REVIEW
of a collective monograph «Digitalization of the economy: how to improve the country's competitiveness» (Vishnevsky V. P., Harkushenko O. M., Zanizdra M. Yu., Kniaziev S. I., Lypnytskyi D. V., Chekina V. D. Kyiv: Akademperiodyka, 2021) (https://iie.org.ua/monografiyi/cifrovizacija-jekonomiki-kak-povysit-konkurentosposobnost-strany/)

Nowadays digitalization is a key factor in the development of all sectors of an economy. The effective implementation of digital technologies to coordinate processes related to operational, marketing and other activities, is the top priority for many enterprises. The emergence of digital business platforms has opened new opportunities not only for the improvement of the resource coordination efficiency, but also for the change of business models and business behaviour. Digitalization processes are also taking place in the public sector of an economy – digital platforms are being created for public service delivery and online databases are being formed. Digitalization takes a significant place in the field of information security, etc.

Due to the fact, that the choice of "digit" is imposed by advertising and the market supply, the digitalization process is gradual and relatively easy in everyday life. But for business and government structures there is a difficult task of formation of a strategic point of view how these technologies will increase business capitalization and improve public administration. It should also be borne in mind that it takes time and investments to implement digital innovations and adapt personnel to new technological conditions.

Each country chooses its own path of digital transformation, develops strategies and programs for economic growth in the new digital environment. Therefore, it is extremely important and timely to study the assessment of the transformational potential of an economy, opportunities and obstacles associated with the introduction of digital technologies in the activities of enterprises and organizations, equipment and technology, production and non-production processes. The monograph presented for review is one of such researches.

It is worth noting the well-constructed structure of the monograph. It consistently reveals a set of issues related to the definition, development and effective use of the transformational potential of digitalization is consistently revealed – from theoretical aspects related to the development of the ICT sector (chapter 1) and digital technologies (chapter 2) to the analysis of the digitalization impact on the environment (chapter 3) and economic growth (chapter 4). The materials of Section 5 are of practical significance – general principles of assessment and scientific and methodological approaches to modelling the transformational potential of the digital economy are presented, the ways of its increase are substantiated. The monograph is well illustrated with statistical tables, figures and graphs.

These research raises relevant issues of developing national and international legal norms in the ICT field (paragraph 1.2), creating conditions for the successful development of this sector (paragraph 1.3) and the impact of digitalization on the results of economic activity (paragraph 2.2).

The authors deeply analysed the possibilities of digital transformation of an economy through the employment of the fifth generation of 5G mobile communications (paragraph 2.3.1) and Big Data (paragraph 2.3.2). These technologies, in turn, are the basis for the further implementation of other digital technologies such as blockchain (paragraph 2.3.3). The potential of it is revealed in the optimization of business operations and the reform of public authorities, as well as the Internet of Things and artificial intelligence.

However, in my opinion, the monograph does not pay enough attention to the last two technologies, regard to the fact that "combination of IoT and artificial intelligence with the blockchain will be able to trigger a new stream of innovations" (p. 72).

The analysis of the impact of digitalization on sustainable development deserves attention. It was carried out by clustering countries according to the criterion of general patterns of socio-economic and digital processes (paragraph 3.2). It is resulted in conclusions about the different level of digitalization impact on an economy's development and the environment, as well as the dependence of this level from the general level of the economy growth and of the real sector technologies.

By deepening this analysis, authors studied the ecological-digital profile of Ukraine using the relevant indices and analysis of government programs for the development of the ICT sector and environmental policy (paragraph 3.3). It was defined that the effectiveness of digitalization to solve environmental problems in Ukraine due to the development of national manufacturing, design and the introduction of modern production processes and products. The monograph emphasizes that the issue of environmental consequences of an economy's digitalization requires a timely response at the state level, including through the implementation of a special national academic program to assess various aspects of the impact of the latest digital technologies on the environment as part of the general strategy for the sustainable development of national industry.

The monograph also raises topical issues of monitoring and assessing digitalization (paragraph 4.1). This making proposals for further study and improvement of indicators to consider problems of measuring and integrating the digital economy into national accounts and other statistical systems. Analysis of modern models of the ICT impact on economic development (paragraphs 4.2, 4.3) showed that the main disadvantage of such models is the outdated methodology for data analysis and the lack of consideration of the technologies' life cycle and technological gaps, capital depreciation. To expand the scope of models of ICT impact on economic development, it is proposed to carry out such studies considering the group (cluster) patterns of countries' development in space and time with the construction of appropriate complexes of models.

Based on the results of the study, the authors established an S-shaped relationship between the costs of digitalization and the results of economic activity, calculated the size of the digital economy by countries of the world and formed clusters of countries by the level of digitalization (paragraph 5.1). Carried out an original assessment of the digitalization impact on the economic development of each cluster on the example of Ukraine, the Czech Republic and Germany (paragraph 5.2). Also, proposals have been developed to increase the transformational potential of digitalization and the competitiveness of the national economy (paragraph 5.3).

The argumentation of the study, in which authors advise to establish the effects of digitalization using the concept of the technologies' life cycle deserves a special attention. These effects described by S-shaped curves, and abrupt (rather than smooth) transitions from one curve to another due to changes in the dominant technologies in one or another country (p. 159-160). This is an important conclusion that allows us to deepen our understanding of the complex processes of digitalization. At the same time, this argumentation requires strengthening. In this context, it was also advisable to draw attention to the well-known "valley of death" problem, which characterizes the gap between academic and applied research in relation to the technology readiness level.

It is worth focusing readers 'attention on the fact that this work is a logical and consistent continuation of the authors' researches carried out at the Institute of Industrial Economics of the National Academy of Sciences of Ukraine. During which the authors specialize in the problems of industrial development and industrial policy, especially in emerging economies. Their result was the publication of

the monographs "Smart industry in the era of the digital economy: prospects, directions and mechanisms of development" (2018) and "Smart industry: directions of formation, problems and solutions" (2019), which are in stable demand among Ukrainian and foreign researchers as evidenced by the performance of digital science platforms such as Google Scholar and Academia.edu. The new monograph is also can be found in the public domain on the Internet and has already found its readers, which indicates the interest in the research topic and the results.

This direction of research has become the impetus for a ramified analysis of the range of issues related to the digitalization of the economy and its impact on the economic development of our state. At present, the specialists of the Institute have a significant backlog of research in this field, which is presented in monographs and specialized scientific journals that can be found on the website of the Institute of Industrial Economics of the National Academy of Sciences of Ukraine.

In conclusion, I would like to note that results obtained in the monograph "Digitalization of the economy: how to improve the country's competitiveness" have both scientific and practical significance, primarily for emerging economies. The presented material is distinguished by substantiation, reliability, consistency and accuracy. Its authors were able to present results of their study in a good scientific (but never dry) and understandable language for the modern reader. Thus, the monograph presented for review is of undoubted interest and will be useful both for researchers, teachers, students, and for the general public.

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