



## Stages and Trends of the Development of the Digital Economy in Uzbekistan

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**Abstract:** this article focuses on the development of the digital economy in our country, Uzbekistan, and the elimination of existing problems. Using the convenience and new opportunities of the digital economy. The need for our country to be among the developed countries. Special attention is paid to the development trends and features of the digital economy.

**Keywords:** digital economy, digital technologies, hidden economy, communication, infrastructure, e-commerce, investment, logistics, communication operators, innovation.

Currently, we must not stop working to be among the developed countries of Uzbekistan. The digital economy is more developed in foreign countries than ours. Digitalization of the economy is important for the development of this country. Today, the development of the digital economy is closely related to the development of all sectors.

The digitalization of the national economy has already become an important component of the economic development of most countries and is becoming the institutional basis for sustainable growth in production, increasing the competitiveness and living standards of citizens of Uzbekistan in the near future.<sup>1</sup>

In the Republic of Uzbekistan for 2018-2020. significant work has been done in this direction at the legislative, executive and sectoral levels: Decrees of the President of the Republic of Uzbekistan were signed: "On additional measures to introduce the digital economy, e-government, as well as information systems in the public administration of the Republic of Uzbekistan" on 13.12.2018; 01/08/2019 No. UP-5614 on approval of the "Road Map" of the main directions of structural reforms of the Republic of Uzbekistan for the period 2019-2021; "On approval of the Strategy "Digital Uzbekistan 2030" and measures for its effective implementation" No. UP-6079 5.10.2020; July 3, 2018 Decree of the President of the Republic of Uzbekistan No. PP-3832 "On measures to develop the digital economy in the Republic of Uzbekistan" was adopted; the Program "Digital Uzbekistan 2030" is being developed. Based on the Decree of the President of the Republic of Uzbekistan dated January 10, 2019 No. UP-5624, the Project Management Center for e-government and digital economy was created under the national project management agency under the President of the Republic of Uzbekistan. The Economic Council for Structural Reforms in the country for the period 2019-2021 has been established; the "electronic government" system is being widely implemented to ensure openness, transparency and efficiency in all areas; construction of the Technological park of

<sup>1</sup> Абдуллаева, М. (2020). Теоретические аспекты определения, развития цифровой экономики и её зарождение в Республике Узбекистан. in Library, 20(3), 21–27.

software products and information technologies has begun in the city of Tashkent; in 2020-2024, it is planned to organize branches of the technopark in 14 regions, triple the number of residents and bring the number of employees to 40,000; the issue of renaming the Ministry for the Development of Information Technologies and Communications into the Ministry of Digital Development was submitted for public discussion.<sup>2</sup>

According to the data of the World Bank, 66 percent of the total wealth of our country - 365 trillion US dollars - corresponds to human capital, that is, mainly to the level of knowledge of a person. In the USA, this figure is 77% of the national wealth - 95 trillion dollars. That's why the head of our state this year in his Address specifically mentioned the idea that "The greatest wealth is intelligence and knowledge, the greatest inheritance is good education, and the greatest poverty is ignorance!"

In the light of all these trends, the concepts of "digital economy" and "knowledge economy" are becoming inseparable. Science and the new knowledge it produces are the central core on which almost all aspects of the modern economy are "strung", based on the scientific and technological paradigm - general principles and standards of development based on innovative sources of growth associated primarily with the use of breakthrough results of fundamental and applied research. This paradigm includes the widespread use of the most modern methods and technologies for research and development, including on a digital basis.<sup>3</sup>

#### Digital economy - development trends and features

The implementation of electronic government elements and support of the digital economy have a strong place in Uzbekistan's near-term development plan. First of all, this concerns the tasks of further increasing the share of electronic document exchange and gradually transferring a certain part of state services to electronic form through State Service Centers. Telecommunications infrastructure plays an important role in this process.

Information in society and economic processes has become the main resource. In the hands of a person, it is transformed into knowledge, and socio-economic relations are increasingly being transferred to the network space.

The key factor in digital transformation in the activities of market entities is the development of digital culture. Currently, we are increasingly confronted with such words: "cryptocurrency", "virtual currency", "digital money", "bitcoins", "electronic wallets", "alternative "money", "blockchain", etc. The digital economy touches every aspect of life: healthcare, education, internet banking, government. It has been developed in all highly developed countries and is beginning to develop in Uzbekistan.<sup>4</sup>

#### Advantages of the digital economy

Interest in the digital economy has grown significantly due to significant changes in society and the economy. Modern technologies and platforms have helped businesses and individuals to reduce costs by minimizing personal communication with customers, partners, and government organizations, as well as making communication faster and easier. The result is a digital or electronic economy based on network resources.

