2020 WAS AN IMPORTANT YEAR FOR UZBEKISTAN IN THE DEVELOPMENT OF THE ICT SECTOR

Kukieva S. S.
Lecturer of the Mathematics Department
Fergana State University named after Al-Kharezmiy
Fergana, Uzbekistan

Akhunova D.
4th year student of mathematics
Fergana State University named after Al-Kharezmiy
Fergana, Uzbekistan

Uzbekistan is a state located in central Central Asia, between the Amu Darya and Syr Darya rivers. It borders Kyrgyzstan to the east, Kazakhstan to the northeast, north and northwest, Turkmenistan to the south and southwest, Afghanistan to the south and Tajikistan to the southeast. Uzbekistan is landlocked.

The importance attached to information and communication technologies is illustrated by the fact that 2020 has been named the Year of Science, Education, and the Digital Economy. Accordingly, a roadmap was developed for all digital reforms.

In accordance with the Decree of the President of the Republic of Uzbekistan on March 2, 2020 "On the State program for the implementation of the Strategy of action in the Five priority areas of the Republic of Uzbekistan in 2017–2021 years of the" Year of Science, Education and Digital Economy "set a task to provide social facilities – secondary schools, pre-school educational institutions and health facilities with high-speed Internet connection.

This, in turn, plays an important role in providing young people with up-to-date knowledge and quality and responsive services to citizens.

On this basis, extensive work on the development of telecommunications infrastructure of the republic is carried out. To date, 1 million broadband Internet access ports have been installed, bringing their total number to 3 million units. In addition, 32 thousand kilometers of fiber-optic communication lines have been laid.

As a result of the modernization of existing production facilities, the throughput capacity of backbone telecommunications was doubled in the

regions and quadrupled in the districts. In order to expand the scale of services provided, more than 5 thousand mobile communication base stations were installed, thus bringing their number to 32 thousand units. Cell phone coverage reached 98 percent of the population, including high-speed coverage of 90 percent. In order to meet the needs of the population in services of broadband mobile communications, the Uzbektelecom branch – "Uzmobile" modernized more than 3,000 base stations of mobile communications.

In the free economic zone "Djizak" together with partners from the Republic of Korea was built a plant worth 11 million dollars with a total capacity of up to 50 thousand kilometers of fiber-optic communication cables.

To date, about 7,906 general education schools, 5,182 pre-school educational institutions and 2,988 health care facilities have been provided with high-speed fiber-optic-based Internet access in the course of the development of telecommunications networks.

In order to further develop the telecommunications infrastructure, projects totaling 153.7 million dollars were approved. If before that moment the work on the expansion of 2G-generation mobile networks was mainly carried out, then today's projects are aimed at increasing the coverage of the population with 3G/4G-generation mobile services. In particular, only this year 3,012 2G-base stations were upgraded to 3G/4G-standards, and 2,933 new stations were installed.

The tariffs for telecommunications services are also consistently falling. So, compared with last year the tariff for the external Internet channel for operators and providers has fallen in price by 36.1 percent and is now 45.0 thousand soums per 1 Mbit / s (4.3 dollars).

Great attention is paid to the introduction of the most modern technological solutions in the ICT sphere. Starting in September 2019, two domestic mobile operators, UZMOBILE and Ucell, began testing 5G technology, and 15 base stations have now been put into operation in Tashkent.

An important part of digital reforms is the interaction of citizens with government agencies through an electronic platform, the provision of modern electronic services to the population by the state.

For this purpose, the Unified Portal of Interactive Government Services (https://my.gov.uz) was created. Today there are 218 electronic public services through this portal. Since the beginning of the year, 45 new services have been added to the EPISU system. In particular, such services as online payment for housing and utilities, electronic doctor's appointment,

registration at the place of permanent and temporary residence, registration of cadastral passport, receipt of state subsidy for a mortgage loan, were transferred into electronic format, and now they can be used through the portal. More than 3.1 million applications for electronic government services have been received since the beginning of the year, an increase of 9 percent over last year.

Another important condition for the consistent development of information and communication technologies is the creation of comfortable conditions for the production of competitive products and services, their promotion in the domestic and foreign markets, the stimulation of innovative developments.

For this purpose, the Software and Information Technology Park (IT Park) was created. At present, 416 companies are its residents, employing more than 5 thousand specialists. It is noteworthy that 14 of them were created with the participation of foreign capital, and 54 – from scratch.

Together with the foreign expert involved the concept of building IT Park infrastructure facilities with a total area of 408 thousand square meters was developed, which will increase the number of residents of the technology park. Agreements on the organization of territorial branches of IT Park residents were concluded with local khokimiyats, and network schedules of tasks for each project were approved.

