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## Foreign Experience in the Implementation and Use of Digitalization of Public Administration

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**Abstract:** Digital transformation can only be recognized as a change based on digitalization of the content of public administration, leading to an improvement in the quality of public administration: reducing unjustified state interference, improving the effectiveness and efficiency of public administration. At the same time, both individual management procedures and the stages of the management cycle, state functions as a whole and their types can change.

**Key words:** transformation, digital economy, Internet giants, smart city, venture capital, e-government.

An analysis of world experience shows that digitalization of public administration is an effective way to increase the effectiveness of interaction between government agencies and society and reduce costs. Thus, Denmark's transition to providing public services only in digital format has brought tangible benefits, reducing the cost of some types of services by 50%, and the created feedback system has provided an opportunity to interact with all departments of the country through a personal account, carrying out business operations via the Internet in real time, annually saving about 10-20% of the budget.

A large-scale program of digital and technological optimization allowed the UK to save up to \$ 4.3 billion in 2016, including through public services portals and citizens' voting, increasing control over public procurement procedures, efficiency and optimization of state property using a single system that automatically checks the validity of expenses. In turn, the openness of the actions of officials contributed to the reduction of corruption and embezzlement in government agencies. Saudi Arabia uses big data to digitalize employment services, reduce bureaucracy, thereby saving up to \$1 billion a year.

According to the E-Government Plan adopted in the EU for 2016-2020, the improvement of online information services will reduce the time and resources needed by government agencies to respond to citizens' requests, will contribute to an annual reduction in the costs of each country in the amount of up to 500 thousand euros and from 4.4 to 50.4 billion euros in general for European business. The implementation of the "only once" principle in the provision of public services will save about 5 billion euros per year, and the full implementation of the "digital by default" strategy in the public sector (all services are provided only in digital format) can lead to an annual cost reduction of about 10 billion euros. For example, a program has been launched in the UK to convert 25 basic services to e-format, such as registration for voting and registration of cars. The United States is one of the world leaders in the field of digital economy, which is understood as "an economy that mainly functions with the use of digital technologies, especially electronic transactions carried out using the Internet."

The main agency responsible for the implementation of this program is the US Department of Commerce, which has established a special position of Director for Digital Economy. 12

departments of this department took part in the development of the program, and 4 of its structural divisions are key in its implementation: the National Agency for Telecommunications and Information (NATI), the National Institute of Standards and Technology (NIST), the US Patent Office and the International Trade Administration.

Since March 2016 A pilot program is being implemented to create positions of "digital attaches" responsible for trade in digital products and services in US trade missions abroad. In addition, in January 2017, the US Department of Commerce published a "Green Book" containing proposals for the development of the Internet of Things. The agenda of the US digital economy provides for:

- Promotion of a free and open Internet (Promoting a free and open Internet worldwide);
- promotion of trust and security in the Network (Promoting trust online);
- providing access to the Internet for employees, families and companies (Ensuring access for workers, families, and companies);
- promoting innovation through intelligent intellectual property rules and promoting a new generation of new technologies (Promoting innovation, through smart intellectual property rules and by advancing the next generation of exciting new technologies)

In addition, China ranks third in the world in terms of venture capital in various fields. In 2016, China ranked 1st in the world in terms of venture capital investments in the financial scientific and technical sphere (which in general was equal to the aggregate investment volumes of the USA and the UK, which took 2nd and 3rd place), in such areas as virtual reality, unmanned vehicles, educational technologies and devices, unmanned aerial vehicles and 3D printers - 2nd place, and in areas related to databases, artificial intelligence and machine learning - 3rd place in the world. According to a report by McKinsey, three main factors determine the development of the digital economy in China. Three Chinese Internet giants (Baidu, Alibaba, Tencent) have created an "ecosphere" favorable for digitalization, which continues to expand continuously. [4] Venture investments of three Internet giants in 2016 accounted for 42% of the total venture capital in China (for comparison: the volume of venture investments of the four largest American Internet companies - Facebook, Amazon, Google and Netflix - in 2016 amounted to only 5% of the US venture capital market. At the end of 2016 Beijing announced that China has reached the 2nd place in the world in terms of the level and scale of development of the digital economy. According to the director of the State Office for Internet Information Affairs, Ren Xulin, the scale of the digital economy in China in 2015 was estimated at 18.6 trillion. yuan (approximately \$2.7 trillion, or almost 14% of China's GDP). In April of this year, a report by the Tencent Research Institute indicated that the digital economy today is approximately 22.77 trillion. yuan (\$3.3 trillion), or 30.6% of China's GDP. According to forecasts of the Boston Consulting Group, by 2035, China's digital economy will create more than 400 million. jobs.

