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## **SPECIFICS OF THE INTERACTION OF REAL AND VIRTUAL ECONOMIC PROCESSES AT THE TRANSITION OF LOCAL COMMUNITIES TO SUSTAINABLE DEVELOPMENT IN METAVERSE**

The subject of scientific research by foreign scientists and experts dealing with the problems of the transition of the digital economy to the Metaverse is, in particular, revealed in books, papers and articles by M. Ball, N. Bostrom, B. Chan, S. Elgani, P. Gareth, V. Geiets, A. Grytsenko, A. Guley, A. Mishra, V. Mishchenko, B. Rockers, A. Setia etc. In our opinion, the institutional structure of the meta-universe in the medium term is moving from the extensive quantitative growth of distracting technologies, mainly in the field of entertainment and gaming, to the transformation of its institutions into qualitatively new socio-economic dimensions. At the same time, as a challenge to inertial economic development, there is a revolutionary change in the identity of the long-standing basic subject and actor of the pre-digital economy – the *homo economicus*, its self-alienation and transition to the next stages of posthumanism.

According to M. Ball [1, p. 245], the meta-universe is a scalable and interoperable network of 3D virtual worlds that are visualized in real time. They are perceived by an unlimited number of users synchronously and continuously. Moreover, consumers of banking services in the Meta-Universe will retain a clear sense of presence (user data protection is guaranteed, which is critical for the development of lending operations by banks in the virtual world for the correct and reliable accounting of such transactions in the real world). In our previous studies, we gave a slightly different, broader definition of the Meta-Universe. The Metaverse is a virtual-real hybrid space in which people and artificially intelligent avatars interact with each other using transitional analogue-to-digital and digital-to-analogue reality converters: 5 and 6 G smartphones, wearable gadgets, virtual and augmented reality glasses, brain implants and other Digital-to-Analogue/Analogue-to-Digital Converter's technologies for human-machine input/output systems [2, p. 93].

In today's digital world, banking services are virtually devoid of an emotional component. Personal, confidential conversations that people used to have with bank employees are a thing of the past. That's why Metaverse methods can be very attractive. It is the Metaverse that promises to bring back the 'empathy factor', which has been almost forgotten in the digital development, to banking. This may be of interest not only to an older audience, but also to Generation Z customers – 'digital babies' for whom the Internet is the main channel for searching for all financial products. Some banks, in turn, are seeking to attract young people who will maintain relationships with the bank for a very long time, possibly for life. Given this fact, credit institutions have begun to use new digital trends. The metaverse opens up great opportunities for product and service innovation. It promises to bring back the face-to-face conversations and pleasant communication that are so lacking in digital channels, but the Metaverse has a lot of advantages for the next cycle.

Firstly, the Metaverse is inherent in rethinking the existing customer experience. It offers the possibility to checking balances, making payments and transfers. Also, digital generation may pay bills, withdraw cash from virtual ATMs in the metaverse, grant loans and borrow money and conduct transactions through augmented virtual reality channels.

Secondly, the Metaverse virtual world significantly personalizes institutional interaction in the bank-client pair of actors. Through the institutionalization of the Metaverse time-space, banks are able to provide reliable more personal advice, including financial planning, portfolio review and product recommendations, through interaction with virtual avatars.

The three sources of further revolutionary penetration of the metaverse into the mainstream are high-speed planetary Internet, blockchain technologies, and artificial intelligence, which cannot develop without the Noo-economy as a knowledge economy. Mass communications based on digital technologies will provide access to the development of new competencies and the generation of new knowledge among a wide range of people without any discrimination. Such *homo futuris*, united in Meta-worlds, will become agents of change – agents of promoting creative industries in Ukrainian society, not just passive Internet users like modern *homo smartphonicus*.

The inevitability of Ukraine's European integration vector of development imposes obligations on state and local authorities to harmonize legislation and adapt sustainable development policies of EU cities and regions to domestic realities. On September 25, 2015, the UN Sustainable Development Summit in New York adopted the final document 'Transforming our world: the 2030 Agenda for Sustainable Development' [3], which identified 17 sustainable development goals and 169 targets that are the most significant and priority for humanity. Therefore, the use of digital technologies and tools will allow to implement the measures envisaged by the Council of Europe Action

Plan for Ukraine for 2023-2026 ‘Resilience, Recovery and Rebuilding’ [4]. In particular, it is necessary to institutionally strengthen and support local governments in promoting innovative approaches to the formation of local policies and strategies to increase social cohesion, inclusiveness and involvement of the population in the processes of recovery and reconstruction of affected territorial communities [5, p. 251]. By combining the properties of digital and financial instruments, in the current environment it is advisable to talk about the formation of the latest digital financial instruments that combine the characteristics of the previous ones, while being more efficient in terms of their use, accessibility to the general public and profitability in the long term.

At the level of local communities, without waiting for the end of the war and the introduction of advanced AI systems, it is advisable to focus on forming a comprehensive resource and ideological basis for a constructive perception of the likely future of the affected territories. The formation of a digital-based institutional framework in the post-war period will ensure the creation of spatially distributed recovery networks similar to the light version of ‘collective superintelligence’ as defined by N. Bostrom [6, p. 72].

Paraphrasing Bostrom’s definition to domestic local tasks, it can be argued that the construction of a complex system for the restoration and development of territorial communities within this approach will combine a large number of distributed intelligences in such a way that the overall productivity, at least in a small number of generalized fields of knowledge, exceeds the capabilities of any non-specialized modern intellectual system. It will be important to develop and apply incentives to encourage local and foreign creative businesses [7, p. 280] to implement the latest digital solutions of GovTech products in the process of sustainable reconstruction of Ukraine’s economy, both at the State level (through the digital application ‘DIIA’) [8] and regional and local levels, especially for affected territorial communities.

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