Fundamentals of the scientific and practical model of electronic government in the context of the digital economy

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Abstract: This article highlights the basics of the scientific and practical model of electronic government in the digital economy and provides information about them. The digital economy has a long list of unique features that cannot be found in other types of economies. Free goods and services like Wikipedia, email services like Gmail, and digital maps like Google Maps are all components of the modern digital economy with enormous economic values. However, they cannot contribute to national accounts, as indicators such as GDP only measure the monetary value of all final products at a price (Brynjolfsson and Collis, 2019; Brynjolfsson et al., 2019). In economic terms, therefore, we say that the digital economy has produced a ton of very valuable, but virtually cost-free and zero-marginal-cost services that cannot be captured in standard measures of economic efficiency. In this section, I outline some of the ways in which the digital economy has contributed to improving the economy.

Key words: digital economy; industry -4; digitization; smart economy; smart business; business model; transformation; e-economy; internet speed

Introduction

In the context of globalization, the digital economy has a direct impact not only on external migration, international trade and capital movements, tourism, foreign investment and other areas, but also on the economic growth of countries through IT development.According to experts, the transition to a digital economy is the main criterion for accelerated development of the state and society in general [3].

Mankind is going through an important period associated with the change of sectors in the economy, the digitization of this process, mobilization, the introduction of artificial intelligence in the industry, as well as the global pandemic. The development of a new digital economy is even more relevant in an environment

where nearly a quarter of world GDP is projected to be in the digital sector by 2022.

However, the President of the Republic of Uzbekistan Sh. Mirziyoyev admitted in his address to the Oliy Majlis that, “although the country has risen by 8 positions in 2019 according to the International Information and Communication Technologies Development Index we are still lagging far behind. It is also true that, most ministries, departments and enterprises are far from digital technologies” [1]. The digital economy is to include Uzbekistan in the list of democratic, economically developed countries as an accelerator (driving force) leading to the acceleration of our country's integration into the international arena. Therefore, in order to shed more light on the theoretical foundations of digital economy, it is necessary to focus on the views of scientists, to analyze in depth the factors influencing its development and to reveal its specific features. It is necessary to study the current situation in our country through analytical conclusions.

Also the infinite number of elements that make up a digital economy defines the complexity of interpreting this term. In our view, the digital economy requires a broader understanding of the complex integrated system of flexible technologies and communications of this intellectual society.

Literature review

The digital economy in our country consists of a deeper study of the theoretical views on it, the need to highlight the most important aspects, features and characteristics. This will allow us to effectively address the pressing economic issues in digitilization. The digital economy provides the transition to a knowledge economy, the main factors of which are the knowledge, skills, abilities and capabilities of the staff. The implementation of the process of digitization of the economy consists of the continuous development and introduction of innovative digital technologies and the transition of society and the economy to a new stage of development. This, in turn, will accelerate the integration of our country into the international arena by the development of the digital economy.

Therefore, economists need to focus on the theoretical knowledge of the concept of digital economy to the economic concept. In particular, the concept of “digital economy” was introduced into scientific use in 1995 by Don Tapscott in his book Digital Economy. He understood it as an “economy based on digital technologies” [4]. The emergence of the term “digital economy” is also associated with Nicholas Negroponte, a researcher at the Massachusetts Institute of Technology, who used

the concept of “e-economy” that year, explaining its differences and advantages over the rapid development of information and telecommunications technology.
The broadest definition of the digital economy in the Russian literature is given by Vladimir Ivanov: "the digital economy is a virtual environment that complements our reality"[4]. However, this definition of the digital economy does not represent it as a separate industry.
Roman Meshcheryakov, another professor at the Russian Academy of Sciences and a doctor of technical sciences, suggests two approaches to understanding the digital economy: extended and classical. In the broadest sense, "digital economy is economic production and the use of digital technology", in the classical way: "digital economy is an economy based on digital technology, and at the same time it is more accurate to describe only the field of electronic goods and services" [5].
The Organization for Economic Co-operation and Development (OECD) report defines digital economy as “a term used to describe markets that focus on digital technologies and refer to the types of economic, social and cultural activities supported by the Internet and other IT technologies” [6].
The international company Boston Consulting Group provides the following definition of the term under study: "The digital economy is an area of economic activity that includes online consumption, the cost of creating this consumer infrastructure" [6].One of the generally accepted definitions were proposed by T. Mesenburg in 2001.
Considering the components of the digital economy, T. Mesenburg identified the following mandatory components [7]:

1) support infrastructure (hardware and software, networks and telecommunications);

2) electronic business (any organizational processes occurring in computer networks);

3) e-commerce (online sales).
A number of works by foreign scholars have been devoted to the formation and development trends of the digital economy, in particular; D. Tapcotti, T. Mesenburg, K. Shvab, V. Ivanov, R. Meshcheryakov and T. Yudina. In their research, these researchers focused on the development trends of the digital economy, its constant increase in the GDP structure of the world's leading

countries, modern processes of digital transformation of the economy, and more. Therefore, in the context of the implementation of the strategy "Digital Economy - 2030" in Uzbekistan, the main directions and mechanisms of digital transformation of enterprises are still relevant and need scientific research.

The word “digitalization” is actually a new term that refers to the involvement of IT solutions in the process of innovative management and office work, resulting in the use of information technology in all systems, from the Internet to e-government. A new direction of economic development is the transition of this economy to a digital economy. In the 21st century, scarce resources are becoming more expensive in social, political and economic processes. The concept of "digital economy" was defined by the first American scientist N. Negropont, who said that "digital economy" is "the transition from the movement of atoms to the movement of bits."

