

**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

# THE ESSENCE OF THE PHENOMENON, PROBLEMS AND RISKS OF THE FORMATION AND DEVELOPMENT OF THE DIGITAL ECONOMY

Mirzarakhimova A. B. Assistant of the Department of Digital Economy at TSEU e-mail: azizamirzarakhimova@gamil.com

#### **Abstract**

Today, new digital technologies and innovative business models penetrate into all spheres of the country's economic life. Society influences the essence of the economy, forming qualitative structural changes in it. The digital economy as a subsystem of the traditional economy, characterized by the active use of digital technologies and, as a result, the turnover of specific electronic goods is formed. The level of development of the digital economy closely correlates with the competitiveness of the country, which requires special attention from the state and business to its development. The article presents an overview of the development of digital technologies, the risks and threats of the development of the digital economy are identified and directions for overcoming them are proposed. It has been established that today the electronic economy is already going beyond purely economic processes. Digitalization is being introduced into social processes, the successful activity of people increasingly depends on it, in addition, large-scale introduction of digital technologies into the work of government organizations and structures is taking place. Cooperation between the state and business in the further development of the digital economy is necessary.

**Keywords:** Digital economy, threats and risks to sustainable development, economic growth, state regulation of the economy, scientific and technological progress.



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

#### Аннотация

Сегодня новые цифровые технологии, инновационные бизнес-модели проникают во все сферы экономической жизни страны. Общество, оказывает влияние на сущность экономики, формируя в ней качественные структурные изменения. Цифровая экономика как подсистема экономики традиционной, отличающаяся активным использованием цифровых технологий и в результате формируется оборот конкретных электронных товаров. Уровень развития цифровой экономики тесно коррелирует с требует конкурентоспособностью страны, что особого государства и бизнеса на его развитие. В статье представлен обзор развития цифровых технологий, риски и угрозы развития цифровой экономики выявлены и предложены направления их преодоления. Установлено, что сегодня электронная экономика уже выходит за рамки сугубо экономических процессов. Цифровизация внедряется в социальные процессы, от нее во все большей степени зависит успешная деятельность людей, кроме того, и происходит масштабное внедрение цифровых технологий в работу государственных организаций и структуры. Сотрудничество государства и бизнеса в дальнейшем развитии цифровая экономика необходима.

**Ключевые слова:** цифровая экономика, угрозы и риски устойчивому развитию, экономический рост, государственное регулирование экономики, научно-технического прогресса.

Today, new digital technologies and innovative business models penetrate all spheres of economic life of society, influencing the very essence of the economy, forming qualitative structural changes in it. One can agree with the opinion expressed by many researchers such as V.V. Asaul, A.O. Mikhailov [1] Minakov V. F., Shuvayev A. V., Lobanov O. S. [2] Polyanin A. V., Dokukina I. A. [3] Pshenichnikov V. V. Prospects [4] they have quite widely revealed in their works that, thanks to digitalization and other technological changes, humanity has entered a new era of global change. The digital economy is today perceived by many as a panacea, and its accelerated development as a way to solve almost



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

all existing problems. This is reflected in the explosive growth of interest in "digital" issues in socio-economic and humanitarian studies, and in public discourse, including in statements by influential politicians, and in government documents. But it should be understood that there is no "cure for all diseases." And the digital economy cannot be a panacea in the modern world as a whole. Its development, in our opinion, should be considered in the context of other transformations that modern society and economy are experiencing, in close connection with them. And for this, we need to study its systemic properties in more detail, as well as the possibilities of practical use of its tools in business practice.

General overview of the development of the digital economy since the second half of the 20th century, information technologies are acquiring an increasingly significant role in the economic development of many countries around the world. The single information economic space, the formation of which was made possible by scientific and technological progress, contributes to economic growth and increased productivity, the creation of innovative jobs and digital assets, the empowerment of citizens, improved access to global markets and the competitiveness of enterprises, and improved quality of public services.

It is generally believed that the concept of "digital economy", as applied to the use of modern information technologies (digital) in economic processes and their management, was introduced by N. Negroponte in 1995. The advantages of the digital economy, in N. Negroponte's opinion, are: the absence of physical weight of products, which is replaced by information volume, lower resource costs for the production of electronic goods, much smaller area occupied by products, as well as almost instantaneous movement of goods via the Internet (in this case, of course, we are talking about specific digital goods). Some key features of the digital economy are presented in Table 1.



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

## Table 1. Main characteristics of digital economy

Characteristics

Impact on the development of the economy as a whole

Economic activities are focused on digital economy platforms

Interaction between economic actors is facilitated, costs (primarily transaction costs) are reduced, additional functionality is provided for both suppliers and consumers, their cooperation is improved, which shortens the cycle time for developing new products and bringing them to market, and promotes the creation and distribution of innovative products and solutions.

Personalized service models are being formed Targeted Internet marketing, 3D printing and other digital technologies allow for personalized production and sales of goods and services, taking into account the requirements and needs of each specific customer, which ultimately contributes to resource savings (by matching the structure and volume of supply and demand) and the growth of the quality and standard of living in the village.

