RISK ASSESSMENT STUDY OF KEY COMPONENTS OF THE DIGITAL ECONOMY

Laila Gazieva[1], Timur Aygumov[2], Alexander Natalson[3]

[1] Kadyrov Chechen State University, Russia
[2] Dagestan State Technical University, Russia
[3] Kazan State Power Engineering University, Russia
gazievalaila@outlook.com

Abstract

This study provides a comprehensive risk assessment of key components of the digital economy to ensure sustainable growth and mitigate potential adverse impacts. The research methodology included a literature review, analysis of academic sources, data and economic indicators, case studies, and development of risk assessment models. The results of the analysis confirm that the digital economy provides significant opportunities for development and progress in modern society. However, it also carries certain risks and challenges, such as cybersecurity, data privacy, ethical issues, artificial intelligence, and misinformation. These insights enable business leaders, governments and the public to prioritize risk management and develop strategies that advance the sustainable and responsible development of the digital economy. Based on this study, measures can be taken to improve cybersecurity, ensure data privacy, ethical use of artificial intelligence and counter disinformation, in order to provide a favorable and sustainable environment for the further development of the digital economy.

Keywords: digital economy, risk assessment, key components

I. Introduction

The digital economy has become a defining force that is changing the modern socio-economic world, evolving the methods and techniques of doing business, the interaction of man and business with technology, and simply connecting people. Spawned by the digital revolution, the digital economy harnesses the power of digital technologies, data sets and the Internet to create, distribute and consume goods and services in ways that were once unimaginable. This profound transformation has resulted in the emergence of a wide range of activities, industries and business models that drive innovation, increase efficiency and unite the global community [1].

It is an undeniable fact that the rapid growth and widespread use of digital technologies has opened up many opportunities for people, businesses and governments. This coin also has a downside – digital technologies have created complex problems and risks that need to be carefully assessed and managed. As the digital economy continues to evolve, it is critical to conduct a comprehensive risk assessment of its key components to ensure sustainable growth and mitigate potential adverse impacts [2].

This study aims to conduct a risk assessment of key components of the digital economy, namely e-commerce and online marketplaces, digital platforms and exchange economies, financial technology and digital financial services, digital content and media, and artificial intelligence and automation elements.

The purpose of this study is to conduct a comprehensive risk assessment of key components

of the digital economy in order to ensure sustainable growth and mitigate possible adverse effects.

An example of the transformative power of the digital economy is the first key component: e-commerce and online marketplaces. This component represents the pinnacle of the digital economy, covering the buying and selling of goods and services over the Internet. E-commerce platforms and online marketplaces such as Amazon, Alibaba and eBay have revolutionized traditional retail models, giving businesses unprecedented global reach and consumers the convenience of online shopping. The benefits of e-commerce go beyond market access and customer experience, as it also reduces business overhead, streamlines supply chains, and improves overall efficiency [3].

However, with the implementation of these technologies comes many challenges and risks that need to be addressed in order to support the growth of this component of the digital economy. Among the most important issues are data privacy and cyber security. E-commerce platforms collect a huge amount of sensitive consumer data that, if mishandled or hacked, can lead to serious reputational damage and financial loss. Protecting customer data and providing strong cybersecurity measures are essential to building trust and sustaining the sustainable growth of e-commerce [4].

The next key component is digital platforms and the sharing economy, which have revolutionized the way goods and services are exchanged and used. These platforms, exemplified by ride-sharing services like Uber and shared accommodation platforms like Airbnb, facilitate peer-to-peer transactions and optimize resource usage. The sharing economy offers tremendous opportunities for economic growth, offering individuals and businesses access to new revenue streams and consumers greater affordability and convenience [5].

The flip side of this component of the digital economy is that the growth of the sharing economy has created issues around labor rights, regulatory compliance, and fair competition. Working in the gig economy, while offering flexible work options, has been criticized for its lack of benefits and protection for workers [6]. Finding the right balance between encouraging innovation and ensuring fair labor practices is essential to ensure the sustainable growth of the sharing economy and protect the well-being of those who participate in it [7].

Fintech and digital financial services are another key element of the digital economy, reshaping the style of financial services and expanding financial inclusion. Fintech innovations, including mobile payments, peer-to-peer lending, advisory bots, and blockchain technology, have changed traditional banking models, enabling greater access to financial products and services. This progress is especially beneficial for low-income populations, who are gaining greater access to formal financial services through mobile payment platforms such as PayPal and Alipay [8].

The emergence of fintech startups and digital banks has brought new security and data privacy risks. Since these platforms handle sensitive financial information, therefore, strong data protection measures are needed to prevent financial fraud and maintain consumer confidence. Finding a balance between innovation and data security is paramount to ensure the sustainable growth of the digital financial services sector [9].

