

Digital Economy of Uzbekistan in the Context of Regional Development: Prospects and Challenges

Key Messages

- The density of communication towers in the Republic remains very low (1 tower per 1600 inhabitants).
- Despite high levels of adult literacy, digital literacy remains at lower levels.
- In Uzbekistan, only 7% of adults use the internet for either to pay bills or buy something online.

The rapid development and wide dissemination of digital technologies have dramatically transformed both markets and societies. There is common consensus that free flow of information transforms into knowledge, thereby transforming socio-economic relations into the network space and forming information markets, which connect consumers, producers and intermediaries in the process of exchanging information. Therefore, turning ICT into the sources of economic growth will require overcoming a number of barriers that prevent ICT development in Uzbekistan



Infrastructure and Connectivity

Fostering digital economy in Uzbekistan is underpinned by common problems that are faced throughout the developing world. One of the major such problems is weak telecommunications infrastructure and connectivity. Due to low investment in ICT (2,8%¹ of overall investment in 2017), the density of communication towers in the Republic remains very low (1 tower per 1600 inhabitants). In contrast, in Kazakhstan, one such tower serves the ICT needs of 643 inhabitants and 235 in Russia. This results in poor internet and mobile services slowing down digital economic growth and increasing digital divide. Approximately 53% of total population of Uzbekistan experience persistent problems with coverage and using communication². Due to low quality of mobile and internet connection and the fact that only 27% of existing networks are built using fiber optics, it is planned to increase investment in ICT up to \$500 million in 2019³.

In addition, there is a significant gap between urban and rural areas in Uzbekistan in terms of 3G and 4G coverage. Specifically, there is no access to 4G or 3G in rural areas due to poor connectivity or instability of electricity supply. In terms of the connection quality, there are dropped calls, weak signals, delays in text messaging and network overload. As a result, internet accessibility in Uzbekistan remains below international average rates, international internet bandwidth per internet user is 5.5 kilobits, while in Kazakhstan and Russia the same indicator is 85.2 and 50.7 kilobits respectively⁴. Related evidence shows that internet

¹ <https://stat.uz/uploads/docs/investitsiya-yan-dek-2017ru1.pdf>

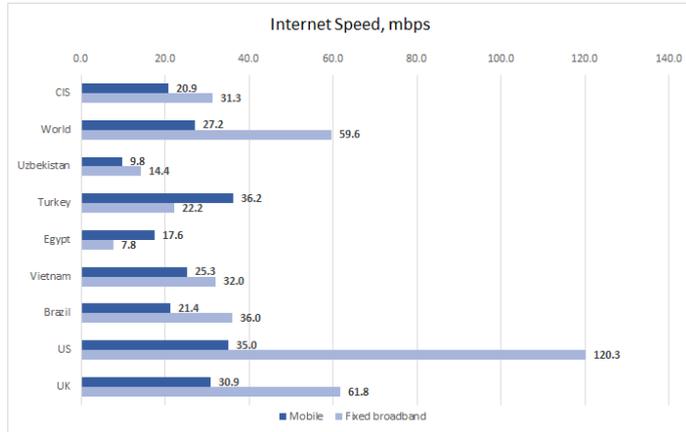
² <https://www.spot.uz/ru/2019/02/18/monopoly/>

³ <https://www.gazeta.uz/ru/2018/09/19/ict/>

⁴ <https://www.itu.int/net4/ITU-D/idi/2017/index.html#idi2017economy-card-tab&RUS>

penetration positively impacts business and economic development⁵.

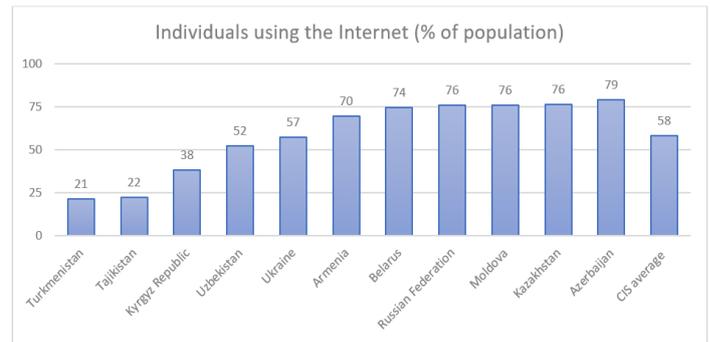
In order to increase the quality of ICT services and spur the role of ICT in the economy, the government has been implementing measures to reduce the cost of internet to general population and private sector. However, both the average mobile and broadband internet speed remains below CIS and global average levels.



