DOI: 10.52363/passa-2023.2-23 UDC: 351.37

Seidova-Bohoslovska E. - graduate student, National Aerospace University H.E. Zhukovsky «Kharkiv Aviation Institute» ORCID: 0000-0002-3334-5959

Shvedun V. - Doctor of Science (Public Administration), Full Professor, Head of the Scientific Department on Problems of Management in the Civil Protection Sphere of the Educational and Scientific and Production Center, National University of Civil Protection of Ukraine ORCID: 0000-0002-5170-4222

Kovalchuk V. - Doctor of Science (Public Administration), Full Professor, Head of the Department of Public Administration and Business, National Aerospace University H.E. Zhukovsky «Kharkiv Aviation Institute», Kharkiv ORCID:0000-0001-5321-8300

DIGITALIZATION OF BUSINESS PROCESS AS AN AREA OF ACTIVITY OF LOCAL GOVERNMENTS

The article is devoted to analysis of digitalization of business process as an area of activity of local governments. The authors prove that digital transformation in modern conditions has the following number of features and advantages: (1) process optimization. New technologies allow enterprises and management systems to automate simpler processes and eliminate intermediate stages in more complex processes. This increases the "flexibility" of enterprises that can now make much more efficient use of their resources; (2) search for new revenue streams. With the advent of new technologies, new ways of making a profit are being discovered that were previously unavailable; (3) creation of a personalized and attractive service infrastructure. Modern customers expect businesses to listen to their opinions and meet their specific needs. Modern technologies are developed so much that they can solve all these problems.

Keywords: digitalization, business process, local governments, digital transformation.

Formulation of the problem. The main factor of changes is the modern consumer of information in the economy, business, society. That is why digital transformation is not only a service of consulting companies, but a fundamental process that the world community is experiencing, adapting to the new conditions and advantages of the digital economy and management society. Thus, digital transformation is not so much technology as a change of thinking in the new conditions of the new digital economy and management.

The idea of digital transformation is covered by the whole world, today it is one of the most popular topics of discussion, but in reality it is far from a new concept, a discussion about the gradual transition of human civilization to information technology and, as a result, it has been going on to the information society for several decades.

Most companies and executive authorities today are focused on digitalization of key processes and perceive digitalization as a new round of automation and informatization, as indicated above. In this regard, digitalization and digital transformation should be distinguished from automation.

Analysis of recent research and publications. To date, there are many definitions of digital transformation. Some experts strongly oppose the "freezing" of this concept and its concretization in a stable definition, justifying this by the fact that the evolution of digital technologies continues, and the content of this term evolves with them. For example, Davis F., Bagozzi R., Warshaw P., Gebhart M., Mevius M., Wiedmann P. etc. have made such a research.

And that's quite obvious. However, in our opinion, to outline the boundaries of the essence and content of the term "digital transformation" is a task not only important, but

also extremely necessary at the present stage of the development of digital society and economy, which allows us to form a unified understanding, and, accordingly, to highlight the main directions of digital transformation.

First of all, it should be noted that within the concept of "digital transformation" there are many terms that have different interpretations. At the same time, the key terms are those that have the same sound in English, but radically differ in content that clearly manifests itself in different publications: for example, the term digitization means transferring information "from physical media to digital one". If we classify this approach, it can be correlated with the third industrial revolution, which lasted in 1969-2010.

In our opinion, as part of digitization, there are no changes in the quality and content of information, it simply turns into an electronic form for further processing in digital format, which allows you to improve existing business processes by adding information in digital format.

In turn, the concept of digitalization is primarily the creation of a new product in digital form. Therefore, the key difference between digitalization is the creation of a new innovative product, with new functionality and consumer properties. And if digitization is primarily aimed at improving existing business models and changing business processes, digitalization allows you to get a significant leap in business and new competitive advantages. Digitalization is already an element of the fourth industrial revolution (Industry 4.0).

