


**GLOBAL EXPERIENCE OF DIGITALIZATION OF ECONOMIC PROCESSES IN THE  
CONTEXT OF TRANSFORMATION**

Taliat Bielialov<sup>A</sup>, Iryna Kalina<sup>B</sup>, Vasyl Goi<sup>C</sup>, Oleksii Kravchenko<sup>D</sup>, Nataliia Shyshpanova<sup>E</sup>



ARTICLE INFO	<u>ABSTRACT</u>
<p><b>Article history:</b></p> <p><b>Received</b> 10 March 2023</p> <p><b>Accepted</b> 06 June 2023</p>	<p><b>Purpose:</b> The article aims to clarify the peculiarities of the main trends, advantages, and disadvantages of digitalization of the economy in the context of reorganization processes in different countries of the world.</p>
<p><b>Keywords:</b></p> <p>Digital Transformation of the Economy; Digital Environment; Digitalization; IT Solutions; E-commerce; Latest Digital Technologies.</p>	<p><b>Theoretical framework:</b> Today, significant competitive advantages can be achieved through the effective management of available company resources based on innovative technologies and methods of business process optimization. Due to the continuous improvement of the digital environment, they are becoming an important management tool and a key development factor.</p> <p><b>Design/methodology/approach:</b> When studying the issues related to the topic of this research, the analytical and bibliographic method was applied to study the scientific literature on the digitalization of economic processes. Abstraction, idealization, induction, deduction, analysis, synthesis of information, and system-structural, comparative, logical, and linguistic methods were utilized to study and process data. Moreover, the authors conducted an online questionnaire survey to clarify the most important issues related to the use of electronic means in the world economy.</p>
	<p><b>Findings:</b> The study identified the most important theoretical aspects of the issues related to the use of digital technologies in the economies of different countries of the world. Furthermore, the views of scientists and managers of companies that use electronic forms of business organization in their work on key aspects of this issue are studied.</p> <p><b>Research, Practical &amp; Social implications:</b> The analysis of the scientific literature on the research topic and the results of the questionnaire survey showed that digitalization in the field of economy is the process of transferring economic activity to a new format. It involves the use of digital technologies and helps to optimize business processes, increase business income and improve the system of communication with consumers</p> <p><b>Originality/value:</b> The authors conducted an online questionnaire survey to clarify the most important issues related to the use of electronic means in the world economy.</p>

<sup>A</sup> Doctor of Science in Economics. Associate Professor. Department of Entrepreneurship and Business, Faculty of Management and Business Design, Kyiv National University of Technologies and Design. Kyiv, Ukraine.

E-mail: [uainnovationua@gmail.com](mailto:uainnovationua@gmail.com) Orcid: <https://orcid.org/0000-0003-4019-755X>

<sup>B</sup> Doctor of Economics. Professor. Department of Marketing, Interregional Academy of Personnel Management. Kyiv, Ukraine. E-mail: [kalinargz@gmail.com](mailto:kalinargz@gmail.com) Orcid: <https://orcid.org/0000-0001-5662-6967>

<sup>C</sup> Candidate of Economic Sciences. Director. Institute of Valuation and Forensic Science. Kharkiv, Ukraine. E-mail: [vasssgoi@gmail.com](mailto:vasssgoi@gmail.com) Orcid: <https://orcid.org/0000-0003-1822-4478>

<sup>D</sup> PhD in Law. Associate Professor. Department of Healthcare Management and Public Administration, Shupyk National Healthcare University of Ukraine. Kyiv, Ukraine. E-mail: [9588621@gmail.com](mailto:9588621@gmail.com) Orcid: <https://orcid.org/0000-0002-8561-7426>

<sup>E</sup> PhD in Economics, Associate Professor. Department of Public Management and Administration and International Economy, Faculty of Management, Mykolayiv National Agrarian University. Mykolayiv, Ukraine. E-mail: [shishpanova@mnau.edu.ua](mailto:shishpanova@mnau.edu.ua) Orcid: <https://orcid.org/0000-0001-8347-5682>

## EXPERIÊNCIA GLOBAL DE DIGITALIZAÇÃO DE PROCESSOS ECONÔMICOS NO CONTEXTO DA TRANSFORMAÇÃO

### RESUMO

**Objetivo:** O artigo tem como objetivo esclarecer as peculiaridades das principais tendências, vantagens e desvantagens da digitalização da economia no contexto dos processos de reorganização em diferentes países do mundo.

**Estrutura teórica:** Atualmente, vantagens competitivas significativas podem ser obtidas por meio do gerenciamento eficaz dos recursos disponíveis da empresa com base em tecnologias inovadoras e métodos de otimização de processos de negócios. Devido ao aprimoramento contínuo do ambiente digital, eles estão se tornando uma importante ferramenta de gerenciamento e um fator-chave de desenvolvimento.

**Projeto/metodologia/abordagem:** Ao estudar as questões relacionadas ao tópico desta pesquisa, foi aplicado o método analítico e bibliográfico para estudar a literatura científica sobre a digitalização dos processos econômicos. Abstração, idealização, indução, dedução, análise, síntese de informações e métodos sistêmico-estruturais, comparativos, lógicos e linguísticos foram utilizados para estudar e processar dados. Além disso, os autores realizaram uma pesquisa por questionário on-line para esclarecer as questões mais importantes relacionadas ao uso de meios eletrônicos na economia mundial.

**Resultados:** O estudo identificou os aspectos teóricos mais importantes das questões relacionadas ao uso de tecnologias digitais nas economias de diferentes países do mundo. Além disso, são estudadas as opiniões de cientistas e gerentes de empresas que usam formas eletrônicas de organização de negócios em seu trabalho sobre os principais aspectos dessa questão.

