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DIGITAL STRATEGIC CONCEPT FORMATION OF MODERN UKRAINIAN SOCIETY IN THE CONTEXT OF TECHNOLOGIES, POSSIBILITIES AND BREAKTHROUGH DEVELOPMENT

© KYRYCHENKO, MYKOLA

Institution «University of Educational Management» National Academy of Pedagogical Sciences in Ukraine (Kyiv, Ukraine)

E-mail: kmumo@i.ua, **ORCID iD**: https://orcid.org/ 0000-0003-1756-9140

ДЗВО «Університет менеджменту освіти» Національної академії педагогічних наук України,52-А вул.Січових Стрільців, 04053 Київ, Україна

Institution «University of Educational Management» of the National Academy of Pedagogical Sciences of Ukraine, 42-A Sichovyh Striltsiv str., 04053 Kyiv, Ukraine

Abstract.

The purpose of the research is to improve theoretical and practical aspects of digital strategic concept forming modern Ukrainian society in the context of technological development, opportunities and breakthrough changes. Objectives of the research: 1) to analyze information, artificial intelligence and machine learning as powerful levers to attract huge amounts of data that revolutionize our lives and production; 2) show the impact of automation on job creation in various areas of work and talent management in digital age; 3) to find out the place and role of information as a digital strategic basis of the new information revolution. Methodology - used systemic and institutional methods that allowed to bring everything into a reliable system for managing complex areas of interdependent activities, which allows you to discover and analyze the components and consistently connect them with each other. The institutional method is necessary for the formation of a holistic view as how the institutional subsystem affects information subsystem functioning. Methods - information scientific modes - general principles - creative relationship of correlation as subject with specific information reality, as well as fixing the results of the subject in gnosis to the world, nature, society, power institutions and their interaction with each other.

The result of the research. As a result of the research, information, artificial intelligence and machine learning were analyzed as powerful levers for attracting a huge amount of data that revolutionizes our lives and production; an automation influence on job formation in various fields of work and talent management in digital age is studied; the place and role of information as a digital strategic basis of the new information revolution are clarified. Practical recommendations: 1) to introduce digital strategic concept of modern Ukrainian society in the context of the breakthrough changes development in the organization; 2) to form a new digital thinking taking into account the new digital culture in order to counteract the negative technologies of the new day; 3) to form computerization with the help of artificial intelligence systems and robots, which will increase productivity, remove barriers to innovation, create new opportunities for small businesses, startups, reduce barriers to market entry, implement software as a service.

Keywords: digital strategy concept, artificial intelligence, information, machine learning, automation, new digital thinking

Introduction

The relevance of the research is that digital strategic model formation

of modern society as a factor of technological development is associated with changes in modern

society, as digital technologies change the world, destroy entire industries, allow large Western companies to achieve significant success technologies, opportunities and breakthrough changes [1]. The development of **BIG DATA** computing today has an incredible expansion and application: centralized cloud computing, quantum computing, neural network processing, biological data storage, optical cellular computing. approaches contribute to the development of software and new cryptography forms. They create and overcome cybersecurity challenges by processing data using natural language and promising increased efficiency in healthcare and modeling of physical and chemical processes. New computing technologies today's most overcome some of complex challenges, but without flexible management approaches to ensure the distribution of benefits and security impact control, these technologies lead can to new challenges. Without Moore's Law, we would not be able to use everyday mobile computing, which involves very small processors and warehouses, nor would we know mobile telephony. According research by the Pew Research Center, it is due to the influence of mobile telephony that various smartphones now have an averagely 43%, the number of smartphones is growing in many new economies, but digital divide remains very noticeable [2]. In 2017, with the rapid smartphones introduction microprocessors and

incorporation into a wide variety of household appliances (from TVs to washing machines), this number has probably more than doubled. Modern high-end computers today would take longer than the universe to solve large numbers. Quantum computers can borrow the probabilistic nature of superposition to simulate many states simultaneously, thus providing a short path to the best (or near-best) answer to a problem that cannot currently be solved by digital computers. Peter Shore, a professor in mathematics at Massachusetts **Technological** Institute, developed Shore algorithm, the quantum factorization algorithm that is exponentially faster than the best known algorithms running on classical computers.

Problem statement in general and its connection with important scientific or practical tasks.

We rely on the idea that the best achieved results are by those managers or entrepreneurs who fully "digitize" the activities of their organization, business, development strategy. Managers do not view digital strategy as one of many, but their activities in digital terms and make sure that their digital strategy covers all aspects and organization levels. Digital transformation requires both strengthening the core and building the future organization capacity to create comprehensive digital strategy and guide your own organization through the transformation process. To mitigate the effects of digital failures, as well as explore new opportunities, companies typically follow a combination of the following three strategies:

- 1) the creation of small and independent units or startups within a larger organization;
- 2) conducting a series of digital experiments;
- 3) and / or the use of information technology to reduce costs and increase efficiency [4].