Presenting main material. The concepts of "digitalization", "information society", "digitalization of management processes", "digital economy", "knowledge economy" and their analogues are presented in modern scientific literature in a form of a new socioeconomic reality that replaces the former industrial paradigm [2; 7].

In this regard, developed countries of the world pay close attention to the harmonious development of system-forming elements of the digital economy, information society and knowledge economy.

It is extremely important to transform the world management system into a modern information, intellectual and digital system as soon as possible.

This is an uncontested path of development. Otherwise, further political, social, economic crises and, as a result, political inequality are inevitable, which even deeper plunges a lot of countries into a technological and then socio-economic lag from the advanced countries of the world.

In the current conditions of the rapidly changing world, the need for systemic transformations and actions aimed at the development of digital management, the development of new information systems in the economy, society, in public administration systems of all levels is obvious.

In scientific circulation and in political and managerial practice, such a concept as "digitalization" is increasingly included.

Most commonly, the term refers to the following: "Digitalization is a generic term for the digital transformation of society and the economy. It describes the transition from the industrial era and analog technologies to the age of knowledge and creativity, which is characterized by digital technologies and innovations in the digital business".

We add to this that these processes affect today not only the socio-economic sphere, but also modern management systems, will it be the system of economic processes management or the system of public administration.

This problem has become particularly relevant in the context of modern world crises, related not only to geopolitical changes, but also changes that are associated with the global pandemic COVID-19.

Thus, according to forecasts published more recently, global investments in digital technologies and services by 2023 should have amounted to 2.3 trillion dollars. But the crisis has changed everything.

Now companies are forced to switch to technologies that they did not plan to implement until sometime, and reconsider their strategic priorities. "Become digital or die" is the reality to which the world has been led by the COVID-19 epidemic. The main problems faced by modern civilization can be solved by digital transformation.

We agree with the point of view of scientists who note that the "digitalization" of all socio-political and economic processes is a modern form of manifestation of a more fundamental pattern of its informatization [1; 6].

Despite the relatively good level of study of this category, in the scientific field and among the business community, a sustainable understanding of the essence and content of the term "digital transformation" has not been formed. It is important to note that the content of the term "digital transformation" has evolved along with the change and development of technology.

For a long time, digital transformation has been understood as translating into digital format or storing traditional forms of data in digital format. This is also one of the directions of digital transformation, its interpretation in the "narrow sense".

However, in the modern world, this concept is much wider than the translation of data into digital format. So, when enterprises and organizations realize all the possibilities of using digitized data, they began to develop processes for these purposes. From that moment on, digital technologies began to develop rapidly, and the ability to quickly introduce them directly determines the competitiveness of the organization in modern conditions.

Most managers agree that digital transformation is necessary to fight competition, keep pace with technology and changing consumer expectations. At the same time, many of them are unsure of where to start and what exactly digital transformation means. In other words, a theoretical elaboration of its "broad interpretation" is required.

Automation is "one of the directions of scientific and technological progress, using self-regulating technical means and mathematical methods in order to free a person from participation in the processes of obtaining, converting, transferring and using energy, materials, products or information, or significantly reducing the degree of this participation or labor intensity of the operations performed". Almost all spheres of human life and activity are automated. Thanks to automation, it becomes possible to "increase labor productivity, improve the quality of products, optimize management processes, remove a person from production hazardous to health" [3; 9].

Digitalization, in turn, is a process aimed at digitizing all information (and even material) resources (creating digital copies) and forming network interaction platforms, in order to obtain a predictable and guaranteed result for any managerial impact using automation tools. Digitalization is the use of online and innovative digital technologies by all participants in the economic and managerial system – from individuals to large companies and states.

In addition, quite often the term "digitalization" is used to describe a transformation that goes further than simply replacing an analog or physical resource with a digital or information resource. For example, books are not just turned into e-books, but provide a whole set of interactive and multimedia files that have independent meaning. Accordingly, in socio-economic and managerial systems, processes can become online dialogues between parties that have not even directly communicated before. Thus, in a business context, an organization that wants to become "digital" should focus on automating processes in order to make them more efficient.

