MANAGING BUSINESS PROCESSES IN THE CONDITIONS OF THE DEVELOPMENT OF THE DIGITAL ECONOMY: GLOBAL AND NATIONAL EXPERIENCES

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Abstract. The subject of the study is the management of business processes in the conditions of the development of the digital economy. Methodology. The research uses general scientific methods, in particular: theoretical generalization – in the formation of national features of business process management; methods of positive and normative analysis – when analyzing the global experience of business process management in the conditions of the digital economy; statistical analysis – when analyzing investments in the development of digital technologies of enterprises. The goal is to study the global and national experiences of managing business processes in the conditions of the development of the digital economy. Research conclusion. The study of national peculiarities of business process management in the conditions of the development of the digital economy shows a positive trend of adaptation for Ukrainian enterprises. The majority of scientists identify significant advantages in the management of business processes in the conditions of the development of the digital economy and emphasize the inevitability of the transition of Ukrainian enterprises to ensure their competitiveness. The analysis of the use of digital technologies by Ukrainian enterprises showed that the most significant investments are in ensuring interaction with customers, data analysis, management of interaction with employees and business processes, automation and closure of the supply chain, cybersecurity and robotics. Ukrainian enterprises generally show significant success in using the digital economy while increasing the volume of products sold (goods, works, services) through e-commerce, social networks, and Internet platforms. A study of the development of the digital economy in the countries of the world showed an increase in its growth rate during the coronavirus pandemic. It was emphasized that among the global trends that will ensure the development of the digital economy in the future are: cloud computing, big data, the Internet of Things, blockchain, artificial intelligence, virtual reality, and augmented reality is increasingly becoming a new engine of high-quality economic development. A model of interaction of the development of the digital economy with the state, business, and society is proposed.

Key words: business processes, digital economy, management, global and national experience.

JEL Classification: O30, O31, O32

1. Introduction

In the conditions of turbulent challenges (the pandemic caused by the coronavirus infection COVID-19, the war of Russia against Ukraine), there is a need for most socio-economic systems to find ways to carry out their activities safely. From the beginning of the pandemic until today, it has been possible to carry out activities safely thanks to information and telecommunication technologies. This is confirmed by the speed of transition of all business entities to the use of information systems to ensure their activities and further development. Assuming that the countries of the world, after the quarantine measures, gradually returned to carrying out their activities in a normal mode, then Ukraine. In this case, the war caused by Russia led to the further use and transition to digital technologies to ensure activities and functioning. In the conditions of successful development of digital economy in the world countries, there is a need for research and...
adoption of experience for Ukrainian business
entities. As already mentioned, Ukrainian enterprises
are moving to the use of digital economy in business
process management, which shows significant
effectiveness and efficiency of operations. However,
such a transition requires significant financial
resources and payback periods, so most managers
do not foresee the benefits of transition to the
digital economy while facing its manifestations on
a daily basis. Accordingly, under such conditions,
there is a need to study the national and global
experience of managing business processes in the
development of the digital economy.

The article aims to explore the global and national
experiences of managing business processes in the
context of the development of the digital economy.

2. National peculiarities of business
   process management in the conditions
   of the development of the digital economy

As already mentioned, the importance of resear-
ching the national characteristics of business
process management in the context of the develop-
ment of the digital economy is becoming more
and more relevant. Therefore, the team of authors
notes: "With the development of IT technologies,
the relevance of digitization of business processes
is constantly increasing. The perfection of business
processes or an advantage in the efficiency of
business processes compared to competitors
contributes to strengthening the competitiveness
of companies, enterprises and organizations. The
relevant topic becomes particularly relevant in the
context of the COVID-19 pandemic, in conditions
when the resources of the company, enterprise and
organization can situationally shift the focus of
efforts and, to a greater extent, direct activities to
internal efficiency development projects." (Timinsky,
Voytenko, Raichuk, 2021)

Effective management of business processes
ensures the appropriate level of competitiveness
and therefore requires constant improvement.
Most Ukrainian enterprises show the result of
effective management only through the introduction
of constant innovative changes, including the use of
information technologies.

The authors note that "Digitalization is one of the
main trends in the development of the domestic
economy. Increasing the competitiveness of industrial
enterprises is possible only by taking into account
the specifics of the fourth industrial revolution.
The concept of "Industry 4.0" is characterized by
a set of ideas for the automation of production on
the basis of digital technologies, the transformation
of the world of professions in conditions of rapid
automation, and the robotization of all spheres
of production. Therefore, the transition from the
third to the fourth revolution is an inevitable
transition from simple digitization (the third
industrial revolution) to innovations based on the
combination of technologies (the fourth industrial
revolution), which forces domestic enterprises
to rethink their business methods." (Tkachenko,
Sharko, 2022)

Therefore, in addition to ensuring competitiveness,
Ukrainian enterprises must ensure their functioning
in the conditions of the Fourth Industrial Revolution,
based on the automation of business processes
using information technologies. Accordingly, ensure
the management of business processes based on
digitization.

