

ISSN: 2733-2713; E-ISSN: 2733-2721

DOI: 10.36962/SWD

© THE BALTIC SCIENTIFIC JOURNALS

SOCIOWORLD

SOCIAL RESEARCH & BEHAVIORAL SCIENCES

REFEREED & REVIEWED JOURNAL

VOLUME 09 ISSUE 03 2022

<https://bsj.fisdd.org/index.php/swd>





ISSN: 2733-2713; E-ISSN: 2733-2721

SOCIOWORLD

SOCIAL RESEARCH & BEHAVIORAL SCIENCES

ISSN: 2733-2713, E-ISSN: 2733-2721

VOLUME 09 ISSUE 03 2022

©**Publisher:** LEPL, Sokhumi State University. R/C 405282260.

Rector: Zurab Khonelidze, Professor, Doctor of Political Sciences.

Technical and reviewer team manager: Larisa Takalandze, Professor, PhD in Economics.

Registered address: 61, Politkovskaya street. 0186 Tbilisi, Georgia.

©**Publisher:** Chernihiv Polytechnic National University. R/C 054607925261

Rector: Oleg Novomlynets, Professor, Doctor in Technical Sciences.

Technical and reviewer team manager: Olha Rudenko, Professor, Doctor in Public Administration Science.

Registered address: 95, Shevchenko street, 14035, Chernihiv, Ukraine.

©**Publisher:** All Ukrainian Institute of Eurasian Research And Eastern Science. R\C 39783993

Registered address: 3B, Petra Hryhorenka Avenue, office 111, Kyiv, 02068, Ukraine

Director and Founder: Olha Rudenko, Professor, Doctor in Public Administration Science.

©**Publisher:** NGO International Center for Research, Education & Training.

MTÜ Rahvusvaheline Teadus-, Haridus- ja Koolituskeskus.

Management Board Member: Seyfulla Isayev.

©**Editorial office:** Narva mnt 5, 10117 Tallinn, Estonia.

©**Typography:** NGO International Center for Research, Education & Training. R/C 80550594

Registered address: Narva mnt 5, 10117 Tallinn, Estonia.

Telephones: +994 55 241 70 12; +994518648894.

E-mail: sc.mediagroup2017@gmail.com, socioworldbsj@gmail.com

Websites: <https://bsj.fisdd.org/index.php/swd>

ISSN: 2733-2713; E-ISSN: 2733-2721; DOI: 10.36962/SWD

SOCIOWORLD-SOCIAL RESEARCH & BEHAVIORAL SCIENCES

OFFICIAL REPRESENTATIVES-COORDINATORS

Isazade Namig (EU, Azerbaijan)

Mob: +994 552 80 70 12; Whatsapp: + 994 552 41 70 12

Rudenko Olha (EU, Ukraine)

+ 380 674 08 20 28

Takalandze Larisa (EU, Georgia)

+995 577 17 07 89

Accepted for publication in this edition 24.11.2022

©**LLC CPNU, NGO AUIERES, NGO SSU, MTÜ ICRET.** The Baltic Scientific Journals. All rights reserved. Reproduction, store in a retrieval system, or transmitted in any form, electronic or any publishing of the journal permitted only with the agreement of the publishers. The editorial board does not bear any responsibility for the contents of advertisements and papers. The editorial board's views can differ from the author's opinion. The journal published and issued by The Southern Caucasus Media Group.