Experiments help companies solve new ideas and explore future trends. Competition in the digital age is usually felt by new players, and rethinking the field of activity is important to ensure future success. This requires a balance to be struck between expanding the scope of activities and staying within its core competencies in order to remain competitive in the digital age. Digital technology can significantly increase the efficiency and profitability of various parts of the business as new models of research and innovation emerge to re-evaluate their research and innovation process. **Digital** technology as a complex system of algorithms and actions has opened a new era of industry, developing digital production, virtual and augmented reality, 3D printing, digital chains, increasing supply the efficiency of created work, for competitive advantage. Each organization must create its own digital strategy development strategy to successfully develop, change the information collected. way is understand its priorities and influence the final choice [5].

Analysis of recent research and publications, which initiated the

solution of this problem and on which the author relies

In our study, we started from the study of V. Kuybida, O. Petros, L. Fedulova, G. Androschuk "Digital competencies as a condition for the formation of the quality of human capital: an analytical note" (Kiev, National Academy of **Public** Administration under the President of Ukraine, 2019); analytical report "Problems and prospects harmonization of the digital market of Ukraine with the markets of the EU and the Eastern Partnership countries (electronic resource, 2018); Concepts of development of digital economy and society of Ukraine for 2018-2020; On approval of the Concept of e-democracy development in Ukraine the action plan for and its implementation (electronic resource, 2017); On approval of the Regulation on the State Agency for Government of Ukraine (electronic resource): Resolution of the Cabinet of Ministers of Ukraine of October 1, 2014 № 492; Global Competitiveness Index. Humanitarian Encyclopedia (electronic resource, 2018); works by Metlyaeva "What is digital business and digital transformation? Modern innovations», 2017. № 7 (21); N. Nagibinova, A. Schukina "HR-Digital: Digital Technologies and Human Resource Management" (Science, (online magazine), 2017, vol. 9, № 2.

Highlighting previously unsolved parts of the general problem to which this article is devoted

In the digital society today, it is extremely important to form the

concept of digital strategy of modern Ukrainian society in the context of development, technology opportunities and breakthrough changes, which will promote innovative confident and use technology in modern Ukrainian society. With mixed reality, it will be possible to create a unique computer perception that transforms our field of vision into a computer screen, where the digital and physical worlds merge single whole. Artificial into intelligence will help in all matters, complementing human abilities with the ability to effectively predict, unattainable to man. After quantum computing will allow us to go beyond Moore's Law, which states that the number of transistors in a computer chip doubles about every two years. Quantum computers will change the physics of computing we know today and improve computing power to overcome the world's biggest complex problems. and most Although today mixed reality (CL), artificial intelligence (AI) quantum computing are considered independent trends, they will soon be combined. In cooperation with mixed reality, cloud computing tools and optimization, business artificial intelligence will be the basis of the process of transformation in spheres of society and man [6].

The purpose of the study - theoretical and practical aspects of the formation of the concept of digital strategy of modern Ukrainian society in the context of technology development, opportunities and breakthrough changes.

The objectives of the study: 1) to analyze information, artificial intelligence and machine learning as powerful levers to attract a huge amount of data that revolutionizes society, organizations, each industry; 3) to find out the place and role of information as the basis of the digital strategy of the new information revolution.

Research methodology. Systemic and institutional methods were used, which allowed to bring everything into a reliable system to represent the of complex direction areas interdependent information activities, which allows to reveal and analyze the constituent components, models mechanisms, and as well consistently connect them with each other. The institutional method is necessary for the formation of a holistic view of how the institutional subsystem affects the functioning of the information subsystem. Methods information science _ general principles-postulates of the creative relation of correlation of the subjectthe concrete-available to information reality, and also fixing of results of activity of the subject in gnosis to the world, the nature, a society, power institutions and their interaction with each other. Methods of analysis, synthesis, abstraction, historical and logical, systematic, structured, comparative analysis are also used, based on the evolution of society to its digital stage, formation of the concept of digital strategy of modern Ukrainian society technology, in context of the opportunities and breakthroughs.

standards, criteria, higher standards of development of a particular digital society [7].

Presentation of the main material of the research with substantiation of the obtained scientific results

1. Information, artificial intelligence and machine learning as powerful levers to attract huge amounts of data that revolutionize society, organizations, every industry

Information, artificial intelligence and machine learning have automated many tasks and have a significant impact on job creation, changing how employees' skills and abilities are used by the organization. Technology helps organizations ensure proper management and implement a less subjective approach to talent management. The rapid development technology makes data software integrated into virtually all enterprises, which makes it possible to blur the boundaries of the industrial market faster than ever, especially with regard to developing a digital strategy for modern Ukrainian society. According to an IBM report, 2.5 quintillion bytes of data are being created today. In other words, 90% of the world's data today has been created in the last two years.

