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"ECONOMICS FOR ECOLOGY"

("EU practices of education for sustainable development")

Materials International scientific-practical conference (Ukraine, Sumy, May14–17, 2024)

> Sumy Sumy State University 2024

УДК: 330.15:502/504 Авторський знак: S70

The conference is held within the Jean Monnet Modules "Fostering EU Practices of Education for Sustainable Development through the Brand Language: Interdisciplinary Studies" (101085708-ESDbrandEU-ERASMUS-JMO-2022-HEI-TCH-RSCH), Jean Monet Module "Youth and Business: EU Practices for Cooperation" (101126538 — YouthBEU — ERASMUS-JMO-2023-HEI-TCH-RSCH) (2023-2026) and "Disruptive technologies for sustainable development in conditions of Industries 4.0 and 5.0: the EU Experience (101083435 — DTSDI — ERASMUS-JMO-2022-HEI-TCH-RSCH)"



Editor-in-Chief Prof., Dr. Oleksandra Karintseva, head of the economics, entrepreneurship and business administration, Sumy State University

Approved by the Academic Council of SSI BIEM of Sumy State University (protocol №2, 5 September 2024)

Economics for Ecology : Proceedings of the International Scientific and Practical Conference, Sumy, May 14–17, 2024 / edited by Karintseva Oleksandra and Kubatko Oleksandr . – Sumy : Sumy State University, 2024 – 103 p. (*electronic edition*)

For scientists, scientists, students, graduate students, representatives of business and public organizations and higher education institutions and a wide range of readers.

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DISRUPTIVE TECHNOLOGIES TO ENSURE ECONOMIC AND RESOURCE SECURITY OF UKRAINE

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Disruptive technologies are essential to ensuring the economic and resource security of Ukraine and the whole world. These technologies can change traditional industries and create new opportunities to increase productivity and efficiency, reduce costs and improve the economy's energy efficiency [4]. This study examines specific aspects of Disruptive technologies that can improve the national economy's economic and resource security.

1. Artificial Intelligence (AI)

Artificial intelligence (AI) has become a critical technology in the first two decades of the twenty-first century. AI increases production efficiency, optimises business processes and ensures accurate and quick decision-making. Artificial intelligence is also helpful in ensuring the security of national resources, including energy and transportation systems. In particular, artificial intelligence systems can detect dangerous situations and prevent road or energy network accidents [1].

Artificial intelligence is widely used to deepen encryption and cryptographic data protection methods, which are now crucial in the economic and business spheres. Encryption and cryptography help solve problems related to transaction security and protection against cyber attacks.

Artificial intelligence is helpful for protecting financial transactions and banking information. Artificial intelligence helps to ensure the security of users' data and prevent the theft of money from bank accounts. Moreover, cryptography and AI can improve solutions to secure online commerce and ensure online privacy.

AI is also useful for developing e-commerce and international trade, thanks to secure electronic transactions and guaranteeing customer privacy. Artificial intelligence can help protect supply chains and reduce business risks from data breaches and cybercrime.

Artificial intelligence is useful for solving energy sector security problems. Firstly, it is possible to increase the technological safety of nuclear and thermal power plants by reducing the risk of nuclear disasters. For green energy sources, artificial intelligence is helpful in the form of intelligent networks (Smart grids), which are necessary to combine many solar generating stations into a powerful energy hub. Artificial intelligence is useful for creating safe control and monitoring systems for energy networks.

2. Blockchain

Blockchain is a technology based on a distributed database that helps store and transfer information without intermediaries. This technology can provide security and transparency in finance, economy, logistics, medicine, trade, and other vital sectors of the economy, as well as the protection of the country's resources. Blockchain improves efficient and secure trade and supply chain management [2].

Blockchain has become one of the most important technologies today, especially in the context of its use in business practice. The use of blockchain technology can help ensure the economic and resource security of the national economy.

The most crucial advantage of blockchain technology is its apparent security. Blockchain guarantees a high level of security because, at every step, any block contains a digital signature confirming the data's authenticity. This protects against abuse, theft and counterfeiting.

Blockchain technologies help ensure the transparency of financial transactions and help reduce transaction costs. Blockchain is useful for improving economic security by creating decentralised systems that do not depend on governments. This provides excellent resistance to financial crises and reduces the risks of corruption and market monopolisation [3].

Moreover, the blockchain is helpful in auditing and monitoring, guaranteeing the security of resources by creating mechanisms to control the use of resources. For example, with the help of blockchain, you can develop a system for monitoring consumer energy use. All of the Disruptive technologies listed above have a chance to increase the sustainability of modern economic systems based on the improvement of the digital financial sector. Disruptive technologies are more energy efficient and, therefore, more climate-friendly.

Acknowledgment. This research was funded by a grant "Restructuring of the national economy in the direction of digital transformations for sustainable development" (N 0122U001232) from National Research Foundation

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