

THE DEVELOPMENT ISSUES OF INFORMATION- COMMUNICATION TECHNOLOGIES IN UZBEKISTAN

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Abstract

The sphere of information and communication technologies (ICT) is one of the fastest growing sectors in the world economy, including Uzbekistan. In this article, the development issues of information-communication technologies in the Republic of Uzbekistan were reviewed in addition to it was learnt foreign experience. As well as, the main indicators related to information-communication technologies sphere in the Republic of Uzbekistan were thoroughly analyzed. All in all, based on inferences, recommendations were made for the improvement of this field in Uzbekistan in the future.

Keywords: Information, technology, economic growth, services, modernization

INTRODUCTION

Today, the sphere of information and communication technologies (ICT) is one of the fastest growing sectors in the world economy. This process of economic growth has changed dramatically in other areas and the intellectual humanity continues to influence the formation of a new kind of economy based on labor productivity, data use and knowledge.

Approved by the decree of the President of the Republic of Uzbekistan dated February 7, 2017 № -4947 " for 2017-2021 in accordance with the strategy of actions for the five priority areas of development of the Republic of Uzbekistan, one of the priority areas of economic development and liberalization, increasing the competitiveness of the national economy by deepening structural reforms the role of first place is the further development of modern high-tech services, as well as road transport infrastructure, modernization and diversification of

production, the introduction of information and communication technologies in the economy, social sphere, management system.

LITERATURE REVIEW

According to the studies, the first data on Information Technology highlighted above is academic M.T. Urazboev Introduced in science, for the first time. At the Institute of mathematics named after Romanovsky, the Department of Computational Engineering was opened. Academic S.S.Ghulomov also conducted a number of research works on the development of Information Technology. According to academic V.Q.Qobulov, “Economic cybernetics is becoming a new science that studies socio-economic processes, based on machine technologies.” In the law of the Republic of Uzbekistan “On Informatization” on the development of information technologies in enterprises, “On the electronic government”, “On the Electronic Digital Signature” are also spelled out in the laws. Currently, Economist scientists of our country are improvement of innovative activities in the field of information and communication sphere as well as N.Aripov, A.M. Kadirov, K. Shakirova, M.A. Makhamova, Sh.A.Tursunov and other scientists are illuminated. In general, the expert scientists cited work on the introduction of information and communication technologies into enterprises, which necessitates the need to carry out research within the framework of the topic of effective development of information-communication technologies in enterprises. This in turn determines the relevance of the article.

RESEARCH METHODOLOGY

This research is focused on the measures aimed at improving the development of information technologies in the enterprises. Such research methods as comparative analysis of the practical data, statistic tables and other relevant data have been widely used in the research. Basing on the research results appropriate proposals and recommendations have been developed.

ANALYSIS AND RESULTS

Technology encompasses a huge body of knowledge and tools that ease the use of economic resources as a way to produce goods and services efficiently and innovatively. Technological progress is essential to economic growth and development, and the more advanced the technology available, the more quickly the local and global economy can improve.

The increasing use of ICTs by institutions has also dramatically impacts public services and their delivery, both via Internet websites and portals, mobile and especially smart phones, social media and kiosks situated in places accessible to the public. ICT-enabled public service delivery is having a significant impact, as it is much more affordable for an increasing number of

users and more cost effective for governments than traditional supply channels. ICT use also enables more targeted, personalized and up-to-date service design and delivery. That gives the service user greater benefits than the sole reliance on traditional service channels, in terms of access, convenience through 24/7 availability, savings in time, and the cost of travel to physical premises such as offices. It also opens up the possibility of new types of public services for achieving the SDGs by 2030.

At the same time, specific threats have arisen from the way technology, especially ICTs, is developing and being used by governments and society. As digital technology companies advance, power may be concentrated in ways that current legal and regulatory frameworks are unable to address. Governments and regulators often struggle to understand the pace of change, let alone formulate relevant policies, prompting the question of what technology companies are accountable for and to whom. Such questions raise concern in various regions of the world. In relation to security, privacy and control, the rise of digital connectivity is leading to increased cyber-security concerns, for example with the hacking of critical infrastructures, including those that control power supplies and transportation networks. It is becoming increasingly important to consider the security, ownership and usage of the massive amount of personal data which is created and shared, as well as to protect the identities of both individuals and organizations.

At the 72nd Session of the United Nations General Assembly, a new agenda item on the impact of rapid technological change on the achievement of the Sustainable Development Goals (SDGs) underscored in a resolution the persistent and growing digital divides in science and technology among and within developed and developing countries.

The text also addresses the issues of ensuring an inclusive and gender sensitive approach and promoting the empowerment of women and girls. It is widely agreed by countries that inclusiveness speaks to the notion of empowerment and the principle of non-discrimination and is reflected in the pledge to leave no one behind. There is similarly a broad accord in the Addis Ababa Action Agreement 3 on the need to create a transformative framework that contains concrete deliverables, and to craft a cohesive strategy ensuring parity in data access and use across regions. World leaders agree that strengthening cooperation in technology, infrastructure and social protections to drive prosperity is key to realizing inclusive and sustainable development.