This data comes from consumer activities such as web browsing, social media posts and the use of mobile devices - increasingly from sensors built into machines. One of the powerful levers for attracting huge amounts of data through machine learning is artificial intelligence (AI).

Today, AI is a force behind automation and at the same time provokes new fear and anxiety. While some people, like Elon Musk, are worried about the potential for AI development, others fear that the technology will revolutionize every industry. There is no doubt that AI will have an incredible impact on future professions and skills needed for a successful career in the digital age [8].

The DATA" term "Big penetrated business vocabulary refer to the large amount of complex information available today. After all, data has always formed the basis for decision-making in economics, business, and so on. This is the data we used to work with through an Excel spreadsheet, but this problem was the focus of ImageNet, a database of millions of images, which led to the development of machine learning, which increased the accuracy image recognition to 85%. Today, face recognition algorithms based on in-depth training have an accuracy of more than 99% [9].

In-depth learning is based on artificial neural networks (ARNs), which are perceived as a way of human brain activity. The average human brain has 100 billion neurons, and each neuron is connected to 10,000 other neurons, allowing information to be transmitted quickly. When a neuron receives a signal that electrical impulse an triggers other neurons, which in turn information propagate associated neurons. The output signal of each neuron depends on the "activation function". Another approach is "transfer knowledge", in which experts (for example, in the field of cybersecurity) transfer their knowledge to the machine, rather than allowing the machine to start from scratch. Most modern approaches to AI are specific to certain areas, such as language or medicine. The next frontier of this achievement is the development of a "generalized AI" capable of synthesizing and finding models from different areas as well as the human brain [10].

2. The impact of automation on job creation in various areas of work and talent management in the digital age

The ability to gather information and train machines for analysis and study transforms every industry and will have a significant impact on job Researchers creation. Oxford at studied University 702 typical occupations and found that 47% of employees in the United States have jobs at risk of automation. A 2017 MeKinsey study found that while less than 5% of jobs have the potential for full automation, nearly 30% of jobs in occupations 60% of can computerized. Even highly qualified well-educated lawyers and radiologists are at risk of automation [11].

Automation in the 1960s and 1970s replaced blue-collar workers in factories, but the type of automation driven by artificial intelligence is likely to replace many white-collar workers. Importantly, the work that is routine, repetitive and predictable, machines are able to do better, faster

and cheaper. The difference no longer passes between manual and cognitive skills or work in blue collars and white collars, but passes over whether repetitive large elements. Automation is causing concern among politicians over people and prospect mass unemployment. of parts Regular and recurring professions will be automated, and people will have to retrain for other aspects of work [12].

In the digital age, the situation is such that not only iobs transformed, but also the processes by which firms recruit, develop and manage talent, and experience significant jobs. Technology is forcing firms to rethink who they hire and how they hire. Goldman Sache has automated many parts of the primary information process public and replaced most its software of engineering traders who write algorithms. [13].

Almost every company has online courses and specialized tools that help employees update their skills and learn. Digital tools and technologies now allow firms to try new faster ways measure employee to performance. Keeping talented employees is a constant challenge for every organization. Human resource recruitment decisions, from training to assessment and retention, will be guided by data and machine learning algorithms. Machines will not replace human judgment, but they will be the main additional assets for what we are currently doing in the field of talent management. The technological revolution will only

accelerate in the future, and we should prepare well for it [14].

Advances in analytics and AI have greatly improved the power accuracy of "people analytics" and recruiting talented staff for strategic workforce planning, as rapid changes in technology also require ongoing training. Digital technologies tools now allow firms to try new and faster ways to measure employee performance. An information technology-driven approach can also identify good performers without any of the biases inherent in human evaluators. resource management However, even journalists today are being pushed out by bloggers, Twitter users and video enthusiasts, but they have said that only professional journalism is able to conduct proper investigations. Scientists have had to get used to instantly discussing their ideas on forums instead of opaque reviews of scientific publications, and politicians have had to come to terms bullying on Twitter. The relationship between business and users that the Internet has brought us has changed the very economy of labor. Internet systems have created this type of crowdsourcing, which can be called "cloud work", or cloud work. In other words, there are many people on the Internet who work independently [15].

