



DIGITAL ECONOMY AND ECONOMIC SECURITY: THEORETICAL-METHODOLOGICAL FOUNDATIONS

Maxmudov Mardonbek Abrorjon o'g'li

Dean of "Business Management and International Economic Relations"

Faculty Kimyo International University in Tashkent

ORCID 0009-0002-9776-7277

ABSTRACT

It is substantiated that the development of the digital economy under modern global transformations significantly affects the formation and maintenance of economic security at the national and institutional levels. The existing economic security models, formed within the framework of traditional economic relations, do not fully correspond to the conditions of digital transformation and therefore require theoretical and methodological revision. The study proves that the digital economy not only generates new economic opportunities, but also creates additional risks and threats that directly influence the stability and sustainability of economic systems. The authors argue that ensuring an adequate level of economic security requires the formation of a comprehensive theoretical and methodological framework based on the integration of digital technologies, institutional mechanisms and state regulatory instruments. Particular attention is paid to identifying the key components of economic security in the digital environment, taking into account technological, informational, financial and social factors. The paper substantiates the expediency of developing methodological approaches to assessing economic security in the context of digitalization, which allow timely identification of internal and external threats and the formation of effective response mechanisms. The role of the digital economy as a decisive factor in transforming economic relations, production processes and management systems is highlighted. It is proved that the digital economy acts as both a catalyst for economic growth and a structural determinant of economic security, requiring systematic scientific understanding and methodological support.

KEYWORDS: *Economic Security, Balance Sheet, Risk Level, Digital Economy, Transformations*

INTRODUCTION

In the context of globalization and profound structural transformations of modern economies, the issue of ensuring economic security is increasingly associated with the development of the digital economy. The transition to digital forms of economic activity fundamentally changes production relations, management models and the mechanisms of interaction between economic agents, which necessitates a revision of traditional approaches to economic security. It is the digital economy that creates new conditions for sustainable economic development, competitiveness and resilience to external and internal threats. At the macroeconomic and microeconomic levels, digital transformation is aimed at increasing efficiency, transparency and adaptability of economic systems. The introduction of digital technologies into economic processes contributes to the optimization of resource use, improvement of decision-making quality and strengthening of financial stability. Without the systematic development of digital economic mechanisms, it becomes impossible to ensure long-term economic sustainability, solvency and protection against modern risks arising in a highly dynamic global environment. The digital economy acts not only as a driver of economic growth, but also as an essential component of the mechanism for ensuring economic security. Its influence extends to financial, informational, technological and social dimensions, forming a new architecture of economic relations. Therefore, the formation of theoretical and methodological foundations for economic security should be based on an integrated understanding of digital transformation processes and their impact on the stability and security of economic systems.

LITERATURE REVIEW

The way economies work today really depends on how they use digital technology and how well they can bring digital tools into the main parts of the economy. When we talk about the economy, we need to think about what makes an economy safe and secure. This is decided by how institutions, technology and social and economic factors work together to make the economy stable able to adapt and strong enough to withstand problems. The digital economy is, about how these things interact to help economic systems work well. The thing that really matters is the economic security mechanism. This is the system that helps keep our economy safe. It uses rules and digital tools to work. It also uses information systems to help it make decisions. This mechanism does not just



affect how well our economy is doing. It also affects if our development is sustainable. This means it affects if we can keep growing and moving forward when the world is uncertain. The economic security mechanism is very important for our performance and, for sustainable development.

These issues have been looked at a lot by scholars in our country and other countries. For example, David L. Rogers and Florian Tursky said in 2016 that digital transformation changes the way we create value gain an edge and make big decisions, which has a direct impact on how stable our economy is. David L. Rogers and Florian Tursky also talked about transformation in 2016. Then in 2019 Popkova E. G., Ragulina Yu. V. And Bohoviz A. V. Took a look at how the digital economy helps our country develop in a sustainable way and stay safe from an economic standpoint and they pointed out that it is becoming more and more important for us to have control, over our own technology and digital infrastructure. Digital transformation is a part of this. Ukrainian researchers have done some important work on economic security in the digital world. Some people like Cherep A. V., Cherep O. H., Ohrenych Y. O., Helman V. M. And Gorbunova A. V. Think that digitalization is a deal for making management better and making economic security stronger when new things are being developed. They wrote about this from 2022 to 2024. These Ukrainian researchers believe that digitalization is a factor in improving management and economic security. They think that digitalization can help with this because it is a part of the digital environment and economic security, in the digital environment. The people who did a study on making management in the digital economy in 2024 said that to have a good economic security system you need to think about the main things that managers do. These things include planning, forecasting, regulation, control, motivation, analysis, evaluation and coordination. The digital economy has things that can help with these management functions. It can help them work together and reach the goals for economic security in the digital economy. The digital economy is important, for achieving these economic security goals. Ilyich L. M. Did some research in 2017 on how societies and economies work. She found out what makes complex economic systems tick. Ilyich L. M. Talked about how important it's for these systems to be able to adapt when things get tough.

