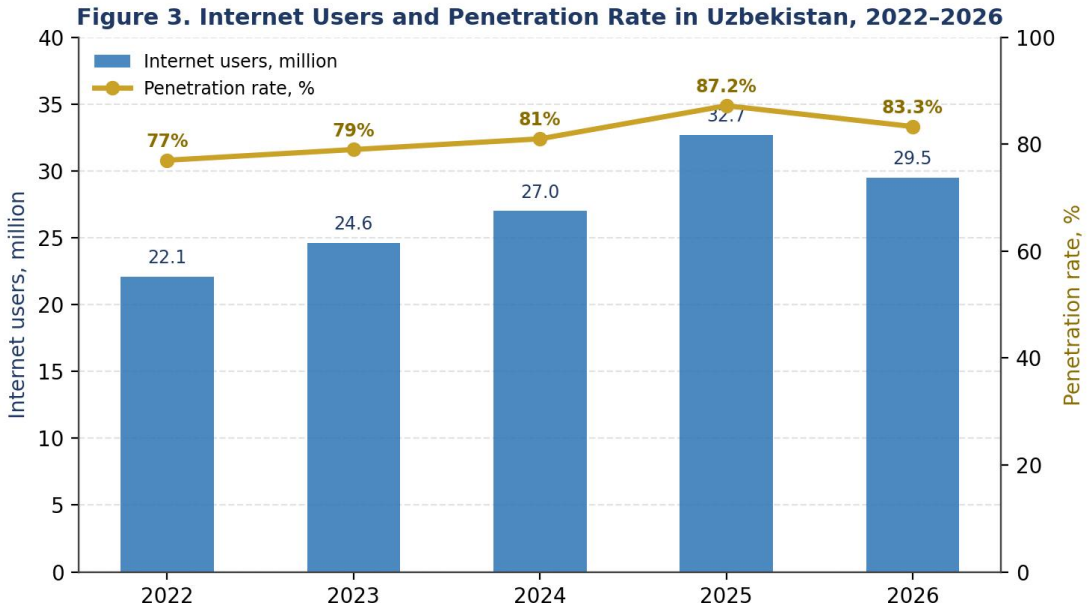


Figure 3. Internet users (million) and penetration rate (%) in Uzbekistan, 2022–2026 (illustrative trend based on DataReportal and 101digital.uz compilations). *Source: DataReportal; ITU; 101digital.uz.*

This infrastructure expansion is a necessary — though not sufficient — condition for small-business digitalization: it lowers the marginal cost for micro-enterprises and individual entrepreneurs to establish an online storefront, accept digital payments, and market products through social platforms such as Telegram (used by more than 70 percent of the population), Instagram, and TikTok, without requiring dedicated IT staff or capital-intensive infrastructure of their own.

A distinctive channel through which digital transformation raises economic efficiency in Uzbekistan is the growth of IT-service exports, which allow even small domestic technology firms to earn foreign-currency revenue without the logistical constraints that limit merchandise exporters. National ICT service exports rose from approximately $440.97 million in 2023 to $619.74 million in 2024, an increase of about 40 percent. IT Park Uzbekistan — the state-backed technology park hosting more than 2,800 resident companies — reported service exports of $728.4 million for full-year 2025, an increase of $273.5 million over 2024, while preliminary data for the first quarter of 2026 show exports of $191.8 million, up $38.5 million year-on-year.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