3. The place and role of information as the basis of the digital strategy of the new information revolution

The new information revolution has already taken place, as it began with information that affected all

social institutions and radically the meaning that both companies and individual employees attach to the concept of "information". The information industry has helped to revolutionize the information we use in our daily lives. The current information revolution is completely unprecedented the cost in information and the scale of its dissemination (expressed in the price of one byte of information and the number of computer owners), as well as in its speed and scale of its impact. People quickly understood meaning and benefits of the Internet, began to engage in crowdsourcing, edit "Wikipedia" and live in the ecloud. But with the development and evolution of the Internet, the number of spies, censors, and web guards restricting began to grow, controlling the Internet not only in Cuba and China, but also in other countries. espionage for their citizens, coordinating their actions with secret legislation [16].

However, despite these actions, "big data" is now widely used to accelerate decisionimprove and making, and profound shifts taking place. The amount of business data in all companies around the world doubles every 1.2 years. There is more data on communities now than ever before, and the ability to manage them is only improving over time. Therefore, it is necessary to resort to technologies for processing large data sets to automate modern programs and provide advanced ways to provide services to citizens and consumers [17].

Effective use of a large array of improvements accelerate will decision-making in a wide range of applications. Automated decisionmaking can simplify the lives of citizens and enable companies and to provide real-time governments services and support throughout. Confidence in data and decisionalgorithms making is becoming critical. Effective use of data to change the processes that are now provided manually can lead to the loss of certain jobs. At the same time, this will give impetus to the emergence of new professions and opportunities that do not yet exist on the market [18].

At the heart of the concept of digital strategy of modern Ukrainian society in the context of breakthrough change - artificial intelligence and decision-making, aimed at automating the complex decision-making process, to quickly reach specific conclusions based on previous experience. The positive consequences of this process include: rational decisions based on data. reducing level the of subjectivity; elimination of "rational redundancy"; reorganization outdated bureaucratic structures; the emergence of new jobs and innovative developments, as a result of which computer processors will reach the level of data processing speed of the human brain in 2025.

Modeling the digital strategy of the modern world as a factor of technological change (technology, opportunities breakthroughs) and requires finding the best ways to challenges manage the of technological requires change,

businesses governments, and individuals to make the right strategic decisions to develop and implement new technologies. For 50 years, we have become more aware of the relationship between society technology in order to prevent negative consequences for ourselves and and others to develop necessary skills to use new technologies.

The formation of a model of digital strategy of the modern world as a factor of technological change (technology, opportunities and breakthrough changes requires the development of a certain position on societal values and improvements in creating mechanisms for joint action, to perceive new technologies as tools people are ready predictably and controlled take a new look at technology, take into account many facets of technological change and allow practical decisions to be made at the personal and organizational levels [19].

The formation of a model of digital strategy of the modern world as a factor of technological change opportunities (technology, breakthroughs) is associated with the introduction of new technologies as powerful factors shaping our values, with scale, complexity urgency of the challenges facing the world today. rapid and responsible action, and from society so that it can collectively push the most desirable ways to use the technologies of the Fourth Industrial Revolution.

Thanks to new technologies, we build our economies, societies, shape worldviews, force all industries to work on systemic leadership and focus on common values, shape a future in which the most powerful technologies will help create an inclusive, fair and prosperous society. society as a whole [20].

Conclusion of the research and prospects for further exploration.

The achievements of the fourth revolution technologies industrial provoke a broad social transformation, help reach all stakeholders and help overcome the main challenges we face now: sharing benefits of technological breakthroughs, curbing inevitable external manifestations and ensuring that new technologies expand rather than narrow our capabilities. Human beings, for which positive change through should be created cooperation, building trust goodwill, overcoming challenges only through cooperation and transparency.

The analytical report "Problems prospects and of digital market harmonization in Ukraine with markets in the EU and the Eastern Partnership countries (electronic resource, 2018) identifies priorities " " Ukrainian development, digital which notes significant shortcomings on the way to this advancement: consistent with European". "The focus on digital development is due to the priority of this area in accelerating the economic and social country's development as a whole. Ukraine has already begun to move towards important socio-economic spheres in digitalization. But along with the significant success. there are shortcomings that need to be

addressed in short term, including towards progress achievements identified in digital market harmonization in "20 Expected Achievements the of Partnership by 2020". At this stage country's "digitalization", the main obstacle is lack of coherent strategic policy-making approach to harmonize digital markets with the EU and Eastern Partnership region. The first step will be coordinated by measures implement to Development Concept of Digital Economy and Society of Ukraine, development of strategic documents / roadmaps / action plans for each of areas above digital market the harmonization. The analytical report harmonization "Problems and prospects of digital market in Ukraine with EU and the Eastern Partnership markets (electronic resource, 2018) states that Ukraine has no vision and no government initiative, program, strategic document aimed at creating a comprehensive national digital development system. literacy. There are also no tools at the state level to monitor and assess digital skills and competencies. Because of this, it is difficult to determine the vector and concrete actions for the development of digital skills and competencies in Ukraine in the nearest Legislative level, such basic concepts "digital skills" and "digital competencies" have not yet been defined ("Problems and prospects of harmonization of the digital Ukrainian market with EU and the Eastern Partnership markets", p.10).