Ilyich L. M. Also said that economic security is like a system. This system has to be able to respond to changes like digital transformation and changes, in the economy. Ilyich L. M. Made some points that can help us understand economic security better. Kirichenko O. V. Wrote a paper in 2020 about how companies can compete in the information and network economy. He thinks that managing risks and threats is a part of keeping the economy safe. The thing is, when everything goes digital it can be both good and bad for businesses. On one hand digitalization brings a lot of opportunities. On the hand it also makes businesses more vulnerable to problems. So, Kirichenko O. V. Says that we need to come up with ways to prevent and adapt to these problems at all levels of activity. This means that companies need to be prepared for anything that might happen and have plans, in place to deal with it. Kirichenko O. V. Is talking about the information and network economy. How it affects the competitiveness of companies. The work done by Polenchuk V. M. And Naumov O. B. Back in 2011 is really important. They figured out that the economic mechanism is like a system that uses methods, tools and resources to affect the economy. What they said still makes sense today with the digital economy. The thing is, digital technologies are changing things they are making economic security mechanisms more complicated and able to do things. So, we need to rethink how we understand these mechanisms. The digital economy is using the mechanism in new ways and the economic mechanism is still a system of methods, tools, levers and resources that influence economic processes, like Polenchuk V. M. And Naumov O. B. Said. Thus, the analysis of scientific literature demonstrates that the theoretical and methodological foundations of economic security are increasingly linked to the development of the digital economy. At the same time, the need for an integrated approach that combines digital technologies, institutional regulation and economic security mechanisms remains insufficiently systematized, which determines the relevance of further research in this area.

RESULTS AND DISCUSSION

Scientific research makes it possible to identify the specific functional role of the structure of socio-economic security of an enterprise, which performs a key stabilizing function in the modern economy and involves the regulation of economic and social processes in accordance with the need to ensure sustainability and resilience. This structure is aimed at creating working conditions that correspond to stable operational standards; maintaining an adequate level of protection against risks related to a decline in production volumes; preventing unjustified staff reductions; supporting continuous innovative development of employees and structural units; ensuring fair remuneration adjusted to labor productivity indicators; and maintaining a high level of earning capacity and profitability of enterprise activity (Figure 1).

The structure of socio-economic security of an enterprise should be considered as a dynamic and flexible system that adapts to changes in the internal and external environment. Transformations in market conditions, technological progress and the intensification of globalization processes require continuous updating of security

mechanisms and management approaches. In this context, particular importance is attached to the social component as a foundation for maintaining the viability and competitiveness of the enterprise.

Under conditions of labor market imbalance, increased labor mobility and accelerated digital transformation, enterprises face challenges related to workforce shortages, productivity constraints and declining business activity. It has been established that the digitalization of business processes plays a decisive role in addressing these challenges, as it enables optimization of labor resources, automation of routine operations and enhancement of labor efficiency. Consequently, digital technologies become a core element of the mechanism for ensuring socio-economic security, supporting the long-term sustainability and competitiveness of enterprises.

Figure 1¹. Structure of Socio-Economic Security of an Enterprise in the Context of the Digital Economy

<i>Component of socio-economic security</i>	<i>Content a functional characteristics</i>	<i>Role in ensuring economic security</i>
<i>Economic security</i>	<i>Ensuring financial stability, solvency, profitability, and efficient allocation of resources through digital financial management tools</i>	<i>Maintains sustainable development, prevents financial risks and losses</i>
<i>Labor and social security</i>	<i>Creation of safe and stable working conditions, prevention of unjustified staff reduction, development of digital competencies and continuous professional growth</i>	<i>Supports workforce stability, motivation and social balance within the enterprise</i>
<i>Technological security</i>	<i>Introduction and protection of digital technologies, automation of business processes, reliability of digital infrastructure</i>	<i>Reduces operational risks and increases productivity and competitiveness</i>
<i>Information security</i>	<i>Protection of data, digital information flows and analytical systems from internal and external threats</i>	<i>Ensures continuity of business processes and trust in management decisions</i>
<i>Innovative security</i>	<i>Development and implementation of digital innovations, support for innovative initiatives and employee creativity</i>	<i>Enhances adaptability and long-term competitive advantages</i>
<i>Managerial security</i>	<i>Digitalization of management functions (planning, forecasting, control, analysis, motivation)</i>	<i>Improves decision-making quality and coordination of economic processes</i>
<i>Financial and investment security</i>	<i>Attracting and managing investments using digital tools, maintaining optimal capital structure</i>	<i>Ensures financial resilience and growth potential</i>
<i>Social responsibility and motivation</i>	<i>Fair remuneration linked to labor productivity, digital performance evaluation systems</i>	<i>Increases employee loyalty, efficiency and socio-economic stability</i>

