

Mariana Fedyk

*Department of Analytical Economy and International Economics,
Ivan Franko National University of Lviv, Lviv, Ukraine*

E-mail: mariana.fedyk@lnu.edu.ua

ORCID: <https://orcid.org/0000-0002-1067-6843>

Solomiya Kudyn

*Department of Economic Theory,
Ivan Franko National University of Lviv, Lviv, Ukraine*

E-mail: solomiya.kudyn@lnu.edu.ua

ORCID: <https://orcid.org/0000-0002-0411-4000>

Mariia Bondarchuk

*Department of Entrepreneurship and Trade,
Odessa Polytechnic National University, Odessa, Ukraine*

E-mail: marybond5813@gmail.com

ORCID: <https://orcid.org/0000-0001-5895-4868>

Digitalization of the world business environment under the conditions of global instability

Abstract

Rapid digitalization, as a response of business to the post-pandemic consequences, has put each participant in the system of economic processes prior to the choice, the essence of which lies in the necessity to determine one's own priorities in the new environment, as well as the formation of further strategies and tactics of life, in particular, developed either on traditional tools or on innovative mechanisms and digital technologies. On the one hand, the subjects of the economic system are ready to adopt and disseminate the practice of using digital tools in professional activity processes. However, on the other hand, both the business sector and employees have certain doubts about the advisability of a radical transformation of the business environment, although they feel the need for new models of organizing life, due to global instability, which has a destructive impact on every sector of the economy and highlights the low efficiency of traditional mechanisms and tools for ensuring business processes in the context of the post-pandemic crisis.

The purpose of the academic paper lies in analysing certain aspects of digitalization of the global business environment, as well as their impact on changing the organizational framework of the global business environment in conditions of pandemic instability.

Methodology. The study of the issues outlined was carried out through the use of methods of comparison, abstraction, analysis and generalization, the method of system-structural research, as well as statistical and analytical analysis, tabular and graphical modelling.

Results. As a result of the research conducted, it has been generalized that digitalization cannot be determined only as a global phenomenon; it is both a strategic goal, and a large-scale social-economic phenomenon, and a progressive tool necessary for business in order to restore the level of efficiency. Summarizing the specifics of post-pandemic instability, it has been proven that the scale of the crisis of 2019–2021 is unprecedented for the modern economy; this leads to the use of unprecedented tools to combat it. Defining the COVID-19 pandemic as a precondition for global destabilization, it has been determined that digital transformation is a business response to the crisis; it also remains both a challenge and an opportunity for businesses. Digitalization has contributed to the rapid restructuring of business process models, which has helped to preserve a significant share of enterprises. *Practical implications.* Further digitalization strategies, tactics and practices should be used as a basis for achieving stability in the world economy. *Value/originality.* Thus, the academic paper is an original study of trends in the digitalization of the global business environment due to changes in the practice of entrepreneurship under the conditions of the global post-pandemic instability.

Keywords

Digital transformations, global economy, business processes, digital tools, information and communication technologies, macroeconomic instability, global crisis

JEL: E20, E44, F01, F29

DOI: <https://doi.org/10.30525/2500-946X/2022-1-6>

1 Introduction

The COVID-19 pandemic has made fundamental changes in the mechanisms of entrepreneurship organization and the general practice of functioning of the global business environment. One of the trends, from among of the set of features typical for the period of post-pandemic instability, is the actualization of the digitalization processes of the global economy and approaches to management.

The theoretical and methodological basis indicates to the fact that digitalization is a real phenomenon providing all the necessary tools, mechanisms and technologies in order to maintain the continuous functioning of the economies of different countries of the world, as well as to maintain activity in the world market, despite the existence of a combination of destructive factors or global threats caused by COVID-19 pandemic.