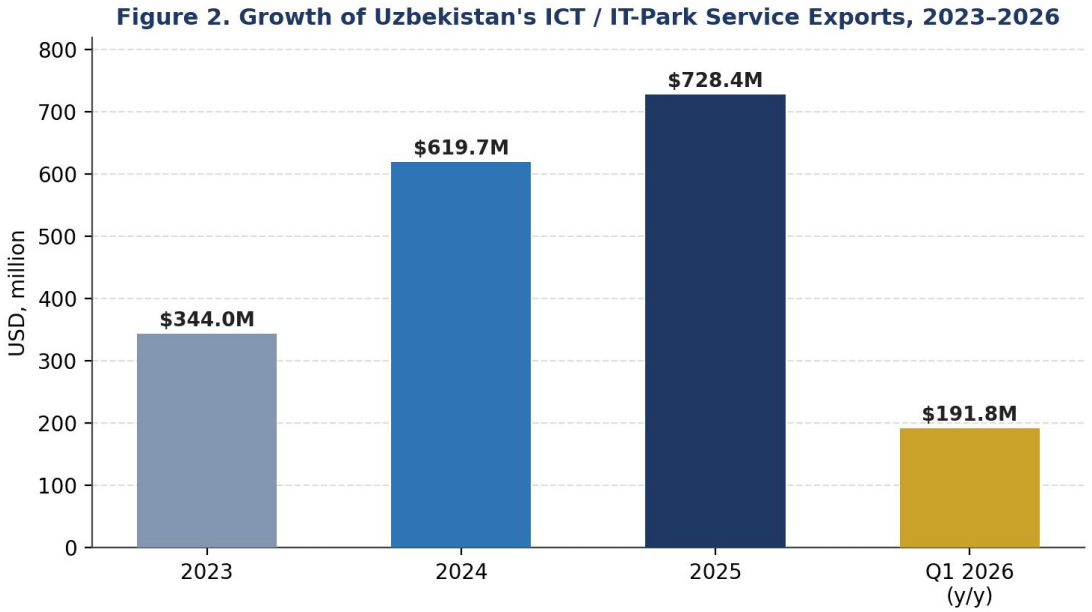


Figure 4. Growth of Uzbekistan's ICT / IT Park service exports, 2023–2026 (Q1). *Note: national ICT export figures (2023–2024) and IT Park resident export figures (2025–2026) are compiled from different reporting frameworks and are not perfectly comparable in scope. Source: CEIC Data / TAdviser; IT Park Uzbekistan; Zamin.uz.*

IT Park membership growth further illustrates how digital transformation is expanding entrepreneurial opportunity beyond the capital: between January and May 2025, 636 new member companies joined the park, of which 267 were regional (non-Tashkent) firms; in the autumn of 2025, a further 470 companies joined, including 212 regional entrants planning to deliver more than $70 million in export services by the end of 2026. By the end of 2024, IT Park employment reached 38,600 people, having grown 146 percent since the end of 2023, with regional employment more than tripling. These figures indicate that IT-enabled entrepreneurship is beginning to diffuse geographically rather than remaining concentrated solely in Tashkent.

E-commerce represents the most direct interface between digital transformation and small-business economic efficiency, since it allows micro and small retailers to reach national and, increasingly, cross-border demand without proportional increases in fixed costs. According to government statistics, Uzbekistan's e-commerce market reached $1.2 billion in 2024, equivalent to 3.8 percent of total retail turnover; KPMG projects this share will rise to between 9 and 11 percent of retail turnover by 2027, with market value reaching $1.8–2.2 billion. Independent commercial estimates (ECDB) place 2024 e-commerce revenue considerably higher, at approximately $2.27 billion, illustrating the sensitivity of market-size estimates to differences in scope (inclusion of cross-border trade, C2C transactions, and social-commerce sales).