It is also possible to define digital transformation as a process in which business leaders take advantage of the opportunities and advantages of new technologies for the digital reconstruction of their companies: their operations, products, marketing, culture and goals for future growth. In turn, technology is a mean of transformation, not an end in itself. The focus should be on setting a goal for the future and then creating a strategy based on that vision.

In our opinion, the most significant is the definition of digital transformation as a process of integrating digital technologies into all areas of business activities of the socioeconomic system and management processes, which requires fundamental changes in technology, culture, operations and principles of creating new products and services.

For the most effective use of new technologies and their prompt introduction into all spheres of the socio-economic system and management, it is necessary to abandon the previous foundations and completely transform the processes and models of work [4; 5].

Digital transformation requires shifting focus to the periphery and increasing the flexibility of data centers to support the periphery. This process also means the gradual

abandonment of outdated technologies, the maintenance of which can be costly to the socio-economic and management system, as well as a change in culture, which must now support the acceleration of processes provided by digital transformation.

Within the framework of our research, the following definition of digital transformation is of interest: "These are revolutionary changes in business models based on the use of digital platforms that lead to radical growth of market volumes and competitiveness of companies".

Digital transformation provides the most complete disclosure of the potential of digital technologies through their use in all areas of business and management – processes, products and services and approaches to management decisions. It is important to emphasize that for digital transformation, it will never be enough just to have technology as such. In order for the process of digital transformation to be complete, clearly formulated management and business tasks, as well as databases are needed.

Based on the above, digital transformation can only be considered at the intersection of all three dimensions (the stated business task, the availability of data and the actual technologies).

Thus, "digital transformation involves a fundamental rethink of how an organization works and how it interacts with the environment".

Digital transformation in modern conditions has the following number of features and advantages.

1. Process optimization. New technologies allow enterprises and management systems to automate simpler processes and eliminate intermediate stages in more complex processes. This increases the "flexibility" of enterprises that can now make much more efficient use of their resources.

2. Search for new revenue streams. With the advent of new technologies, new ways of making a profit are being discovered that were previously unavailable.

3. Creation of a personalized and attractive service infrastructure. Modern customers expect businesses to listen to their opinions and meet their specific needs. Modern technologies are developed so much that they can solve all these problems.

Analysis of the above advantages shows that they are most significant in the provision of services determined by the known properties of services, such as their personalized character, orientation to the interaction of the contractor (manufacturer) and the customer (consumer), intangible and, most often, informational character, etc.

That is why the processes of digital transformation are most actively taking place in the service sector (retail trade, tourism, consulting, entertainment services, etc.), as well as in those sectors of the economy and management that receive added value from the development of service activities (for example, in the banking sector).

Enterprises and organizations in both services and other sectors of the economy and management are quickly replacing traditional processes of interaction with digital ones, using the most modern technologies. Very often, transformation occurs not because organizations decide so, but because they need it to survive. Today, the market has increased demand for effective digital technologies for business, and organizations that have not been able to adapt to the new digital consumer model will surely cease to exist. Organizations that welcome changes and are ready for them, as well as are able to adapt to more flexible models of work, have great potential for success. This is due to the fact that digital transformation covers all areas of the business and offers effective ways to improve it along with the development of digital technologies. Big data and "advanced" analytics allow you to make more accurate and faster decisions – from preventive production repairs to the prevention of fraudulent operations [1; 3].

However, the most difficult change for traditional sectors of the economy and management will be, in our opinion, not so much the creation and integration of technologies as the fundamental restructuring of corporate culture and organization. An iterative, adaptive approach, higher risk tolerance, characteristic of the entrepreneurial mentality, are largely alien to established approaches to big business management. Therefore, it is difficult to perceive that the structure of any industry and company today should be perceived as a basic variable, not a constant one.

