



Conceptual Approaches to Research Digitization

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Abstract

The purpose of this study is to investigate the methodology, approaches, and assessment of the impact of digitalization on the sustainable development of the company. The modern economy is based on the constant development: advanced, modernized and invented new management models, products and systems. Such development in recent years is directly related to the concept of “digitalization”.

Keywords: *Digitalization; Digital Economy; Digital Transformation; Sustainable Development; Competition; Business Processes; Micro Level; Macro Level; Information*

Introduction

Many authors mistakenly consider digitalization as a separate process for automating a company, which is associated solely with the growth of labor productivity and the modernization of production. However, the modern approach involves a comprehensive study of any process and phenomenon, so it is important to conduct a theoretical and practical justification of the impact of digitalization on improving the economic performance of the company, reducing its impact on the environment and developing relationships with participants, and tools for assessing the impact of digitalization on sustainable development are becoming increasingly relevant.

Thus, over the past decade, there has been an increased interest of the world community in the problems of environmental impact, social and economic inequality between countries and individual segments of the population. Under the auspices of the United Nations Organization, international political and economic unions, work is being carried out to promote the Sustainable Development Goals, which are aimed at solving these problems at the global and regional level. For the effective implementation of a number of identified goals, it is important to build up sustainable development tools, to look for new ways to solve global problems at the level of countries and individual entities (regions, cities and companies). One of the most promising tools today at the micro level is the use of digitalization as a factor of sustainable development.

Methods

In studies on digitalization, the main difficulty is the vague definition of the term and the substitution of concepts. These questions are revealed in the works of Russian researchers V. Dravitz, A.Kurbatsky, A.A.Kryukova, P.Yu.Mikhailova, Yu.A.Mikhaleiko, E.N.Nartova, S.A.Tolkachev, a team of authors T.O.Tolstykh, E.V.Shkarupet and I.A.Shishkin, as well as T.N.Yudina and a number of other authors. A lot of work in terms of delimiting concepts and in-depth study of the term “digital economy” was carried out by L.I.Malyavkina. Attempts to develop a definition of the concept of “digitalization” are present in the research works of foreign and Russian authors: Ming Zeng, E.V.Maimina, T.A.Bubbles, N.Yu. Shchetinina and other authors, a special contribution to the study of digitalization in Russia was made by N.S.Verkhovsky.

Issues of sustainable development of companies in earlier periods were engaged in E.A.Borgardt, A.E.Mikhailova, S.P.Fukina, A.D.Sheremet, identifying the term with the concept of economic stability and financial stability. More progressive views on the sustainable development of the company as a balance of economic, environmental and social development are present in the works of M.M. Makova, V.M.Ryabov and some other authors. Sustainable development in relation to corporate social responsibility was studied by S.M.Anpilov, V.N.Bolidrev, E.Yu.Davydova M.A.Shatalov and a number of other researchers. The most complete definition of the phenomenon at the company level belongs to E.V. Gorcheshina, V.G. Naizyanu, T.S. Rotar, N.A.Khomyachenkova. The problems of the transition of Russian enterprises to the concept of sustainable development were dealt with by K.A.Barmut, O.V.Efimova, V.P.Samarina and other authors.

As President of the Republic of Uzbekistan Sh.Mirziyoyev repeatedly noted in his speeches, one of the priority tasks for the consistent socio-economic development of Uzbekistan is the widespread introduction of ICT and digital technologies. It is digital technologies that are the effective tool which can ensure the qualitative reform of economic sectors and spheres of public life.

The logical installment of these works was the Decree of the President of the Republic of Uzbekistan dated October 5, 2020 “On approval of the strategy “Digital Uzbekistan - 2030” and measures for its effective implementation”. The large-scale policy document includes road maps for the digital transformation of priority economic sectors and regions.

Among the main documents, one can also note the resolution of the head of state dated March 17, 2020 “On measures for the widespread introduction of digital technologies in the city of Tashkent”. The Development Concept approved by the resolution and the Digital Tashkent comprehensive program are aimed at the comprehensive digital development of the capital of Uzbekistan.

Results

It should be noted that in the past two years, even in the context of the COVID-19 pandemic, large-scale digital reforms have been carried out in the country. And, importantly, today, at such a difficult stage for the country and all of humanity, the importance of measures for the widespread introduction of digital technologies in the field of public administration, public services, and trade has been clearly demonstrated.

Attempts to transition into a digital economy are an important trend for the state and business, but its formation according to any predetermined algorithm is impossible. All over the world, economists, businessmen and IT specialists create new technologies and models for the transition to a digital economy, while today there is no common understanding of this term. In particular, the community of authors under the general name Sretensky Club named after S.P.Kurdyumova defines the digital

economy as a new stage in the development of the socio-economic system. The basis for the development of the digital economy, in their opinion, is digital technologies that use various information including personal one. The authors believe that only with such a large-scale use of data and their openness is possible to achieve full satisfaction of consumer needs and maximum transparency of processes. A.E. Zubarev, when defining the digital economy, focuses on the “techno-digital” form of existence of the company’s products, due to which there is a saving on resources for production, i.e. the phenomenon of the digital economy is presented as the digitization of physical products. From our point of view, this understanding greatly limits the scope of the digital economy, since not all products can be digitized, and simple digitization is just a stage on the way to the digital economy.