As the research team notes, "The goal of digitizing
business processes is to optimize the available
resource potential, labor costs, and increase the
efficiency of business processes. The transition
to a digital environment requires a whole set of
procedures, such as the digitalization of production
processes, control over the execution of work and
product quality, communication with the team and
customers, and logistics and deliveries. Digitization
of business processes is aimed at simplification
and increased flexibility. Considering the growing
importance of the role of digitalization in the
activities of enterprises, further scientific research
is planned to determine the role of digitalization
in the economic security of the enterprise." (Dergacheva,
Vorzhakova, Khlebynska, 2021)

To ensure the digitalization of business processes
it is necessary to have a long time, as well as skills
and abilities of the management to make appropriate
changes in the company with the participation of
employees and taking into account their needs.
In the conditions of digitalization and automation
of business processes, a significant role belongs
to the management of employees, because their
number is reduced during such processes. Therefore,
it is important to find the right approach to human
resources management in the process of business
process digitalization.

Also, "The implementation of digitization of
business processes of industrial enterprises is
an important and relevant step, which acts as a
driver of radical changes in the current activity
and development of the enterprise. Before making
a managerial decision on the digital transformation
of business processes, it is necessary to carefully
analyze the current business processes of the
enterprise, understand the problems and oppor-
tunities for solving them, and only then choose
methods and measures for digitalization of existing
business processes or development of funda-
mentally new ones based on digital technologies
and platforms. In order to determine which
companies and industries are capable of achieving the goals set by the National Strategy, it is necessary to conduct an interdisciplinary analysis of the state of digitalization of business processes in industrial enterprises, and at the enterprise level it is advisable to develop own digital transformation maps, which will allow systematizing actions and concentrating resources on the most promising areas of development.” (Zub, Kalach, 2021)

In general, it is essential to develop a concept and an action plan for the transition of business process management to the digital economy. This will ensure the effectiveness and phased development of this procedure by determining the appropriate terms and executors, while calculating the necessary financial resources. Taking steps towards digital transformation is typical for Ukrainian companies today.

However, the essence of the changes implemented is the chaotic use of digital tools without a previously established program. The identified benefits serve as a necessary basis for the development of a digital transformation program, and the identified obstacles actualize a more thorough consideration of the possibility of the emergence and impact of new risks and threats. The considered multi-level digital transformation is designed to identify the current place of each company with the corresponding planning to improve the situation to follow the development trends of the digital economy. (Andriyev, 2022)

Therefore, when transitioning to digital management of business processes, each manager must develop a concept, strategy, and an appropriate action program that will ensure the appropriate result of such work. It is important to remember the preservation of human potential when actively using digital technologies and economy. The active use of digital information technologies in business leads to changes in human participation in the business processes of economic entities, especially enterprises.

The extensive capabilities of the software allow to process large amounts of information and offer ready-made conclusions. However, effective management of business processes requires prioritizing the formation of human potential in such a part of it as knowledge, as well as its constant renewal thanks to the activation of creative thinking processes. This is due to the central role of a person in the decision-making process as the basis of management. It uses all the possibilities of digital information technology only to improve the quality and speed of information processing. The secondary role of such technologies in the management of business processes determines the similar place of human digital skills. (Ivanova, 2021)

It is clear that over time robotics will replace human potential. Under such conditions, it is necessary to ensure the priority of human potential; appropriate guarantees should be formed at the government level. In Ukraine, more and more companies are investing in digital technologies for customer interaction – 75%, data analytics – 55%, employee interaction management – 48%, and business processes – 44%, supply chain automation – 38%, cybersecurity – 35%, cloud technologies – 31%, and robotics – 26% (Figure 1).

In general, Ukrainian companies are interested in investing in the development of the digital economy. In the first place when making investments it is necessary to ensure customer satisfaction, therefore it is possible to predict the further development of the digital economy. Most of the customers today are choosy; they need to open their mobile phones, gadgets or laptops. After checking all the information about the manufacturer of the product, they are content to make a purchase via e-commerce. To ensure their competitiveness, the corresponding demand for e-commerce is only growing, which is why Ukrainian companies need to ensure the transition in managing business processes based on digitalization.

Digital technologies in modern conditions are being transformed and adapted in various areas of business processes of enterprises. The use of the latest software, artificial intelligence, big data, mobile and cloud technologies, blockchain, the Internet of Things, etc. together cause significant transformation processes in enterprise management. An essential tool of digitalization is the development of accounting to create a complete information system with control elements in the enterprise management system. Interaction of information in electronic form is necessary both at the level of enterprises and the economy of states as a whole. Therefore, the modern trend in the conditions of the digital economy is the introduction of IT technologies into the business processes of enterprises to ensure their competitiveness and effective functioning in the market. (Korolyuk, Mazurenok, 2021).

The development of digital tools in the economy today ensures the functioning of e-commerce both on the domestic and foreign markets, providing speed and spatiality in turbulent conditions. It has been observed that the development of digital tools in the economy is limited due to insufficient knowledge of their use, which is why knowledge and skills in their use are crucial.

