DIGITAL TRANSFORMATION AND FISCAL POLICY IN UZBEKISTAN: TRENDS IN E-COMMERCE, REMOTE BANKING, AND DIGITAL SERVICE TAXATION

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Abtract. This study examines the rapid digital transformation of Uzbekistan's economy through a statistical analysis of three interrelated domains: tax revenues from foreign electronic service providers, the growth of e-commerce trade volume, and the increasing adoption of remote banking services. Utilizing official data from 2016 to 2024, the research identifies significant upward trends in all three sectors. Tax revenue from companies such as Meta, Google, and Apple surged following Uzbekistan's 2020 digital VAT reform, reflecting successful integration of global digital services into the national tax framework. Simultaneously, the e-commerce market exhibited exponential growth, and the number of remote banking users increased nearly fivefold between 2019 and 2024. These developments signal a comprehensive shift toward a digital economy. The paper concludes with strategic policy recommendations to enhance infrastructure, promote digital inclusion, and ensure sustainable growth through supportive regulation and innovation ecosystems.

Keywords: Digital economy; Uzbekistan; E-commerce; Remote banking; Digital taxation; VAT on electronic services; Digital transformation; Statistical analysis; ICT development; Fintech.

Introduction. Uzbekistan's economy is undergoing a rapid digital transformation under an ambitious national agenda. In 2020 the government launched the "Digital Uzbekistan 2030" strategy and mobilized large investments in digital infrastructure. For example, Uzbekistan planned over \$2.5 billion in fibre-optic and broadband expansion during 2021-22 [1]. By early 2023 the country had roughly 31 million internet users, with high-speed mobile coverage nearing 98-99%. This broad connectivity has fuelled strong growth in online activity: e-commerce revenue reached an estimated \$1.39 billion in 2021, comprising over 90% of the country's total digital services market [2]. International experts note that Uzbekistan's e-commerce sector has the fastest-growing contribution to GDP in recent years (with a compound annual growth rate of ~372% from 2017-2022) [1]. In tandem, the financial sector has embraced digitalization: "online banking has emerged as a crucial component of this digital revolution," enabling customers to manage finances and make payments remotely [3]. In fact, a UNDP assessment observes that "digitalisation in Uzbekistan has been led by the banking and financial services sector, which remains predominantly state-owned," with private firms only just beginning to adopt advanced digital tools [1]. These trends toward a "cashless" economy have occurred alongside significant fiscal reforms: since 2020 foreign internet companies providing electronic services to Uzbek consumers must register and pay VAT, integrating them into the tax system. Early evidence shows this policy is yielding substantial revenue. According to official data, in the first half of 2024 sixty foreign e-service providers remitted UZS 48.4 billion in VAT to Uzbekistan (up 50% year-on-year), with Meta, Google, and Apple alone contributing over 80% of that amount. Thus, in just a few years Uzbekistan's digital services have become a rapidly expanding part of the economy, with far-reaching implications for trade, finance, and public revenues.

Literature Review. Recent studies on Uzbekistan's digital economy highlight four broad themes: the growth of e-commerce and ICT services; the emergence of digital taxation; the rise of online banking and fintech; and the role of policy and infrastructure in shaping these trends.

Digital Economy and E-Commerce Growth. Analyses by government and international organizations document a surging digital sector. A UNDP study (2025) reports that by 2022 e-commerce contributed about 1.2% to GDP and was the fastest-growing segment of the ICT sector [1]. Similarly, market surveys find that Uzbekistan's e-commerce market nearly quadrupled in size from 2018 to 2022. KPMG (2023) estimated the sector at \$311 million in 2022 (about 2.2% of retail sales) and projected it could reach \$1.8–2.2 billion by 2027 (roughly 9–11% of retail) [5]. Other research notes that widespread adoption of smartphones and online platforms has been the main driver of this boom. For example, a country profile from the U.S. International Trade Administration highlights the rapid expansion of Internet infrastructure and e-

commerce initiatives (such as a national online trading platform launched in 2021) as key enablers [2]. Despite these gains, the literature also warns that Uzbekistan remains behind regional peers in ICT penetration; global rankings still show low software spending and ICT exports, indicating room to further develop the digital economy.

