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FORMATION OF THE DEVELOPMENTAL CONCEPT OF INFORMATIVE-DIGITAL TECHNOLOGIES IN DIGITAL (ELECTRONIC) CONDITIONS OF THE ERA

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Abstract. The relevance of the research of current problem is that the development of information and digital technologies contributes to digital development of the society, which is based on new wave of technological progress. **The purpose of the research** is to show how informative revolution of the XX1 century contributes formation of developmental concept of information-digital technologies in the conditions of the electronic era; to identify contradictory phenomena that contribute to the reduction of labor as a result of progressive robotics, which is being introduced through digital technologies. The technologies that are used today to replace people are different; the need for human resources is reduced thanks to robots, automation and computerization, and other high-tech gadgets. **Methodology. The methods of theoretical analysis** - deduction and induction, historical and logical, comparative and system analysis, informational method, which contribute insight into the essence of the studied phenomenon as a complex phenomenon and dynamic process. **Results**: It has been proven that, thanks to various well-known developments in information digital technologies and robotics, many experts believe that society is at an early stage of the new industrial (post-industrial) revolution. This type of revolution in the future can change the way people live and work, just as a steam engine did 200 years ago. Technological unemployment is one of the main reasons for introducing the concept of development of information and digital technologies in the conditions of the electronic era, which has contributed to increasing the overall unemployment rate in Western countries over the past 30 years. The development of information-computer technologies, as well as other types of automation and the Internet, played a significant role in shaping the concept of information-digital technologies. **Conclusion.** Digital society focuses on the development of human (intellectual) resources; therefore, in connection with the introduction of the concept of development of information and digital technologies, many workplaces with cheap labor can disappear. The world is turning into a digital society and the world is ruled by a figure, the world is controlled by intelligence, intelligence, algorithms and digitalization. The digital society consists of a set of algorithms that are controlled by information and computer technologies that penetrate digital management, which is based on intellectual and rational power, represented by intellectual and creative human resources. It is human resources that develop robotics, artificial intelligence, computerization, automation, robotics, which are based on the activity of algorithms. These varieties of digital society accelerate the potential for long-term productivity gains through intellectualization. **Practical recommendations.** Formation of the concept of development of information and digital technologies in the digital (electronic) era will contribute to the development of information bases of the society, which is based on advanced technologies, small business development, which is based on networked intelligent platforms, which requires the creation of jobs in the Internet and the search for new types of employment.

Keywords: information-digital technologies, digital society, technological innovations, creativity.

The problem is presented in general terms and its connection with important scientific or practical tasks

The relevance of the research topic of the development of information and digital technologies is one of the directions of the development of the Digital (digital) era. In the 21st century, the formation of the concept of the development of information-digital technologies accelerated as a revolution occurred in the means of communication, which gave rise to many problems of digital society. The development of information-digital technologies is promoted by the "knowledge society", the computer revolution, the essence of which is in the cultivation of the digital economy, creative individuality, the formation of which is based on information, knowledge, intelligence, and experience.

The essence of the concept of development of information and digital management is determined by the development of information and communication technologies that determine the rating of a country and its promotion to the level of competitive. The main directions of development of information and digital management are based on the grounds - economic, educational, cultural, which contribute to the improvement of the information technology of the society and the formation of a creative and innovative personality. Digital information management is designed to deepen the importance of scientifically categorical forms of digital discourse, which contributes to the formation of the concept of digital management, "based on the main intellectual and creative resource of society" [1].

Analysis of recent research and publications

We rely on works of such authors as R. Andrûkajtene, V. Voronkova, T. Romanenko, M. Maximeniuk, V. Nikitenko, O. Punchenko, V. Sosnina, I. Ryzhova, N. Rezanova, A. Shevchenko, .; foreign authors - E. Brignollsson, E. Makafi, P. James, D. Womack, T. Jones, D. Rus, E. Rogers, M. Donell, D. Meadows, J. Randers, D. Rose, S. Christopher, V. Starzhinsky, R. Florida, M. Ford, which consider innovative ideas of becoming a concept for the development of information-digital technologies in the digital (electronic) era.