In conditions of instability, digital transformations have become, on the one hand, the strategic goal of each of the states seeking to restore the constancy of social-economic development. However, on the other hand, digitalization has become a powerful tool that is especially important in the context of developing the practice of using informal models, technologies and innovations in business organization and management. Summarizing the experience of digitalization of the global business environment, it can be argued that this is a global social and economic phenomenon that has made it possible to radically change the organization and mechanisms of business functioning in conditions of severe restrictions on the interaction of people, businesses and even countries that are major players in the world market. These aspects, in fact, testify to the inalienability of digital tools from the strategy of developing and managing a business in current conditions, as well as the impossibility of denying the existence of the evolutionary nature of digitalization, without which it is really difficult to imagine the functioning of the world economy.

2 Main part

2.1 Purpose and objectives

The purpose of writing an academic paper lies in analysing certain aspects of the digitalization of the global business environment, as well as its impact on changing the organizational fundamentals for functioning of the global business environment in the context of pandemic instability. In order to achieve the purpose set in the research process, the important scientific and practical objectives were formed and solved, in particular as follows:

- to characterize global instability as a consequence of the influence of a combination of mutually agreed destructive factors;

- to explore the concept of digitalization as a modern phenomenon and a progressive tool to support the functioning of the global business environment;
- to determine the prospects for stabilizing the business in the conditions of updating the processes of digital transformation.

2.2 Methodology

In the course of the research, a set of theoretical methods has been used, namely: methods of comparison, abstraction, analysis and generalization in order to determine individual signs of digitalization, generalization of digital transformation trends, as well as a comparison of the practice of organizing business processes on the basis of using traditional or innovative, high-tech methods, tools and mechanisms. The method of system-structural research was used to outline the conceptual basis for applying digital tools as elements of the global process of digitalization, as well as to determine digitalization as a complex social-economic phenomenon needed for resumption of business in conditions of instability. Also, methods of statistical and analytical analysis, tabular and graphical modelling were applied to display quantitative and qualitative changes in the efficiency of the business environment.

2.3 Literature review

Certain aspects of the digitalization of the global business environment, typical trends and forced managerial steps in the context of global instability are analysed by numerous researchers, including as follows: V. Vergun, O. Pizhuk, Ye. Prushkivska, P. Pashko, L. Lazebnyk, Yu. Kindzerskyi, O. Pyshchulina, I. Shkodina, H. Azarenkova, B. Samorodov, I. Derid, H. Puryi, V. Pilinskyi, S. Veretiuk et al. For instance, O. Pizhuk explores various aspects of digital transformations in the national and global economy, identifies prospects for digitalization as a tool or method of reducing pandemic instability. The scholar has summarized that digitalization is a new stage of economic development, “a global phenomenon involving the transition from a traditional economy to a digital economy based on electronic infrastructure, electronic business, electronic commerce, electronic money and electronic government” (Pizhuk, 2019, p. 39). Along with this, this researcher has proposed a three-sector model that is appropriate for the practical implementation by different countries of the world in the context of global digitalization. The scientific development of the scholar suggests that the primary sector of the model should be formed by information and communication technologies; the secondary sector should include services based on current basic digital technologies;

the third sector should include the digitalized national economy, that is, new activities or business models that are transformed as a result of digitalization and global formalization of economic processes in conditions of instability (Pizhuk & Muraviov, 2020). L. Lazebnyk pays considerable attention to the analysis of certain aspects of digitalization, in particular, tendencies in the formation of digital infrastructure in order to facilitate communication between international businesses entities, on whose activities the success and prospects for the development of the global business environment depend. It has been revealed that it is expedient to determine digitalization taking into account the process approach. The conceptual fundamentals of digital transformations suggest that the concept of information infrastructure focused on digital management of business processes in conditions of instability should be defined as “a set of services and aids (information systems and technologies, databases), ensuring the activities of enterprises through the formation and provision of access for all subjects of the management process to information resources, as well as means of generating and processing information, analysis and communication interaction” (Lazebnyk, 2020, p. 19). O. Pyshchulina (2020), being a leading expert on social and gender programs, analyses the trends in economic and social development, characterized by a significant impact of digitalization. The scientist identifies the determinants of the global digital economy, as well as Ukraine’s readiness to introduce and use digital technologies in a global instability; it has been summarised that “the exit of the global business environment from the existing turbulence to the trajectory of sustainable growth will be accompanied by shocks for countries that have not created in time the technological, economic and political preconditions for a new rise” (Pyshchulina, 2020, p. 4). I. Shkodina generalizes the practice of digital transformations in the context of optimizing business processes in conditions of global instability. During the study, the scientist has concluded that the crisis, on the one hand, has slowed down the financing of some investment projects; however, on the other hand, it has stimulated the implementation of projects related to the digitalization of international business (5G, smart factories, Internet of Things, robotics and blockchain). Digitalization has contributed to the growth in funding for projects related to remote work, virtual collaboration tools, mobile devices, security programs, etc. (Shkodina & Serediuk, 2020, p. 228).