**Implicações sociais, práticas e de pesquisa:** A análise da literatura científica sobre o tópico da pesquisa e os resultados da pesquisa por questionário mostraram que a digitalização no campo da economia é o processo de transferência da atividade econômica para um novo formato. Ela envolve o uso de tecnologias digitais e ajuda a otimizar os processos de negócios, aumentar a receita das empresas e melhorar o sistema de comunicação com os consumidores

**Originalidade/valor:** Os autores realizaram uma pesquisa por questionário on-line para esclarecer as questões mais importantes relacionadas ao uso de meios eletrônicos na economia mundial.

**Palavras-chave:** Transformação Digital da Economia, Ambiente Digital, Digitalização, Soluções de TI, Comércio Eletrônico, Tecnologias Digitais Mais Recentes.

## EXPERIENCIA MUNDIAL DE DIGITALIZACIÓN DE LOS PROCESOS ECONÓMICOS EN EL CONTEXTO DE LA TRANSFORMACIÓN

### RESUMEN

**Objetivo:** El artículo pretende aclarar las peculiaridades de las principales tendencias, ventajas y desventajas de la digitalización de la economía en el contexto de los procesos de reorganización en diferentes países del mundo.

**Marco teórico:** En la actualidad, se pueden obtener importantes ventajas competitivas mediante una gestión eficaz de los recursos disponibles de la empresa basada en tecnologías innovadoras y métodos de optimización de los procesos empresariales. Debido a la mejora continua del entorno digital, se están convirtiendo en una importante herramienta de gestión y en un factor clave de desarrollo.

**Diseño/metodología/enfoque:** En el estudio de las cuestiones relacionadas con el tema de esta investigación, se aplicó el método analítico y bibliográfico para estudiar la literatura científica sobre la digitalización de los procesos económicos. Se utilizaron los métodos de abstracción, idealización, inducción, deducción, análisis, síntesis de la información y los métodos sistémico-estructural, comparativo, lógico y lingüístico para estudiar y procesar los datos. Además, los autores realizaron una encuesta por cuestionario en línea para aclarar las cuestiones más importantes relacionadas con el uso de los medios electrónicos en la economía mundial.

**Resultados:** El estudio identificó los aspectos teóricos más importantes de las cuestiones relacionadas con el uso de las tecnologías digitales en las economías de diferentes países del mundo. Además, se estudian las opiniones de científicos y directivos de empresas que utilizan formas electrónicas de organización empresarial en su trabajo sobre los principales aspectos de esta cuestión.

**Implicaciones sociales, prácticas y de investigación:** El análisis de la literatura científica sobre el tema de investigación y los resultados de la encuesta por cuestionario mostraron que la digitalización en el ámbito de la economía es el proceso de transferencia de la actividad económica a un nuevo formato. Implica el uso de

tecnologías digitales y ayuda a optimizar los procesos empresariales, aumentar los ingresos de las empresas y mejorar el sistema de comunicación con los consumidores.

**Originalidad/valor:** Los autores realizaron una encuesta mediante cuestionario en línea para aclarar las cuestiones más importantes relacionadas con el uso de los medios electrónicos en la economía mundial.

**Palabras clave:** Transformación Digital de la Economía, Entorno Digital, Digitalización, Soluciones Informáticas, Comercio Electrónico, Últimas Tecnologías Digitales.

## INTRODUCTION

In a changing economic, social, and political environment, digital development and support for the digital transformation of the economy are becoming increasingly important. In recent years, the use of digital tools has become a decisive factor that makes successful companies at the stage of their development stand out from those that lose customer confidence and market presence.

The theoretical part of this study presents the views of scholars on the concept of digitalization in the economic sphere and reveals the relevance of the use of electronic means in the organization of business processes. The main trends and features of the use of digital technologies in companies around the world are also traced.

The practical part of the study includes:

analysis of the distribution of respondents' opinions on the concept of digitalization of economic processes;

- assessment of the most important advantages and disadvantages of digitalization in the economic environment;
- identifying the most important trends in digitalization that are widespread in the world, given the rapid transformation of business in all sectors of the global economy;
- identifying the most important goals of business digitalization in terms of optimizing the activities of business entities at the micro level;
- identifying the most promising forms of employment that will be especially in demand in the future due to the digitalization of companies;
- outlining the most important vectors of scientific research in the business sphere in terms of studying the factors of the development of digitalization of economic processes.

Based on the results of the study, conclusions have been drawn on the issues raised. In particular, the concept of digitalization of economic processes is popular in economic research in different countries. This involves the practical digitization of information, its collection,

storage, and analysis, which is used in various sectors of the economy, as well as the use of digital technologies to help optimize the work of organizations. According to the respondents, the advantages of digital business organization include savings, increased customer loyalty, and improved corporate image. At the same time, respondents believe that the disadvantages of business digitalization include the need to attract highly qualified specialists. The survey helped to identify the main trends in digitalization that are widespread in the world, given the rapid transformation of business in all sectors of the economy. According to the respondents, the main features of the development of electronic technologies in business today are the digitalization of the banking sector, increasing productivity and popularization of enterprises operating in the digital sphere, and the digitalization of small businesses. Based on the results of the survey, it was found that in terms of optimizing the activities of individual business entities, digitalization could primarily contribute to the achievement of certain goals. These include such goals as enhancing interaction with consumers and potential customers, increasing the company's positive image, and reducing the cost of goods through automated process implementation and digitalization. Meanwhile, the respondents named outsourcing and crowdsourcing as the most promising forms of employment in connection with the digitalization of the business environment in the world, which, according to the survey participants, will be especially in demand in the future. The opinion of the survey participants on the most important areas of research in the business sphere, which will allow studying the factors of development of digitalization of economic processes, is determined. Currently, these include process management based on the use of automated technologies for processing, analyzing, and forecasting large amounts of data, obtaining and processing data in real-time and issues related to the speed of decision-making and action in a digital society.