According to the World Bank, 66% of the total wealth of our planet - 365 trillion US dollars - falls on human capital, mainly on the level of knowledge of the individual. In the United States, the figure is 77 percent of national wealth - $ 95 trillion. Therefore, the Head of our country in this year's Address to Oliy Majlis, emphasized the idea that "the greatest wealth is intelligence and knowledge, the greatest heritage is a good upbringing, the greatest poverty is ignorance!" [8].

Research Methodology

The current study analyzes the theoretical interprations of the digital economy and its importance by comparing digitilization contribution to the economic growth relying on the existing literature. Discussions of the scholars’ works have been studi and stated in the article.

Due to the significant impact of digital economy on the country economic growth, the current reforms in digitization in Uzbekistan are also presented in the article. The article also discusses the main country-wide electronic changes, target points and directions in digital reforms according to the time-set in the President’s Adress to the Oliy Majlis.

Analysis and results

It is well known that today the digital economy also plays an important role in creating added value. Various algorithms, processes and digital information are becoming a key determinant in the strategic development of corporate business. Digital non-financial factors determine the competitiveness of banks, affect their efficiency.

It should be noted that according to the International Telecommunication Union (ITU), 51.2% of the world's population used the Internet by the end of 2018, or 3.9 billion people actively used the Internet.

According to the ITU data, the share of the population using the Internet in developed countries in the total number of population increased from 51.3% in 2015 to 80.9% in 2018, which was slow and steady growth rate. In developing countries, the growth rate was significant, from 7.7% in 2005 to 45.3% in 2015. Among all regions of ITU, the share of Internet users in Africa increased from 2.1% in 2005 to 24.4% in 2018. Of the regions with the lowest rates of growth, 79.6% in Europe and 69.6% in North and South America used the Internet. In the CIS regions, 71.3% of the population use the Internet, 54.7% of the population of the Arab countries and 47% of the population of the Pacific region use the Internet.People who have access to basic telecommunications services are generally considered to have a better understanding of the industry. In the corresponding period, the number of registered telephone subscribers in 2018 continued to decline, while the number of mobile phone subscribers from the number of subscribers worldwide increased by 12.4%. The last five years have seen an increase in the number of mobile phone subscribers in Asia-Pacific and Africa. Significant growth in the Americas and the CIS countries has led to a steady increase in the number of subscribers who have access to this broadband. Ongoing trend in 2018, there was an expansion of broadband connections, which increased by 1.1 billion compared to fixed telephone connection (942 million).The increase in the number of active subscribers worldwide through mobile broadband increased from 69.0 in 2017 to 69.3 in 2018. There was also a decline in European and Arab countries.[9]

It should be noted that almost all (96%) of the world's population has a mobile phone with 3 capabilities. In addition, 90% of the world's population has a higher speed or is connected to the Internet via a 3G set.

According to ITU estimates, in 2018, almost half of all households in the world have a single computer. In developed countries, this figure was 83.0% in 2018, and in developing countries - 36.3%. The highest rates of this indicator were observed in the Arab and CIS countries. In African countries, it increased from 3.6% in 2005 to 9.2% in 2018.Abdrasilova G.S, Bauer V.P, Chinese scientist Gun Yanhua, Truntsevsky Yu.V focused on "The digital economy and the digital environment of modern architecture." Also Ageev A.I, Bachilo I.L developed the works as “Methods of digital economy in the control and management of the real sector of

the economy", Alekseenko OA and Veduta E.N. worked on "The role of the state in the digitization of the global world and the digitization of the economy", Akhromeeva TS and Lapidus L.V on the the value and meaning of the digital authenticity in the future, Bagautdinova N.G. emphsized on "new clear advantages of competition in the context of digitalization."[10]

Conclusion

The importance of IT and digitization forced the Uzbek government to focus on technological reforms. As a result of the changes being carried out in new Uzbekistan, openness, the development of international economic and political relations are creatiTherefore, given that the digital economy is essential for the acceleration of the

economy of our country, in order to accelerate the pace of its development, it is necessary to pay special attention to the following:

- It is necessary to form the infrastructure for the rapid development of mental intelligence in our country. To do this, first of all, it is necessary to separate gifted children (regardless of family life conditions) from the school education system and accelerate the organization of group-based centralized education in specialized boarding schools in order to form the mental faculties of people in our country (IT and software);
- Introduction of accelerated school education in the school program for gifted young schoolchildren, the creation of a system of self-motivation in various forms;
- Immediate introduction of a system of close acquaintance of gifted young schoolchildren with the prestigious higher education systems abroad (organization and formation of integrated joint learning processes (to familiarize with the accelerating human
intellectual intelligence around the world));
- Accelerate the growth of infrastructure for the creation of a platform that includes information programs, bringing high-speed technologies at the speed of modern information technologies, which are widely used around the world;
-creation of infrastructure, including the organization of the introduction of high-speed technologies at the speed of modern information technologies, which are widely introduced worldwide.Thus, in such a rapidly developing world economy, the digital economy is a strong catalyst for innovation, growth and social welfare, and its development in Uzbekistan must become a modern requirement.

Deepening and expanding digitalization will increase the competitiveness of not only the world economy but also the economy of Uzbekistan, create conditions for the gradual transition to an innovative economy and knowledge economy, positively change the living standards and quality of life of the population.[11]

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