Studies have shown that to keep a company from a financial point of view we need a system that includes social and economic institutions. These institutions have to be supported by rules and methods that make sense. This set of rules and methods helps to keep everything safe and it protects the company’s financial interests. When we have a set of rules the company can work in a consistent way to keep its financial situation secure. The company’s socio-economic security is based on this system of economic institutions and it is very important for the company to have a clear set of rules to follow. The change to form makes it a lot easier for companies to gather work with and look at information. This helps people in charge make decisions. To really benefit from this companies are using technology more and more. They are also making sure all their digital plans work with the latest systems. This makes the way companies do things more flexible it makes sense. It is easy to see what is going on. This is really important when the market is changing all the time. Companies need to be able to change. The digital form of information is very useful, for companies. It helps them to collect information and make decisions.

At the time digitalization is changing things in a big way. It is starting digital transformation processes that are changing the way the economy works how industries are set up and how organizations work. Digitalization is making this happen. The reason, for this transformation is that social mobile cloud-based and intelligent technologies are all coming together. Big data analytics, automation and system integration are also becoming

¹ Source: compiled by the author



very important. Digital platforms and network technologies are making it possible for companies, customers and partners to communicate with each other in ways. This means that people can share information quickly and come up with ways to create value. Digitalization is really driving this change. To deal with the problems that come with digitalization companies need to make changes. This means they have to come up with a plan for using digital technology. The plan needs to think about the things and the bad things that can happen when you use digital technology. The main goal of this plan is to create value and make sure the company makes money by using things in a smart way. Digitalization is a challenge for companies and they need to have a good plan, for digitalization to succeed. The company needs to work on some things. This includes having digital leadership being able to make decisions based on data and talking to the people who matter. The company also needs to be good at managing its platform coming up with new business ideas and changing its IT systems. It has to make its processes digital and automated. The company must also make sure it is safe online. Follows all the rules. Digital security and following the rules are very important, for the company. The continuous integration of technological innovations into business operations contributes to improving performance indicators by enhancing efficiency, increasing labor productivity and reducing operational costs. Although automation, computer-integrated technologies and digitalization are studied within different research domains, they share common conceptual foundations and objectives. Their combined application forms a methodological basis for strengthening socio-economic security and ensuring the sustainable development of enterprises in the digital economy.

The digital economy is doing well with all the problems we are facing around the world and, at home. In 2024-2025 the digital economy and how safe it is showed that it can handle times and adjust to new situations. Businesses and governments and other organizations are changing how they do things because of the economic pressures. They are using technology more and making sure their information is safe. They are also using technology in many different areas. This makes us think that the economy will do better soon. The digital economy is really important. It is doing well. Uzbekistan's economy did well in 2024 and it kept going strong in 2025. The numbers say that the country's real GDP went up by 6.7 percent in 2025. This is because a lot of things were happening in services, industry and construction. People were also trading more with countries and investing money. Uzbekistan's economy was growing because people in the country were spending money and businesses were investing. The country was also exporting goods. All of this helped Uzbekistan's economy to get better. The numbers that show how well businesses are doing were much better than they were in the past. Uzbekistan's economy was really strong, in services, industry and construction. This helped the country's GDP to grow. The digital economy is a reason why the economy is doing well. This is because the government has a plan to help it grow. They have something called the "Digital Uzbekistan – 2030" plan. This plan has goals to improve digital infrastructure make government services available online and help new companies start and grow. The digital economy will probably become a part of the country's economy in the next few years. This is because more people and businesses will start using services. The digital economy is going to keep growing. This will be good for the country. The "Digital Uzbekistan – 2030" plan is important, for the economy.

Table 2 presents an overview of Uzbekistan's projected GDP in 2025 according to various sources, including national authorities and international institutions.

Indicator	Value (2025, Approx.)	Notes / Source
Total GDP	~\$145 billion	According to official statements by President Mirziyoyev, this is expected to be the first time GDP reaches this level
GDP Growth Rate (CERR)	~7.5 %	Estimated by CERR analytics for 2025
GDP Growth Rate (IMF)	~6.8 %	IMF projections
GDP Growth Rate (ADB)	~6.6 %	Asian Development Bank forecast
GDP Growth Rate (World Bank)	~5.8 %	Older World Bank estimate
GDP per Capita (USD)	~\$3,589	Based on Uzbekistan Ministry of Economy and Finance budget statement