The research aims to determine the position of scientists and managers of companies that use electronic forms of business organization in their work regarding the peculiarities of using digital technologies in economic processes in the context of a changing economic environment.

## **LITERATURE REVIEW**

Due to the emergence of a certain Internet dependence of consumers, their need to buy goods, order works or services online, and economic entities have felt the need to introduce digital technologies into their business processes. To do this, they use the positive experience

of leading companies that have succeeded in developing digitalization of their activities (Banga, 2022), (Kan, Lyu, Huang & Yao, 2022).

Digitalization is now becoming the key to success and the basis for competitive advantage for companies around the world. In addition, organizations must focus on building their reputation to ensure the high productivity and profitability of their operations. Working in a digital format allows businesses to take measures to ensure their reputation among customers (Zhang et al., 2022), (Khan, Saienko & Tolchieva, 2021).

On the one hand, in the face of transformational changes in the market, companies usually try to minimize costs, including the cost of organizational management measures. On the other hand, considering the possibility and necessity of digitalizing the organization's activities, managers understand the period of change as an opportunity for a qualitative restructuring of the company's work and try to introduce the latest electronic management tools during transformation processes. They use them to determine the vector of digitalization and the ability to consider the peculiarities and trends of changes in the industry market and the economy as a whole (Hrosul et al., 2021).

The breakthrough of digital technologies shortly will be that expensive IT solutions will be replaced by cloud services and systems that will actively interact with each other. As companies grow, they will connect to more of these tools and expand this set to simplify and speed up business processes (Goldfarb & Tucker, 2019).

Digitalization affects the labor relations between employers and employees and fundamentally changes the organization of work. In addition to the transformation of such important elements of labor relations as the workplace and work schedule, the way employees are hired is also undergoing significant changes in the digitalized economy and global labor market. This element of labor relations is of paramount importance as it defines the rights and obligations of employers and employees (Lin, 2019), (Pereira et al., 2022). A well-developed institutional platform for the actors of the emergency response mechanism directly affects the quality of labor relations (Gaman, P., Yarovoi, T., Shestakovska, T., Akimov, O. & Akimova, L., 2022).

The timeliness and completeness of information about the management entity is the reason for the increasing use of modern advances in business digitalization in management activities, which enables deeper analysis, modeling, and forecasting. Digitalization is a key factor affecting the productivity, profitability, and economic growth of companies in all sectors of the economy. For the successful implementation and further development of digitalization,

it is necessary to increase the personal, intellectual, and technological achievements of organizations and their employees, as well as to form a flexible regulatory framework that will help regulate the digital environment in all business areas. The use of digital solutions and the continuous improvement of digital transformation processes contribute to effective corporate governance. This helps to improve the competitive position in the market, which has a positive impact on the economy and investment attractiveness of the country (Adriaens & Ajami, 2021), (Melnik et al., 2021). Timely financial monitoring eliminates the risks of internal audit of enterprises (Levytska, S., Pershko, L., Akimova, L., Akimov, O., Havrilenko, K. & Kucherovskii, O., 2022). European integration processes in the EU policy have weaknesses in countering terrorism (Kryshtanovych, M., Akimova, L., Shamrayeva, V., Karpa, M., & Akimov, O., 2022). But in turn, considerable attention is paid to the investment potential of rural communities (Kostiukevych, R., Mishchuk, H., Zhidebekkyzy, A., Nakonieczny, J. & Akimov, O., 2020) with a focus on the rational management of natural resources, which will provide a strategy ecological development (Koval, V., Mikhno, I., Udovychenko, I., Gordiichuk, Y. & Kalina, I., 2021). All this is done taking into account international experience in the field of national security of the state (Akimov, O., Troschinsky, V., Karpa, M., Ventsel, V. & Akimova, L., 2020).