In recent years, the Republic of Uzbekistan has made significant progress in the introduction and use of information technologies in public administration and various sectors of the economy, including:

- provision of public services in electronic form and through the extensive infrastructure of public service centers;
- formation of a system of interdepartmental electronic interaction;
- creation of basic state information systems and resources;
- regulation of relations in the field of personal data;
- widespread use of electronic means of payment;
- the use of information technology in the real sector of the economy;

the beginning of the implementation of the "Smart City" and "Safe City" projects.

More than 25.6 thousand km of fiber-optic communication lines have been laid. More than 67 percent (22.5 million users) of the country's population have access to the Worldwide Internet Information Network (hereinafter referred to as the Internet), while the number of mobile users of the third and fourth generations has exceeded more than 16 million subscribers.

At the same time, the share of expenses for the support and development of information and communication technologies from national expenditures in 2019 amounted to only about 1.5 percent (\$7.8 million), which is a low indicator for the effective digitalization of the republic both in the short and long term. A similar minimum indicator for developed leading countries (Great Britain, Finland, Denmark, the Netherlands, Sweden, the USA, France, Norway, Japan) in this direction is more than 12 percent of all government spending.

Exports of telecommunications and information technology services in 2018 amounted to \$154.5 million (5.1 percent of total exports of services), and imports – \$47.1 million (2.1 percent of total imports of services). The share of ICT specialists among the employed population in 2019 was 0.5 percent, which is almost 7 times less than, for example, the average for EU countries (3.7 percent). At the same time, the demand for ICT specialists in the country is rapidly increasing, and therefore, the shortage of personnel in this area can lead to negative consequences for both the private sector and effective public administration.<sup>1</sup>

One of the most promising and dynamically developing areas of digital development is e-commerce. A serious impetus to its development was given by the decree of the President of the Republic of Uzbekistan "On measures for the accelerated development of e-commerce" dated May 14, 2018, which streamlined not only the rules for conducting activities in this area, but also defined measures for the consistent development of e-commerce in 2018 - 2021. So, if the volume of sales in the field of e-commerce in 2018 amounted to 41 billion soums, then in 2019 it reached 275 billion soums, and by the end of 2020 it exceeded 1.1 trillion soums.

Competition in the market is also growing: in 2019, the number of e-commerce entities did not exceed 150, and in 2020 it increased more than twice (320 units) and three times - according to the results of the first half of 2021 (475 units). The number of e-commerce entities included in the National Register of E-Commerce Entities is consistently increasing ([www.e-tijorat.uz](http://www.e-tijorat.uz)). This includes legal entities and individual entrepreneurs whose profits from sales through e-commerce account for at least 80 percent of the total volume of goods (services) sold by them. So, within three years, their number has more than doubled: from 42 subjects in 2018 to 90 by the results of the first half of 2021.

In order to further improve the sphere of e-commerce in Uzbekistan, in accordance with the Presidential Decree "On measures to approve the Strategy "Digital Uzbekistan-2030 and measures for its effective implementation" dated October 5, 2020 and the approved roadmap, it is planned to develop a new version of the Law "On e-commerce". The dynamic growth of EPIGU indicators is largely due to the introduction of an increasing number of relevant services for the population. So, today 257 types of service are provided through a Single portal. Of these, 143 are free, 131 do not require an EDS. By the end of this year, it is planned to increase their number to 300. In total, it is planned to introduce 135 new ones within two years, as well as simplify 100 types of electronic public services.