Taking into consideration the fact that the COVID-19 pandemic has had an unprecedented destructive impact on the organization of the functioning of the global business space, the models, mechanisms and traditional approaches used to stabilize the social-economic situation at the post-

pandemic stage require improvements. This, in fact, stipulates permanent detailed analysis of the phenomenon of digitalization as a tool for streamlining business processes in conditions of instability.

2.4 Global instability as a result of the influence of a combination of mutually agreed destructive factors

Global instability is a current phenomenon preventing sustainable growth of the world economy. It also hinders the protection of the economic system from destructive threats, the emergence of which is inevitable in the conditions of the formation of a global economic space. COVID-19 pandemic became an event that:

- on the one hand, has emphasized each of the existing problems in the development of the global business environment and multiplied the negative impact that they had on the dynamics of social-economic growth;
- on the other hand, has destroyed those strong features of the global economic space that ensured the permanence of business and acted as the basis for maintaining the efficiency of its functioning.

Instability in the modern world cannot affect only individual national economies. Taking into consideration the dynamization of the globalization phenomenon, the system of economic processes and relations of each of the states should be considered as a functional element of the global business space. It is a common fact that the weakness of the individual component of the structure inhibits growth and has a destructive effect on the overall performance of the global market. The recession, observed during 2019–2020 (closure of a number of enterprises, especially services, reduction of investment activity, loss of jobs, etc.), has contributed to significant losses for all, namely:

- firstly, for the subjects of the world business environment, which, regardless of their scale and strength of entrepreneurial potential, are key elements supporting the production and trade activity in the global economic space;
- secondly, for employees, each of whom contributes to the existence and development of the world market;
- thirdly, for countries that, regardless of the current level of development and economic growth, seek to maintain a strong competitive position in the global market, and, accordingly, are actively expanding their trade activity beyond the national market space.

Although each region of the world manages to search for the best methods, mechanisms and tools for maintaining economic activity in the conditions of the COVID-19 pandemic, however, different rates of recovery in the future may pose financial risks.

Such risks remain especially dangerous for weaker economies or economies with significant financial liabilities, which in the medium term may make it difficult to implement measures in order to manage their debt and maintain financial stability. This also exacerbates the problem of global instability and hinders the development of individual national economies or even entire regions, which together can only aggravate the uneven resumption of activity in the global business environment.

It was 2019–2020 that became the turning point, when the COVID-19 pandemic contributed to the onset of unprecedented transformations in the structure of the global business space. In 2020, the world has suffered significant losses, the quantitative measurement of which can be seen in the percentage change in GDP of individual regions (Figure 1). The unprecedented scale of the instability has been proven by the fact that the level of losses exceeded even the indicators of losses incurred during the global financial crisis of 2009. Thus, it must be conceded that the global instability, which has originated in 2019–2020 and continues to this day, could not but affect the activities of business and the efficiency of the functioning of the global business space.

Exploring the European region as the most attractive market for Ukraine in the context of current reforms and identified as promising in terms of preserving Ukraine’s European integration

vector of development, it is advisable to analyse the basic indicators of its performance over the years of pandemic crisis. Global instability can be considered as one of the modern transformations, which has precipitated to radically change the management tools and models, move to remote mechanisms of business management, accumulation and processing of information, analysis of virtual data in real time. Losses in conditions of instability are inevitable. There was a deterioration of macroeconomic indicators, as well as indicators reflecting the state of activity in the European business environment, which only contributed to the rapid decline in activity of business entities (Table 1).