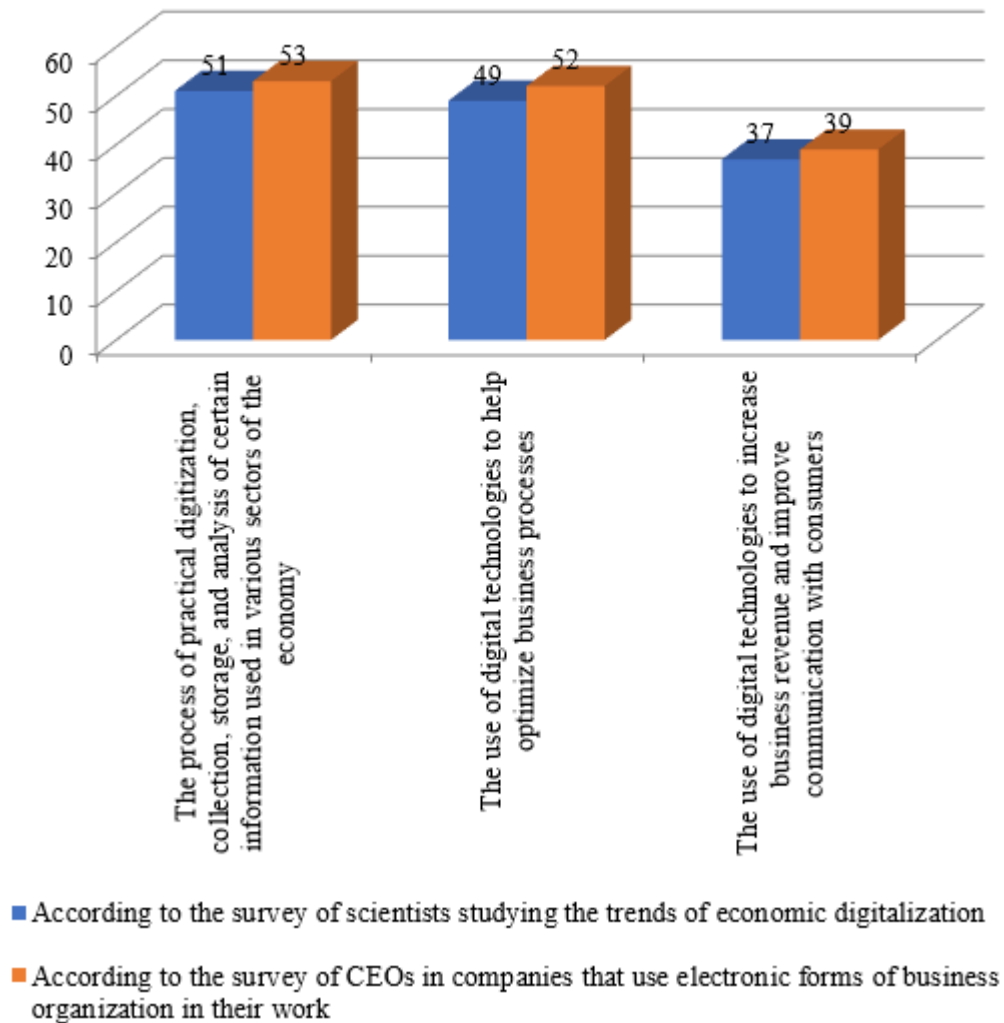
## **METHODOLOGY**

A practical study of current trends in the use of electronic technologies in the management of economic processes in the world was conducted through a survey. Two hundred and thirty-eight scholars studying the digitalization of economic processes were interviewed, as well as two hundred and sixty-four executives of companies that use digital technologies in their work and conduct research and business activities in Khmelnytsky, Odesa, Rivne, Zhytomyr, and Kyiv oblasts of Ukraine. The study was performed through the Survey Planet service.

## **RESULTS AND DISCUSSION**

First, in the course of the survey, the respondents identified the most popular views on the concept of digitalization of economic processes in the scientific works of economic researchers in different countries (Figure 1).

Figure 1. The concept of digitalization of economic processes in the scientific works of researchers in the field of economics in different countries, %

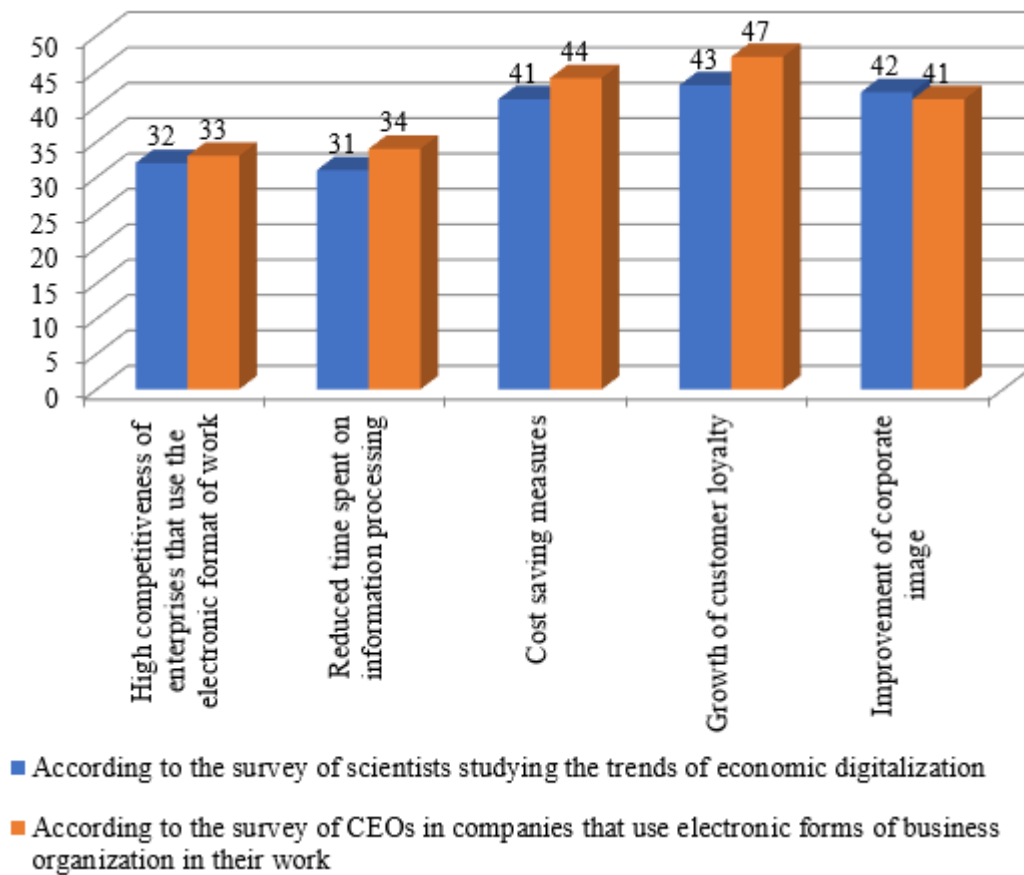


Source: Prepared by the authors (2023).

As can be seen from Figure 3, the most popular definitions of digitalization in the economy are the characterization of this process as the practical digitization, collection, and storage of certain information used in various sectors of the economy, as well as the use of digital technologies, which helps optimize business processes.