Practical recommendations: (analytical report "Problems and

harmonization prospects of digital market in Ukraine with the EU and the Eastern Partnership markets" was used);

- 1) to introduce digital strategic concept of modern Ukrainian society in the development context of breakthrough changes in the organization to form a society in accordance with digital values;
- 2) to form a new digital thinking taking into account new digital culture in order to counteract the negative technologies of the new day;
- 3) to form computerization with the help of artificial intelligence systems and robots, which will increase productivity, remove barriers to innovation, create new opportunities for small businesses, startups, reduce barriers to market entry, implement software as a service.
- 4) accelerate the development of national strategy for the development of broadband access (broadband) to the Internet (Problems and harmonization prospects of digital market in Ukraine with the EU and the Eastern Partnership markets);
- 5) to develop a comprehensive methodology for conducting research on the situation in the field of digital skills and competencies in Ukraine (Problems and harmonization prospects of digital market in Ukraine with the EU and the Eastern Partnership);
- 6) Initiate the creation of Coalition for Digital Skills and Jobs in Ukraine on the basis of the Coalition for Digital Skills and Jobs in the EU. In the nearest future to start a discourse

- on the creation of appropriate structures (Problems and harmonization prospects of digital market in Ukraine with the EU and the Eastern Partnership);
- 7) develop and implement national roadmaps for the development of digital and technological infrastructures for research and innovation (Problems and harmonization prospects of digital market in Ukraine with the EU and the Eastern Partnership);
- 8) provide a mechanism of state regulation on harmonization with the European Cloud Initiative, in particular Ukraine's participation in the creation of the European Cloud of Open Science (Problems and harmonization prospects of digital market in Ukraine with the EU and Eastern Partnership markets, p.11);
- 9) to promote the accession to European policy of open science and open innovation in the European Research Area (Problems and harmonization prospects of digital market in Ukraine with the EU and the Eastern Partnership markets, p.11);
- 10) provide state support for the participation of the best Ukrainian research centers and scientists in national European and digital (Problems infrastructures and harmonization prospects of digital market in Ukraine with the EU and the Eastern Partnership markets, p.11);
- 11) to ensure the creation of a system of credit and tax benefits for the development of innovation (Problems and harmonization

prospects of digital market in Ukraine with the EU and the Eastern

Partnership markets, p.11).

СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

- 1. Бгаргава Рогіт, 2019. Неочевидне: як передбачити майбутнє, аналізуючи тренди/ пер. з англ. К.Дерев'янко. Харків : *Віват.* 288.
- 2. Бріньолфссон Е., Макафі Е.. 2016. Друга епоха машин: робота, прогрес та процвітання в часи надзвичайних технологій. Київ : *FUND*. 236 с.
- 3. Гупта Суніл, 2020. Цифрова стратегія. Посібник із переосмислення бізнесу / пер. з англ. І. Ковалишеної. Київ: Вид-во КМ-БУКС. 320.
- 4. Келлі Кевін, 2018. Невідвортне. 12 технологій, що формують наше майбутнє / пер. з англ. Наталя Валевська. Київ : *Наш формат*. 304.
- 5. Кириченко, Микола, 2019. Вплив цифрових технологій на розвиток людського і соціального капіталу в умовах діджиталізованого суспільства. *Humanities studies: Collection of Scientific Papers. Zaporizhzhia: ZNU.* 1 (78). 108-129.
- 6. Левітін Даніел, 2020. Структуроване мислення. Ясний розум в інформаційному хаосі / пер. з англ. Роман Шиян. Київ: *Наш формат*. 456
- 7. Nikitenko, V. O., 2013. Problemne pole heokul'turnoho fenomenu: naukovi pidkhody. *Hileya (naukovyy visnyk): zb. nauk. pr. Kuïs: UAN TOV «NVP»«VIR»*, 71. 500-504.
- 8. Nikitenko, V. O., 2013. Suchasna heokul'tura yak sotsiokul'turnyy fenomen. *Humanitarnyy visnyk Zaporiz'koyi derzhavnoyi inzhenernoyi akademiyi. Zaporizhzhia:* ZDIA, 53. 261-270.
- 9. Nikitenko, V., Andriukaitiene, R., Punchenko, O., 2019. Developing corporate management to improve the quality of customer service. *Humanities studies: Collection of Scientific Papers. Zaporozhye: ZNU.* 1 (78), 140-153.
- 10. Oleksenko, R., 2017. Lyudyna v umovakh informatsiynoho suspil'stva yak ob'yekt sotsial'no-ekonomichnoyi refleksiyi. *Stanovlennya i rozvytok informatsiynoho suspil'stva yak osnovy zabezpechennya konkurentospromozhnosti Ukrayiny u sviti a staloho rozvytku suspil'stva i derzhavv.* 59-62.
- 11. Макафі Ендрю, Бріньолфссон Ерік, 2019. Машина, платформа, натовп. Як приборкати наше майбутнє / пер. з англ. Олександра Асташова. Київ: *Наш формат*. 336 с.
- 12. О' Райлі Тім, 2018. Хто знає, яким буде майбутнє / пер. з англ. Юлія Кузьменко. Київ : *Наш формат*. 448.
- 13. Пінкер Стівен, 2019. Просвітництво сьогодні. Аргументи на користь розуму, науки та прогресу. Київ : *Наш формат*. 560.
- 14. Портер Майкл, 2019. Конкурентна перевага. Як досягати стабільно високих результатів / пер з англ. Ірина Ємельянова, Ірина Гнатковська. Київ : *Наш формат*. 624.
- 15. Росс Алек, 2017. Індустрії майбутнього / пер. з англ. Наталія Кошманенко. Київ: *Наш формат.* 320.
- 16. Стайнер Крістофер, 2018. Тотальна автоматизація. Як комп'ютерні алгоритми змінюють життя / пер. з англ. Олександр Лотоцький. Київ: *Наш формат*. 280.
- 17. Тегмарк Макс, 2019. Життя 3.0 Доба штучного інтелекту / пер. з англ. Зорина Корабліна. Київ : *Наш формат*. 432.
- 18. Фостер Провост, Том Фоусетт, 2019. Data science для бізнесу. Як збирати, аналізувати і використовувати дані. Київ: *Наш формат*. 400.
- 19. Череп, Алла, Воронкова, Валентина, Муц, Луай, Фурсін, Олександр, 2019. Інформаційні та інноваційні технології як чинник підвищення ефективності цифрової економіки та бізнесу в умовах глобалізації 4.0. *Humanities studies: Collection of Scientific Papers. Zaporizhzhia: ZNU.* 1 (78). 170-181

- 20. Шваб Клаус, 2019. Четверта промислова революція, Формуючи четверту промислову революцію. Харків: *Клуб сімейного дозвілля*. 426.
- 21. Струтинська І. Цифрова грамотність людського капіталу бізнес-структур. *Економіка та управління підприємствами*. 4, 2019. С.93-100.
- 22. Voronkova Valentyna, Metelenko Natalya, Nikitenko Vitalina, Silina Iryna, 2019. System analysis of the economy of sustainable development as environmentally balnced and socially oriented one. *HUMANITIES STUDIES: Collection of Scientific Papers*. *Zaporizhzhia: ZNU*. 1 (78). 86-97.

REFERENCES

- 1. Rogit Bgargawa, 2019. Unobvious: how to predict the future, analyzing trends / trans. from English K. Derevyanko. *Kharkiv: Vivat.* 288.
- 2. E. Brinolfsson, E. McAfee. 2016. The second era of machines: work, progress and prosperity in times of emergency technology. *Kyiv: FUND*. 236.
- 3. Sunil Gupta, 2020. Digital strategy. Business Rethinking Guide / trans. from English I. Kovalyshena. Kyiv: *KM-BOOKS Publishing House*. 320.
- 4. Kevin Kelly, 2018. Inevitable. 12 technologies that shape our future / trans. from English Natalia Valevska. Kyiv: *Our format*. 304.
- 5. Mykola Kirichenko, 2019. The impact of digital technologies on the development of human and social capital in a digital society. *Humanities studies: Collection of Scientific Papers. Zaporozhye: ZNU*. 1 (78). 108-129.
- 6. Daniel Levitin, 2020. Structured thinking. Clear mind in information chaos / trans. from English Roman Shiyan. Kyiv: *Our format*. 456
- 7. Nikitenko V., 2013. The problem field of the geocultural phenomenon: scientific approaches. *Hileya : zb. science. pr. Kyiv: UAN TOV «NVP» «VIR»*, 71. 500-504.
- 8. Nikitenko V., 2013. Contemporary geoculture as a socio-cultural phenomenon. *Humanitarnyy visnyk Zaporiz'koyi derzhavnoyi inzhenernoyi akademiyi*. Zaporizhzhia: ZDIA, 53. 261-270.
- 9. Nikitenko V., Andriukaitiene R., 2019. Developing corporate management to improve the quality of customer service. *Humanities studies: Collection of Scientific Papers. Zaporozhye: ZNU*. 1 (78). 140-153.
- 10. Oleksenko R., 2017. Person in sinformative society as a main of competitiveness object. 59-62.
- 11. Andrew McAfee, Eric Brinolfsson, 2019. Car, platform, crowd. How to tame our future / trans. from English Alexander Astashov. Kyiv: Our format. 336.
- 12. Tim O'Reilly, 2018. Who knows what the future will be like / trans. from English Yulia Kuzmenko. Kyiv: *Our format*. 448.
- 13. Stephen Pinker, 2019. Enlightenment today. Arguments in favor of reason, science and progress. Kyiv: *Our format*. 560.
- 14. Michael Porter, 2019. Competitive advantage. How to achieve consistently high results / per from English. Iryna Yemelyanova, Iryna Hnatkovska. Kyiv: *Our format*. 624.
- 15. Alex Ross, 2017. Industries of the future / trans. from English Natalia Koshmanenko. Kyiv: *Our format.* 320.
- 16. Christopher Steiner, 2018. Total automation. How computer algorithms change lives / trans. from English Alexander Lototsky. Kyiv: *Our format*. 280.
- 17. Max Tegmark, 2019. Life 3.0 The era of artificial intelligence / trans. from English Zorina Korablina. Kyiv: *Our format.* 432.
- 18. Provost Foster, Tom Fousett, 2019. Data science for business. How to collect, analyze and use data. Kyiv: *Our format.* 400.