Digitalization is one of the critical factors in the development of an enterprise, which involves not only the introduction of innovative technologies, but also a change in its management. As a result, there is a transformation of the specifics of influence both on individual structural divisions of the
enterprise and on the management system of the enterprise as a whole. Digital transformation requires significant changes in the business and economic environment, which should be aimed at tracking global digital trends, the possibilities of implementing innovative digital technologies, and monitoring and evaluating the stability of the company’s functioning (Mykolyuk, Bobrovnyk, 2021).

Therefore, the action program of the government and partner countries should create levers to support the post-war economic development of Ukraine. Accordingly, the study of world economic growth during the war in Ukraine, the analysis of the current state of the war economy and the proposal of measures for the post-war economic development of Ukraine is quite relevant and timely (Irtyshcheva, Kramarenko, Sirenko, 2022).

In general, it is important to study global trends in the development of the digital economy for their successful adaptation in Ukraine. Therefore, it is important to study the global experience of managing business processes in the development of the digital economy.

3. Global experience in managing business processes under the conditions of the development of the digital economy

The share of digitally deliverable services in total services exports increased in all regions during the pandemic. Digitally deliverable services are approaching 80% and 70% of total services exports in North America and Europe, respectively, in 2021. In Asia and Latin America and the Caribbean, the share of total services exports also increased sharply between 2019 and 2020. In Oceania, the share jumped from 24 percent in 2019 to 42 percent in 2021. In comparison, regions with relatively low pre-existing levels of digitalization-including digital connectivity and digital skills-entered the pandemic with lower levels of trade in digitally delivered services, and total exports of digitally delivered services declined in 2020 before recovering in 2021 (UNCTAD digital economy database Get the data, 2022).

In Africa, digitally delivered trade varied widely over the course of the pandemic. While countries in North Africa experienced the strongest growth of any region, their less digitized counterparts in Sub-Saharan Africa experienced the sharpest decline from 2019 to 2020. Least Developed Countries (LDCs), which generally have the lowest levels of availability, quality, and affordability of digital technologies and digital skills, followed a markedly different trajectory, experiencing no recovery in digitally deliverable services trade during this period. LDCs urgently need international support to take the necessary measures to seize the opportunities of digital trade, including resilience in times of crisis. (UNCTAD digital economy database Get the data, 2022)

In general, for most countries in the world, regardless of the level of economy, several problems hinder the development of digital economy, such as insufficient digital infrastructure, insufficient digital industrial base and technical support, low level of digital penetration in the economy, delay in the construction of the appropriate system, and the incompleteness of the digital economic ecosystem.
However, the prospects for the development of the digital economy point to corresponding economic growth. For example, by 2021, nearly 40% of China’s GDP will come from digital economy revenues, with further growth predicted. (Kan, Lyu, Huang, Yao, 2022)

New and emerging digital trends such as cloud computing, mobile web services, smart grids, and social media are radically changing the business landscape — reshaping the nature of work and the boundaries and responsibilities of organizations. These trends go beyond technological innovation.

Regardless of the sector or level of development in their respective countries, businesses are affected by policy developments related to ICTs, the Internet and data flows. With the right policies in place, ICTs and the Internet have enormous potential to accelerate growth and drive progress towards the Global Sustainable Development Goals (International Chamber of Commerce (ICC), 2022).

In general, the global development trends of the digital economy will be represented by innovative technologies such as cloud computing, big data, the Internet of Things, blockchain, artificial intelligence, virtual reality, and augmented reality is increasingly becoming a new engine of high-quality development economy. Therefore, a model of the interaction...
of the development of the digital economy with the state, economy and society has been proposed (Figure 3).

A model of interaction of the development of the digital economy with the state, business and society based on skills and knowledge is proposed, leading to economic growth, increasing productivity and ensuring competitiveness.

The prospects for the development of digital technologies were also explored in the conditions of the war between Russia and Ukraine (Irtyshcheva, Kramarenko, Sirenko, 2022), with the expansion of the sales market (Pryshchepa, Kardash, Yakymchuk, et al., 2020; Popadynets, et al. 2021), and with regional public administration (Irtyshcheva, Pavlenko, Boiko, et al., 2022).

4. Conclusions

The study of national peculiarities of business process management in the conditions of the development of the digital economy shows a positive trend of adaptation for Ukrainian enterprises. The majority of scientists identify significant advantages in the management of business processes in the conditions of the development of the digital economy and emphasize the inevitability of the transition of Ukrainian enterprises to ensure their competitiveness. The analysis of the use of digital technologies by Ukrainian enterprises showed that the most significant investments are made in ensuring interaction with customers, data analysis, management of interaction with employees and business processes, automation and closure of the supply chain, cybersecurity, and robotics. In general, Ukrainian enterprises show significant success in using the digital economy while increasing the volume of products sold (goods, works, services) through e-commerce, social networks and Internet platforms.

A study of the development of the digital economy in the countries of the world showed an increase in its growth rate during the coronavirus pandemic. It was emphasized that among the global trends that will ensure the development of the digital economy in the future are: cloud computing, big data, the Internet of Things, blockchain, artificial intelligence, virtual reality and augmented reality is increasingly becoming a new engine of high-quality economic development.

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