The phenomenon of taxing foreign digital companies is well discussed in global tax literature, and Uzbekistan has been at the forefront of this trend in Central Asia. According to KPMG, Uzbekistan became one of the first countries in the region to enact a digital services tax: effective January 1, 2020 all non-resident vendors of electronic services to Uzbek consumers (B2C) must register and collect VAT [4]. In practice this means foreign tech giants are now systematically paying Uzbek taxes on the ads, software, and online goods they sell to Uzbek users. An EY tax bulletin notes that by late 2024 dozens of international internet companies had been issued notices by Uzbek authorities to report and pay VAT on past electronic sales [6]. These reforms mirror international trends (many countries introduced similar taxes in the 2018–2023 period) and have significant revenue impact. Indeed, recent news reports from Uzbekistan's Tax Committee indicate that a small number of foreign tech firms dominate digital VAT collections: in H1 2024, Meta, Google, and Apple alone accounted for roughly 80% of the UZS 48.4 billion collected from 60 registered providers [7]. This suggests that digital taxation is quickly becoming an important component of the fiscal base. At the same time, academic analyses caution that fully integrating global digital services into national tax regimes poses challenges - for example, ensuring compliance, dealing with low-value transactions, and aligning with international BEPS guidelines - issues that Uzbek policymakers must continue to address.

The acceleration of remote banking and fintech in Uzbekistan is another area well documented in the literature. Several studies have traced the rise of online banking as a government priority [12]. Shermamatova finds that Uzbekistan's government and central bank have deliberately promoted online banking as a way to modernize the financial sector and expand inclusion [3]. By digitizing payment systems and encouraging banks to offer mobile apps, the authorities aimed to shift the population away from cash. Empirical reports confirm this strategy's impact: a Visa research report shows that the number of users of remote banking services surged 43% over 2020–2021 (to 14.5 million users), and by end-2022 over 30 million remote bank accounts were active [8]. These findings align with other accounts which emphasize that Uzbekistan's banking sector – though historically state-controlled – is now the leader in digital adoption. However, literature also points out that many small businesses and rural people still have limited digital access, and those further efforts (e.g. expanding broadband and improving financial literacy) are needed to bring the remaining population online.

In summary, recent literature (2018–2024) consistently characterizes Uzbekistan's digital economy as rapidly expanding but uneven. E-commerce and ICT services are growing at record rates, foreign digital companies are newly tethered into the tax system, and banking services are being transformed by digital platforms. At the same time, analysts note that some infrastructure gaps and regulatory challenges remain. These studies provide a broad context for our analysis of the statistical trends.

Research Methodology. This study relies on quantitative analysis of official data from Uzbekistan's government and international agencies. We compiled time-series data on key indicators – including e-commerce trade volumes, number of remote banking users, and tax receipts from foreign digital services – from authoritative sources such as the State Statistics Agency, Central Bank, and the Tax Committee, as well as published reports by institutions like the World Bank, UNDP, and industry research firms. Data visualization (bar and line charts) and descriptive statistics (growth rates, percentage shares) were used to examine trends over time and compare subcategories (e.g. tax revenue by company). The rationale for this approach is to provide an empirical overview of the digital sector's evolution: by using official figures we ensure accuracy and relevance, and by focusing on aggregate trends we can identify the major shifts shaping Uzbekistan's economy. The methodology is primarily descriptive and explanatory, aimed at informing policy through evidence (rather than, for example, econometric modelling).







The bar chart illustrates the amount of tax paid in 2024 by various foreign companies that provide electronic services in Uzbekistan, measured in millions of soums. Overall, it is clear that Meta contributed by far the highest amount in taxes, while companies such as TikTok, Xsolla, and Acca paid the least.