TABLE OF CONTENTS

Olha Rudenko, Maksym Zhytar, Yevheniy Kodis, Serhiy Shturkhetsky PERFORMANCE CRITERIA OF THE IMPLEMENTATION OF MECHANISMS FOR PUBLIC ADMINISTRATION IN ECONOMIC COOPERATION OF EASTERN PARTNERSHIP COUNTRIES	4
Oksana Nahornyuk FINANCIAL, POLITICAL AND TECHNICAL ASPECTS OF ENERGY REFORMS IN UKRAINE IN THE POST-WAR PERIOD	10
Olena Akymenko, Viktor Akymenko ARCHITECTURE OF FOREIGN ECONOMIC ACTIVITIES: THE INFLUENCE OF THE TAX COMPONENT ON THE FORMATION OF THE MECHANISM FOR REGULATING THE FOREIGN ECONOMIC ACTIVITIES OF THE STATE IN THE CONDITIONS OF WAR	15
Margarita Hariga-Hrykhno, Nazar Kotelnytskyi THE PHENOMENON OF COLLECTIVE MEMORY IN MANAGEMENT AND HISTORICAL PRACTICE	25
Halyna Dzyana, Rostyslav Dzyanyy TRANSFORMATION OF COMMUNICATION ACTIVITIES OF PUBLIC AUTHORITY BODIES IN THE CONDITIONS OF THE LATEST CHALLENGES AND THREATS	33
Maryna Zholobetska, Anastasiia Kotelenets MAIN DIRECTIONS AND PRINCIPLES OF THE RECONSTRUCTION PLAN OF UKRAINE	41
Oksana Lisnichuk CONCEPTUALIZATION OF DIGITAL MANAGEMENT AS A MODERN TREND	48
Halyna Kaplenko, Andrii Stasyshyn CONCERNING PRINCIPLES OF PUBLIC ADMINISTRATION IN UKRAINE IN THE CONTEST OF ITS EUROPEANIZATION	57
Volodymyr Burak LIMITS OF EXERCISING THE EMPLOYEES' RIGHT TO PROTECTION IN UKRAINE	66
Svitlana Svirko, Sergii Moshenskyi, Vitaliy Butuzov GENESIS OF THE STATE MANAGEMENT OF BUDGET SECURITY	74



CONCEPTUALIZATION OF DIGITAL MANAGEMENT AS A MODERN TREND

DOI: 1036962/SWD09032022-48

¹Oksana Lisnichuk

¹Candidate of Economic Sciences, Associate Professor of the Department of Management, Finance and Business Administration, Private Institution of Higher Education "International European University", email: oksanaskvur81i@gmail.com, <http://orcid.org/0000-0002-2563-0717>

ABSTRACT

The article is aimed at exploring theoretical aspects of designing a digital management system as a tool for the inclusion of the country in the global system of division of labor and the international cooperation system. The author has found out that digitalization processes substantially affect the system of global division of labor and create conditions for digital inequality, which requires new approaches to management of organizational systems.

The article considers the possibilities of digital management initially focused on the activation of inclusion of organizational systems in global division of labor and cooperation processes at a new level of managerial efficiency as such an approach.

Keywords: digital management, management, division of labor, cooperation, activation, transformation.

INTRODUCTION

The rapid development and expansion of information and communication technologies in the late 20th and early 21st centuries resulted in the information explosion or information revolution dating back to the 1980s and continuing to the present day. In just a few decades, information and communication technologies entered all areas of social life, and information became the main production resource at the post-industrial development stage similar to energy and raw materials. Moreover, since the 1980s, the stage of economic globalization as the highest stage of internationalization has begun as a result of the scientific and technological revolution evolving into the information one.

Thus, in the late 20th and early 21st centuries, we could see significant changes in the system of international division of labor, which led to the necessity of shifting to a brand-new concept of management now being formed – to digital management.

In recent years, problems of digital management organization have been widely highlighted in the Western scientific literature because in Ukraine, for various reasons (low level of participation in the international division of labor, late inclusion in digitalization processes, etc.), this management model is not considered as a promising area of modern management, its features and potential benefits are not studied.

It defines the relevance of problems revealed in the article and its goal: to examine theoretical aspects of designing a digital management system as a tool for the inclusion of the country in the global system of division of labor and the international cooperation system.

Presentation of the basic material. Globalization, which covers more and more areas of modern life every year, is based on the economic relationship of states, their interaction to create a unified world production and economic system. The development of scientific and technological progress leads to the blurring of clear national borders, which contributes to the creation of unified



financial and information spaces, the growing influence of transnational companies, sales market integration, and technology advancement.