There is direct interaction between producers and consumers

producers and end consumers, building effective production and consumer cooperation

Comprehensive digitalization and accelerated communications create

Prerequisites are created for reducing chains of intermediaries between

There is a proliferation of the "sharing economy"

prerequisites for the erosion of traditional property relations and the development of legal practices using the theoretical institutional concept of "bundle of property rights". The phenomenon of joint ownership of goods (especially technically complex and expensive goods, such as passenger cars) is developing, which can radically reduce the costs of final consumers.

The role of contribution of individual participants in economic activity is increasing

The development of small and medium-sized businesses, as more flexible and mobile, plays a significant role in business processes; innovative start-ups are being promoted at an accelerated pace; the sector of the "economy of individuals" is expanding and there is a tendency towards increasing "atomization" of the economic structure.

Digitalization of business, which started with local intra-company and corporate projects, is gradually acquiring a global scale, and major players in digital business have reached the top positions in the world. Thus, Apple, Alphabet, Microsoft, Amazon and Facebook are among the most expensive companies in the world by market capitalization. The most expensive non-US company on this list is Chinese internet seller Alibaba Group. In addition, there are examples of "digital ecosystems" in various other industries and companies today. According to recent estimates, by 2024, the digital economy continues to show



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

steady growth, playing an increasingly important role in the global economy. The global digital economy is estimated to be worth \$16.5 trillion in 2024, representing about 17% of global GDP. This is projected to remain at 17% by 2028. On average, the digital economy accounts for 18.4% of GDP and the average digital economy accounts for 10% of GDP. [5]

The leading countries in the digital economy are China, the US and the UK. China's digital economy accounted for 42.8% of the country's GDP in 2023, underscoring its key role in economic growth. The US and China together these two countries form nearly two-thirds of the global digital economy. The UK's share of the digital economy was 12.4% of GDP in 2016. The current figures for 2024 need to be updated.

It should be emphasized that just as the economy and society as a whole develop unevenly [6], their digital transformation is also uneven. Politics, legal norms, traditions and culture, the achieved level of economic development, the development of education and its own technological base, as well as many other factors play a significant role in the formation of a country's digital economy. For example, the digital market of China, the country with the largest number of Internet users in the world (over 720 million people), exists autonomously from the world. [7] It should be noted that some countries have also recently discussed the creation of a kind of "national Internet" - similar to China - in order to protect the national digital space, which in modern conditions is becoming an element of critical infrastructure, from malicious influence from the outside. At the same time, the digital economy is inherently inter- and transnational. Therefore, despite the desire to protect the national digital space, which is demonstrated by the governments of many countries, at the same time there is an opposite tendency associated with the unification of technical standards and regulatory rules in this area. For example, the European Union has over 400 million Internet users, but its market is still fragmented. In this regard, EU leaders are actively working on the creation of a single digital market in this integration association. Similar problems can arise at the level of individual, rather large, countries. For example, India has over 460 million Internet users. However, India's digital economy is multi-lingual (financial transactions are conducted in several languages), which negatively affects the functioning of the digital market.



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

The explosive growth of social media, the proliferation of smartphones, the facilitation of broadband Internet access, and the spread of machine learning and artificial intelligence technologies are changing the modern world. The digital transformation of organizations, both commercial and non-commercial (including governmental), is a reaction to the development and active dissemination of new information digital technologies around the world. At the same time, based on the progress paradigm prevailing in science since the Renaissance, we believe that the main goal of the digital economy is to improve the life of the population by increasing the quality of goods and services produced using modern digital technologies, as well as their accessibility. Efficient development of markets in the digital economy is possible only if there are developed technologies, so measures to stimulate it should focus on two areas. The first is institutions; they need to be restructured and modernized to create the conditions for the development of the digital economy (normative regulation of digital markets and digital production, training of personnel with digital competencies, etc.). The second is technical infrastructure (data networks, data processing centers, software services, etc.), the creation of which requires not only significant efforts but also investments. It should be noted that, despite the obstacles and difficulties, the digital economy as a whole continues to develop rapidly in the world. The manufacturing sector of the digital economy is also growing. Production automation, big data and artificial intelligence, the use of which has become possible thanks to digital technologies, transform production processes and models of production-technological cooperation, accelerate and reduce the cost of various products, works and services. This opens up new ways of utilizing human potential, but at the same time it may cause social problems associated with the disappearance (primarily in developed countries) of a number of mass, "traditional" professions.

Risks and threats of the digital economy, directions for overcoming them. It should be noted that, like any other large-scale phenomenon, the development of the digital economy is associated not only with positive consequences, but also with various kinds of risks and threats. Their sources are two main effects. First, it is the emergence of new types of risks and threats inherent in the digital economy and based on its technological features. Secondly, the transition to the



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

digital economy involves institutional transformation, which in itself, regardless of its causes and nature, is a powerful destabilizing factor for sustainable and successful socio-economic development. Let us consider some negative consequences of the development of the digital economy (a detailed and complete analysis of actual and prospective risks and threats is an independent research problem and can be the subject of a separate scientific study):

- the growth of cybercrime;
- technological vulnerability of the created digital infrastructure;
- rapid obsolescence of technology and, as a consequence, the problem of its utilization;
- growing technological dependence on foreign suppliers and, as a result, weakening of technological and economic security both at the level of the country as a whole and of individual industries and enterprises.