The word "digitalization" is actually a new term, which refers to the involvement of IT solutions in the process of innovative management and administration, and as a result, the use of information technologies in all systems, from Internet of Things to e-government. .

The main source of the digital segment of the economy is the growth of the transactional sector. In developed countries, this indicator makes up more than 70 percent of GDP and combines public

<sup>2</sup> Абдуллаева, М. (2020). Теоретические аспекты определения, развития цифровой экономики и её зарождение в Республике Узбекистан. in Library, 20(3), 21–27.

<sup>3</sup> Абдуллаева, М. (2022). Introduction of digital technologies into educational processes: theory and practice. in Library, 22(1), 133-141.

<sup>4</sup> Абдуллаева, М. (2020). Теоретические аспекты определения, развития цифровой экономики и её зарождение в Республике Узбекистан. in Library, 20(3), 21–27.

administration, consulting and information services, finance, wholesale and retail trade, as well as services (utility, personal and social).

Today, regular videoconferences have become commonplace, which a few years ago were a dream, or a performance. The launch of the unified corporate computer network "E-education" changed everything for universities. The formation of a common resource base has also started due to the creation of digital libraries, systematically replenished with textbooks, methodological manuals, multimedia courses and other materials.<sup>5</sup>

The higher the diversification and dynamics of the economy, the greater the circulation of unique information within and outside the country, and the greater the information traffic within national economies. Therefore, the digital economy develops rapidly in markets where the number of participants is large and IT services are widespread.

In particular, it creates unlimited convenience for transport, trade, logistics and similar industries that actively work with the Internet. According to some researchers, the share of the electronic segment in them is close to 10% of the GDP and provides employment for 4% of the population. Most importantly, these indicators will grow steadily.

Undoubtedly, the effectiveness of the digital economy is influenced not only by the coverage of information technologies and the availability of infrastructure, but also by standard economic criteria such as the business environment, human capital, and successful management instruments. Therefore, economic development relies on them, which means that these criteria are as important as before in the development of the digital economy.

The digital economy is being created before our eyes

Today, old and new companies that use IT tools to create new services and business models around the world are creating strong competition for companies that are leaders in most industries.

According to forecasts, in the coming years, the macro-economy is expected to be strongly dependent on manufacturers relying on the criteria of "lean production", additive, nano and biotechnology. In this regard, the volume of information considered necessary for rational management will also increase, and the structure of production and civil communication, business and government bodies will undergo serious changes.

The digital economy assumes unprecedented digitalization, robotization, when robots will perform many functions of human life, up to the functions of lawyers, judges, investigators, doctors, teachers. As for Uzbekistan, this fact cannot but affect the labor market: the day is not far off when only the best employees will keep their jobs in companies, otherwise the principle of "leave or develop" will be applied, because in the competition between technology and education, those who stimulate the improvement of skills, who are able to take advantage of digital opportunities, win. Now the competitiveness of organizations, firms, industries, regions, countries as a whole depends not only on the efficiency of using available personnel, but also on the availability of human resources.<sup>6</sup>

The following are indicated as the main conditions and factors for gradually entering the path of social and economic development:

- implementation of electronic government and digital city concepts due to informatization and integration of public administration bodies and municipal services;
- mass production of products of the new technological generation (such as driverless cars, etc.);
- implementation of ideas related to the construction of "smart" and ecological houses with the help of unique decoration and building materials;

<sup>5</sup> Абдуллаева, М. (2022). Introduction of digital technologies into educational processes: theory and practice. in Library, 22(1), 133-141.

<sup>6</sup> Абдуллаева, М. (2022). Introduction of digital technologies into educational processes: theory and practice. in Library, 22(1), 133-141.

- widespread promotion of alternative forms of employment through outsourcing, self-employment, etc.;
- creating professional networks that serve to search for workers-freelancers to perform certain tasks.

It is necessary to refine the legal mechanism and create a multi-level system for the protection, use and protection of the results of intellectual activity.<sup>7</sup>

All of the above allows businesses to reduce costs with the help of modern platforms that integrate goods and electronic services in production and management. First of all, this issue concerns the integration of service orders, joint use of resources, selection of counterparties, conduct of electronic trade, payments and others.

The technological digital environment is an "aquarium" in which legal entities and individuals establish a completely new dialogue for collaborative activities. Information technologies provide an opportunity for enterprises to adopt a completely new, faster pace of work and to diversify the form of services and products. In addition, researchers are also talking about the introduction of short shelf life products into the market.