One of the most significant trends in the development of the global economy is the increasing differentiation of countries in terms of the level and quality of life. Differences in income levels have been increasing almost exponentially since the beginning of the 20th century. Besides, about two-thirds of the difference in incomes is caused by cross-country inequality, which is a consequence of digital inequality due to the fact that developed countries actively use digitalization achievements for the economic development, while other global market players face problems in accessing digitalization achievements [5].

In the process of post-industrialization of the world economy, mass industrial production is moving to developing countries. Such movement is carried out both by transferring enterprises to other countries and by creating production subsidiaries of transnational corporations abroad. Developed countries, such as the USA, Japan and Western Europe, are characterized by the advantage of non-productive elements of industrial complexes over industrial production. Besides, the main driving forces of the global economy at the beginning of the 20th century were large oil, metallurgical, machine building and mining enterprises. Nowadays, the largest companies include representatives of the digital economy, whose activities are based on the functioning of digital platforms (Table 1).

Table 1

The largest digital platforms by number of visits [12]

No.	Marketplace	Regional coverage	Number of visits per month
1	Amazon	Global	5.9 billion
2	PayPay Mall	Japan	2.1 billion
3	eBay	Global	1.6 billion
4	Mercado Libre	South America	661.7 million
5	AliExpress	Global	639.1 million
6	Rakuten	Global	621.5 million
7	Taobao	China	545.2 million
8	Walmart.com	USA	469.0 million
9	JD.com	Global	318.2 million
10	Etsy	Global	266.3 million

As we can see, the global character of digital platforms given the number of users compared to the population of certain countries provides conditions for digital globalization when the digitalization erases traditional boundaries of the division of labor, creating a common global space of digital commerce.

At the same time, we should admit that the situation forms a new type of division of labor where countries that are the centers of physical location of companies acting as owners and operators of digital platforms (Amazon, eBay (USA), Taobao (China), etc.) succeed.

The growth poles in such countries are not industrial centers but centers of idea generation and creativity, which become drivers of the digital economy, the international division of labor, and



cooperative relations based on achievements of the digital transformation of businesses and management systems.

Therefore, we can assume that inequalities in the division of labor, especially technological and information inequalities, will intensify in the coming years. [12]

As to our country, today Ukraine occupies a rather modest position in the international division of labor. This is because its full-fledged inclusion in the system of the international division of labor took place in the early 1990s and was accompanied by an extremely negative scenario characterized by the following aspects:

- the main place in international trade is occupied by finished products and services based on high technology, while the majority of Ukrainian exports are raw materials and products of the first processing;

- manufacturers essentially remain outside international industrial and investment cooperation: they do not have strong cooperative relations with foreign partners, are not included in international reproduction chains [9];

- digital transformation in Ukraine began 15 years later than in Europe, the USA and China. Therefore, the management system of inclusion processes in the global system of division of labor and cooperative relations is currently under development.

That is why the digital transformation of business processes related to the development of the digital economy in Ukraine requires a new theoretical and methodological substantiation of approaches to market economy management, taking into account the features that now determine the international division of labor.

Considering the above-mentioned problem, one should take into account the fact that, according to researchers [14], over the past years, the international division of labor has been related to the technological transformation based on the division of the world economy by the level of human capital development, which allows speaking about the establishment of cognitive time in the system of division of labor.

Therefore, the evolution and transformation of basic concepts of management took place in developed countries: financially oriented management, marketing management, quality management (process-oriented management), knowledge management (cognitive management). Besides, scientists emphasize the use of various services based on cognitive computing in modern management [6].

At the same time, one cannot but agree that the penetration of cognitive ideas in the economy allows us to distinguish cognitive constructs in any activity area related to decision-making and characterized by a high degree of uncertainty of future events. The shift of attention from the object to the subject of management allows us to focus on cognitive constructs of managers' thinking, development of their professional competencies, and achievement of a cognitive breakthrough for efficient activities of both the individual employee and the organization as a whole.