In the context of the rapid transition of the economic environment to the digital mode of operation, attention should be paid to identifying the positive and negative features of digitalization in the economic sphere (Figures 2, 3).

Figure 2. Benefits of digitalization in the economic sphere, %

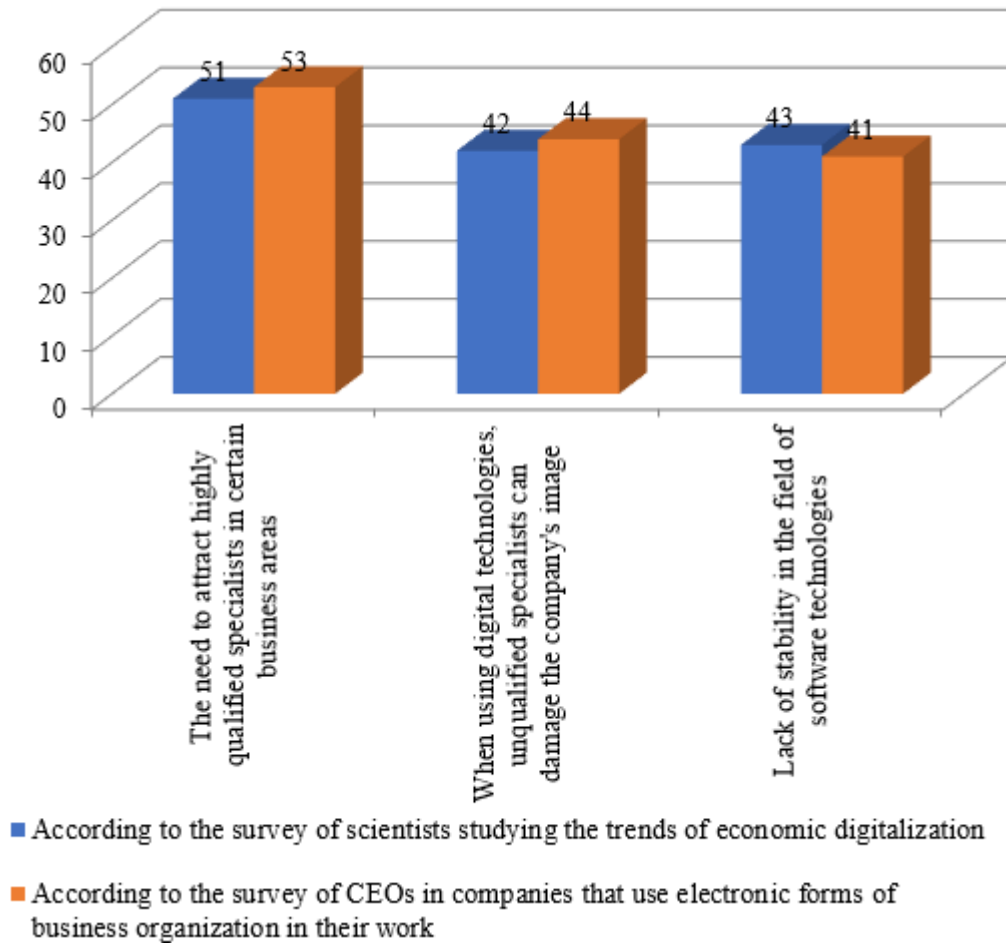


Source: Prepared by the authors (2023).

As can be seen from Figures 2 and 3, the vast majority of scientists and business process managers believe that the advantages of digitalization include cost savings, increased customer loyalty, and improved corporate image. At the same time, respondents consider the need to attract highly qualified specialists in certain business areas to be a disadvantage of business digitalization.



Figure 3. Negative features of digitalization in the economies of different countries, %