Digital Literacy (Human Capabilities)

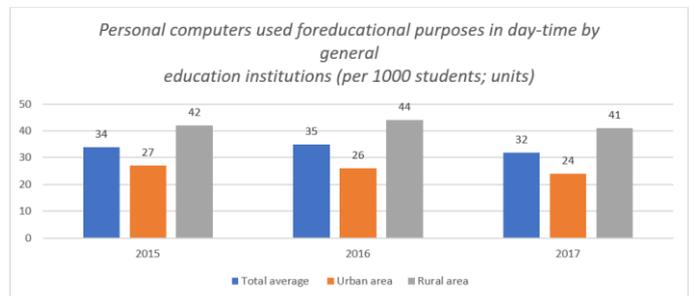
Uzbekistan is one few developing countries has absolute adult literacy rates (100% in 2016), compared to other countries with similar levels of GDP per capita (for example, in Lao PDR 84.66% in 2015)⁶ On the other hand, despite high levels of adult literacy, digital literacy remains at lower levels. This is also reflected within labor market trends, as a recent survey devoted to assess skills gap on Uzbek labor market shows that 68% of surveyed companies highlighted the importance of IT and computer skills as one of the key reasons to hire new applicants.

Possibly this could be explained by low levels of ICT use within schools and penetration within the population. In 2017, 32 students from 1000 have personal computers, whereas in 2015 this indicator was by 2 units more. This may be explained by the increased number of school enrollment within the Republic⁷. In a similar vein, only 52% of Uzbekistan's overall population use the Internet which is slightly below average levels for CIS member countries.

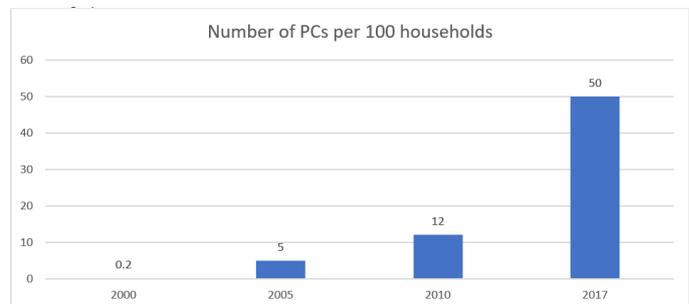


Source: Worldbank

Moreover, high-speed internet (to fibre-to-the-building (FTTB) broadband connectivity) is largely available in the capital of Uzbekistan and other large cities, while internet speed in provinces significantly lags behind.



Furthermore, computer shortage in schools is further exacerbated by the number of Uzbek households with personal computers, 50 PCs per 100 households⁸.



Lack of digital skills in Uzbekistan can be a serious barrier to digital transformation. The current level of digital skills taught in educational institutions mismatches desired level of skill-sets to build a future workforce. At the same time, the county needs to guarantee equal opportunities for its population to acquire the digital skills needed to be competitive in the digital age. In order to meet its transformation goals, Uzbekistan should integrate capacity building and transformation skills in national policies and strategies.

⁵ Manyika & Roxburgh, 2011; Czernich N. et al., 2011; Guerriero M., 2014; Clarke, G. R. et al., 2015. World Bank Database

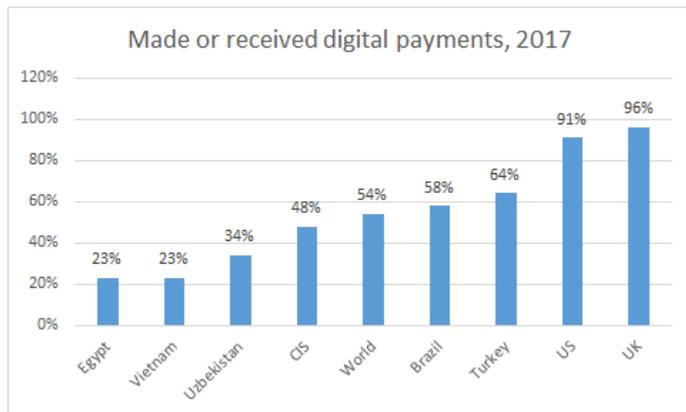
⁶ World Bank Database

⁷ <https://stat.uz/uploads/docs/tur-dar-17ru.pdf>

⁸ <https://stat.uz/ru/433-analiticheskie-materialy-ru/4977-uroven-zhizni-naseleniya>