However, in any case, the emergence of the managerial concept of cognitive management is explained by the understanding that the priority among production factors of the organization includes not material (natural) resources, and not information, but intellectual (knowledge, technology, experience) ones.

Scientists focusing on the application of cognitive (intelligent) tools in management of company development processes in the context of globalization talk about the increasing penetration of



artificial intelligence in the managerial decision-making system, which is a consequence of the development of the digital economy [14].

Meanwhile, the analysis of works [6; 14] allows us to conclude that the concept of cognitive management, transforming literally in one decade, has reached a new level of conceptualization. Having not yet fully formed, cognitive management can be transformed into digital management based on the best practices. Indeed, the concept of professional managerial competencies is already the basis of employees' digital skills [2]. Now in addition to critical thinking, emotional intelligence, creativity, and the ability to lead people, a candidate for a managerial position needs media literacy, cognitive flexibility, and digital thinking. Therefore, tools for competence-based organization management in the digital economy necessarily include the convergence of knowledge management, artificial intelligence, and cognitive science [11].

Based on the above, let's design a comparative characteristic of cognitive and digital management approaches (Table 2).

Table 2

Comparative characteristic of cognitive and digital management (designed by the author)

Criterion	Cognitive management	Digital management
Object of management	Combination of live and robotic labor	Combination of live and robotic labor
Key resource	Knowledge, experience	Digital resources
Manager's role	Organizer, coordinator	Profile of the role of communicator, coordinator
Communications	Personal communications prevail	Collaboration based on digital technologies
Management infrastructure	Departments, services, management personnel	Digital offices, digital platforms
Organizational culture	Ethics of personal and business communication	Digital culture, virtual communication
Foundation	Cognitive technologies and cognitive systems	Digital technologies
Use of Industry 4.0 technology	Used to make decisions	Widely used
Competencies	Cognitive competencies	Digital competencies (hard skills, soft skills)
Decision maker	Person who independently generates decisions based on cognitive systems	Person who generates decisions using artificial intelligence
Strategic goal	Aimed at achieving key goals of organization development	Integrated goals of the organization, society, and the individual

The comparison of cognitive and digital management conducted by the author allowed us to determine that digital management is an extension, the development of cognitive management both technologically and conceptually. The differences show only the level of development of the digital environment, infrastructure, and requests for managers' competencies. In fact, it is the

external environment through the inevitable implementation of the digital economy that has given impetus to the development of digital management. If talking about the essence, the use of cognitive technologies at the intersection of biological, technological, and psycho-scientific achievements will allow us to create comprehensive tools for managerial decision-making in digital management [5].

The emergence and evolution of digital management, as well as any other concept, is impossible without a theoretical platform. It is the technological strategy of Industry 4.0 and the state program of digitalization of the economy that have become, to our mind, the basis of the digital environment where digital management emerges (Fig. 1) [4].