The purpose of the research is to develop a concept for the development of information-digital technologies in the digital (electronic) era, which is not yet sufficiently developed in modern management and economic literature; therefore, it is very important to study all new approaches to its development. The problem situation is in the conceptualization of information-digital technologies in the conditions of the digital (electronic) era, the essence, content and main directions of development, "which are introduced into the practice of the

modern educational process of higher education.

Objectives of the research:

- to show how the information revolution of the XX1 century contributes to the formation of the concept of the development of informative-digital technologies in the conditions of the electronic era;

- to identify the contradictory phenomena that contribute to the reduction of labor as a result of progressive robotics, which is being introduced through digital technologies.

- analyze the technologies that are used today to replace people thanks to robots, automation and computerization, and other high-tech gadgets.

This goal is realized by a number of tasks.

- conceptualization of digital information management as a new scientific field and discipline, based on informative mechanisms that contribute to the identification of information and innovative potential;

-the formation of the concept - the development of information and digital standards and the implementation of intellectual human capital, BIG DATA (big data) information, communication, digitalization of society;

- conditions for the transition to digital civilization, which is in the context of globalization - economic, political, cultural, educational - the nature of "digital projects", "based on the information and innovative development of society."

The research methodology

The methodological basis for the formation of the concept of information-digital management is informationalism, researched by M. Castels, the autopens theory of Maturana and Varela, which is based on the self-organization of society. The methodological foundations of information-digital society are the changes towards re-industrialization, its evolution into a digital society. Re-industrialization is seen as a new stage in the development of digital society, based on “an eco-friendly digital economy, intellectual resource, digital management culture” [3]. For the formation of the concept of development of information-digital technologies in the digital (electronic) era, it is necessary to use a new scientific method, which made it possible to create thousands of other beautiful objects. This is a methodological and methodical reception of constant changes and improvements, as the process itself has created millions of new products.

This transition to processes means that constant changes relate to everything that we make, with the result that we move away from statistical techniques to dynamic ones. Products are turned into services and processes. So, the car turned into a transport service that quickly adapts to consumer use, feedback, competition, innovations. In the digital world, everything is a constant becoming.

Selection of unexplored parts of the general problem. Unsolved earlier part of the general problem.

Prove the value of the concept of information-digital society and management, which are determined

by the value of their positive and negative results, taking into account the quantitative and qualitative measurement of the results of informatization and computerization and the benefits from the implementation of the concept. To realize the objectives of the study, it was necessary to collect statistical data that made it possible to determine the pros and cons of introducing the concept, carry out the orderliness of the data collection structure at all stages of the development of the information society and its evolution into digital, defining organizational, financial, technological, social and environmental problems, that arise at different stages of development of society.

Presentation of the main research material.

The results of the research are the formation of the concept of information-digital management as one of the most modern directions of development of the 21st century society, digital development of all spheres of life, requiring the development of an information-innovative society and an information-innovative personality. The concept of information-digital management as a science must comply with the digital way of production and the management system, which is based on information and communication technologies and contributes to the strengthening of its information-innovative culture [12].

The digital information potential of society is designed to resist the destructive industrial tendencies of society, which necessarily necessitates the formation of a creative and creative personality that turns digitalization into creative and innovative processes. The concept of digital information management has the character of "digital projects", which includes: 1) information and communication management; 2) management of digital information resources; 3) control the processing of digital information [4].

The concept of digital information management is a set of rules, technical methods and systems that define the information and communication structure of the organization and the whole society, defining the purposeful use of digital as the main resource on the way to the digital innovation society (Rose, 2014). The concept of "information-digital management" includes the creation of such an information structure of an organization and society, where all the "parts" of digitalization provide the necessary level of coincidence of all information components on a new innovative digital basis. Digital information management is considered as the basis of an innovative society, "based on which innovations and digitalization are cultivated" [5].