At the time people are paying more attention to economic security because of digital processes. The internet is being used by people and there are more financial technology solutions and information technology services being exported. This has helped to change the way things are done digitally. It has also shown that there are problems with cybersecurity. There have been a lot of reports about threats lately and the number of cybercrimes is going up fast. This is especially true in areas like banking, energy and public services which are becoming more reliant, on systems. The fact that these threats are getting means that we need to have better cybersecurity plans and risk management systems to protect the economy and the trust of the public. Digital processes and cybersecurity need to be a priority to keep the economy safe. The use of tools in the economy has also had an effect on how stable



the economy is. When we use digital tools, it helps businesses work better by making things easier letting them reach more people and using resources in a smarter way. Digital payment systems, cloud computing services and online platforms have made it easier for businesses to operate and have helped some businesses that were not formally part of the economy become formal. At the time digital tools and digital infrastructure are important for the economy and investments in these areas will help the economy grow through 2025. Digital tools are very important for the economy and digital infrastructure is crucial, for growth. From the point of view of keeping our economy safe things like making sure our digital infrastructure is strong being able to control our technology and having good cyber governance are very important for our overall security policy. As more things become digital, we need to make sure we are preventing threats in a way that helps our economy grow. This means we need to have rules in place work together with private companies and make sure we have the skills we need to deal with cybersecurity issues. We are doing this to reduce the risks that could make investors lose confidence disrupt our economy or make us less competitive, in the world market. The digital economy and digital security are closely linked so we need to focus on both the economy and digital security to keep our economy safe. Overall, the 2024–2025 period can be characterized as one of consolidation and forward momentum in both digital economy development and economic security enhancement. While global uncertainties and evolving digital threats persist, the combined effect of policy interventions, public and private sector digital adoption, and targeted economic reforms is expected to support continued expansion. Moving forward, the alignment of digital transformation initiatives with comprehensive economic security policies will be crucial for ensuring sustainable growth, resilience to external shocks, and inclusive participation in the digital age.

CONCLUSION

So, it seems that digitalization is really important for companies to grow and get better. Digitalization helps companies work smarter try ways of doing business and change how people work together. The way companies make digitalization happen is by using things like computers, websites and special systems to manage information. Digitalization is what makes all these changes, for modern companies. The digital economy is a type of economy where digital data plays a role in how things are made. This digital data really helps to make things more efficient. It helps people to work better. It also makes the things we buy and sell more valuable. The digital economy is important for the digital society to grow and develop. The digital economy is, about using digital data to make things better. The way things work with money has changed a lot because of technologies. These days, companies, governments and people all use technologies to do their jobs. Digital technologies are very important for helping the economy grow. When businesses use technologies, they can get work done faster and make more money. This also helps create markets and makes people want to buy new and interesting things. It even makes the quality of products and services better across all areas of the economy. When businesses and countries start using technologies it helps keep the economy safe. This is because digital technologies help make the economy stronger and better able to deal with problems that come from inside and outside the country. Digitalization is really important for security and for businesses. Digitalization helps businesses and countries by making them more resilient, to risks. Key factors considered in this context include technological capacity, economic and social conditions, the level of development of the national economy, strategic priorities of the national innovation system, technical and infrastructural readiness, market dynamics, and the implementation of relevant state policies.

LIST OF REFERENCES

1. Rogers, D.L. (2016). *The Digital Transformation Playbook: Rethink Your Business for the Digital Age*. New York: Columbia Business School Publishing.
2. Tursky, F. (2016). Digital transformation as a factor of economic development and competitiveness. *Journal of Business and Economics*, 7(4), pp. 512–520.
3. Popkova, E.G., Ragulina, Yu.V. and Bohoviz, A.V. (2019). Digital economy as a driver of economic growth and economic security. *Studies in Systems, Decision and Control*, 169, pp. 3–15.
4. Cherep, A.V., Cherep, O.H., Ohrenych, Y.O., Helman, V.M. and Gorbunova, A.V. (2024). Improvement of the management mechanism in the digital economy for ensuring economic security. *Financial and Credit Activity: Problems of Theory and Practice*, 1(54), pp. 471–484. <https://doi.org/10.55643/fcactp.1.54.2024.4295>
5. Cherep, A.V., Cherep, O.H. and Ohrenych, Y.O. (2022). Digitalisation as a tool for strengthening economic security under conditions of innovative development. *Financial and Credit Activity: Problems of Theory and Practice*, 42, pp. 134–144.
6. Ilyich, L.M. (2017). Socio-economic system: Essence, functions and management mechanism in the context of structural transformations. *Economy of Industry*, 2(78), pp. 96–118.
7. Kirichenko, O.V. (2020). Socio-economic mechanism of increasing competitiveness in the information and network economy. *Scientific Bulletin of Economic Studies*, 3, pp. 55–66.
8. Polenчук, V.M. and Naumov, O.B. (2011). Economic mechanism of development in the context of market transformations. *Economic Theory and Practice*, 4, pp. 21–29.