The digital economy has had a significant impact on the media and entertainment industry, as exemplified by the digital content and media component. Platforms such as Netflix and YouTube have changed traditional broadcasting models by offering consumers vast libraries of on-demand content and enabling content creators to reach global audiences [10]. The democratization of content creation has led to new marketing strategies, public discussions and opportunities for content producers.

However, it is worth noting that this component also presents problems with the spread of disinformation, fake news, and controversial content [11]. Responsible content creation and distribution is essential for promoting informed public debate and maintaining social harmony. Regulating content on digital platforms while maintaining freedom of expression is a delicate balance that must be carefully struck.

II. Methods

To achieve the goal of the study, the following methodology was applied:

- Literature review and analysis of academic sources to identify the main components of the digital economy and their risks.
- Analysis of data and statistical indicators related to the digital economy to determine trends and risk levels.
- Case studies and developments related to each of the key components of the digital economy in order to identify specific vulnerabilities and problems.
- Development of risk assessment models for each component based on collected data and analysis.

III. Results

Among all its achievements and prospects, the digital economy also carries risks and challenges. The rapid growth and pervasiveness of digital technologies has opened up new opportunities for cybercriminals, resulting in complex challenges and threats to data security, privacy, privacy and national security. The advent of the sharing economy has sparked a debate about social justice and labor protection for workers on these platforms.

The following are the main risks associated with the digital economy:

- Cyber security and data threats.

  The rise of digital technology has increased the vulnerability to cyberattacks and breaches of data privacy. Cybercriminals can exploit weaknesses in systems and infrastructure to gain unauthorized access to sensitive data, which can lead to financial loss, information leakage, and damage to the reputation of companies and organizations [12].
- Privacy and data collection

  The expansion of the digital economy is accompanied by an increase in the amount of data collected and stored about users and customers. Misuse and insecure storage of this data may compromise the privacy of personal information and lead to violations of data protection laws.
- Responsibility and ethical issues

  The possibility of using big data and artificial intelligence raises questions of responsibility and ethics. Lack of control over the use of data can lead to unfair treatment of customers and the creation of systems of discrimination.
- Artificial intelligence and automation

  The development of artificial intelligence can affect jobs, displacing some types of work activities and creating employment challenges. In addition, process automation can lead to a decrease in the quality of service and dependence on technological solutions [13].
- Disinformation and Fake News

  The digital economy has increased the speed at which information spreads, which can lead to the spread of misinformation and fake news. This poses a threat to society, contributing to the dissemination of false data and influencing public opinion.
- Technological gap

  The rapid development of technology can lead to a technological gap between countries and individual sectors of the economy. Underdevelopment can create problems for economic growth and competitiveness.
- Digital Divide

  Uneven distribution of access to digital technologies can exacerbate inequalities in society,

leaving part of the population outside the benefits of the digital economy.

IV. Discussion

In this paper, risk assessments of key components of the digital economy were considered. The data obtained confirm that the digital economy is the driving force behind modern socio-economic progress, contributing to innovation and efficiency in various industries. The analysis also revealed the presence of significant risks and challenges that should be considered when developing strategies for sustainable development.

From the study, it became clear that cybersecurity and data threats pose significant risks to the digital economy. It is necessary to actively work on strengthening the protection of data and network infrastructure in order to prevent potential cyber-attacks and information leaks.

Privacy and data collection are becoming a pressing issue in the digital economy. It is necessary to strictly comply with data protection legislation and develop effective mechanisms for the control and processing of personal information.

The liability and ethical issues associated with the use of big data and artificial intelligence pose certain risks for the digital economy. A balance is needed between innovation and the protection of the rights and interests of users, as well as the prevention of possible misuse of data.

This study has shown that the digital divide and technology divide are major issues that can exacerbate inequality and reduce economic competitiveness.

To ensure sustainable growth and maximize the benefits of the digital economy, it is necessary to actively manage risks and develop appropriate strategies and policies. Experts face the difficult task of finding a balance between innovation and protection in order to ensure the favorable development of the digital economy and minimize the negative consequences [14].

V. Conclusion

The digital economy has become a defining force in today's world, providing enormous opportunities for innovation, improved efficiency and the connection between people and technology. However, the rapid growth of digital technologies has also brought complex challenges and risks.

The risk assessment of key components of the digital economy has identified several critical aspects that require special attention. Cybersecurity and data protection are paramount concerns as the rise of digital technologies has led to an increase in vulnerabilities and the possibility of cyberattacks. This requires the development and implementation of modern methods and technologies to protect information and prevent violations.

The paper also identified data privacy, ethical issues and liability issues in the use of big data and artificial intelligence. There needs to be a balance between innovation and safeguarding the interests of users and society as a whole.

In addition, the digital economy is generating discussion in the areas of social justice, protecting labor rights, and countering misinformation.

Overall, this study highlights the need for a comprehensive risk assessment of the digital economy and the development of strategies to ensure sustainable and responsible development. It also opens up new opportunities for further research in this area in order to ensure a sustainable and beneficial interaction between humans and digital technologies.

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