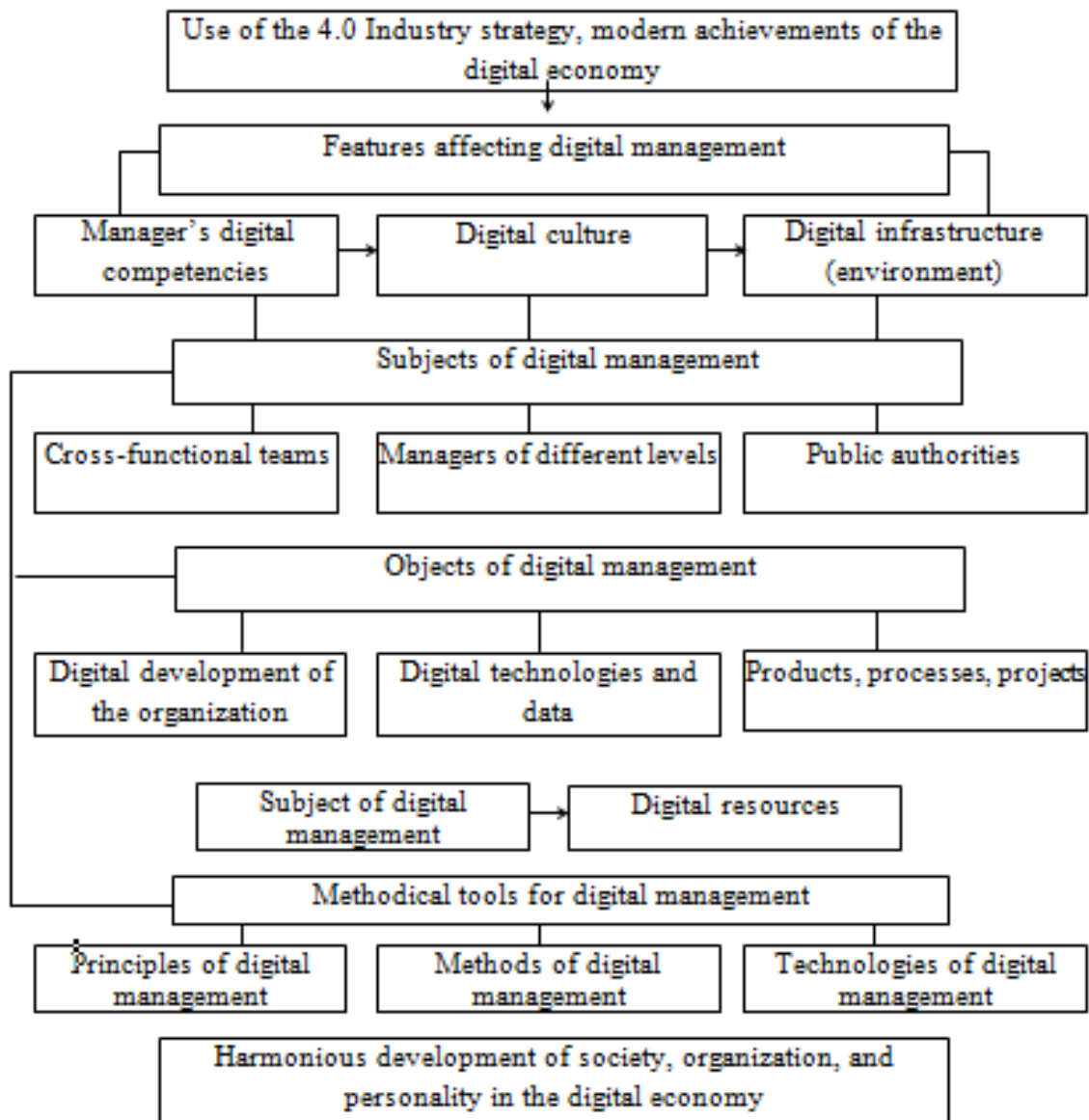


Fig. 1. Conceptual model of digital management (based on the data [1; 4; 5])



At the same time, it is the degree of maturity of the necessary resources: intelligent (human competencies), infrastructural (technological), and social (organizational and cultural), that has also become the prerequisite for the possibility of the establishment of digital management.

The list of subjects of digital management can be expanded given the industry specifics and the level of implementation of this system.

It is obvious that the above-mentioned objects and subjects of digital management are subject to critical reflection.

V.I. Liashenko and O.S. Vyshnevskiy suggest distinguishing business ecosystems, which mean a set of subjects united around the industry digital platform, as a new object of management in case of the development of the digital economy [2].

The cost-saving operating model aims to optimize business processes. It thrives due to the less is more culture and the standardized organizational structure.

Companies applying a data-driven operating model establish digital competence centers; processes are backed by deeper analytics, rapid testing and learning [8].

SkyNet intensively uses robotics and automation to increase the efficiency and flexibility of production.