The concept of information-digital management is based on the principle of technological determinism, the development of science and technology, new creative technologies - nanotechnology, biotechnology, social and humanitarian technologies. As a result of the introduction of state-of-the-art technologies, innovative

development of science and technology, advanced research projects are cultivated, based on the digital development of the technological and technical spheres of production, the introduction of intellectual resources as the main component of society. In accordance with this, the social structures and relations of society also change, which require appropriate development, which would correspond to the technical-innovative structure of the information society [6].

Digital economy, information-digital management and culture are based on the technetronic, super-industrial, information use of components that are concentrated in the field of digital services to the public. Information and digital development of society is the overcoming of industrialization, which embodies the digital industry and the corresponding digitization of society [7].

Information and digital society is no longer a "raw material warehouse" in which products of industry accumulate and products are overproduced, which are consumer-oriented. Large databases are used in digital processing of materials and transforms databases (information) into customer service quality through the use of information. In the conditions of the information-digital society, the qualification, education, competence, intelligence and creativity of the individual becomes the place of productivity [8].

The value of digital information management in its focus on digitalization, which is determined by the number of efforts, abilities, qualifications, competencies, which will be accompanied by an update that will solve complex issues of computerization [9].

In the culture of information-digital society, the problem of overcoming standards is becoming increasingly important, since it is a question of stimulating people's intellectual creative activity, and developing intercultural contacts and dialogue forms of sociality. D. Bell, who did not use the concept of "digital society", nevertheless stood at its origins, since he calls its main determining factors: 1) not capital, but theoretical knowledge becomes the organizing principle of this type of society; 2) the social system is the nerve node of this type of society; 3) The cybernetic revolution defines the criteria for the development of digitalization. It is not by chance that the concept of information-digital management is based on mechanisms for implementing the main factor of the country's intellectual potential.

Conclusions:

The concept of information-digital management should be introduced in all areas of social development, including higher education, which requires the formation of an intellectual creative personality as a subject of the information-innovative society of digital civilization. We do not fight with machines, we turn them into a part of "technological singularity". Scientists believe that over time, people will create greater intelligence and history will reach a kind of singularity, that is,

unprecedented intellectual development, that is, the connection of space and time and the world can go beyond our understanding [11]. Commitment to bulk cheap copies

There will be a reduction in jobs, as computers will be included in every organization and life, and there will be a "human battle with machines". Computerization will totally affect our life, economy and politics, social, cultural and other spheres of development. Therefore, it is necessary to form successful innovative strategies and make every effort for the further development of digital society, which is based on the development of intellectual human capital. Digital generation or Z generation - this generation, born after 1995 and never knowing the time without the Internet, they are accompanied by these devices from childhood, they cannot be surprised by crypto currency or new technologies like block chain, they will become global citizens rather than hired employees. The future development of society is digital development, which requires the formation of a digital consciousness, digital culture, digital worldview. The digital identity will become the object and subject of digital society.

Recommendations

1. To promote the development of digital civilization, based on the further digitalization of society, its introduction into all spheres of human life, as soon there will be a total digitization of everything that can be imagined in this area: innovation, artificial intelligence, computer welfare, the development of all kinds of convergent (breakthrough) technology [14].

2. Develop technological progress that relies on digital technologies, which together are a powerful driving force for the development of society, contributing to improving the well-being and quality of life of millions of people and overcoming inequality in the Digital era [15].

3. Higher education institutions should be guided by the concept of information-digital management, contributing to the formation of the information personality, the values of the information civilization. The modern creative economic system is still far from being complete with the formation of a creative concept.

4. To promote the development of a creative personality, creative professions, creative abilities and competencies, based on the ability to synthesize, followed by the future of the information civilization [13]. Creativity is a multidimensional concept that promotes the development of intelligence, enriched by human experience, associated with the mind, in which there are many different interests, knowledge and approaches. It is necessary to develop technological creativity, economic creativity, educational creativity, which, all taken in integrity, contribute to the development of information-digital management.