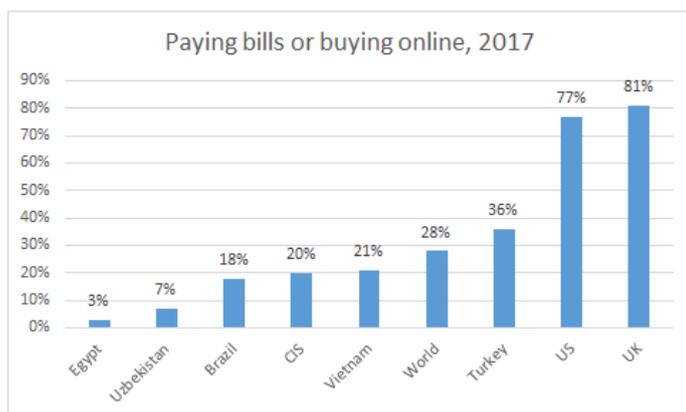
Digital Payments systems

The third barrier that prevents the growth of digital economy is underdeveloped digital payment systems. Cash-based economy still prevails in developing economies, obstructing digitalization. Specifically, 44% of adults in developing countries with an account (bank, credit union, microfinance institution, cooperative, post office or personal debit card) received or made digital payments in 2017, comparing to 91% of developed economies⁹.



Source: The Global Findex Database 2017

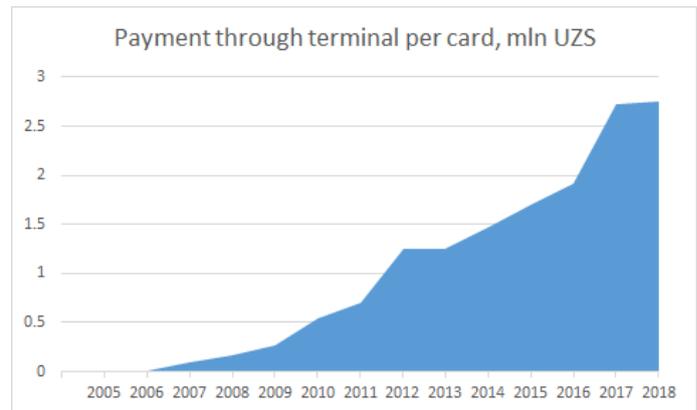
Currently, there is a number of digital payment systems existing in Uzbekistan (Click, Payme, M-bank, Upay, Humo, Oson, etc), which enables online. Despite those systems enable online payments for mobile connection, internet, public services, taxes and fees and other, only 34% of account owners made or received digital payments in 2017.



Source: The Global Findex Database 2017

In Uzbekistan, only 7% of adults use the internet for either to pay bills or buy something online. However, with the development of such e-commerce sites as arba.uz, lebazar.uz, express24, aviasales, allbiz.uz and others buyers can process online payment through mobile applications, smartphones, bank card, mobile payments. This mainly increases the development of

domestic e-commerce can benefit Uzbek economy by low capital intensity and high speed of capital turnover.



Source: Data.gov.uz

However, during the last 13 years average payment through terminal per card has increased rapidly, starting from 207 thousand to 2.7 million UZS. In 2018, total amount of payments through terminal was equal to 53 trillion UZS.

In 2018, after the approval of the presidential resolution¹⁰, which include measures to develop telecommunication infrastructure and provide the population of Uzbekistan with quality mobile communication and broadband access to the Internet, definite further steps are undertaken to digitalize the economy of Uzbekistan.

Moreover, the resolution states that there is inadequate level of online commerce and trading platforms in the Republic. Although, in 2005 the Parliament approved the "Law on Electronic Digital Signature", which became a basis for legal Internet transactions. Underdeveloped trade regulations still were the main barrier preventing development of eCommerce in the Republic of Uzbekistan.

Currently, on the site aimed at discussion draft of legal acts (regulation.gov.uz) was placed draft of the legal act on introduction of amendments and changes to the Law on "E-Commerce", where improved regulations in the field of electronic commerce are being introduced.

The Republic makes efforts to spur investments into ICT and technology development. In Tashkent, was launched Mirzo Ulugbek Innovation Center to support development of high-tech industries based on increased use of ICT and integration of educational

⁹ <https://globalfindex.worldbank.org/>

¹⁰ "On measures of further improving the sphere of information technologies and communications"

and scientific approach within the industry. Also, residents of this technopark are provided assistance to attract foreign investments.

Under the Center is planned to launch Blockchain Competence Centre to fully use the capability of the blockchain technology, increasing human resource potential and supporting domestic developers to master this technology.

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