One of the most interesting operating models of international business development in the digital economy is the open model that builds an ecosystem around a common customer. In the digital economy, platforms create a network effect that transforms a company by shifting production from inside the company to outside. Besides, they not just create values on their own but organize the creation of values by external users. The platform is more important than the product in this inverted model. The value of the platform is increased due to reuse and wider use, and it increases with positive feedback, eventually dominating the static value of the product or declining value.

With users being producers and the company acting as an intermediary, the inverted model redefines traditional models of interaction between public and private sectors, requiring transparency that managers brought up on traditional competitive dynamics find difficult to cope with. However, once the scale is achieved, digital ecosystems become very powerful [10].

Thus, we can conclude that the creation of the company's digital model focused on active inclusion in the system of modern international division of labor and production cooperation implies changes at organizational, process, and functional levels, the creation of a unified ecosystem of the company and digital assets, the integration of digital services into key business areas, providing access to information and analytics in real time.

The use of the digital business model requires defining the main areas of transformation of the company's business processes. In particular, one notes the digitalization of technological processes, procurement activities, preparation of financial reporting and control of deviations from business plans, risk management based on big data, control of the implementation of investment programs, human resources management [3].

Digital breakthrough technologies, such as robotic process automation, intelligent automation, application of artificial intelligence, in-depth analytics and big data, cutting-edge business modeling tools – simulation modeling, open up new opportunities for foreign trade companies.

Robotic automation of business processes has led to the emergence of software robots taking over most of the routine operations and not requiring human participation. Intelligent automation (computer vision technology, unstructured information processing, machine learning) assumes that software robots work together with artificial intelligence, can replace the employee not only in simple operations but also in making complex decisions based on data analysis and self-



learning. Collecting statistics on the state of internal processes of the foreign trade company using mobile sensors (IoT – Internet of Things) allows data to be accumulated in corporate storages, which are then analyzed by artificial intelligence systems and software robots to make more complex decisions. Business planning applies simulation modeling technology in the form of computer programs that can build a model of any complex object in real environment [7].

The digital environment is characterized by a high level of changes, active use of technology, work processes are becoming much less structured and predictable, whereby it is not enough to have digital skills, as you should also learn how to work in the innovative environment.

The introduction of digital technologies causes the need to develop digital skills of personnel, which primarily include: digital literacy, data analysis and decision-making based on artificial intelligence, systemic thinking and understanding of business models, continuous advancement using cost-saving and flexible methods.

The most important competencies for digital workforce are related to continuous learning and innovations, awareness of differences between relevant and irrelevant data for finding insights, network interaction, and improved performance. A foreign trade company that has implemented a digital business model should change the personnel management function to work digitally using digital tools and software to deliver solutions, the combination of talents, technologies, and the digital workplace.

One should take into account different levels of maturity inherent to the digital transformation of foreign trade companies. Thus, T. Saldanha highlights five stages of successful digital transformation [13].

At the first stage, one should create a foundation for the digitization of assets and the shift to digital transformation. The foundation is the automation of internal processes using the CRM system.

At the second stage, one launches the digitalization of individual functions or departments. This stage is quite isolated and allows experimenting with different breakthrough business strategies, for example, the financial department can shift to financial and technical solutions to facilitate international transfers, the use of the Internet of Things has made major changes in logistics management, etc.

At the third stage, one achieves partial synchronization between divisions and business processes, but there is no unified structure and management. Therefore, one should implement coordinating programs of digital transformation strategy and develop guidelines for divisions of the foreign trade company.

The fourth stage produces platforms, products, and processes based on digital technologies, as well as attains full synchronization of division operations.

The fifth stage indicates that the digital transformation enters the core of the business strategy and is traced in the culture, mission, and business model of the company [13].

Thus, digital capabilities and the flexible innovative culture become the foundation for the development of the company focused on active inclusion in the system of modern international division of labor and production cooperation, while the digital management system allows organizations to rapidly adapt to the dynamic conditions of the modern division of labor.