Therefore, global instability in the European dimension, as a result of the influence of a combination of mutually agreed destructive factors, is as follows:

- a decrease in GDP in 2020 by 626, 5 billion EUR (or 4,5%) compared to the corresponding period of the previous year;
- a decrease in exports of goods and services in 2020 by 663, 6 billion EUR (or 9,6%), and imports – by 684, 5 billion EUR (or 1,06%) compared to the corresponding period of the previous year;
- reduction of indices of production volume in the industrial sector, turnover in the industrial sector, construction volume, sales volume in wholesale and retail trade in 2020 compared to the corresponding period of the previous year (Figure 2).

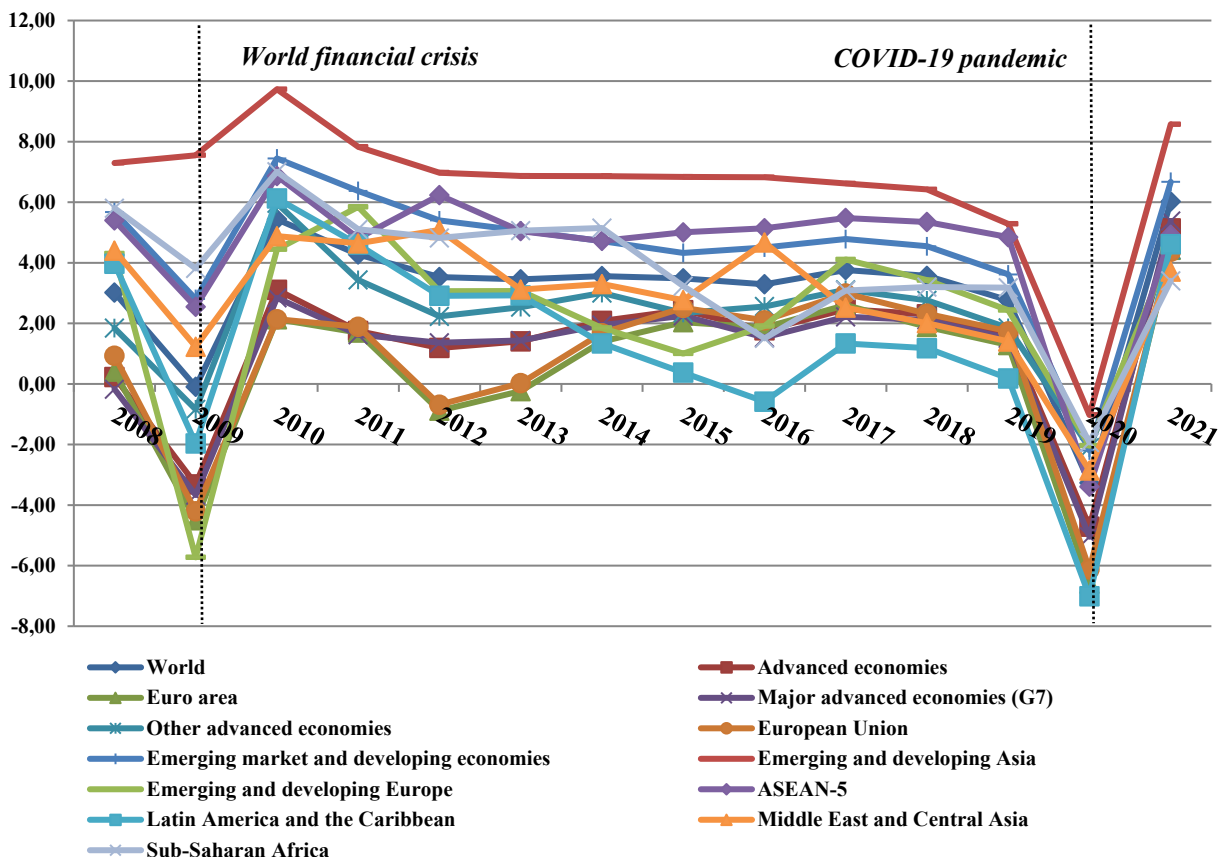


FIGURE 1 Dynamics of GDP in the regions of the world in 2008–2021, % till the previous year
 Source: it has been compiled by the authors according to the data of the International Monetary Fund, April 2021

