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SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

## International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 04 Volume: 84

Published: 30.04.2020 <http://T-Science.org>

QR – Issue



QR – Article



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## IMPLEMENTATION OF EFFECTIVE MANAGEMENT OF INFORMATION AND COMMUNICATION TECHNOLOGIES AS AN IMPORTANT FACTOR OF INNOVATIVE DEVELOPMENT

**Abstract:** This article describes the importance of further improving the system of innovation management in the field of information-communications. Also, the indicators of development of the sphere of information and communication technologies were analyzed.

**Key words:** information and communication technologies, innovation development, information products, internet users, management.

**Language:** English

**Citation:** Nurimbetov, R. I., & Saatova, L. E. (2020). Implementation of effective management of information and communication technologies as an important factor of innovative development. *ISJ Theoretical & Applied Science*, 04 (84), 930-934.

**Soi:** <http://s-o-i.org/1.1/TAS-04-84-168> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.04.84.168>

**Scopus ASCC:** 1710.

### Introduction

The processes of globalization taking place in the world, in turn, play an important role in opening the door to great opportunities for the sustainable development of each country's economy, as well as increasing the level of global competitiveness. In this regard, the role of modern information and communication technologies in the strategic organization of the management of the national economy of each country is growing more than ever.

### Materials and Methods.

According to some data, the sector is currently expected to grow by more than 9 percent in 2020,

compared to about 5,5 percent of global GDP. For example, in the Republic of Korea, the share of information and communication technologies in GDP is more than 11,8 %, in Sweden – 7 %, and in the United States – 6,8 %. For example, in the Republic of Korea, the share of information and communication technologies in GDP is more than 11,8 %, in Sweden – 7 %, and in the United States – 6,8 %. Therefore, special attention is paid in the Republic of Uzbekistan to the consistent development of information and communication technologies, further improvement of its legal and organizational framework, study of the experience of advanced foreign countries, including South Korea, effective use of its achievements [1].

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As a result of the study, table 1 shows the number of mobile and traditional internet users per 100 people in 2019 worldwide.

**Table 1. Number of mobile and traditional internet users per 100 people in 2019\***

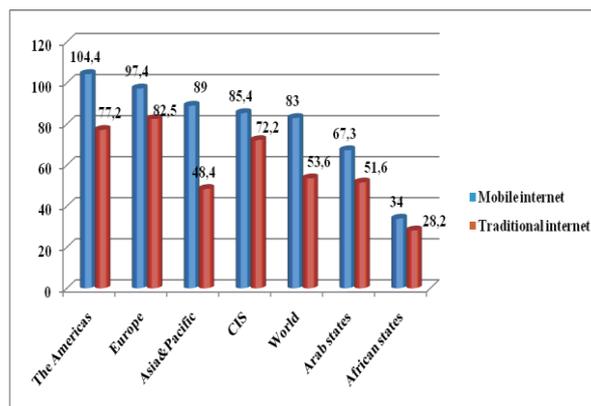
№	Regions	Mobile internet	Traditional internet
1.	The Americas	104,4	77,2
2.	Europe	97,4	82,5
3.	Asia & Pacific	89	48,4
4.	CIS	85,4	72,2
5.	World	83	53,6
6.	Arab states	67,3	51,6
7.	African states	34	28,2

*\*Developed by the authors on the basis of statistics from the International Telecommunication Union*

According to international telecommunications data, in 2019 the number of mobile internet users worldwide will reach 83 out of every 100 people. The number of traditional internet users is 53,6 per 100 people. This is a clear proof that the internet is more accessible to the population than traditional internet users.

If we analyze the countries of the world, the number of mobile internet users in America in 2019 was 104,4 per 100 people, which is the highest in the world, while the number of traditional internet users was 77,2 per 100 people. In European countries, mobile internet was 97,4 per 100 people. Traditional internet users account for 77,2. Asian countries are slightly lower than European countries in both types of services, with 89 mobile internet users, while traditional internet has a very low figure of 48,4.

