

5. Jayachadran, G., Gimeno, J., Varadarajan, P. (1999). Theory of Multipoint Competition: a synthesis and implications for Marketing strategy. *Journal of Marketing*, 63(3), 49-66.
6. Batiuk, L.A., Kravchenko, O.K. (2016). Socio-economic risks of modern globalization processes. *Actual problems of innovative economy*, 1, 65-68.
7. Subbotyn, A.A. (2006). Hyper competition and the main directions of the strategy of Western European global companies. *Current problems in Europe*, 2, 92-110.
8. Jankelova, N., Masar, D., Moricova, S. (2017). Risk factors in the agriculture sector. *Agricultural Economics*, 63(6), 247-258.

Melnyk Oleksiy V.

graduate student of the Department of Finance, Accounting and Taxation

Natalia Trusova, D.Sc., Professor

Dmytro Motorny Tavria State Agrotechnological University

DIGITAL TECHNOLOGIES IN THE FINANCIAL MARKET

In the conditions of aggravation of threats to Ukraine during the martial law, the problem of protecting national interests, in particular protecting the financial market, which connects all spheres of the economy, carries out funds storage and credit service to clients through national and currency flows, is becoming an actual issue. The financial market of Ukraine is dependent on external regulatory mechanisms for the protection of the national currency and the distribution of capital on electronic payment systems. In the financial market, segmental metaspaces in the innovative environment of digital technologies lead to the formation of new services, forms and models of management of payment systems based on transparency as the dominant levers of the development of the financial infrastructure of national and global economic systems [1].

Metaspace as an innovative environment of digital technologies in the financial market of Ukraine is a virtual network of social interaction of people with virtual digital objects using virtual, augmented or mixed reality technologies [6]. Metaspace, like any organism, is considered an iteration of a three-dimensional virtual worldview, where digital technologies absorb real financial and economic relations between business entities on the financial market and constantly absorb into their activities more and more innovative ideas that open access to new opportunities. Broadly speaking, metaspace is a digital ecosystem built on various types of 3D technologies, real-time collaborative software, and Blockchain-based decentralized finance tools [5]. Thus, financial technologies ("Fintech") appeared which, through innovative methods and ideas, introduce new opportunities for the functioning of banking and other financial institutions into the financial sphere.

There are many metaspace worlds in the financial market. However, their context becomes interconnected over time. Consumers of services of financial institutions can use their digital personal assets in one interconnected space. In fact, the metaspace in the financial market is an underworld in one giant space of the global payment system. Accordingly, the country's payment systems located in the metaspace depend on the degree of interoperability between the virtual worlds of the financial market and transfer all data to manage and use the interfaces. For this, users of financial institutions use metaspace technologies: virtual reality (VR), augmented reality (AR), tactile sensors and others [6].

That is, there are three possible scenarios for the development of metaspace in the financial market when it is implemented [6]: metaspace remains the field of applications of financial institutions used by consumers of payment systems, but does not expand all-encompassing virtual reality; the metaspace is controlled by large competing ecosystems (for example, the Apple and Android metaspaces have limited interoperability); metaspace is a dynamic, open and interactive space similar to the Internet, but in 3D format.

There is a conflict of interests on the financial market, which is disguised as the optimization of information media to accelerate the flow of financial resources through electronic payment systems. Therefore, instant protection of payment transactions in the network of financial institutions using metaspaces, in a 3D environment, is the result of a timely response of the electronic financial regulator to fraud and misinformation regarding the legality of financial flows between users of payment systems [4].

Financial market players are experimenting with meta-virtual workplace applications that have been deployed during the pandemic to support remote work. Thus, corporate functions of metaspaces applications to the financial market include the following types: digital twin avatars that exist not only on computer screens, but also in the form of holograms based on artificial intelligence or holographic images (for example, a manager of a financial institution can activate your AI-based hologram to interact with multiple stakeholder groups simultaneously); a metaverse for collaborative work, as adding an "element of realism" to remote work (for example, creating 3D rooms where employees can collaborate) [6].

Metaspaces is the cyber protection of information technologies as a complex control technological system of the financial market, with a set of specific processes and security management tools (protection from both certain types of threats or investigations of cyber incidents, to broader ones – the application of configuration standards and security hardening) [3]. Accordingly, innovative metaspaces technologies are information carriers of personalized protection of financial transactions of clients of financial institutions, which requires a complex, clearly planned, phased project for the introduction of Fintech ecosystems. Such a complex combines approaches to identifying threats to the functioning of information systems of financial institutions. It begins with technological protection operations (optimization of the entire IT infrastructure of financial institutions) to possible threats (security of IT technologies of financial institutions), as well as information protection of the entire financial sector - working with management to understand all possible risks of cyber attacks, comply with legal requirements, use centralized monitoring tools) and conducting trainings with personnel (data confidentiality, qualification, work with information carriers, functioning of bank servers) [2].

References

1. Doran, N.M., Bădîrcea, R.M., Manta, A.G. (2022). Digitization and Financial Performance of Banking Sectors Facing COVID-19 Challenges in Central and Eastern European Countries. *Electronics (Switzerland)*, 1(21), 3483.
2. Eisenbach, T.M., Kovner, A., Lee, M.J. (2022). Cyber risk and the U.S. financial system: A pre-mortem analysis. *Journal of Financial Economics*, 145(3), 802-826.
3. Trusova, N. V., Chkan, I. O. (2021). Payment systems in Ukraine and the risks of their operation. *Business Inform*, 1, 257-263.
4. Trusova, N.V., Chkan, I.O., Kondratska, N.M., Zakharova, N.Yu., Osypenko, S.O. (2023). Cybersecurity of the Banking Sector in the Context of Digitalization of the World's Economy. *The Banking Law Journal*, 40(9), 471-502.
5. Volosovich, S.V., Vasylenko, A.V. (2019). Regtech in the financial technology ecosystem. *Modern Economics*, 15, 62-68.
6. What is the metaverse? An explanation and in-depth guide. URL: <https://www.techtarget.com/whatis/feature/The-metaverse-explained-Everything-you-need-to-know>