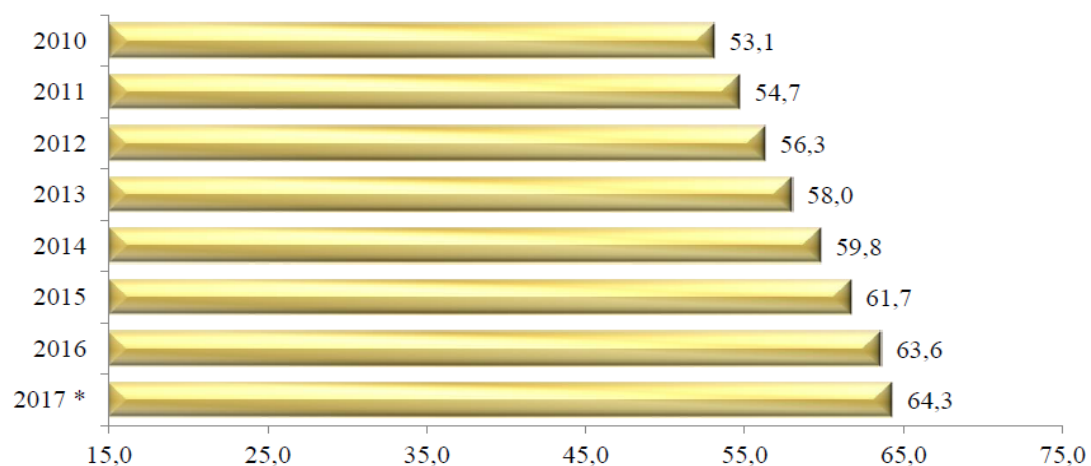
In Uzbekistan, a number of measures have been implemented to the modernization of information and communication technologies, projects with high potential associated with innovative methods in all spheres of life.

Today our republic is recognized as the most dynamically developing country in the sphere of ICT. In 2017, according to the International Telecommunication Union ("Measure of the information society"), when compared with 2016, our country took 95 place, rising eight points in the ICT Development Index. In 2016, the share of the ICT sector in the Republic GDP amounted to 2,6%. The high share in ICT accounts for the services sector. Above, we examined the share of information and communication technologies in gross domestic product over the years.

The share of communication and information in the economy is achieved through the provision of technical capabilities of the population to the telecommunications network, the provision of quality services on their basis, the complete transition to digital telephone communication and television systems.

As of January 1, 2018, about 6.4 thousand enterprises and organizations (except peasant and peasant farms) were involved in the activities of "Information and communication". It can be seen from the picture 1 that the number of people occupied by the following type of activity is equal to 64,3 thousand people.

Figure 1. Dynamics of employment of employees in the sphere of "information and communication" thousand, people



Currently, the demand for communication services in the Republic, along with financial services, transport, trade and catering services, is growing day by day.

In all trunk, territorial and interstactic types of communication, fiber-optic lines are concentrated, which is the result of the introduction of modern technologies into the telecommunication system. The expansion of the coverage zone of such communication lines make it possible to increase the range of ICT services offered in the market, increase the quality of services for the production of videotelephony services, Internet Television, high-speed internet, NS-channel broadcasting.

At the same time, today the level of development meets the requirements of our time, digital technologies have been introduced to all inter-city and international scale, as well as local telephone stations, telecommunication networks have been reconstructed. Internet access channels have been radically expanded. This, in turn, has allowed for the last five years to reduce the cost of channels offered by operators and providers by six times.

Active use of ICT has been widely used with the latest types of equipment and technology infrastructure being jailed with high manpower potential. This work is based on improving the quality of living standards of people, improving their daily lives, ensuring effective use of the latest technologies in public administration.

The volume of communication services in 2017 amounted to 7168,1 billion soum increased by 28,5% compared to 2016 year (at current prices). The largest volume is mobile services (3881,0 billion. soums); internet including data transmission network (1808,8 billion. international telephone communication services (911,1 billion soums).

Table 1. Communication services by type of activity

	Volume, billion. soum	Growth rate compared to last year, %
The proceeds from the service, Total	7168,1	128,5
Including:		
Postal communication	238,0	121,8
Telegraph communication	1,5	109,0
International, long distance telephone communication	911,1	168,0
Local phone connection	101,1	108,2
Special communication	8,7	126,8
Transmission and reception of television programs	109,3	135,3
Transmission and reception of radio programs	9,5	159,8
Recording, control and protection of radio waves	69,8	126,0
Mobile communication	3881,0	118,4
Data transfer network with the addition of the Internet	1808,8	140,1
Including internet network	1533,3	161,7
Other communication services	29,3	101,7

In the 2016 year, when the content of communication services by types of activity was studied, “Technology of postal communication” services were 3.3 percent, telephone communication (international, long distance, local) services were 14.10 percent, mobile communication services

were 54.2 percent, while other communication services(with the addition of the internet) accounted for 25.25 percent.