Mobile internet users in the CIS countries are also slightly lower than in Asia, at 85,4 per 100 people. The number of traditional internet users was relatively high at 72,2. This is evidenced by the fact that the demand for landlines in the CIS countries has been met, and the population uses traditional internet, not mobile internet. The lowest rates for this type of service are in the Arab and African countries. Mobile internet was 67,3 per 100 people, while traditional internet was 51,6. In African countries, the number of mobile internet users was 34, while traditional internet was 28,2 (Figure 1). These indicators show that the prevalence of mobile communications and the level of use of its services vary from country to country, and these indicators also affect their role in the global economy today.



**Figure 1. Diagram of mobile and traditional internet service users per 100 people in 2019 according to international telecommunications data\***

*\*Developed by the authors on the basis of statistics from the International Telecommunication Union*

The analysis also shows that today there are significant differences in the number of mobile and landline users in the world (Table 2).

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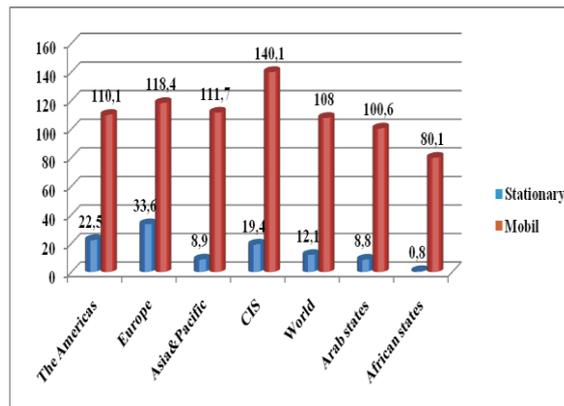
**Table 2. Number of mobile and landline users per 100 people in 2019 \***

№	Regions	Stationary	Mobil
1.	The Americas	22,5	110,1
2.	Europe	33,6	118,4
3.	Asia&Pacific	8,9	111,7
4.	CIS	19,4	140,1
5.	World	12,1	108
6.	Arab states	8,8	100,6
7.	African states	0,8	80,1

*\*Developed by the authors on the basis of statistics from the International Telecommunication Union*

Table 2 shows the number of mobile and landline users per 100 people in 2019, with European countries having the highest number of landline telephone users at 33,6 per 100 people, while landline telephone users

in the United States at 22,5 per, while the number of mobile services was 110,1 per compared to 100 people.



**Figure 2. According to international telecommunications data, the number of mobile and landline users per 100 people in 2019\***

*\*Developed by the authors on the basis of statistics from the International Telecommunication Union*

According to Figure 2, fixed telephone services worldwide accounted for 12,1 per 100 people, while mobile services accounted for 108, respectively. In America landline services account for 22,5 people per 100 people, while mobile phones account for 110,1 people, or 10,1 more than the norm. While the highest rate in the world for the provision of fixed communication services was 33,6 people per 100 people, it can be seen that the level of mobile services is 118,4 people or 18,4 people more than the norm, respectively. It should be noted that the demand for mobile services is stronger in Asian countries than landline services. For example, in the CIS countries, the number of mobile phone customers worldwide was 140,1, while the lowest in Africa was 0,8 per 100 people, while the number of mobile phone services was 80 respectively. Corresponds to 1 person. And in

conclusion, we can see that today the rate of introduction of information and communication technologies in African countries is very low.

Based on the above analysis, we can say that today in no country in the world there are no networks and industries that have not been penetrated by modern information technologies. Regardless of which front, modern information technology is becoming an important factor in innovation in terms of convenience, transparency and speed.

From this point of view, it is no coincidence that the Republic of Uzbekistan, which is an integral part of the world economy, pays special attention to the widespread introduction of modern information and communication technologies in all spheres to ensure economic stability, social welfare and living standards. This is due to the fact that from the first