Digital strategic concept formation of modern ukrainian society in the context of technologies possibilities and breakthrough development

- 19. Alla Skull, Valentina Voronkova, Luay Mutz, Alexander Fursin, 2019. Information and innovation technologies as a factor in improving the efficiency of the digital economy and business in the context of globalization 4.0. *Humanities studies: Collection of Scientific Papers. Zaporozhye: ZNU.* 1 (78). 170-181
- 20. Klaus Schwab, 2019. The Fourth Industrial Revolution, Forming the Fourth Industrial Revolution. Kharkiv: *Family Leisure* Club. 426.
- 21. Strutynska I., 2019. Digital literacy of human capital of business structures. *Economics and business management.* 4, 2019. Pp. 93-100.
- 22. Voronkova Valentyna, Metelenko Natalya, Nikitenko Vitalina, Silina Iryna, 2019. System analysis of the economy of sustainable development as environmentally balnced and socially oriented one. *HUMANITIES STUDIES: Collection of Scientific Papers. Zaporizhzhia: ZNU.* 1 (78). 86-97.

КИРИЧЕНКО, Николай Алексеенвич - доктор философии, профессор кафедры философии и образования взрослых, член-корреспондент Академии наук высшего образования Украины, ректор «Университета менеджмента образования» Национальной академии педагогических наук Украины (Киев, Украина)

E-mail: kmumo@i.ua

ORCID iD: https://orcid.org/ 0000-0003-1756-9140

ФОРМИРОВАНИЕ КОНЦЕПЦИИ ЦИФРОВОЙ СТРАТЕГИИ СОВРЕМЕННОГО УКРАИНСКОГО ОБЩЕСТВА В КОНТЕКСТЕ РАЗВИТИЯ ТЕХНОЛОГИЙ, ВОЗМОЖНОСТЕЙ И ПРОРЫВНЫХ ИЗМЕНЕНИЙ

Аннотация.

Актуальность темы исследования. Актуальность исследования заключается в том, что современные условия диджитализации требуют формирования модели цифровой стратегии современного мира в контексте развития технологий, возможностей и прорывных изменений, выступают как конкурентоспособная сила, в основе которой экспоненциональное развитие, цифровая информация, воздействия на экономику, бизнес, общество, человека, национальное и глобальное. Цель исследования - совершенствование теоретических и практических аспектов формирования концепции цифровой стратегии современного украинского общества в контексте развития технологий, возможностей и прорывных изменений. Задачи исследования: 1) проанализировать информацию, искусственный интеллект и машинное обучение как мощные рычаги для привлечения огромного количества данных, революционизирующих нашу жизнь и производство; 2) показать влияние автоматизации на формирование рабочих мест в различных сферах труда и управления талантами в цифровую эпоху; 3) выяснить место и роль информации как основы цифровой стратегии новой информационной революции. Методология - использовано системный и институциональный методы, позволившие привести все в надежную систему для управления сложными сферами взаимосвязанной деятельности, что позволяет раскрывать и анализировать компоненты и последовательно соединять их друг с другом. Институциональный метод необходим для формирования целостного представления о том, как институциональная подсистема влияет на функционирование информационной подсистемы. Методы - модусы информациологии - общие принципыпостулаты креативного отношения корреляции субъекта-креатора к конкретноимеющейся информациологичной действительности, а также фиксации результатов деятельности субъекта в гностизации к миру, природе, социуму, институтам власти и их взаимодействие друг с другом. Результат исследования. В результате проведенного исследования проанализированы информация, искусственный интеллект и машинное обучение как мощные рычаги для привлечения огромного количества

