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THE TRANSFORMATIONAL POTENTIAL OF DIGITAL TECHNOLOGIES: CONSTRUCTIVE DESTRUCTION

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There is no single understanding of the beginning of digital transformation: some of them argue that its emergence is associated with the emergence of the first digital technologies, while others believe that real digital transformation is associated with a change in business models under the influence of a set of specific digital technologies – technologies of the third platform of IT transformation [1] (Table 1).

Table 1

Comparison of digitization and digital transformation

DIGITIZATION	DIGITAL TRANSFORMATION
Precedes digital transformation	The result of digitalization
Localized effect	The effect is scalable at a global level
Quantitative impact on business processes,	Qualitative impact on business processes
Improves individual stages of business processes	Transforms business models

Source: developed by the author

The first is based on mainframes and terminals with thousands of applications and millions of users, the second is based on PCs and client-server architecture with hundreds of thousands of applications and billions of users, and the third platform is based on various devices, including mobile devices, mobile Internet, social networks, cloud technologies and the construction of all kinds of "smart" economy solutions. The current stage of economic development is characterized by an active transition to process management and digital transformation of business. Leading companies are transforming their business models taking into account emerging opportunities in order to increase operational efficiency, improve production technologies and methods of interaction with consumers, thereby ensuring a sustainable competitive advantage. The development of digital technologies allows for the creation of more environmentally friendly and safe production methods. In addition, digitalization simplifies interaction with all stakeholders, expanding communication channels. The creation of digital (online) platforms in any field of activity leads to a significant reduction in transaction costs and acceleration of operational cycles of its participants [1–3].

The growth of labor productivity due to the digitalization of the economy will become noticeable if digital technologies become widespread not only in large companies, but also in small and medium-sized businesses. In addition, the result of their application will depend on how national governments respond to new challenges. Technological progress does not displace professions, but their least productive functions [4]. "Industry 4.0" is considered as a change in business processes: (1) the first stage – "lean" production (1970s); the second stage – the spread of outsourcing from developed countries to developing countries (1990s); (3) the third stage – mass automation (2000s). The above business models stimulated the processes of globalization and constituted its essence: entrepreneurial capital was looking for new sources and ways to maximize profits. These processes were very active despite the fact that the free movement of goods and capital clearly did not correspond to the remaining restrictions on the movement of labor from country to country [3]. On the one hand, digitalization stimulates innovations in chemistry, materials science, robotics (robots can quickly assemble new custom-made designs from these parts and components at minimal cost). Thus, the restrictions of the traditional technological process are removed, mass marketing is replaced by customization, live labor is replaced by robotics, and "smart production" is created. On the other hand, opposite trends in the impact of technology on globalization processes are developing.

Outsourcing with cheap labor in developing countries is being replaced by reshoring, which is expressed in the fact that international companies are returning their production to Europe and the United States [5]. At the same time, developing economies are losing tens of thousands of jobs. In the United States, in recent years, more than 200 companies have returned their production from China, creating more than 600 thousand new jobs in industry. Reshoring is developing in those industries where production has significant competitive advantages and opportunities for the widespread use of robotic technologies. This process mainly concerns the production of goods for which it is important to reduce transportation costs. In addition, this group can include goods with a short production cycle that require precise delivery times for components, as well as strict quality control of products, compliance with and protection of copyright and patents.

The United States, being a leader in the global market for high-tech products [6], has defined technological priorities for the development of five high-tech industries: aerospace engineering; pharmaceuticals; communications; semiconductors and measuring instruments; high-tech services, which are largely based on digital technologies. Digital transformation creates new opportunities for international outsourcing. Technologies allow companies to work with external service providers around the world, which can reduce production costs and expand the geography of business. The implementation and use of digital products for internal and external business processes will

allow outsourcing companies to most effectively use information products to ensure competitive advantages in the rapidly growing and expanding outsourcing services market. Digital outsourcing allows companies to access specialists on demand and pay for their services only after the work is completed. Digital outsourcing allows you to reduce IT infrastructure costs [7]. The use of cloud technologies allows companies to reduce IT infrastructure costs and focus on business processes. IT infrastructure outsourcing allows companies to access advanced technologies and infrastructure without the need to invest in their own resources. IT outsourcing is a particular manifestation of digital outsourcing, which allows you to: save on wages and taxes; free up internal resources to solve more important tasks; systematize the work of the IT department; develop IT infrastructure; guarantee the availability of professional knowledge and technologies; reduce risks associated with the implementation of various business processes.

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