When it comes to the service industry, information technology solves many daily tasks, making large-scale operations faster, cheaper, more convenient, and without intermediaries.

In the course of the study of the problem, the views of various authors on the definition of the digital economy are given, the features of its development and its constituent elements are clarified. It was also found that most researchers give their definitions of the digital economy, referring to one or another digital technology: e-commerce, the Internet of things, a platform, etc. But the digital economy is complex and multifaceted, and when each expert describes one facet and draws a conclusion on this, it may not always be correct, since the digital economy is being replaced by digitalization or some other processes. In this case, our position on this issue is that the digital economy is systemic.<sup>8</sup>

E-commerce, internet banking and other such modern directions are developing day by day. As a result, automated network services (such as a quality website or mobile application) are replacing middlemen in business in many industries to increase revenue.

As a result, business can significantly reduce the prices set for services, and in the macroeconomic direction, individual production and false employment indicators will increase. Also, directions such as crowdfunding and crowdsourcing are now included among new economic technologies.

As a rule, the more developed a country is, the higher the share of the service sector in the structure of GDP and in the number of employees. The innovative economy within the framework of the scientific and technological paradigm also differs from the traditional one in that in the process of its functioning, the share of intellectual property in the creation of new property is growing at a higher rate. Intangible assets, such as theoretical knowledge, scientific and technical developments, and, above all, innovations, become a determining factor in the development of production.<sup>9</sup>

According to economists, at the same time, as a result of such changes, the economy based on the practice of extracting additional value is changing to the economy of cooperation and sharing of interests ("sharing-economy"). This gives rise to hope that market competition will actively give way to mutually beneficial cooperation and cooperation, and at the same time, it will move from vertical communication to equal relations and complementary services.

<sup>7</sup> Абдуллаева, М. (2020). Инновационная экономика Республики Узбекистан: достижения, проблемы. in *Library*, 20(1), 12–15.

<sup>8</sup> Абдуллаева, М. (2020). Теоретические аспекты определения, развития цифровой экономики и её зарождение в Республике Узбекистан. in *Library*, 20(3), 21–27.

<sup>9</sup> Абдуллаева, М. (2022). Introduction of digital technologies into educational processes: theory and practice. in *Library*, 22(1), 133-141.

Scientists, engineers, designers, designers and other specialists, as well as entrepreneurs, become the main actors of the economic system based on digitalization, ensuring the introduction of scientific developments that are the locomotive of the development of other industries. In the model of such an economy, the main added value is created with the help of the "knowledge" factor, the consumption of the "land" production factor is reduced. In the new conditions, the key to economic superiority is leadership in the production of high-tech products and control over the flow of information.<sup>10</sup>

According to estimates, this will be reflected in the increase in the number of services and the growth of the volume of electronic trade in services.

### **The economic importance of the digital sector**

It is noted that digital technologies will dramatically change more than 50 percent of economy-related sectors. This vision is based on the fact that information technologies and digital platforms will dramatically change business models, eliminate intermediaries and optimize processes for their efficiency.

We believe that economic mechanisms are important in complementing market mechanisms and increasing their efficiency. The economic mechanism can include taxes, government contracts, tariffs, licenses, subsidies, credit and control over valuation mechanisms. It is clear that the economic mechanism and the market mechanism are interdependent and complementary.<sup>11</sup>

According to the calculations of the World Bank, a 10% increase in the number of high-speed Internet users can increase the annual GDP from 0.4% to 1.4%.

Today, innovative technologies are used to prevent unemployment. The advantage of the development of the digital economy is to create a favorable opportunity. The shortage leads to an increase in unemployment. This should be analyzed. In Uzbekistan, taking into account the social orientation of the state policy, the issues of employment and employment of the population have always been and remain relevant and are currently an important problem for study.<sup>12</sup>

Also, the share of the digital economy in the country's GDP is considered to be an indicator of its importance.

In 2010, the Boston Consulting Group estimated the scale of digitalization at \$2.3 trillion (4.1 percent of GDP) for a group of 20 countries. If this trend continues, after 10-15 years the share of such an economy in the world GDP will approach 30-40%.

In developing economies, about 1 percent of the population is employed in the IT sector, a sector that creates more jobs than others. However, the rise of the IT sector is driving the creation of jobs in other sectors that are adopting new technologies (for every 1 new job created in the IT sector, there are 4.9 jobs in related sectors).

The digital economy boldly opens new horizons for entrepreneurs and self-employed people.