CONCLUSION

The analysis of changes in the international division of labor occurring in the information age has allowed us to define the set of transformation processes, the most important of which is the change in the paradigm of management of organizational systems.

Currently, digitalization processes affecting the whole system of division of labor globally require new management approaches. Therefore, it becomes relevant to integrate the digital management model into management processes, which actually means the use of digitalization achievements in management processes of organizational systems.

Methodical tools for digital management are aimed at achieving the main goal of management: integrated, harmonious development of the organization and personality in the digital economy.

Thus, this conceptual model reveals the paradigm of inclusion of organizational systems in the international division of labor and cooperation activities based on the intensification of digital interaction and the use of digital technologies in various areas of management.

REFERENCES

1. But-Gusaim O. G., Kovtunenکو K. V. Digital management: development problems and prospects // *Business Inform.* 2020. No. 6. P. 297-304.
2. Liashenko V.I. Digital modernization of the Ukrainian economy as an opportunity for breakthrough development: monograph / V.I. Liashenko, O.S. Vyshnevskiy; National Academy of Sciences of Ukraine, Institute of Industrial Economics. Kyiv, 2018. 252 p.
3. Niskhodovska O. Y. Digitalization: foundation for competitive enterprises // *Collection of scientific reports: Podilsky State Agrarian Technical University.* Kharkiv: O.M. Beketov National University of Urban Economy in Kharkiv, 2020. P. 163-166.
4. Tupkalo V. M. Digital economy: Changing the paradigm of enterprise management // *Economic Bulletin of Igor Sikorsky Kyiv Polytechnic Institute* 2021. No. 19. P. 177-182.
5. Abuselidze G., Mohylevska O., Kompanet N., Iushchenko L. Modern concepts and methodological recommendations for teaching economic disciplines: tasks of the course "Digital Management of Transport Infrastructure". *Transportation Research Procedia.* Vol. 63, 2022, pp. 2759-2766.
6. Behera R., Bala P., Nripendra P.Rana, Kizgin H. Cognitive computing based ethical principles for improving organisational reputation: A B2B digital marketing perspective. *Journal of Business Research.* Vol. 141, 2022, pp. 685-701.
7. Davis C., Hashimoto Ken-ichi. Productivity growth, industry location patterns and labor market frictions. *Regional Science and Urban Economics.* Vol. 97, 2022, 103817
8. Zhytar M., Sosnovska O., Skchur R., Lisnichuk O., Navolokina A. Scientific and Methodical Approach to the Assessment of Diagnostics of the Economic Security of Economic. *Financial and Credit Activity: Problems of Theory and Practice.* 5 (46). P. 209-221.
9. Kiljunen K. Toward a theory of the international division of industrial labor // *World Development.* Vol. 17. Is. 1, 1989, pp. 109-138
10. Jacobides M.G., Sundararajan A., M. Van Alstyne. Platforms and Eco- systems: Enabling the Digital Economy. February 2019. URL: <https://reports.weforum.org/digital-transformation/wp-content/blogs.dir/94/mp/files/pages/files/digital-platforms-and-ecosystems-february-2019.pdf>
11. Lisnichuk O.A. Diagnostics of the development of crisis phenomena at the enterprise. All-Ukrainian scientific and production journal "Sustainable Development of Economy". *Khmelnyskyi.* 2012. P. 120–126.



12. Merton K. The World's Top Online Marketplaces 2020 / Webretailer. 2020. URL: <https://www.webretailer.com/b/online-marketplaces/>
13. Saldanha T. How To Reverse The Dismal Failure Rate Of Digital Transformations. URL: <https://www.porchlightbooks.com/blog/changethis/2019/how-to-reverse-the-dismal-failure-rate-of-digital-transformations>
14. Samuel J., Kashyap R., Samuel Y., Pelaez A. Adaptive cognitive fit: Artificial intelligence augmented management of information facets and representations International Journal of Information. Management. Vol. 65, 2022, 102505.