In this sense, there are changes like the cost analysis approach adopted in microeconomics. As it is known, in a short period it is customary to allocate constant and

variable costs, while the latter periods are often called "decisive" in the scientific literature, since the management of the company can influence them.

At the same time, in the cost structure there are those that are accepted as unchanged ones – these are fixed costs. But when moving to a long period, all costs become variable. There are no more fixed costs, management gets a lot of leeway, because it can affect all areas of business associated with costs without exception. But, on the other hand, this situation leads to concerns about rising uncertainty, which could lead to a market failure of the firm.

Thus, digital transformation for modern control systems is:

1) a growth driver, which ensures the construction of digital business models with the help of: stimulating growth within and outside the framework of the organization's main business; identify and create new digital business models ensuring long-term competitiveness;

2) a tool to improve efficiency based on the transformation of the operating business model into digital technologies due to: optimization of business processes of all levels and reduction of costs; rational use of existing competencies and infrastructure; translation of the entire value chain into digital technologies and modernization of IT architecture;

3) the basis for breakthrough innovations, which, in turn, is the basis for the creation of a corporate incubator and venture capital by: identifying promising opportunities for growth in the future; early creation of conditions for access to the latest, as well as additional technologies; positioning as a partner in the long term.

Conclusions. Therefore, digitalization of processes, digital transformation, digital education, digital marketing are processes not so much far ahead as now. The concept of "digital" has become quite popular in recent years. The current crisis related to the global COVID-19 pandemic, with the bombshell effect, has already proved to the whole world that not only the future of business and management systems lies in the transition to digital technologies, but also the present is closely connected with the digitalization of life of the whole society, economy and management systems.

Management structures, companies and organizations that will survive in the long run are those that have the best tools that allow them to be flexible, agile, modern; those who are better than others will be able to respond to the changes taking place in the modern world, monitor the work of enterprises, regulate supply chains and will be able to use their workforce really anywhere to make the most effective management decisions.

It should be emphasized that the introduction of digitalization in the modern economy and management systems is well underway, and therefore the digital transformation of business and society is inevitable, it is only a matter of time. Therefore, those economic and management structures that will be the first to begin digital transformation will receive undeniable competitive advantages in the near future.

References:

1. Alekseev A., Korchuganova T. & Padolski, S. (2018), "The BigPanDA selfmonitoring alarm system for ATLAS", The Distributed Computing and Gridtechnologies in Science and Education, Dubna, 13–16.

2. Davis F.D., Bagozzi R.P. & Warshaw P.R. (1989), "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models", Manag. Sci., 35, 982–1003.

3. Barnes C., Blake H. & Pinder D. (2009), "Creating and Delivering Your Value Proposition: Managing Customer Experience for Profit", Kogan Page: London, UK, 2009.

4. Gebhart M., Mevius M. & Wiedmann P. (2014), "Application of Business Process Quality Models in Agile Business Process Management. In Proceedings of the Sixth International Conference on Information, Process, and Knowledge Management", eKNOW, Barcelona, Spain, 152–158.

5. Marrella A. (2017), "What Automated Planning Can Do for Business Process Management in Business Process Management Workshops", Springer: Barcelona, 2017, 22, 7–19.

6. Koopman A. & Seymour L.F. (2020), "Factors impacting successful BPMS adoption and use: A South African financial services case study in Enterprise, Business-

Process and Information Systems Modeling", Springer: Cham, 387, 55-69.

7. Nunamaker J.F., Briggs R.O., Derrick D.C. & Schwabe G. (2015), "The Last Research Mile: Achieving Both Rigor and Relevance in Information Systems Research", Manag. Inf. Syst., 32, 10–47.

8. Rahimi, F., Møller C. & Hvam L. (2016), "Business process management and IT management: The missing integration", Int. J. Inf. Manag., 36, 142–154.

9. Rosemann M., de Bruin T. (2005), "Towards a business process management maturity model, The London School of Economics: London, UK, 521–532.