TABLE 1 Generalized indicators of the state of economic development and business activity of the EU countries during 2018–2021

Indicator	2018	2019	II quarter 2020	2020	II quarter 2021
<i>Economy and finances</i>					
GDP, billion EUR	13 531,5	14 007,8	6 417,5	13 381,3	6 913,9
Exports of goods and services, billion EUR	6 667,2	6 915,4	2 995,0	6 251,8	3 437,7
Imports of goods and services, billion EUR	6 139,8	6 428,1	2 815,7	5 743,6	3 128,9
<i>Industry, construction and trade</i>					
Production volume index in the industrial sector, %, including:	106,5	105,7	85,6	97,3	104,9
percentage change compared to the corresponding period of the previous year, %	1,2	-0,8	-19,5	-7,9	22,5
Industrial sector turnover index, %, including:	110,8	111,4	87,4	100,6	115,4
percentage change compared to the corresponding period of the previous year, %	3,6	0,5	-23,0	-9,7	32,0
Lifetime commitment index, %, including:	108,4	111,0	97,6	105,5	111,4
percentage change compared to the corresponding period of the previous year, %	2,6	2,4	-12,7	-5,0	14,1
Sales volume index in wholesale and retail trade, %, including:	107,3	110,1	103,1	109,5	115,3
percentage change compared to the corresponding period of the previous year, %	2,1	2,6	-6,3	-0,5	11,8
Business registration index, %	109,9	116,8	82,8	105,6	126,7
Index of declaration of bankruptcy, %	89,6	91,0	60,6	70,1	73,2

Source: it has been compiled by the authors according to the data of European Commission, 2021

Under such circumstances, digitalization is an effective method, a progressive tool towards supporting business activity under severe quarantine restrictions and excluding the actual social interaction of business entities in the global business environment. This is the updating of the development of e-commerce and electronic provision of services, including banking,

transport or government services, the increase in self-service zones and the use of contactless payment, the introduction of intelligent systems and chatbots for interacting with customers. This is a set of measures that makes it possible to maintain business in the context of pandemic instability and the low level of predictability of the COVID-19 pandemic.