The share of services rendered to the population in the total volume of communication services was 71,2%. The volume of communication services rendered to the population in 2017 amounted to 5104,7 billion. the sum was up, and compared to 2016 year the figure increased by 25,1% (at current prices).

Table 2. The dynamics of communication services, including those shown to the population, bln.sum

	Volume, billion. soum	Growth rate compared to last year, %
The proceeds from the service, Total	5104,7	125,1
Including:		
Postal communication	44,9	90,7
Telegraph communication	0,8	101,0
International, long distance telephone communication	30,2	100,6
Local phone connection	64,9	104,2
Radio programs	74,0	148,1
Mobile communication	3450,8	120,4
Data transfer network with the addition of the Internet	1438,7	141,0
Including internet network	1251,4	163,9
Other communication services	0,4	203,1

The largest share in the total volume of communication services on the scale of Regions was occupied by Tashkent City (42,1 %), Samarkand (7,7 %), Fergana (7,4 %), Andijan (5,9 %), Namangan (5,4 %), Kashkadarya (5,2 %) regions. The lowest share was observed in Syrdarya (1,9 %), Tashkent (2,5 %), Jizzakh (2,5 %), Navoi (2,7 %), Khorezm (3,6 %), Surkhandarya (3,9 %), Bukhara (4,4 %) regions and the Republic of Karakalpakstan (4,4%).

CONCLUSION

According to the decree of the president of the Republic of Uzbekistan dated February 19, 2018 № PD-5349, a number of shortcomings have been shown in the development of information and communication technologies in the country. Consistent work is carried out in the country on the development of modern information technologies and communications, the creation of a holistic

system of electronic public services, the introduction of new mechanisms for the interaction of state bodies with the population.

At the same time, a number of systemic problems and shortcomings in the sphere of management and introduction of information technologies and communications have hindered the rapid development of this sphere, the provision of quality information services. In particular: first, the infrastructure of Telecommunications was not sufficiently developed, the remote population of the country remains without access to telecommunication networks, the quality of mobile communication and internet networks does not satisfy the needs of the population;

Secondly, due to the fact that the unified technological approach to the introduction of information technologies and communications into the system of Public Administration is not effectively implemented, departmental information systems and resources are introduced separately, as a result of which the process of integrating them into a single information space is complicated;

Thirdly, in e-commerce, there is not enough attention to the introduction of integrated trading and marketing platforms, internet shops, payment systems, as well as logistics systems, this is one of the reasons why the development of economy and entrepreneurship, the involvement of foreign investors are suspended;

Fourth, the vulnerable Organization of the work of ensuring information security and information protection in public information systems and resources increases the possibility of unauthorized access to information, violation of the integrity and confidentiality of databases;

Fifth, the leaders of many government agencies and organizations are not sufficiently paying attention to the issues of implementation of modern information technologies and communication projects aimed at increasing the quality and speed of services provided to the population, eliminating bureaucratic procedures, reducing the circulation of paper documents;

Sixth, modernization of postal services and logistics systems, introduction of qualitatively new methods of activities of the national operator of postal communication and increasing the position of its activities in the market are not taking impressive measures;

Seventh, the current system of training, retraining and professional development of personnel in the field of Information Technology and communications does not take into account the rapid pace of development of IT technologies, as well as the inability to organize effective communication with leading educational institutions of foreign countries in order to introduce advanced methods of teaching;

Eighth, it is mentioned that systematic work is not carried out on in-depth study and introduction of the experience of e-Government, e-commerce, electronic public services

provision system, their transparency and openness, as well as countries with much advancement in the development of telecommunication infrastructure.

On December 13, 2018, the decree of the president of the Republic of Uzbekistan No. 5598 “on additional measures for the introduction of digital economy, electronic government and information systems into the state administration of the Republic of Uzbekistan” was adopted. According to the decree, consistent work is underway to simplify the transition from administrative procedures to our country, to improve the quality of the population and improve the system of modernization and development of electronic government, including the system of public services, aimed at improving the investment and business environment. Along with this, a number of unresolved problems and shortcomings that prevent the provision of digitization and the transition to the digital economy are maintained, as stated in the decree.

The fact that the infrastructure of the “electronic government system does not develop at a satisfactory level is one of the main problems that the broad application of modern information and communication technologies in the provision of public services and interdepartmental electronic cooperation has shown. It is also mentioned that the non-availability of impressive coordination and a unified technological approach in the implementation of the “Electronic government” system leads to a disproportionate use of resources. At the end, this article can give the following recommendations to the development of information - communication technologies in the future:

1. The development of human resources management in the communication organizations;
2. The rise of Internet speed;
3. To attract of foreign investment for the development this field in the future.

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