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FEATURES OF DIGITALIZATION OF THE ECONOMY OF THE REPUBLIC OF BELARUS AND THE EU COUNTRIES

The aim of this article is to explore the stage of development of the digital economy in the Republic of Belarus and EU countries, as well as to highlight problems related to digitalization of the economy and how to address them.

Along with such current global economic trends like internationalization, globalization, international economic integration, the process of digitalization of the economy is becoming increasingly important, which involves the widespread adoption of information and communication technology (ICT), also includes moving economic processes into the virtual realm, transformation and automation of traditional industries (medicine, energy, education, transport). Therefore, exploring the features of the digital economy, description of the level of digitalization of the economy of Belarus and the EU countries, identifying promising areas of development of ICT in our country are important.

The evolution of digitalization largely coincides with the stages in the development of electronic computers (EC). Its beginning is usually attributed to the 60s, when EC decreased significantly in size and became more accessible. The current phase of digitalization is characterized by the widespread use of the computer networks and ICT. Digitalization changes the structure of the economy and speeds up business processes. Its important feature is the transformation of the role of knowledge in the economy. Information becomes the main resource, the demand for knowledge is growing, the range of knowledge in comprehensive services is expanding, the demand for information processing skills, automatization, machine and technology is rising.

Digitalization is now an integral feature of global economic development. The success and competitive advantages of each country depend to a large extent on the application of modern ICT. Therefore an attempt has been made to compare the digitalization rates in the Republic of Belarus and in the EU countries to identify forward-looking directions for the ICT development in Belarus.

It should be noted that there are various methodologies for assessing the digitalization of the economy. In our opinion, Digital Economy and Society Index (DESI) is of particular interest [1]. This index monitors Europe’s overall digital performance and the progress of EU countries in digital competitiveness. It is made up of 5 dimensions: connectivity, human capital, use of internet, integration of digital technology, digital public services.

To compare the parameters for each dimension, we selected several indexes with comparable values (figure 1).

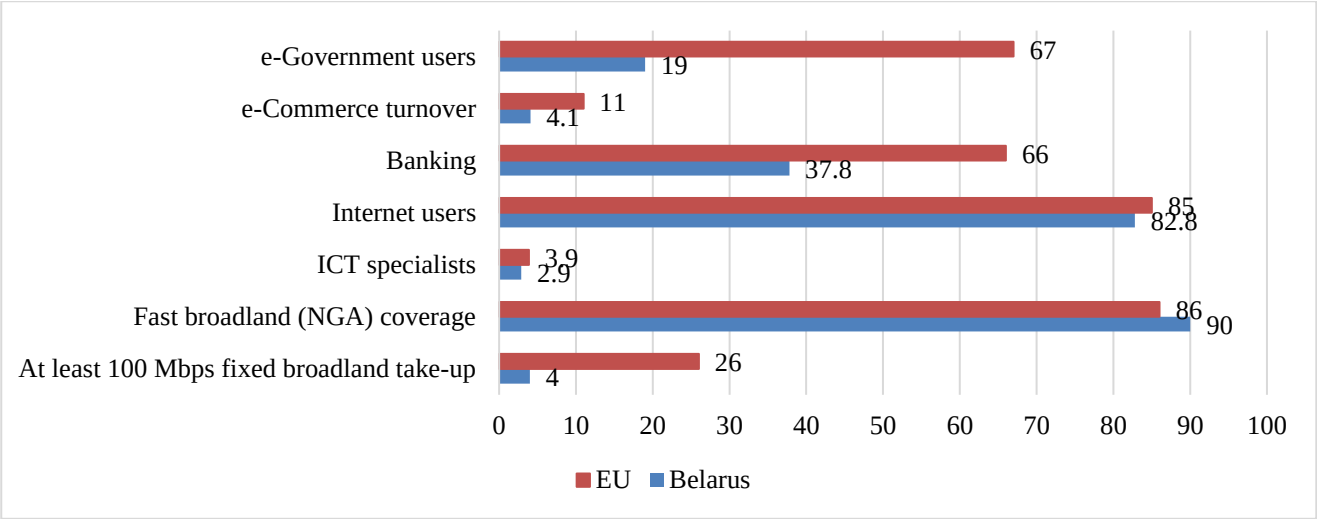

Fig. 1 – Comparable indicators of digitalization in Belarus and the EU countries as of 2019
Note – source: own working-out based on data [1], [2].

As shown from the data, such indicators as Internet users, ICT specialists and NGA coverage in Belarus and the EU are approximately at the same level, which is indicative of prevalence of the Internet among the population and the popularity of the profession in the technology [1; 2]. However, compared to the EU countries, in Belarus the Internet is used 3.5 times less for interaction with the government; only 37.8% of the population uses the Internet for financial transactions, which is 2 times less than in the EU [1; 2]. The level of fixed broadland connection is far below in our country as well. All these indexes point to certain barriers in the processes of digitalization, reveal the extent of public lack of population to the security of the Internet, the low digitalization of the public sector, the conservatism of the older generation, the need for significant investments in expensive equipment.

In this regard, the main digital priorities of the Republic of Belarus include: the digital transformation of the banking sector, further digitalization of the real economic sector, the introduction of digital public services, the development of information and communication infrastructure, the development of the human potential of the digital economy, ensuring cybersecurity and ideological support for the transition to the digital economy. At the same time, technologies should not only have economic efficiency, but also provide opportunities for human development, ensuring digital well-being, which consists of equal and constant access to ICT, as well as maintaining physical and mental health while using digital technologies at work and in life.

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DIGITAL INNOVATIONS AND THEIR ROLE IN BUSINESS DEVELOPMENT

Digital technologies contribute to the transformation of a significant part of our economy and society. Not only the five most valuable companies in the world belong to the digital sector, but the very nature of innovation has undergone a digital transformation. In addition to transforming business models, digital innovation also leads to a change in the entrepreneurial culture: digital businesses can grow at a huge pace and scale, and founders can create temporary monopolies or oligopolies with less external capital. Digital innovation is no longer just a business for software companies [1].

According to the creative-functional approach, digital innovation is an effective creative activity, which is understood as an achievement of existing or completely new goals using new tools [1]. According to the philosophical approach, digital innovation is a process that combines science, technology, economics, entrepreneurship and management to achieve a positive synergistic effect. Creating digital innovations is a process that includes all the work related to the creation and development of a new digital product, such as research, development and implementation of their results. Introduction of innovations (digital innovations) is not limited to serial and mass production, sales, distribution and use of digital products [2].

However, in some cases, a digital innovation product may not be intended for mass production, exchange, or consumption.

Examples include aerospace, nuclear products, or digital (single, unique, singular) or digital products produced for medicine, nuclear physics, and other high-tech industries. It should be noted that no serial or mass production can be called innovative [3].

The companies that refuse to recognize the value of revolutionary technologies will quickly give a way to smarter competitors. Managers need to constantly think about how technological advances can help them stay relevant and add value to their business.

The companies that innovate can benefit from:

- competitive advantage;
- technology solutions that increase ROI and increase revenue;
- increase efficiency and optimize processes through automation and integrated digital solutions [4].