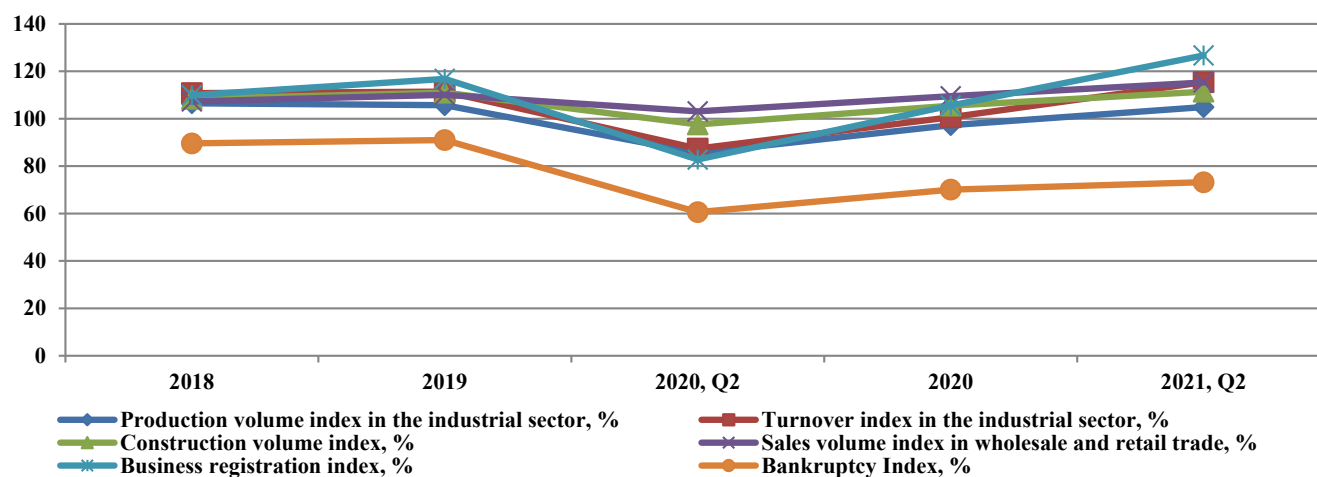


FIGURE 2 Dynamics of key indices of business activity in the EU countries during 2018–2021

Source: it has been compiled by the authors according to the data of European Commission, 2021

2.5 The concept of digitalization as a modern phenomenon and a progressive tool in order to support the functioning of the global business environment

As it has been recognized, digitalization is a modern trend that does not have an unambiguous determination, which suggests, however, that its essence should be explored in contexts as follows:

- firstly, as the strategic goal, the path to the implementation of which involves updating the processes of practical application of information and communication technologies (hereinafter referred to as ICT), digital technologies in business management strategy;
- secondly, as the modern social-economic phenomenon, which is becoming widespread in the era of "Industry 4.0";
- thirdly, as a tool to support communication, management of the organizational structure of the business under quarantine restrictions.

Exploring digitalization as a strategic goal, it should be recognized that its achievement involves the implementation of three tasks that are key success factors in developing a digital business environment in a global dimension, namely (Ministry for Development of Economy, Trade and Agriculture, 2016):

1. Stimulation of the penetration of technologies into business processes;
2. The absorption of digital technologies by business and the economy, the adaptation of traditional management methods to the requirements of a high-tech, post-industrial society, following the strategy of balanced use of traditional and informal tools in order to influence the operation of the business environment;
3. Intensification of practical use of technology in entrepreneurship.

As a social and economic phenomenon, digitalization is a phenomenon, the essence of which can be identified with the progressive mechanism for updating the practice of functioning and developing the business environment in conditions of instability. The functional content of the phenomenon lies in the fundamental changing of the forms of business process management in the direction of forming their new quality. The drivers, determining digitalization as a social-economic phenomenon, are as follows:

- firstly, the absence of conditional geographical barriers to spreading digital technologies;
- secondly, the global availability of information and the unlimitedness of its volume.

The two definitions outlined above reveal in detail the content of the phenomenon, covering each of the important features of the concept; however, they do not allow denying the essence of digitalization as a progressive tool. Consequently, digitalization is a multicomponent tool that is formed from a set of technologies needed to support the continued operation of the business environment in the face of a number of threats posed by the COVID-19 pandemic and global instability as a result of quarantine restrictions.

An important objective for the subjects of the global business environment was the development of a radically new strategy and tactics that are effective in the conditions of uncertainty, taking into account aspects of the practical application of digital and information and communication tools for managing business processes. The transformations that have taken place during the years of the aggravation of the pandemic crisis are based on a set of tasks, namely: the search for new models of organizing business activities, the identification of industries that have remained priority ones as a result of quarantine restrictions, and the determination of problems

TABLE 2 Digitalization of the global business environment in the context of stabilizing business process management

Direction	Features and tools of support
Interaction of personnel	Formation of a system of communication and interaction of personnel using digital communication systems through the use of Viber, FB Messenger, Telegram, WhatsApp, Zoom, Skype, Trello, etc.
Interaction with customers	Formation of a multi-channel system of communication with customers through the use of a call center, instant messengers, social networks and its own website.
Partnership and collaboration	Development of communication infrastructure with partners, in particular the use of API system or integrated interaction of partner companies.
Processing information and analytical data	Collection, accumulation, sorting, analysis and evaluation of indicators for making management decisions through the use of 1C, CRM-system and ERP-system.
HR strategy and culture	Training of personnel for the implementation of digital technologies through internal and external exercises, the formation of an appropriate corporate culture in order to quickly adapt to permanent changes and dynamic digitalization of business processes.
Business value management	Formation of added value by spreading virtual customer service and maintaining continuous communication and support. The tools of support include as follows: a call centre, instant messengers (Viber, FB Messenger, Telegram, WhatsApp), social networks and one's own website.