Often, the contribution to the development of the IT sector creates the basis for the development of the economy, the creation of new jobs, the emergence of new types of services for people and businesses, and the reduction of costs within the framework of e-government projects.

At the same time, the overall effect resulting from the implementation of information technologies turns out to be less effective than expected and not distributed in the same order.

<sup>10</sup> Абдуллаева, М. (2022). Introduction of digital technologies into educational processes: theory and practice. in Library, 22(1), 133-141.

<sup>11</sup> Azamjonov Ulug'bek Usmonjon o'g'li; Sayidjonov Sanjarbek Nodirjonovich. THE ECONOMIC MECHANISMS AND IMPLEMENTATION OF SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP. Aca. Glo. Ind.Res. 2021, 2, 427-431.

<sup>12</sup> Abdullayeva M. (2020). Problems of the youth labor market in the modern world and Uzbekistan: ways to overcome them. Жамият ва инновациялар – Общество и инновации – Society and innovations Issue -1, №02 (2020) / ISSN 2181-1415. 79 page

Getting the most out of such investments requires a good understanding of how technology interacts with other factors, called "analog complements" in a World Bank report.

Among them:

- ✓ a regulatory legal framework that supports an active business environment and allows businesses and people to use digital economy technologies for competition and innovation, cost reduction, as well as improving living conditions;
- ✓ full-fledged skills in the use of information technologies in business management and civil servants;
- ✓ institutions (public and private) that provide consulting services in the field of information technology use are included.

It would not be an exaggeration to say that the announcement by the President of the Republic of Uzbekistan of 2018 as the Year of Support for Active Entrepreneurship, Innovative Ideas and Technologies was an important step towards the innovative development of Uzbekistan.<sup>13</sup>

At the same time, the transition of the economy to an innovative development path is associated with existing problems.

It is very difficult to enumerate the effects created by the digital economy, therefore, it is difficult to fully evaluate the connections that the access to electronic services and metadata provides to economic objects. Therefore, justifying the importance of investments in information, especially at the state level, is a difficult task. It is a self-evident phenomenon that it is impossible to always calculate gigabytes of information created in one or another field.

### **Digitization is a companion of new economic technologies**

The communication models that have emerged as a result of the integration of information platforms give impetus to the emergence of new economic technologies (YIT).

IT is information that is integrated into a single technological platform to create, transfer, store and reflect information products (data, ideas and knowledge) that serve a purpose to organizational management systems and minimize transaction costs for communication between economic agents. is a collection of new "customizable" tools and methods in all aspects of processing.

The main principles of IT:

- creation of radically new business models;
- rational integration of various IT services and application of methods of their use in organizational and technological processes in the real economy sector;
- minimization of transaction costs and material resources used in production.

The urgency of the problem of introducing innovations in the field of public administration in Uzbekistan is connected, first of all, with the strategy for the development of a new statehood, which, on the one hand, is aimed at creating a strong state capable of solving major internal and external problems, on the other hand, at the formation of a legal, democratic, socially oriented and controlled by the people of the state education. Responsibility for resolving these issues society, as a rule, lays on public authorities. Therefore, the formation of a democratic, socially oriented and at the same time capable of withstanding external and internal challenges of the state largely depends on the quality of public administration, on the level of professionalism of managers, including in the issue of introducing innovations, which contributes to the growth of innovative activity in the country. Analysis of the data of the Statistical Committee of the Republic of Uzbekistan allows us to trace changes in the dynamics of enterprises producing goods, works and services for 2012-2019.<sup>14</sup>

<sup>13</sup> Абдуллаева, М. (2020). Инновационная экономика Республики Узбекистан: достижения, проблемы. in Library, 20(1), 12–15.

<sup>14</sup> Абдуллаева, М. (2021). Роль государства в управлении инновационными процессами: международная практика, опыт Республики Узбекистан. in Library, 21(1), 14–17.

YIT develops in the current economic realities on the basis of digital technologies. Earlier, technologies related to production, trade, and finance have gradually improved, but now emerging ITs are focused on horizontal relations (self-organization and singularity), innovative entrepreneurship (self-development), information engineering (self-improvement) and serves as a basis for auto-formalization (automatic structure) of economic processes.

Data centers and modern IT platforms for information systematization and analytical processing form the true basis of IT. In this case, the development of the direction of providing services related to management consulting and business analysis is of great importance. New institutions, such as information and consulting services and state development agencies, serve as the organizational basis for improving the business environment.

### **Digital technologies and risks**

The most active driver of the digital economy is the state. He is the main customer and consumer of the digital economy. For example, China spent about 9 billion dollars for these purposes. The Internet resource Alibaba, with a market capitalization of more than 210 billion dollars, proved that these investments were correctly directed.