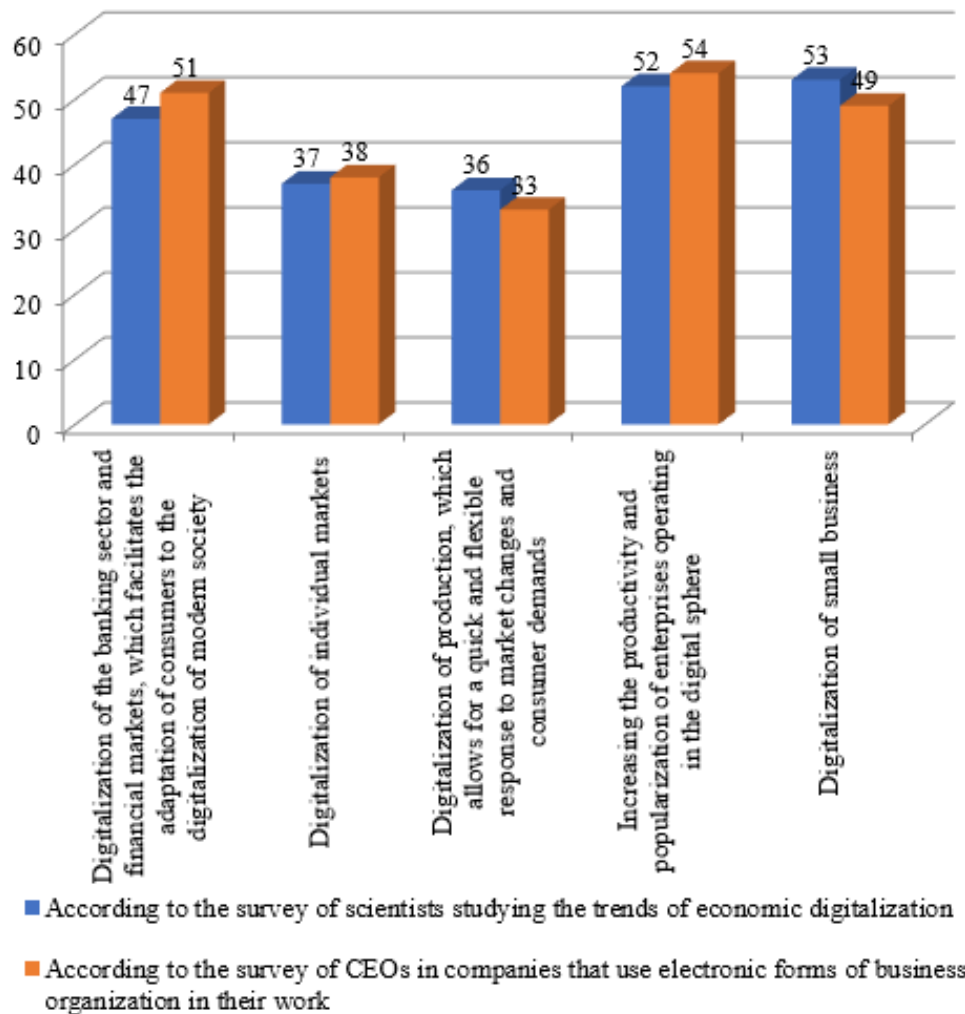


Source: Prepared by the authors (2023).

An essential result of this study was to examine the main trends in digitalization that are widespread in the world, given the rapid transformation of business in all sectors of the economy (Figure 4).

According to the survey participants, the main digitalization trends that are rapidly spreading around the world are the digitalization of the banking sector and financial markets, the increase in productivity and popularization of enterprises operating in the digital sphere, and the digitalization of small businesses. Previously, starting a business required certain premises, equipment, or personnel, but now it is enough to have uninterrupted access to the Internet.

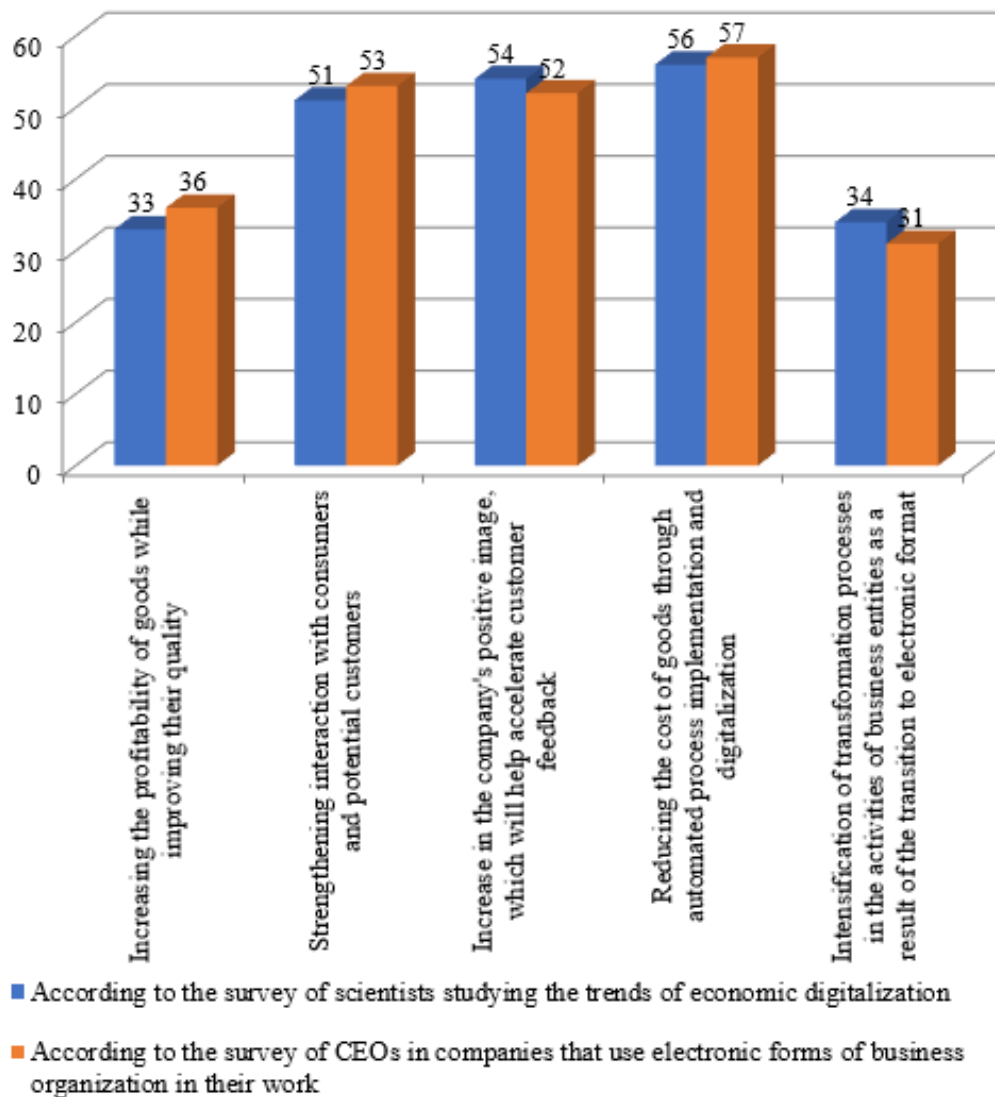
Figure 4. Digitalization trends that are widespread in the world, given the rapid transformation of business in all sectors of the global economy, %



Source: Prepared by the authors (2023).

According to the survey participants, in terms of optimizing the activities of individual business entities, digitalization can help achieve the following goals (Figure 5). As shown in Figure 5, according to the survey participants, the main goals of digitalization at the micro level are to enhance interaction with consumers and potential customers and increase the company's positive image. This will help speed up customer feedback and reduce the cost of goods through automated process implementation and digitalization.