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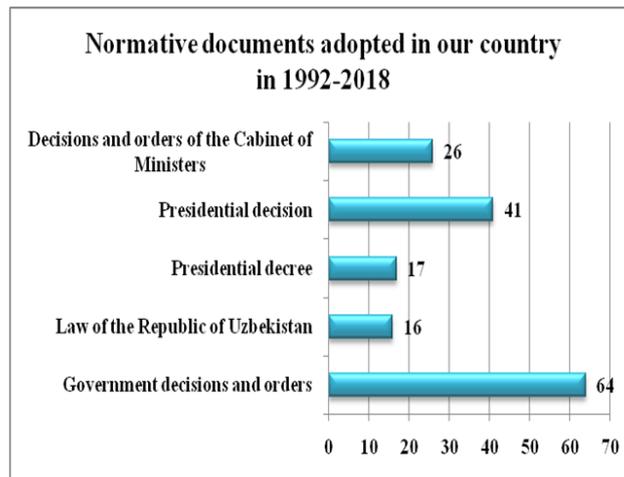
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years of independence, especially in recent years, the transition of Uzbekistan's economy to a new stage of development is considered one of the most important issues on the agenda [2].

In this regard, we can see, first of all, the adoption of a number of legal documents aimed at

forming the institutional, legal framework of the industry, improving the organizational and managerial system (Figure 3). As a result, the country is gradually introducing information and communication technologies in industries and sectors of the economy and in the practice of public administration in general.



**Figure 3. Number of regulatory documents adopted in the Republic of Uzbekistan between 1992-2018\***

*\*Developed by the authors.*

In general, the introduction of the latest positive trends and innovations of information and communication technologies in the life of society in our country is always in focus [3]. The adoption of a number of laws, decrees and resolutions of the head of our state and other documents is a solid basis for this. First of all, attention is paid to the formation of the legal framework of the industry. In particular, 16 laws, 58 Presidential decrees have been adopted over the past years, 64 government decisions and orders, 26 resolutions and orders of the Cabinet of Ministers of the Republic of Uzbekistan have been adopted. This is evidenced by the adoption of a number of normative and legal acts “On Telecommunications”, “On Electronic Document Management”, “On Electronic Digital Signature”, “On e-Government” [4; 5; 6].

It should be noted that the development and widespread support of information technology is one of the important strategic tasks of our state for the near and long term. This can be seen in the speech of Shavkat Mirziyoyev at the joint session of the Oliy Majlis dedicated to the inauguration of the President of the Republic of Uzbekistan. It was noted that the more active involvement of advanced technologies and information and communication systems in all spheres is important in more than doubling the country's GDP by 2030 [7; 8].

As noted above, world practice shows that information and communication technologies are a key factor in increasing the competitiveness of each country, the collection and generalization of large

flows of information, creating a wide range of opportunities for strategic management [9]. It is obvious that modern information technologies and software products are becoming one of the most important sectors in the development of each country's economy as one of the most profitable industries [10].

It is the effective use of information and communication technologies that will create favorable conditions for greater transparency in the activities of government agencies and businesses, the active participation of citizens and civil society institutions, the media in important governance processes [11]. At the same time, life itself shows us that the widespread use of information and communication technologies will improve e-commerce, increase the competitiveness of all sectors of the economy, ensure the rights and freedoms and interests of citizens, as well as improve the quality of life.

### Discussion and Conclusion.

In general, the widespread introduction of modern information technology in practice is an important tool in ensuring the transparency of the reform process, the establishment of an effective mechanism for the exchange of information between the state and society. At present, special virtual receptions of government, ministries and departments, as well members of parliament have been established in the country to establish effective communication with the population serves for effective implementation.

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Based on our research, it can be considered necessary to further improve the system of effective management of modern information and communication technologies in the country:

- accelerate the construction of fiber-optic lines to further improve the quality of information exchange in remote areas of the country;

- development of the infrastructure of large-scale telecommunication networks through the construction of the necessary equipment for the operation of telecommunications networks;

- further improvement of the work of JSC "Uzbektelecom" on the installation of new communication stations in rural areas, the development of information and communication infrastructure for mobile communication terminals, etc.;

- increase the number of services provided to users of internet services and mobile internet services, as well as improve the quality of services by increasing the bandwidth of internet providers;

- further accelerate the introduction of information and communication technologies in practice by accelerating investment in the construction of modern communication stations, antennas and communication equipment (direct foreign, domestic, DHS mechanism, etc.).

In general, one of the most important tasks today is to steadily increase its share in the country's GDP by achieving the rapid development of this sector, which plays an important role in the economy of the country.

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