A country that wants to get the maximum benefit from digitization should create and support the market for the necessary high-tech products. At the same time, while developing private applications for public administration, important industries and enterprises in parallel, it is also important to keep the instruments that control the main platforms of the electronic economy in their tracks.

The Ministry of Innovative Development was created, the main the directions of which are: the introduction of innovations in state and public construction; in the sector of the economy; Agriculture; social development; system of environmental protection and nature management; initiating, coordinating and stimulating the introduction of advanced technologies.<sup>15</sup>

In particular, Japan lost the leading positions in the digital economy due to the fact that although it purchased technologies, it could not create its own manufacturing networks in this direction and could not maintain the level of technical developments at a consistently high level.

South Korea, on the other hand, invests 1% of the national budget in e-government and e-intermediation (for e-commerce activities and public procurement), generating 10-15 billion dollars annually and receiving income that covers costs 30-40 times. In particular, this result was achieved by organizing call centers in the public and private sectors, creating mobile applications and reengineering state-owned internet platforms.

Training of personnel working with information systems in state administration remains one of the important areas of this field. For example, in the 70s of the last century, in Belgium, special mobile groups of specialists (including teachers and students from specialized educational institutions) were organized to train employees of state bodies and configure systems directly for them at their workplaces. .

Another subtle aspect of the digital sphere is that the development of complex digital systems and their practical application requires a serious and detailed approach. It may seem strange to you, but often programming (in itself) is not really a sufficiently technological phenomenon. Therefore, the programmer who solves your tasks will act according to how he understands the task in many respects. Most important solutions are left unexplained in this process because each side assumes they are self-evident.

Currently, we are moving to an innovative way of teaching online in educational institutions. Despite the fact that, other things being equal, traditional education still wins, at the same time, the listed

<sup>15</sup> Абдуллаева, М. (2020). Инновационная экономика Республики Узбекистан: достижения, проблемы. in Library, 20(1), 12–15.

disadvantages can be turned into some costs, since any problem never remains unresolved, especially since the new trajectory of the life path proves that there is no turning back.<sup>16</sup>

The accompanying documents related to the programs are sometimes compiled in a fragmented manner. As a result, in the process of working with the product, the customer loses control over the development that he ordered and paid for. In this case, the budget allocated to information projects does not provide for the costs of providing services, despite the fact that they are extremely important.

Because the digital economy covers the whole world, any government project related to information and digitization should be studied comprehensively and based on a single coding system, identifying economic and management related information.

The most important and at the same time the most difficult stage in the development of the digital economy is the simplification of the business environment and the maximum reduction of the costs of people and business communication with the state.

It is necessary to use the digital economy to destroy the informal economy. Giving this problem more publicity and informing through official Internet resources about real statistical data. The lack of free access to real statistics does not make it possible to make a specific calculation of the number of people involved in the shadow economy, such an analysis would clarify the number of people participating in the shadow sector of the total number of employees in the country's economy and establish a more accurate percentage of the share of the shadow economy in GDP. Such facts can give rise to a low degree of trust in the government, which can become fertile ground for the formation of the shadow sector of the economy.<sup>17</sup> After that, it is required to establish an inter-organizational (multi-agent) dialogue within the framework of the public and private sectors of the parties.

The most important part of this process is the digital economy platforms that move from "one-to-one" and "one-to-many" communication formula to "many-to-many" formula. Shifts in this area will automatically dramatically change the situation in the real sector of the economy (and stimulate structural reforms in these areas) through the development of consulting and technical organizations suitable for small and medium-sized businesses with state support, and help create conditions for an innovative economy. will give.

## Conclusion

To sum up, for the development of every country, there must be new changes, ideas, and new procedures that change from time to time. The prospect of our country's development also depends on the development of the digital economy and the level of coverage of digital technologies. As the leader of our state said, "building the economy requires a lot of money and work. But we should not be afraid of this and form a digital economy. We must start this work with responsibility and determination from today. Every person is responsible for the development of the country. Each of us should take this issue seriously." Some elements of the digital economy are already working successfully in the life of our country. In particular, mass transfer of documents and communications to digital means, authorization of electronic signatures, and communication with the state are also being transferred to electronic platforms. Of course, digitization in this field should not be stopped, and the transition to the digital economy should be carried out in other areas as well.

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<sup>16</sup> Абдуллаева, М. (2020). Дистанционное обучение: мировая практика, достижения, риски, перспективы. in *Library*, 20(4), 231–235.

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