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

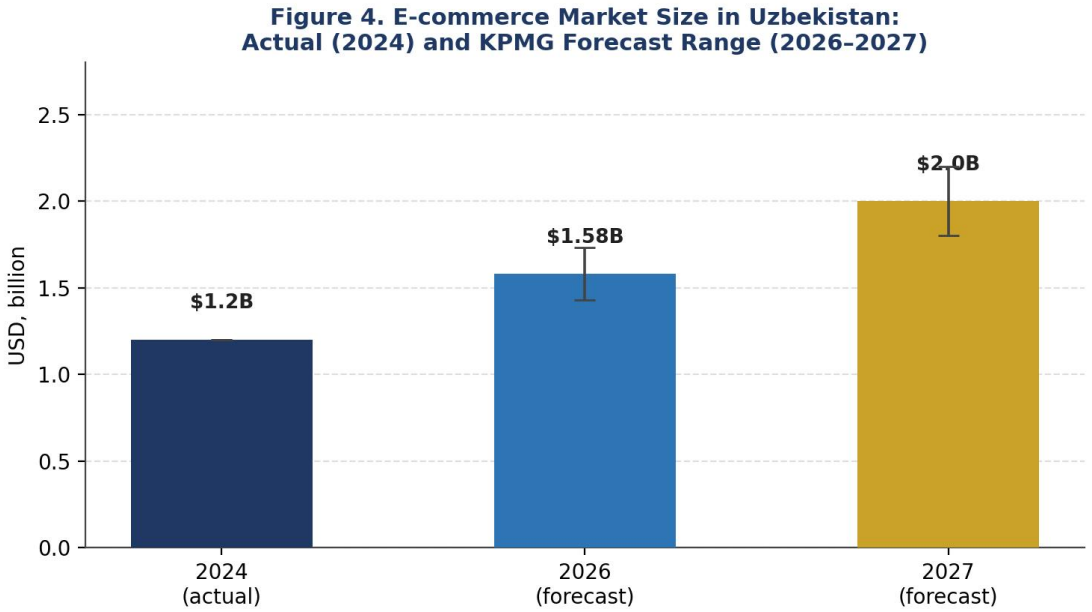


Figure 5. E-commerce market size in Uzbekistan: 2024 actual and KPMG forecast range for 2026–2027 (error bars denote the low–high forecast interval). Source: KPMG Caucasus and Central Asia; U.S. International Trade Administration; UzDaily.uz.

The domestic digital ecosystem Uzum, launched in 2022, exemplifies the scale achievable through integrated marketplace–fintech–logistics platforms: by the end of 2024 its e-commerce segment recorded a gross merchandise value of $345 million, growing 2.4 times year-on-year, served by roughly 14,000 sellers and nearly 1,000 pick-up points across the country, with more than 17 million monthly active users. In August 2025 the company raised $70 million in equity financing from international investors including Tencent, at a valuation of $1.5 billion — signalling growing investor confidence in Uzbekistan's small-merchant digital economy. The most commonly purchased categories online are electronics and appliances (35 percent of e-commerce spend) and fashion (19 percent), while digital wallets such as Click and Payme have become effectively mandatory integrations for any small merchant seeking to sell online.

Despite the encouraging aggregate trends documented above, several structural constraints continue to limit the extent to which digital transformation translates into measurable efficiency gains across the entire small-business population, rather than a comparatively small circle of digitally native firms concentrated in Tashkent and a handful of regional capitals.

●Regional digital divide: although national internet penetration exceeds 83 percent, last-mile logistics infrastructure, warehousing, and sorting-center density remain concentrated in Tashkent and a small number of regional hubs, limiting the speed and reliability of e-commerce fulfilment outside major cities.

●Financial literacy and consumer trust: reported increases in payment-card fraud and limited financial literacy among both consumers and micro-entrepreneurs constrain conversion rates and repeat online purchase behavior, according to national e-commerce sector studies.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

●Cybersecurity capacity: industry surveys indicate that a majority of Uzbek companies still lack a dedicated information-security budget, exposing small merchants that process digital payments to elevated fraud and data-breach risk.

●Access to growth financing: while overall small-business investment in fixed assets grew rapidly in 2025, access to affordable working-capital financing for technology adoption (point-of-sale systems, inventory-management software, digital marketing) remains uneven across firm size and region.

●Statistical and definitional fragmentation: divergent estimates of e-commerce market size and digital-economy value added across national and international sources complicate evidence-based policymaking and make it harder to monitor the sector's true contribution to overall economic efficiency.

●Expand targeted digital-adoption financing instruments (subsidized loans, leasing schemes for point-of-sale and inventory software) specifically for micro and small enterprises operating outside Tashkent, to narrow the regional digital divide documented above.

●Strengthen last-mile logistics and sorting-center infrastructure in regional centers, building on the national postal operator's platform expansion targets, to enable regional small merchants to participate in e-commerce on comparable terms to those in the capital.

●Institutionalize financial-literacy and cybersecurity-awareness programs for micro-entrepreneurs, delivered jointly by commercial banks, payment operators (Click, Payme), and the Ministry of Digital Technologies, to reduce fraud exposure and strengthen consumer trust in online transactions.