The basic principle of operation of the EPIGU is full availability on all digital media. In this regard, the mobile version of the portal is also actively developing. Today, 36 types of electronic public services can be obtained through the EPIGU mobile application, including 13 types without prior registration. In the future, it is planned to increase their number to one hundred. Among the advantages of the Single Portal are more affordable tariffs with a 10 percent discount. Thus, according to the results of the first half of this year, citizens' funds were saved in the amount of more than 18 billion soums. In addition, the EPIGU system has created the ability to carry out electronic transactions by linking the subscriber's bank card to the PaySys payment system.

<sup>1</sup><https://www.gazeta.uz/ru/2019/11/28/e-transformation/>

The projects implemented within the framework of e-government allowed us to achieve tangible results:

- by introducing electronic document management through an Interdepartmental Integration Platform, about 7 billion soums were saved;
- \* the introduction of the "Electronic Work Book" system saved about 2.1 billion soums;
- over 146.4 thousand people have been provided with jobs through the National Database of Vacancies;
- \* social assistance has been provided to more than a million families through the Unified Register of Social Protection system;
- more than 1.7 million certificates have been digitized using the Electronic Certificate information system;
- with the help of the information system "youth notebook", over 55.8 thousand people have been provided with work, 23.2 thousand have started their own business, 26.5 thousand have been trained in their specialty, 133.5 thousand have received land resources for the organization of the dehqan economy, 15.6 thousand have received social, financial and psychological support from the state.

The comprehensive reforms carried out in Uzbekistan to develop the e-government system have been highly appreciated by the international community. According to the UN research on the level of e-government development in 2020 and according to the rating of the Global Open Data Index, Uzbekistan was awarded the highest indicator (Very High OGD), taking 41st place among 193 countries of the world. Efforts to increase the openness and transparency of the activities of public services received a positive assessment. Thus, in the Open Data Inventory (ODIN) Rating, Uzbekistan, with a score of 63 points, rose 125 positions up and took 44th place in the world, becoming the leader in Central Asia. And according to the results of monitoring of the Open data Inception resource, Uzbekistan ranked fifth in the world in terms of the number of resources with open data. Digital technologies are being actively introduced into the banking sector. Thanks to the introduction of the Digital Bank system, the number of Internet banking users has grown to 16.8 million. and the number of online cards has reached 20.1 million units. The share of transactions through mobile applications of banks is increasing. In the first half of 2021, individuals conducted online conversion operations in the amount of 3.6 trillion soums, online microloans - 1.5 trillion soums and online deposits - 6.7 trillion soums. The main obvious advantages of digital technologies are remoteness and interactivity, which significantly saves time and financial costs. This is especially true for the private sector, where digital technologies open up new opportunities.

In conclusion, I would like to add that, in the issue of consistent implementation of high-quality digital transformations, the leadership of Uzbekistan relies on the education of highly qualified youth who possess information and communication technologies. In this context, educational reforms in the field of ICT are carried out in two main directions.

The first is the creation of a comprehensive system of continuous training of IT specialists within the framework of school, secondary special and higher education.

For this purpose, a Specialized school for in-depth study of subjects in the field of information and communication technologies named after Muhammad al-Khorazmiy was established in 2017. Taking into account the growing interest of young people in ICT, especially among schoolchildren, it was decided to gradually open specialized IT schools throughout the republic. In 2020, 14 specialized basic schools with in-depth study of computer science and information technology have already been created. In the period 2021-2023, it is planned to organize 205 such schools.

