

DIGITAL ECONOMY AND THE BASICS OF DEVELOPMENT

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The term “digital economy” appeared in 1995 simultaneously with the Canadian professor of management Don Tapscott from the University of Toronto (his best-selling book was published in 1997) and American computer scientist from MIT Nicholas Negroponte and quickly became widespread, displacing the concepts: New Economy , Web Economy , Internet Economy , Network Economy to the periphery of economic science and giving this term more specific content.

Briefly, the digital economy is an economy based on information and communication technologies, but, unlike informatization, digital transformation is not limited to the introduction of ICT, but radically transforms companies and their business processes based on the Internet and new digital technologies .

Initially, three components of the digital economy were identified:

- e-business infrastructure – networks, software, computers, etc.;
- electronic business (e- business), i.e. business organization processes using computer networks;
- electronic commerce (e- commerce), i.e. retail online sales of goods.

However, as new technologies spread: big data (Big Date), cloud computing (Cloud Computing), blockchain (Blockchain), cognitive computing (Cognitive Computing), Internet of things (Internet of Things - IoT), robots, financial Internet technologies (Fintech), as well as virtual goods (games, music, films, books), this concept has acquired a significantly broader meaning, and the central element of the digital economy - the global Internet - has become clear.

Digitization abroad of economics (or in industry – digitization of industrial organization), and Russians use either the English calque “digitalization” or the old, somewhat narrower term “informatization”, but increasingly they also use the new phrase “digitalization” or “digital transformation”.

In industry, changes in technology and business processes influenced by the digital economy have been called the fourth industrial revolution (Industry 4.0).

The ideas of the digital economy, as a complex phenomenon, gradually entered the political agenda of governments, which began to develop and implement national digital strategies, and international organizations concerned

with coordinating digitalization efforts. Thus, in 2015 in Antalya, the G20 leaders adopted the final document “Program for Development and Cooperation in the Digital Economy” (translation into Russian is available on the website eurasiancommission.org), in 2016 in Cancun, the OECD countries at a ministerial meeting recorded their common goals in the field of the digital economy, and already in 2017 in Hamburg they discussed common approaches to regulating the digital economy.

As a result, the digital economy sector has become the driving force of innovation in the world, now accounting for a large share of enterprise R&D spending and more than a third of all patent applications.

The speed of spread of the digital economy is explained by the following data: over the past 19 years, the number of Internet users has grown 15 times - in 2000 it was 260 million people, in 2005 it reached 1 billion people, and as of the end of 2018, the Internet used by 51.2% of individuals or 3.9 billion people.⁵⁹ The reports from We Are Social and Hootsuite indicate that in July 2019, the Internet audience totaled 4.333 billion people, 3.534 billion users were registered on social networks, and the number of mobile phone owners in the world was 5.117 billion people.⁶⁰ According to the ITU, it took 16 years to reach the first billion Internet users. The second billion joined the network in just 6 years. Today, the Internet is growing at a rate of 1 billion new users every 2.7 years; In 2020, according to Google forecasts, the number of Internet users in the world will exceed 5 billion people.

According to data collected by Lori Lewis and Officially Chadd for Visual Capitalist , one minute in the global digital economy is 1 million logins on Facebook, 4.5 million video views on YouTube, 1.4 million swipes on Tinder , a total of 41.6 million messages sent on WhatsApp and Facebook Messenger, 3.8 million Google searches, 347,222 Instagram swipes and nearly \$1 million spent online .

⁵⁹Measuring the Information Society Report 2018. Volume 1. – Geneva: ITU, 2018. – 13 p.

⁶⁰Kemp, S. Global Social Media Users Pass 3.5 Billion // We Are Social [Electronic resource]. – Mode of Access: <https://wearesocial.com/blog/2019/07/global-social-media-users-pass-3-5-billion>. – Date of access: 07/30/2019.