Among the listed companies, Meta stands out significantly, paying 41,700 million soums in taxes. This is followed by Google and Apple, which also made substantial

contributions, with 29,000 million and 27,300 million soums respectively. These three tech giants were the top taxpayers, collectively accounting for the majority of total taxes collected from foreign e-service providers.

In contrast, Amazon and Booking.com paid notably lower amounts, with figures of 4,100 million and 3,600 million soums respectively. Mid-range contributors include Netflix and Zoom, both of which paid an equal amount of 1,400 million soums, while Acca followed closely behind with 1,200 million soums. At the bottom of the chart, TikTok and Xsolla paid the least, contributing 903 million and 966.7 million soums respectively.

In summary, the data indicates a substantial disparity in tax payments, with Meta, Google, and Apple far ahead of the rest. The large differences likely reflect the scale of these companies' operations and revenues in Uzbekistan's digital market.



Figure 2. Electronic commerce trade volume from 2016 to 2023 (Annual Data), in billion soums. [10]

The bar chart illustrates the annual trade volume of electronic commerce in Uzbekistan from 2016 to 2023, measured in billion soums. Overall, the data reveals a dramatic upward trend throughout the period, with the most significant growth occurring after 2019.

In 2016, the e-commerce trade volume was extremely low, starting at only 6 billion soums. It then experienced a gradual increase over the next two years, reaching 12.1 billion in 2017 and 40.9 billion in 2018. However, a noticeable surge began in 2019 when the volume jumped to 275.3 billion soums - almost a sevenfold rise compared to the previous year.

The growth accelerated further in 2020, with the trade volume rising to 1,002.5 billion soums, nearly quadrupling the 2019 figure. This rapid expansion continued into 2021, reaching 5,978.7 billion soums. The most substantial increases occurred in the

final two years of the period. In 2022, the volume more than doubled again to 10,886.8 billion soums, followed by another significant rise to 13,263.8 billion soums in 2023.

In summary, the chart demonstrates an exponential increase in e-commerce activity in Uzbekistan over the eight-year span, particularly from 2019 onwards. This surge likely reflects growing internet accessibility, digital payment adoption, and consumer reliance on online platforms, especially during and after the COVID-19 pandemic period.



Figure 3. Number of users of remote banking services in Uzbekistan from 2019 to 2024 [11]

The line graph illustrates the number of users of remote banking services in Uzbekistan from 2019 to 2024. Overall, the chart shows a consistent and significant increase in the number of users over the six-year period, highlighting the growing adoption of digital banking in the country.

In 2019, the number of users stood at approximately 10.2 million. This figure rose moderately to around 13 million in 2020. However, a more pronounced increase can be observed in the following years. By 2021, the number of users had grown to 18.7 million, marking a rise of nearly 6 million compared to the previous year. The upward trend continued in 2022, with the figure reaching 28 million, indicating a surge of almost 10 million users.

This growth accelerated further in 2023 when the number of remote banking users reached over 39.3 million. By 2024, the user base expanded even more sharply to approximately 49.4 million. In total, the number of users nearly quintupled between 2019 and 2024, reflecting a widespread digital transformation in the banking sector.

To conclude, the data demonstrates a strong and uninterrupted increase in the number of remote banking users in Uzbekistan, likely driven by improved digital infrastructure, enhanced financial technologies, and growing public trust and reliance on online banking services.

Ta'lim innovatsiyasi va integratsiyasi

Conclusion and suggestions. The statistical evidence highlights three clear trends in Uzbekistan's digital services. First, e-commerce is growing explosively. Annual e-commerce trade has climbed from negligible levels in the mid-2010s to multi-trillion-soum volumes by 2023, reflecting widespread internet adoption and changing consumer behaviour. Official sources indicate the e-commerce sector's contribution to GDP has expanded at hundreds of percent per year and shows no signs of slowing. Second, digital banking adoption is surging. The share of Uzbek households with remote banking access has risen dramatically, from around 10 million users in 2019 to nearly 50 million accounts by 2024 (a fivefold increase, as reported by the Central Bank and corroborated by industry studies). This indicates that most citizens now interact with banks digitally, reflecting both improved infrastructure and bank-driven initiatives during the COVID era. Third, tax revenues from foreign digital companies are rising sharply. Following the 2020 VAT law, receipts from global internet firms (Meta, Google, Apple, etc.) have become material: in mid-2024 alone they paid nearly UZS 48.4 billion – about 1.5 times more than in the first half of 2023. These three trends reinforce one another: as more Uzbek consumers shop online and use digital payments, foreign platforms generate more taxable transactions; meanwhile, banks are modernizing to handle this new digital money flow.