Regional branches of IT Park – Digital city in the city of Andijan, branches in Margilan Fergana region, Gulistan Syrdarya region and Kashkadarya, Djizak and Samarkand regions have already been put into operation. Today there are 10 residents in the Andijan branch of IT Park, and 7 residents in Margilan.

Consistent work on the development of the postal sector is being carried out. In particular, Uzbekistan Pochtasi JSC introduced 10 new services this year.

Tashkent University of Information Technologies named after Muhammad al-Kharazmiy has more than a thousand professors and teachers, including 57 doctors and 259 candidates of science. In 2020 16 doctoral dissertations were successfully defended. In 2020 professors and teachers of TUIT and its regional branches published 103 scientific articles in international journals Scopus, Web of Science.

In the academic year 2020/2021 at TUIT opened a new undergraduate direction – "Digital Economy", as well as 8 new directions for the master's degree.

The corresponding decree of the Cabinet of Ministers opened a joint Uzbek-Belarusian faculty in the structure of TUIT. In the 2019/2020 academic year, 505 students successfully completed their first year in the department. For the 2020/2021 academic year, there are 500 students enrolled in the joint department.

About 1,500 students are currently enrolled at TUIT and its branches.

In 2020 TUIT and its regional branches carried out 66 research works for the total sum of 14.7 billion soums: 9 fundamental for 2.4 billion soums, 21 practical for 4.6 billion soums, 8 innovative for 4.2 billion soums and 28 projects based on economic contracts for 3.5 billion soums.

In 2019, TUIT launched two new projects under the European Union's Erasmus+ program worth a total of 998,000 euros. These projects are expected to be completed in 2019-2021. There are currently 9 projects under the Erasmus+ program worth a total of $1.7 million.

TUIT has two scientific councils to defend doctoral dissertations in seven areas in the field of ICT.

Amity University in Tashkent was organized by presidential decree on January 7, 2019. The university, which began its 2019/2020 academic year, has 17 professors and faculty members with PhD degrees. In the 2020/2021 academic year, 384 students enrolled based on online admissions.

Inha University in Tashkent currently has 51 professors, lecturers, and assistants. The total number of students at the university is 1,506. Entrance examinations for the academic year 2020/2021 to the university were also conducted entirely in the online format, with 420 students enrolled.

In December 2019, the new building of the Muhammad al-Kharazmiy Specialized School for Advanced Studies in Information and Communication Technology for 880 students was fully commissioned. At present, the school has 62 teachers. Five of them are PhD holders, 14 are teachers of higher category, 17 are 1st category teachers, 11 are 2nd category teachers and 20 are qualified specialist teachers.

The quota for admission to the Specialized School in 2020/2021 was 330, and the school's entrance exams were held online for the first time.

In order to create conditions for the widespread and effective use of computer technology and the Internet by the population and young people, their broad involvement in business activities in the field of ICT in the third area of the Five Initiatives launched by the President of the Republic of Uzbekistan, 102 Training Centers for Digital Technology were opened throughout the country.

Thus, the rapid development of information technology and communications in Uzbekistan opens up new horizons for socio-political, social and economic progress in the country.

Literature:

1. Decree "On the formation of the Ministry of Innovative Development of the Republic of Uzbekistan" dated 29.11.2017.

2. Kukieva S. S., Raxmatova O. Sufficient conditions for uniform convergence of random series International Journal on integrated education. Volume 3, Issue I, Jan 2020. 34.

3. Kukieva S. S., Akhunova D. Finding the correlation coefficient by example. Materials of the international scientific conference "Trends in the development of condensed matter physics". FarDU, Vilnius University. Fergana, May 25, 2021.

MULTIMEDIA AS A LEARNING TOOL
AT THE MARITIME ENGLISH LESSON

Kulikova I. Yu.
PhD, Senior Lecturer,
English Language Department
Kherson State Maritime Academy
Kherson, Ukraine

Multimedia is a useful educational tool for teachers and students. The computers and IT aids consumption can enable greater flexibility in teaching and learning processes. Learning apps may provide a big benefit during the distance learning, assessing and interactive processes. It prompts to be more flexible and self-organized in learning process.

Many researches of the various branches and fields define the term multimedia in different way. Multimedia is a combination of more than one media type such as text (alphabetic or numeric), symbols, images, pictures, audio, video, and animations usually with the aid of technology for the purpose of enhancing understanding or memorization [6, p. 280]. It supports verbal instruction with the use of static and dynamic images in form of visualization technology for better expression and comprehension [3; 4].