Source: it has been compiled by the authors according to the data of Ligonenko & Domans'kyj, 2020, p. 153–154

that must be initially resolved in accordance with the interests of customers, partners, investors in conditions of limited social interaction. Thus, there was a significant digitalization of business in various directions during 2020 (Table 2):

The practice of transforming the global business environment has been going forward. Key aspects of business digitalization in the European market are reflected in Table 3.

In the context of the actualization of the business digitalization process in 2020, the number of enterprises with an e-commerce turnover of at least 1% has increased by 8, 9% in the territory of the European business environment. Characteristic for 2020 is the increase in the following indicators, namely:

- total turnover of enterprises from sales in e-commerce – by 11,1%;
- the number of staff employed remotely via using the Internet – by 3,7%;
- percentage of enterprises providing electronic invoices suitable for automated processing – by 28,0%;
- percentage of enterprises that have purchased customer relationship management software – by 42,8%;
- percentage of enterprises that have purchased computer equipment to run their own software – by 80,0%;
- percentage of enterprises that have purchased software for conducting financial accounting and bookkeeping – by 77,8%.

Therefore, digitalization, as a modern phenomenon and a progressive tool to support the functioning of the global business environment, is acquiring a dynamization of the pace of development; it is that particular stage of human progress that is necessary in the context of global stabilization, expansion of business opportunities and impact on the quality of life, both in the sphere of entrepreneurship and each individual.

2.6 Prospects for stabilizing business operations in the context of updating digital transformation processes

Under the conditions of the COVID-19 pandemic, the structure of the global economic system is undergoing a dynamic transformation. The labour market is also changing rapidly, and it is characterized by updating the requirements for the competencies of professionals, their personal traits and skills (Fedyk, 2022, p. 48). Taking this into account, the stabilization of the operation of the business environment by choosing a vector for activating digital transformation is the most promising in the current conditions. Accordingly, in order to improve economic conditions in the global dimension, it is advisable to focus on removing existing barriers, namely (Brechko, 2020, p. 15–16):

- barriers related to the differentiation of the provisions of national laws of different countries of the world, which are caused by economic uncertainty of the country or lack of standards for using digital technologies in the organization or management of business processes;
- barriers related to the intensification of competition in the global market, influencing the effectiveness of meeting the needs of economic entities in additional resources for the digitalization of activities. The difficulty of choosing a business model in conditions of instability is exacerbated by the fact that there are differentiated views of suppliers and consumers on the feasibility and convenience of using digital technologies in business (in particular, the commitment of the end user to the usual “traditional” products / services);
- barriers related to the lack of digital solutions based on the specifics of business, weak protection of digital technologies from criminal encroachments, insufficient provision of the business environment with digital infrastructure, in particular, in the global dimension (the problem is complicated by the difference in the development of the digital infrastructure of individual states);
- barriers related to the resource base and financing, in particular, due to the high cost of projects involving the use of digital technologies, as well as significant costs for the operation of systems applying digital technologies;
- barriers related to human capital, in particular, lack of awareness of the benefits of ICT and digital technologies, insufficient digital literacy and competence of employees, incorrect definition of the essence of digital transformations and their impact on the business model and strategy of persons making management decisions.

In our opinion, it is advisable for each of the states that are a participant in the global business environment and take an active part in economic relations at the interstate level, in the medium term, to focus on reforms related to the elimination of existing barriers in accordance with the capabilities that they possess. An important aspect of stabilization is the identification of structural inconsistencies in order to ensure the acceleration of economic growth, as well as the creation of conditions for the development of industries that will have the greatest positive effect on the economy in the context of digitalization. Summarizing, it can be argued that the new pandemic and post-pandemic conditions in and of themselves are a factor that has a strong potential in the context of stimulating the development of high-tech industries using medium-high level technologies.