In *Smart Business: What Alibaba’s Success Reveals about the Future of Strategy*, Ming Zeng, director of strategy at China’s technology company Alibaba Group, argues that as businesses become more digitalized, competition in its traditional form will no longer be the mainstay of strategy. The coordination of processes and the creation of a dynamic management system come to the fore. Thus, digitalization is understood as a tool for business transformation, the transformation of routine processes into automated ones so that it becomes possible to reorient the company to build more flexible business models. N.S. Verkhovsky argues that following the digitalization trend is not a fashion, but a necessity for a company to ensure a sustainable position in the market. At the same time, the phenomenon itself is understood by the author as the introduction of modern technologies into the activities of the company.

Discussion

Thus, digitalization can be understood as a concept or a process. In the first case, digitalization is the idea of developing the economy by automating the production process. In the second, it represents the steps necessary to make the transition to a new era, to a digital economy, through the use of specific technologies and inventions.

A separate consideration of all concepts made it possible to form a generalized scheme of the development stages of digital economy, which includes the stages of digitalization and digital transformation. This scheme is shown in the figure.

I stage Digitalization	II stage Digital transformation	III stage Digital economy
Improvement and transformation individual stages business process by using digital technology and digitized data turned into practical knowledge	Implementation of IT technologies on each production stage goods or services: business model, management, supply, direct production	Completion digital transformation of all activities and aspects of social economic life

Figure - stages of introducing digital technologies into business processes

Digitalization serves as a tool for transforming an organization at different levels: management, production, control and others, but it can be used in each of them.

Digitalization leads to an increase in labor productivity and, in general, to the efficiency of production and communication with various parties: suppliers, consumers, the state or may affect intra-corporate relations.

Today, most of the leading companies in their industries are actively implementing digitalization tools: creating corporate programs for communication, training and development, platforms for selecting contractors/suppliers, which is especially important given the growing anti-corruption requirements and business transparency. The desire for digitalization is conditioned both by internal needs, which were already mentioned above (increasing efficiency, product quality, the desire to receive additional income), and by external impact on the company: market development, increased competition, tightening of legislation. Modern companies, especially large ones, are subject to comprehensive regulation by the following entities:

- The state, which tightens anti-corruption legislation, increases the requirements for transparency in doing business. These measures are aimed at increasing the information openness of companies and are designed to help improve their reputation, as well as promote the principles of sustainable development in business;
- Shareholders and investors who are objectively interested in increasing the openness of processes, as well as the efficiency and stability of the company, which is due to the economic interests of these parties;
- Partners (suppliers, contractors, etc.) - this is the group that is most interested in the sustainability and transparency of the company.

Thus, all of the listed parties are interested in the development of digitalization of the company's business processes, since its development requires the use of data and their openness. Increasing openness allows all interested parties to receive the necessary information, as a result of which the possibility of its falsification is reduced.

Summarizing all of the above, we present the definition of the process under study. Digitalization is a deep business transformation at all levels of value creation based on the use of digital technologies, optimization of business processes and management in order to simplify interaction with consumers, employees, suppliers and other participants. Thus, not every single digitalization of activity leads to digital transformation. Among researchers, it is customary to talk about digital transformation if the process has changed dramatically, i.e. an effect of more than 80% was obtained, other results are usually attributed to ordinary digitalization.

The theoretical and methodological study carried out in this work allowed us to draw the following conclusions:

- a) digitalization is the main step in the transition to digital transformation and the creation of a digital economy, since at this stage there is a qualitative improvement in the company both from the side of production processes and management, and from the side of openness and transparency;
- b) in the scientific literature there are different approaches and visions of digitalization, but they are united by a common idea - when introducing digitalization, it is important to pay attention to qualitative characteristics: the efficient use of raw materials and resources, the creation of an optimal management structure and a high level of corporate social responsibility of the business - the company should not only be striving to minimize costs and maximize profits, but also to care about employees and society. Implemented technologies should be environmentally friendly, safe and transparent in terms of protecting rights and complying with laws. In other words, the principles of sustainable development must be respected;

- c) the analysis of the works of foreign and domestic authors allows us to highlight the common features of the phenomenon of digitalization under study in its unconditional link to the digital economy and digital transformation, as well as to form an idea of the problem under study:
- 1) digitalization is a tool for digital transformation, it involves the introduction of IT developments, digital solutions and digital interaction platforms;
 - 2) the degree of digitalization depends on the needs and capabilities of the company (both financial and intellectual);
 - 3) the need for digitalization is due to external factors (development of the market, technologies, competitors) and the goals of the organization itself (creating opportunities for additional income or creating a unique product).

Conclusion

The theoretical study that was carried out showed that the penetration of digitalization into all spheres of socioeconomic life is large and requires an assessment of the effect so that it becomes possible to effectively manage it in the interests of business and society. It has been proven that sustainable development is an important trend in a modern balanced economy, which is based on the development of the company's activities not only in terms of improving economic results, but also assessing its impact on society and the environment. In addition, the relevance of creating mechanisms for assessing the impact of digitalization on the promotion of the concept of sustainable development was confirmed, which make it possible to objectively assess the effect of the use of digital technologies as part of a sustainable development strategy in a company, in a country or at the global level. It was revealed that digitalization penetrates into all spheres of socioeconomic life, transforming the processes of interaction between economic entities. Advanced technologies make significant adjustments to the company's business processes, value creation processes at all stages and become a competitive advantage. An analysis of global digitalization research practices has shown that all developed countries are striving to use digital technologies as a tool to achieve the Sustainable Development Goals, investing in increasing the availability of communications, developing digital skills among the population and improving the quality of public services.

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