Figure 1 – Actions on the Internet in 1 minute⁶¹

The phenomenon of the digital economy is inextricably linked with the formation of the global information space as a set of “... banks and databases, technologies for their maintenance and use, information telecommunication systems that operate on the basis of general principles and ensure information interaction between organizations and citizens, as well as the satisfaction of their information needs ⁶². ”

The global information space consists of the following main components:

- information resources containing data, information and knowledge recorded on appropriate media;
- organizational structures that ensure the collection, processing, storage, distribution, retrieval and transmission of information;
- means of communication interaction (usually the Internet), providing individuals and organizations with access to information resources.

Many foreign and domestic researchers identify the digital economy with categories such as information economy , knowledge economy Economy), creative

⁶¹Desjardins, J. What Happens in an Internet Minute in 2019? / J. Desjardins // Visual Capitalist [Electronic resource]. – Mode of Access: <https://www.visualcapitalist.com/what-happens-in-an-internet-minute-in-2019/>. – Date of access: 07/31/2019.

⁶²Kogan, Y. Long Wave of Economic Growth Yoshihiro Kogan // Futures. – 1998. – October. – P. 536.

economy (Creative Economy), Internet economy (Internet Economy), network economy (Network Economy), electronic economy (E- economy), new economy (New Economy), etc. These terms are used as synonyms to refer to new concepts in the economy predetermined by the formation of a global information network, the universal spread of personal computers and smartphones, the development and constant improvement of software, the production of intangible digital products, and the widespread introduction of ICT. According to the US Access Council, ICT is any information technology, equipment, integrated systems or subsystems of equipment, the functional purpose of which is to create, transform, copy, automatically collect and process, store and analyze, manipulate, manage, move and control, reproduce, switching, exchange, transmission, reception, and broadcast of data or information (electronic content, telecommunications products, computers and auxiliary equipment, software, information kiosks and transaction automatic devices, video, IT services, multifunctional office equipment designed for copying, scanning and facsimile transmission of documents ⁶³. As for the ICT sector, OECD member countries back in 1998 agreed to define this sector of the economy as a set of manufacturing industries and service sectors of the economy, covering the transmission and display of data and information in electronic form ⁶⁴.

The digital economy is not only new digital technologies, but also significant changes in traditional rules of doing business, in new manifestations of classical economic patterns. The massive spread of global communication networks and devices accessing them (personal computers, smartphones, tablets), the emergence of new digital goods decisively changes the content, meaning and relationship of the following concepts in the digital economy: material and intangible, location and distance, time and space, consumer cost and utility, quality and quantity, consumer demand and competition, intermediation and logistics, human capital and business ethics, transactions and performance measurement, behavior of sellers and buyers, new relationships between producers and consumers, marketing and sales technologies, etc.

LITERATURE

1. Measuring the Information Society Report 2018. Volume 1. – Geneva: ITU, 2018. – 13 p.

⁶³Information and communications technologies (ICT). Standards and Guidelines. – Washington DC: US Access Board, 2011. – p. 8

⁶⁴Measuring the information economy. – Paris: OECD, 2002. – p. 81 .

2. Kemp, S. Global Social Media Users Pass 3.5 Billion // We Are Social [Electronic resource]. - Mode of Access: <https://wearesocial.com/blog/2019/07/global-social-media-users-pass-3-5-billion>. -
3. Desjardins, J. What Happens in an Internet Minute in 2019? / J. Desjardins // Visual Capitalist [Electronic resource]. - Mode of Access: <https://www.visualcapitalist.com/what-happens-in-an-internet-minute-in-2019/>. -
4. Kogan, Y. Long Wave of Economic Growth Yoshihiro Kogan // Futures. - 1998. - October. - P. 536.
5. Information and communications technologies (ICT). Standards and Guidelines. - Washington DC: US Access Board, 2011. - p. 8
6. Measuring the information economy. - Paris: OECD, 2002. - p. 81 .