The school curriculum itself is being qualitatively reformed, enriching it with relevant ICT directions, including by including disciplines from the mega-project "One Million Programmers" in the subject "Informatics". Starting from the 8th and 9th grades, students will be taught programming and design, from the 10th grade - robotics. Within the framework of secondary special education, IT personnel are trained by six academic lyceums at the Tashkent University of Information Technologies named after Muhammad al-Khorazmiy. Technical schools for training personnel in the field of ICT will be created in each region of the country. There are already three technical schools in operation today. This year, 11 more technical schools are planned to be organized in the regions. Specialized training in the field of ICT in the framework of higher education in Uzbekistan is carried out by three universities: TUIT, as well as branches of Inha and Amity universities in Tashkent. In recent years, qualitative changes have been taking place in the TUIT curriculum. So, in the 2020/2021 academic year, TUIT opened a new bachelor's degree program - "Digital Economy", as well as 8 new master's degree programs. In May of this year, the sixth branch of TUIT was opened in the city of Nurafshon. Work is underway to organize a Digital University together with leading international educational organizations Coursera, EPAM and Open University Malaysia. Also, a joint faculty of Information Technologies of the Tashkent University of Information Technologies named after Muhammad al-Khorazmiy and the Belarusian State University of Informatics and Radioelectronics has been operating within the university since 2019. Graduates of the joint faculty receive two diplomas at once, and the best of them have the opportunity to find employment in the Republic of Belarus.

A branch of one of the leading universities of the Republic of Korea, Inha University, operates in Tashkent. And in September 2019, a branch of Amity University opened in Tashkent – one of the largest universities in India with offices around the world. As part of the second direction of educational reforms, the Ministry of ICT is carrying out comprehensive work on the extensive training of IT specialists across the republic. Among all the projects, the megaproject "One Million programmers" ("One Million Uzbek Coders") should be highlighted. This project is aimed at wide distance learning of young people and the population in relevant IT specialties through a specialized online portal ([uzbekcoders.uz](http://uzbekcoders.uz)). Currently, over 476 thousand participants have registered as part of the project. More than 177 thousand of them have already successfully completed courses and received certificates. For the current year, it is planned to increase the number of project participants to 550 thousand, and the number of graduates to 200 thousand. Digital technology training centers are also contributing, which are being created in accordance with the third of five important initiatives put forward by the head of the republic: the organization of effective use of computer technologies and the Internet by the population and youth. Today, 147 such centers are already operating in the republic, where more than 40 thousand students have been trained. By the end of this year, their number will be increased to 205. Among the important state initiatives aimed at training young people in IT specialties, we can note the introduction from June 1, 2021 of the procedure for reimbursing up to 50 percent of the costs of obtaining an international IT certificate.

### **List of used literature**

1. Digitalization: history, prospects, digital economies of Russia and the world  
Accessmode:<http://www.uppro.ru/library/strategy/tendencii/cyfrovizaciya-trend.html>.
2. Bank B. et al. Boston Consulting Group, 2016. - Access mode:  
<https://hightech.fm/2017/05/31/china-ecommerce> (accessed: 29.08.2017).
3. <https://www.gazeta.uz/ru/2019/11/28/electronic-transformation/>
4. <https://mitc.uz/ru/pages/communication>
5. Sh. Sadikov. Uzbekistan is on the threshold of new digital changes. Pravda Vostoka No. 173, August 27, 2021,
6. Ochilova, H. F. (2020). Restoration of tourism in Uzbekistan after the pandemic. Tourism and Hospitality, (2), 70-75.

7. <https://www.marketresearchfuture.com/reports/online-travel-market-5182>
8. <https://welcomecitylab.parisandco.com/Startups/Startups-Incubated>
9. A.Abduvokhidov. Digitalization of education intelligent information systems. "Global Science and Innovation 2021: Central Asia" No. 3(14). October 2021 series "Pedagogical Sciences"
10. D. Abidova. Promising measures for the development of sustainable tourism in the context of the COVID-19 pandemic. Academic Journal of Digital Economy and Stability Volume 4, 2021 ISSN 2697-2212 Online: <https://academicjournal.io/>