●Harmonize statistical methodologies across the National Statistics Committee, sectoral ministries, and international data providers for measuring e-commerce and digital-economy value added, to improve the accuracy of policy monitoring and international benchmarking.

●Continue geographic diversification of the IT Park model, building on the demonstrated growth of regional resident companies, including dedicated incubation and export-support programs for entrepreneurs in secondary cities.

●Support the export orientation of small IT and BPO firms through continued preferential tax treatment and simplified administrative procedures, given the sector's demonstrated capacity to generate foreign-currency revenue independent of physical logistics constraints.

Conclusion

The evidence assembled in this article indicates that digital transformation has become a meaningful, and in several respects an accelerating, driver of economic efficiency within Uzbekistan's small business and entrepreneurship sector. Small enterprises and private entrepreneurs already generate more than half of national GDP and are reinvesting at a pace that outstrips large enterprises, while parallel expansion of internet penetration, mobile connectivity, IT-service exports, and e-commerce platforms is creating new channels through which even micro-enterprises can reach broader markets, access foreign currency revenue, and reduce transaction costs. The rapid scaling of integrated digital ecosystems such as Uzum, and the geographic diffusion of IT Park membership beyond Tashkent, both suggest that the efficiency gains associated with digitalization are beginning to extend beyond a narrow set of early adopters.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

At the same time, the persistence of regional infrastructure gaps, limited financial literacy, uneven cybersecurity capacity, and definitional inconsistencies across statistical sources indicate that the transformation remains incomplete and unevenly distributed. Realizing the full efficiency potential of digitalization for Uzbekistan's small business sector will require continued, coordinated investment in logistics infrastructure, financial inclusion, and digital skills — particularly outside the capital — alongside sustained policy support for the export-oriented IT and e-commerce ecosystems that have already demonstrated the strongest efficiency gains to date.

References

1. National Statistics Committee of the Republic of Uzbekistan. (2025–2026). Reports on socio-economic development and small business indicators, January–September 2025 and full-year 2025. stat.uz.
2. UzDaily.uz. (2025). Small Business in Uzbekistan Accounts for Over Half of GDP in 2025.
3. INVEXI Investment Consulting Management Company. (2025). Key Indicators of Small Entrepreneurship in the Republic of Uzbekistan for 2024; Uzbekistan's Economy on the Rise: GDP Growth Reached 7.6% in the First 9 Months of 2025.
4. Multidisciplinary Journal of Science and Technology. (2026). The Economic Significance of Developing Small Business and Private Entrepreneurship in Uzbekistan.
5. IT Park Uzbekistan. (2025–2026). Resident growth and export performance releases; Wikipedia entry on IT Park Uzbekistan.
6. Zamin.uz. (2026). Uzbekistan IT Park Service Exports Reach Record Growth.
7. TAdviser / CEIC Data. (2025). ICT Market of Uzbekistan.
8. U.S. International Trade Administration. (2025). Uzbekistan – eCommerce Country Commercial Guide.
9. KPMG Caucasus and Central Asia. (2023). E-Commerce in Uzbekistan.
10. UzDaily.uz. (2026). E-Commerce Growth in Uzbekistan Accelerates Rapidly; Exports from SEZ Enterprises Exceed 9 Trillion Soums, IT Park Boosts Service Exports by US$273 Million.
11. Nasridinovna, T. O. (2026). Strategies for ensuring territorial economic growth through the development of tourism infrastructure. Shokh library, 1(1).
12. Nasridinovna, T. O. (2026). Competitiveness factors and effective management mechanisms of tourist business. Shokh library, 1(1).
13. ECDB. (2025). E-Commerce Industry in Uzbekistan, 2017–2029.
14. 101digital.uz. (2026). Uzbekistan Digital Marketing Statistics 2026: Comprehensive Report.
15. International Multidisciplinary Journal for Research & Development. (2026). Development Trends and Prospects of E-Commerce in Uzbekistan.
16. Nordascend / European Journal of Economic Dynamics and Policy. (2025). Current State and Development Trends of Electronic Commerce in Uzbekistan