THE DIGITAL ECONOMY: CHALLENGES AND PROSPECTS

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Annotation:
The article examines several problems in the formation and development of the digital economy, technological changes inherent in the digital economy, the impact of digital economy growth on global economic growth, the role of the digital economy in the global economy. It highlights the opportunities that digitalization, the shaping of the digital economy, create for consumers, the state, and society.

Keywords: Digital economy, problems of the digital economy, formation of the digital economy, development of digital economy, prospects of the digital economy, digital economy and world economy.

World experience shows that, Although, it has unlimited benefits, the development of the digital economy causes many challenges as an objective process. The digital economy is generally understood as an economic activity related to the production, sale and consumption of goods and services using digital technologies, as well as the use of e-commerce, the web and the Internet economy. After the remarkable success of some startups in the digital economy, getting rid of the dot-com crisis (this business model is a term used for companies based entirely on Internet activity) and especially after the capitalization of Internet giants, equalized (company profits increase charter capital), then exceeded the capitalization of large enterprises in traditional sectors of the economy, the importance of the digital economy began to grow.

The formation and development of the digital economy pose several challenges. First, access to information and the creation of more efficient technologies for its processing and application will largely reduce transaction costs (costs associated with searching and processing the data found) and increase the flexibility and efficiency of the economy. However, this cannot happen if at the same time the old technologies of information processing do not disappear and the share of transaction costs increases due to the increase in the cost of information protection,
assessment of its reliability. Online business activity drastically reduces, sometimes even eliminates, the need for intermediaries and agents.

It should be added that the mass production economy is opening the way for consumers to order items online. Another problem is that, like any mass technological innovation, digital technology requires professionals with new professions and new skills, and also makes many people engaged in traditional work useless, leading to resistance and protests. The lack of specialists such as programmers, salespeople, analysts, etc. does not allow the elimination of many other jobs and leads to increased income differentiation and new poverty.

The security of data from external sources is particular concern. Data is traditionally considered reliable and trustworthy because if they are validated from three independent sources, creating many independent data sources today is a much more technical challenge. In general, the problems of product-to-product conversion and the socio-economic consequences of this process require separate analysis and discussion. The digital economy is changing the economy as a whole. For example, it is possible to increase the number of robots trading on the stock exchange. Robots can react to changes in market conditions faster than humans because they have the most advanced algorithms to calculate profitability and risks. But is there a real decline in uncertainty and risk in financial markets in the future? It is difficult to give a positive answer, because for many users the methods of working with information and decision-making technologies will be the same, so the question arises about the possibility and even inevitability of the "crowd effect" or markets in another, especially panic as a result of an unexpected change in the financial situation, words.

Digitalization will lead to the growth of the global economy, for example, according to estimates by the prestigious consulting firm McKinsey Global Institute, the use of the latest digital technologies will lead to an increase in the gross domestic product (GDP) by 2025 worldwide at $3-6 trillion [2]. The company estimates that 12 types of high-tech (mobile Internet, advanced robotics, cloud technology, renewable energy, Internet of Things (IoT) data) will contribute to this growth. wireless transmission, mobility, and artificial intelligence, etc.). At present, large companies around the world are aware of the realities of digitalization and have guidelines for modernizing cloud technologies and network infrastructure. Digitalization, the formation of a digital economy opens up great opportunities for consumers, the state, and society in general. Among the world's leading countries in maintaining the digital economy are Singapore, China, South Korea, New Zealand, and Denmark. These countries have made significant initiatives in the field of digitization and the formation of high technologies.
Singapore, for example, justified its “Smart Nation” concept in 2014 and invited businesses to implement the above concept. The concept of "smart nation" is the business spirit of the state aimed at improving the quality of life through the introduction of digital technologies in the daily lives of the population. Not only large companies but also small and medium businesses participated in the implementation of this concept. City blocks with "smart" sensors equipped - they monitor the real-time consumption of electricity, water, and other indicators. The data obtained will help the government to improve water consumption and reduce dependence on Malaysia, which brings clean water to the city. The sensors also allow citizens to monitor resource use and The program participants are primarily concerned with housing, health (the patient receives assistance without leaving home, communicates with a doctor remotely), and the transport network (unmanned vehicles and buses) All of these systems form a single ecosystem called Virtual Singapore (residents can track traffic in real-time, view data from security cameras, etc.). [3]

![Diagram about Dynamics of Internet traffic for individual years](image)

**Figure 1 - World Internet traffic diagram**

The development of digital technologies is critical to achieving almost all economic and social goals and will cover all countries, industries, and stakeholders. There is a huge difference between countries in the world today that do not have an Internet connection and countries with a much higher level of digitalization. For example, in less developed countries, one in five people use the Internet in developed countries, four out of five people have access to the Internet. This
is just one example of a digital division. In other areas, such as digital data and opportunities for advanced technology, the gap is much larger.

For example, Africa and Latin America host less than 5 percent of all rented data centers in the world. Without the necessary measures, this gap will lead to a further increase in inequality in income distribution. Therefore, it is important to understand how this evolution will affect developing countries in terms of value creation and benefits, and what needs to be done to improve the current situation.

Digital platforms are playing an increasingly important role in the global economy. In 2017, the total value of platform companies with a market capitalization of more than $100 million exceeded the estimated $7 trillion, which is 67% more than in 2015. Some global digital platforms have gained very strong market positions in certain segments. For example, about 90% of the Internet search engine is occupied by Google. Facebook accounts for two-thirds of the global social media market and is the most popular social media platform in more than 90% of countries. Almost 40% of online retail worldwide is sold through the Amazon network, and its subsidiary Amazon Web Services has approximately the same share of the global cloud infrastructure services market. At the same time, advances in digital technology have led to the creation of enormous wealth, but this has been concentrated in a group of small individuals, companies, and countries. If current policies and regulations are maintained, this trend may continue and lead to further inequality. Without proper action, it will not be possible to overcome the digital divide where more than half of the world’s population has little or no access to the Internet. For a digital economy to work in the public interest, it must be inclusive. New technologies are inevitably associated with significant changes in the labor market, including job cuts in some industries and the creation of new opportunities on a large scale in others. The digital economy requires a variety of new knowledge and skills, significantly new social protection measures. At the same time, large sums of money are required to develop education, as well as to provide general access to lifelong learning services. [4]

List of used literature
2. https://www.mckinsey.com
3. https://www.engadget.com