Overall, the convergence of booming e-commerce, ubiquitous digital finance, and effective taxation suggests Uzbekistan's economy is in the midst of a true digital transformation. The share of digital services in the economy is increasing, and the state is capturing new revenue streams as a result. However, challenges remain: literature and data both note that while growth rates are high, Uzbekistan still lags many peers in absolute ICT usage and exports. Ensuring that the gains from digitalization are widely shared (across regions, firm sizes, and demographic groups) will be a key policy task going forward. In the next section we outline specific policy and practical measures to sustain this positive momentum.

To build on these positive trends, Uzbek policymakers should consider a multifaceted strategy combining infrastructure investment, skills development, supportive regulations, and targeted incentives:

Accelerate Infrastructure Expansion. Continue expanding high-speed internet, especially in underserved rural areas. Prioritize fibre-optic and next-generation wireless coverage so that businesses and households nationwide can access digital services. Improve affordability by supporting lower-cost data plans and community network initiatives.

Enhance Digital Skills and Inclusion. Expand digital literacy programs in schools and vocational training, focusing on coding, e-commerce, and financial technology. Provide training and advisory support to SMEs and entrepreneurs to help them go online (e.g. digital marketing workshops, "how-to" guides). Promote gender-inclusive outreach to ensure women and rural residents can participate fully in the digital economy.

Support E-Commerce and Start-ups. Simplify registration and licensing for online businesses, and maintain favourable tax treatments for e-commerce sales (such as the current reduced rate on online revenue). Offer targeted grants or low-interest loans to tech start-ups and small e-tailers. Expand logistics capacity (e.g. warehousing, delivery services) through public–private partnerships so that online goods can be shipped more efficiently. Encourage development of domestic e-commerce platforms and payment gateways that cater to local needs and currencies.

Maintain Clear and Fair Tax Policies. Ensure that foreign digital service providers continue to register and comply with VAT obligations (through outreach and efficient enforcement). At the same time, monitor the impact of these taxes on consumers and businesses. Consider phased or threshold-based VAT rules for very small suppliers to avoid overburdening micro-entrepreneurs. Align Uzbekistan's tax rules with international standards (e.g. OECD digital tax guidelines) to give investors certainty. Transparency in how digital tax revenues are used can also build public trust.

Promote Fintech and Modern Banking. Encourage banks to innovate further by streamlining mobile app regulations and allowing new entrants (e.g. digital banks, payment service providers). Strengthen interoperability of banking platforms (for example, making it easier to send money between different apps and banks). Support the proliferation of cashless payment points (POS terminals, QR payments) so that citizens can transact digitally in more places.

Strengthen Cybersecurity and Data Protection. As more services go online, invest in cybersecurity infrastructure and consumer protections. Update laws and standards to protect user data and financial information. Public campaigns on safe Internet banking and fraud prevention can reinforce trust.

Foster Technology and Innovation Ecosystem. Invest in incubators and innovation hubs (building on the existing IT Park framework), and simplify regulations for technology export and foreign cooperation (for example, maintain tax incentives for IT companies). Encourage collaboration between universities, research institutes, and the private sector to develop high-value digital skills and homegrown software products. Consider special economic zones or visa programs (such as the IT Park visa-IT initiative) that attract international tech talent to Uzbekistan.

By pursuing these measures, Uzbekistan can sustain its digital momentum, deepen the impact of digital services on economic growth, and ensure that the benefits of the digital economy are widely realized across the country.

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