The above-mentioned and many other risks, threats and problems of digital economy development require measures to neutralize them. Unfortunately, it is impossible to do this quickly and solely with the resources of the state. Comprehensive efforts using both public and private resources are required. Among the top-priority tasks determining the directions of activity, in our opinion, we can point out:

- 1) stimulating the creation and development of businesses focused on the digital economy;
- 2) additional support for small and medium-sized businesses in the creation of digital technologies, platforms, and digital services;
- 3) formation and scaling of digital platforms for the main spheres of the economy;
- 4) increasing the training of IT specialists (we have already pointed out the priority of this activity earlier);
- 5) formation of sectoral, regional and country-wide cybersecurity systems.

In particular, it is necessary to finalize legislation to combat cybercrime, create protection units in law enforcement agencies, develop secure technological solutions, and ensure interaction between all participants in the global digital economy. At the same time, it should be remembered that security should not



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

hinder the growth and development of technology. Cross-country information exchange in the area of cyber security should be strengthened.

Conclusion The digital economy is a new type of economic relationship that is already present in all sectors of the global market and is actively developing. The digital economy may soon become a leading segment, a driver of growth and development of the economic system as a whole. This is due to the fact that the digital economy has some advantages over material commodity-money exchanges, such as fast delivery of goods or almost instantaneous provision of services. Another advantage of the digital economy is the lower cost of producing and executing transactions. One of the key advantages of the digital economy over the traditional economy is that electronic goods are virtually inexhaustible and exist in virtual form, while material goods are almost always limited in quantity and much more difficult to access.

Today, the e-economy goes beyond purely economic processes. Digitalization is being introduced into social processes, people's successful livelihoods increasingly depend on it, and there is also a large-scale introduction of digital technologies into the work of government organizations and structures. At the same time, competition in this area remains very fierce, therefore, we cannot stop at what has been achieved, we need to work together with the state and business to further develop the digital economy. In this activity, it is necessary to take into account a number of problems, risks and threats highlighted in the article in order to focus resources and efforts on their neutralization.

## References

- 1. Asaul V. V., Mikhaylov A. O. Ensuring information security in the conditions of formation of digital economy // Theory and practice of service: economy, social sphere, technologies [Teoriya i praktika servisa: ekonomika, sotsial'naya sfera, tekhnologii]. 2018. No. 4 (38). P. 5–9. (In rus);
- 2. Minakov V. F., Shuvayev A. V., Lobanov O. S. Effect of digital convergence in economy // News of the St. Petersburg State University of Economics [Izvestiya Sankt-Peterburgskogo gosu darstvennogo ekonomicheskogo universiteta]. 2018. No. 2 (110). P. 12–18. (In rus);



**ISSN (E):** 3067-7203

Volume 01, Issue 02, May, 2025

Website: usajournals.org

This work is Licensed under CC BY 4.0 a Creative Commons

Attribution 4.0 International License.

- 3. Polyanin A. V., Dokukina I. A. Transformation of the social and economic relations based on digitalization business of space // Work and the social relations [Trud i sotsial'nye otnosh eniya]. 2018. No. 6. P. 16–27. (In rus);
- 4. Pshenichnikov V. V. Prospects and risks of application of electronic money in the conditions of digitalization of economy // News of the St. Petersburg State University of Economics [Izvestiya Sankt-Peterburgskogo gosudarstvennogo ekonomicheskogo universiteta]. 2018. No. 1 (109). P. 39–45. (In rus)
- 5. https://www.statista.com/statistics/1250092/china-digital-economy-gdp-share/Share of the digital economy in the GDP of China from 2015 to 2023
- 6. Vertakova Yu. V., Polozhentseva Yu. S. Increase in stability of regional development based on smoothing of territorial inequality: monograph. Stary Oskol: TNT publishing house, 2009. 248 p. (In rus)
- 7. Kulik A. M., Koryakov D. P. Digital economy: features and trends of development // Breakthrough economic reforms in the conditions of risk and uncertainty. The collection of articles following the results of the International scientific and practical conference. Tyumen, 2018. P. 189–192. (In rus)
- 8. Курбанов А. Х., Курбанов Т. Х. Применение современных цифровых технологий в логисти ке // Развитие региональной экономики в условиях цифровизации: Сборник материалов Международной научно-практической конференции, посвященной 80-летию ФГБОУ ВО «Чеченский государственный университет». Грозный, 2018. С. 683–688.
- 9. Развитие цифровой экономики в России как ключевой фактор экономического роста и повышения качества жизни населения: монография / Андреева Г. Н., Бадальянц С. В., Богатырева Т. Г. и др. Нижний Новгород: Профессиональная наука, 2018.
- 10. Формирование цифровой экономики и промышленности: новые вызовы: монография / Александрова А. В., Алетдинова А. А., Афтахова У. В. и др.; Санкт-Петербургский политех нический университет Петра Великого. СПб., 2018.