Figure 5. Goals of business digitalization in terms of optimizing the activities of business entities at the micro level, %

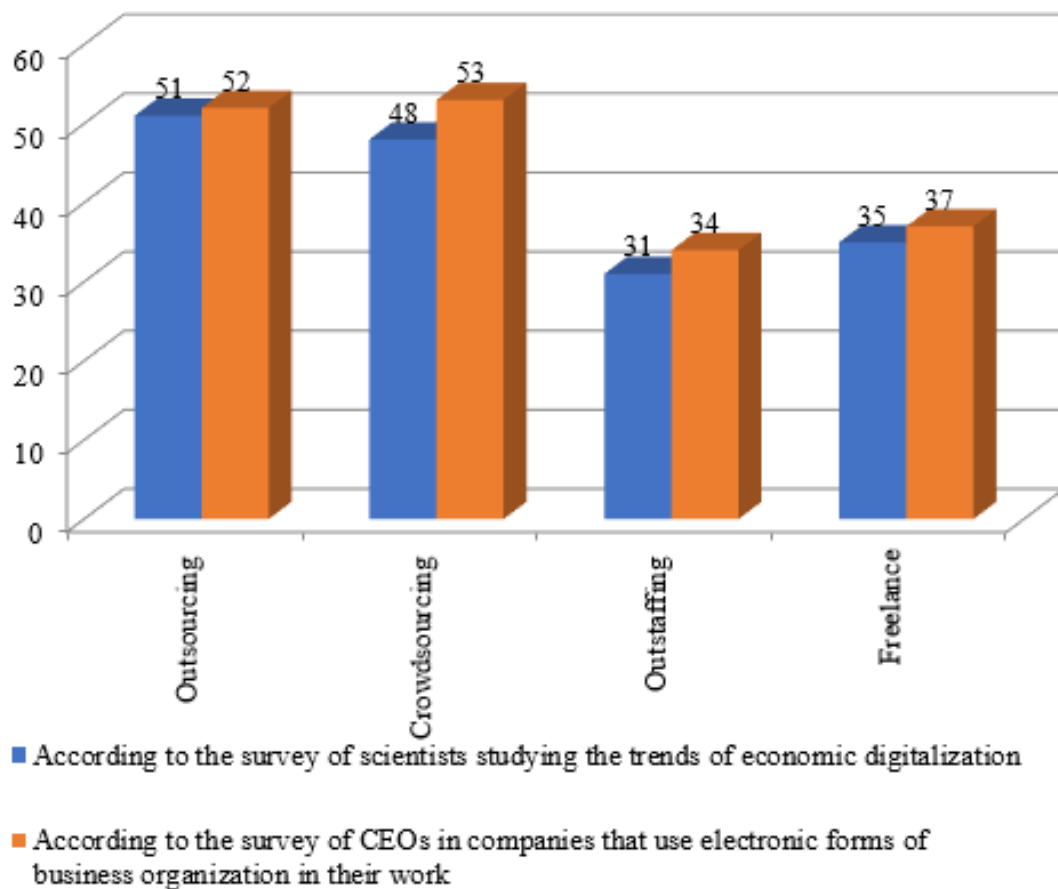


Source: Prepared by the authors (2023).

As for the most promising forms of employment in connection with the digitalization of the business environment in the world, which, according to the survey participants, will be especially in demand in the future, the respondents named (Figure 6).

According to the survey, outsourcing and crowdsourcing will become particularly widespread in the e-business environment in the future, according to business managers and academics who study the peculiarities of the business sector.

Figure 6. The most promising forms of employment that will be especially in demand in the future due to the digitalization of the business environment in the world, %