3 Conclusion

In the course of the research, it has been established that the digitalization of the global business environment is a modern phenomenon that can be determined as a strategic goal or a tool. Digital transformations of the business environment, in the context of combating global pandemic and post-pandemic destabilization, should be considered as a stage of transition from traditional business process management to innovation-oriented, progressive, built on the use of the latest ICT and digital technologies. The scales of global instability are underpinned by the unprecedented sources of the crisis, and digitalization, as one of the most progressive methods of supporting business, possessing the necessary potential to sustain the economy at the global level.

Taking into consideration the purpose of the research, it has been determined that global instability is a phenomenon that renders impossible the sustainable growth of the world economy, and also prevents its protection from destructive threats, the emergence of which is inevitable in the conditions of the formation of a global economic space. In turn, digitalization, as an effective method of combating the slowdown in activity in the global business environment, is the latest way to support business processes in the face of strict quarantine restrictions and the impossibility of actual social interaction between business entities.

Further investigations should focus on searching for the optimal set of measures that will maintain the business in the conditions of the pandemic instability and low predictability of the COVID-19 pandemic.

References

- [1] Pizhuk, O. I. (2019). The key drivers of digital transformation of the economy. *Problemy rozvytku ekonomiky: Visnyk KNUTD. Serija: Ekonomichni nauky*, vol. 3(135), pp. 38–47. (in Ukrainian)
- [2] Pizhuk, O. I., & Muravjov, V. Je. (2020). Economic and social consequences of digitalization of the national economy. *Ekonomichnyj prostir*, vol. 163, pp. 56–61. (in Ukrainian)
- [3] Lazebnyk, L., & Voitenko, V. (2020). Information infrastructure in digitalization of business processes of enterprise. *Naukovyj visnyk Mizhnarodnogo humanitarnogo universytetu*, vol. 42, pp. 18–22. (in Ukrainian)
- [4] Pishhulina, O. (2020). *Digital economy: trends, risks and social determinants*. Kyiv: Razumkov Centr. (in Ukrainian)
- [5] Shkodina, I. V., & Serdyuk, T. V. (2020). Impact of COVID-19 on the Introduction of Digital Technologies by International Business. *BiznesInform. Ekonomika: informacijni tehnologii v ekonomici*, vol. 10, pp. 227–232. (in Ukrainian)
- [6] International Monetary Fund (2021). World Economic Outlook database: April 2021. E-source: <https://www.imf.org/en/Publications/WEO> (accessed 13 April 2022).
- [7] European Commission (2021). *Database. European and national indicators for short-term analysis*. E-source: <https://ec.europa.eu/eurostat/web/main/data/database> (accessed 13 April 2022).
- [8] Ministry for Development of Economy, Trade and Agriculture (2016). *Digital Agenda of Ukraine – 2020*. E-source: <https://ucci.org.ua/uploads/files/58e78ee3c3922.pdf> (accessed 13 April 2022). (in Ukrainian)
- [9] Ligonenko L. O., & Domans'kyj A. O. (2020). Digitalization as an anti-crisis strategy during the coronavirus epidemic. *Strategichni imperatyvy suchasnoho menedzhmentu: zb. materialiv V Mizhnar. nauk.-prakt. konf.* (pp. 152–155). Kyiv: KNEU. (in Ukrainian)
- [10] Fedyk, M. (2022). Creative employment under the conditions of digital transformations. *Investytsiyi: praktyka ta dosvid*, vol. 1, pp. 48–54. DOI: <https://doi.org/10.32702/2306-6814.2022.1.48> (in Ukrainian)
- [11] Brechko, O. V. (2020). Determinants of digital transformation of the national economy. *Visnyk Ternopil's'kogo nacionalnogo ekonomichnogo universytetu*, vol. 4, pp. 7–24. DOI: <https://doi.org/10.35774/visnyk2020.04.007> (in Ukrainian)