данных, революционизирующих нашу жизнь и производство; исследовано влияние автоматизации на формирование рабочих мест в различных сферах труда и управления талантами в цифровую эпоху; выяснено место и роль информации как основы цифровой стратегии новой информационной революции. Практические рекомендации: 1) внедрять концепцию цифровой стратегии современного украинского общества в контексте развития прорывных изменений в организации; 2) формировать новое цифровое мышление с учетом новой цифровой культуры, чтобы противодействовать негативным технологиям нового дня; 3) формировать компьютеризацию с помощью систем искусственного интеллекта и роботов, что приведет к повышению производительности, устраненит препятствия для инноваций, появятся новые возможности для малого бизнеса, стартапов, снижения барьеров для вхождения на программного обеспечения реализации Ключевые слова: концепция цифровой стратегии, искусственный интеллект, информация, машинное обучение, автоматизация, новое цифровое мышление.

КИРИЧЕНКО, МИКОЛА ОЛЕКСІЙОВИЧ — доктор філософії, професор кафедри філософії і освіти дорослих, член-кореспондент Академії наук вищої освіти України, ректор ДЗВО «Університет менеджменту освіти» Національної академії педагогічних наук України (Київ, Україна)

E-mail: kmumo@i.ua

ORCID iD: https://orcid.org/ 0000-0003-1756-9140

ФОРМУВАННЯ КОНЦЕПЦІЇ ЦИФРОВОЇ СТРАТЕГІЇ СУЧАСНОГО УКРАЇНСЬКОГО СУСПІЛЬСТВА У КОНТЕКСТІ РОЗВИТКУ ТЕХНОЛОГІЙ, МОЖЛИВОСТЕЙ І ПРОРИВНИХ ЗМІН

Анотація.

Актуальність теми дослідження. Актуальність дослідження у тому, що сучасні умови діджиталізації вимагають формування моделі цифрової стратегії сучасного світу у контексті розвитку технологій, можливостей і проривних змін, що виступають як конкурентоспроможна сила, в основі якої експоненціональний розвиток, цифрова інформація, довгострокові впливи на економіку, бізнес, суспільство, людину, національне і глобальне. Мета дослідження – удосконалення теоретичних і практичних аспектів формування концепції цифрової стратегії сучасного українського суспільства у контексті розвитку технологій, можливостей і проривних змін. Завдання дослідження: 1) проаналізувати інформацію, штучний інтелект і машинне навчання як потужні важелі для залучення величезної кількості даних, що революціонізують наше життя і виробництво; 2) показати вплив автоматизації на формування робочих місць у різноманітних сферах праці та управління талантами у цифрову епоху; 3) з'ясувати місце і роль інформації як основи цифрової стратегії нової інформаційної революції. Методологія - використано системний та інституціональний методи, що дозволили все привести в надійну систему для керування складними сферами взаємозалежної діяльності, яка дозволяє розкривати й аналізувати складові компоненти і послідовно сполучати їх один з одним. Інституційний метод необхідний для формування цілісного уявлення про те, як інституціональна підсистема впливає на функціонування інформаційної підсистеми. Методи - модуси інформаціології - загальні принципипостулати креативного відношення кореляції суб'єкта-креатора до конкретно-наявної інформаціологічної дійсності, а також фіксації результатів діяльності суб'єкта у гностизації до світу, природи, соціуму, інститутів влади та їх взаємодії один з одним.

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Результат дослідження. У результаті проведеного дослідження проаналізовано інформацію, штучний інтелект і машинне навчання як потужні важелі для залучення величезної кількості даних, що революціонізують наше життя і виробництво; досліджено вплив автоматизації на формування робочих місць у різноманітних сферах праці та управління талантами у цифрову епоху; з'ясовано місце і роль інформації як основи цифрової стратегії нової інформаційної революції. Практичні рекомендації: 1) упроваджувати концепцію цифрової стратегії сучасного українського суспільства у контексті розвитку проривних змін в організації; 2) формувати нове цифрове мислення з врахуванням нової цифрової культури, щоб протидіяти негативним технологіям нового дня; 3) формувати комп'ютеризацію за допомогою систем штучного інтелекту та роботів, що приведуть до підвищення продуктивності, усунення перешкод для інновацій, появі нових можливостей для малого бізнесу, стартапів, зниження бар'єрів для входження на ринку, реалізації програмного забезпечення як послуги.

Ключові слова: концепція цифрової стратегії, штучний інтелект, інформація, машинне навчання, автоматизація, нове цифрове мислення

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