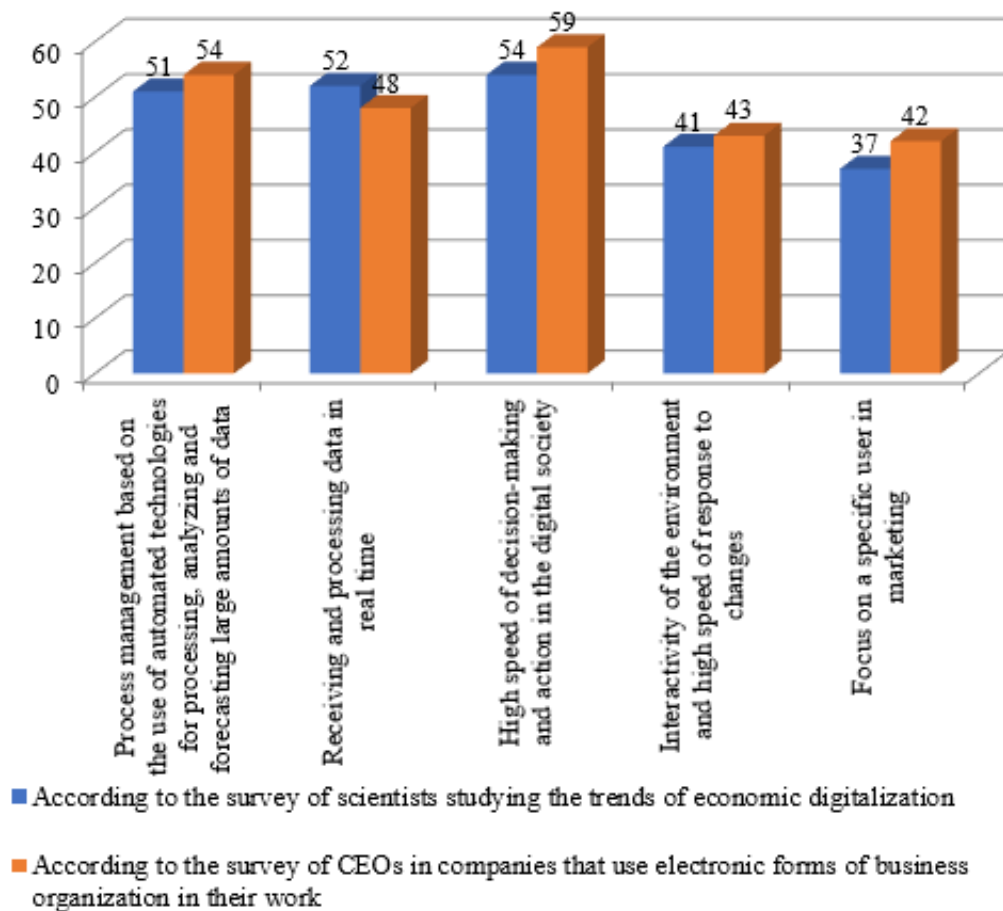


Source: Prepared by the authors (2023).

The survey participants also expressed their opinion on the most important vectors of scientific research in the business sphere in terms of studying the factors of the development of digitalization of economic processes (Figure 7).

As can be seen from Figure 7, these directions include process management based on the use of automated technologies for processing, analyzing, and forecasting large amounts of data, obtaining and processing data in real-time and high speed of decision-making and action in a digital society.

Figure 7. The most important vectors of scientific research of the business sphere in terms of studying the factors of development of digitalization of economic processes, %



Source: Prepared by the authors (2023).

The digitalization processes that have been going on for more than 20 years and are still ongoing in the global economic environment can be considered successful for the vast majority of companies in both the private and public sectors of the economy (Ercan & Samet, 2018).

Digitalization can be viewed as an effective mechanism for improving the competitiveness of business entities that have had trouble in their development for one reason or another. With the help of electronic communication and organizational tools, companies can create their strategy, and procedure for the introduction and use of innovative technologies, realizing the potential of scientific and technological innovations and intellectual capital. All of this will help speed up and facilitate the processing, analysis, and further use of a large amount of information, effective interaction of individual company units with contractors, as well as potential and actual consumers (Pradhan et al., 2019), (Ferracane & Marel, 2019).

Particular attention should be paid to the fact that digitalization is most characteristic and effective in those sectors of the economy where there is direct interaction with the consumer. The banking sector, for instance, the use of Internet banking, is a good example of

the introduction of digital technologies. The spread of Internet use and changing end-user needs stimulates the transformation of an ordinary real-world enterprise into a technological business entity, thereby stimulating its transformation (Ding, Zhang & Tang, 2021).

New technologies and the widespread use of Internet communication tools have made the digital economy a global phenomenon that is constantly evolving. The transition of businesses to online mode has become commonplace nowadays since online business transformation makes it possible to use new opportunities for the development of companies and facilitates the process of human resource management (Serafim-Silva et al., 2022).

The high-quality organization of a company's activities in the Internet environment is nowadays a company's strength. It ensures its ability to withstand the risks of its activities in the external environment and makes the company resilient in the face of these changes (Dulaimi & Al-Hindawy, 2023).

The digitalization of most economic processes, especially in the field of customer service and meeting current customer needs, will lead to positive results, such as ensuring the flexibility of the IT infrastructure. This significantly reduces the risks of the company's activities, expands analytical capabilities for processing large amounts of information, and automates processing and analysis of consumer behavioral characteristics through the use of Internet resources, which is the basis for further decisions and the creation of new products. Special opportunities for the digitalization of the business environment lie in the use of artificial intelligence, which independently analyzes consumer profiles and creates personalized offers for potential customers (Plekhanov, Franke & Netland, 2022), (Sabir, Niyaz & Bakhtiyar, 2022).

The impact of ICTs on all spheres of social life, including competitive business development, is growing every year. Digitalization is affecting an increasing number of the world's leading companies, expanding and deepening their networking, increasing competitiveness, and the level of implementation of innovative and productive information technologies in the framework of international business activities (Zhang, Pan, Feng & Qin, 2022).

Digitalization can also play a role as an effective tool for the de-shadowing of companies. Nowadays, this is especially evident in the interaction between business and government, which uses digital payment instruments to increase the efficiency and transparency of public and private transactions (Qian, Liu & Pan, 2022).

It is noteworthy that European countries are striving to increase the use of cloud computing services, increase the intensity of participation of small and medium-sized enterprises in digitalization processes, and increase the capitalization of private companies operating electronically (Timchuk & Evloeva, 2020).

Modern globalized society is shaping the global labor market, where the trend of digitalization of labor relations is visible. Through the influence of information technologies, we can observe the emergence of new forms of labor, namely organizational and legal means, and prerequisites for the functioning of intellectual labor (Elia et al., 2021).

## CONCLUSION

Thus, in accordance with the research objective, the analysis of the major directions and tendencies of the world experience in developing digitalization of the economic sphere has shown that the volume of digital innovations in the global economic environment is growing steadily nowadays. However, innovation processes are not developing efficiently enough, and this significantly slows down the digital modernization of the world economy. The analysis of the scientific literature on the research topic and the results of the questionnaire survey showed that digitalization in the field of economy is the process of transferring economic activity to a new format. It involves the use of digital technologies and helps to optimize business processes, increase business income and improve the system of communication with consumers. The limitations of the practical part of the research are related to the features of the calculation of the Network Readiness Index, which is the basic indicator used to assess the directions, tendencies and degree of developing the digital economy in the world. Further promising areas for future studies could be the assessment of industry-specific features of online business and the construction of a model of marketing policy effectiveness for companies starting or intensifying their activities in the online mode.

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