5. Develop platforms in government agencies to implement the electronic needs of the population, using information and computer management (technology platforms) for the population, which is associated with electronic control, which should be flexible, mobile and efficient. Each platform must invest in innovation to open up more and more opportunities. Government bodies will work more efficiently if they use the principles of the work of technical industries.

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СТАНОВЛЕННЯ КОНЦЕПЦІЇ РОЗВИТКУ ІНФОРМАЦІЙНО-ЦИФРОВИХ ТЕХНОЛОГІЙ В УМОВАХ ЦИФРОВОЇ (ЕЛЕКТРОННОЇ) ЕРИ

Актуальність дослідження даної проблеми у тому, що розвиток інформаційно-цифрових технологій сприяє розвитку цифрового суспільства, в основі якого хвиля технологічного прогресу**. Мета дослідження** – показати, як інформаційна цивілізація XXI століття сприяє становленню концепції розвитку інформаційно-цифрових технологій в умовах електронної ери; виявити суперечливі явища, що сприяють покращенню робочої сили у результаті прогресуючої роботизації, яка впроваджується за рахунок цифрових технологій. Технології, що використовуються сьогодні, щоб замінити людей, є різними; технології, потреба в людських ресурсах зменшується завдяки роботам, автоматизації і комп'ютеризації та іншим високотехнологічним гаджетам.

Методологія дослідження. Методи теоретичного аналізу – дедукції та індукції, історичного і логічного, порівняльного і системного аналізу, інформаціологічного методу, що сприяють проникненню у сутність досліджуваного феномена як складного явища та динамічного процесу.

Результати дослідження: доведено, що завдяки різноманітним відомим розробкам в інформаційно-цифрових технологіях і робототехніці, багато експертів вважають, що суспільство знаходиться на ранній стадії нової індустріальної (постіндустріальної) революції. Даний тип революції у майбутньому може змінити спосіб життя і діяльності людей так, як зробила парова машина 200 років назад. Технологічне безробіття є однією з основних причин упровадження концепції розвитку інформаційно-цифрових технологій в умовах електронної ери та сприяє підвищенню загального рівня безробіття у країнах Заходу за останні 30 років. Розвиток інформаційно-комп'ютерних технологій, а також інших видів автоматизації та Інтернету відіграли значну роль у формуванні концепції інформаційно-цифрових технологій.

Висновки. Цифрове суспільство робить акцент на розвиток людських (інтелектуальних) ресурсів, проте багато робочих місць з дешевою робочою силою можуть зникнути. Світ передвоюється у цифрове суспільство і світом управляє цифра, інтелект, розум, алгоритми, цифровізація. Цифрове суспільство складається з великої сукупності алгоритмів, які управляються інформаційно-комп'ютерними технологіями, які проникають у цифровий менеджмент, який базується на інтелектуально-розумній силі, представленій інтелектуально-креативними людськими ресурсами. Саме людські ресурси розвивають робототехніку, штучний інтелект, комп'ютеризацію, автоматизацію, роботизацію, в основі яких діяльність алгоритмів. Ці різновиди цифрового суспільства прискорюють потенціал довгострокового збільшення продуктивності праці за рахунок інтелектуалізації**.**

Практичні рекомендації. Становлення концепції розвитку інформаційно-цифрових технологій в умовах цифрової (електронної) буде сприяти розвитку інформаційних засад суспільства, що базуються на передових технологіях, розвитку малого бізнесу, що тримається на мережевих інтелектуальних платформах, що вимагає створення робочих місць в Інтернеті та пошуків нових видів зайнятості.

Ключові слова: інформаційно-цифрові технології, цифрове суспільство, технологічні інновації, креативність

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СТАНОВЛЕНИЕ КОНЦЕПЦИИ РАЗВИТИЯ ИНФОРМАЦИОННО-ЦИФРОВЫХ ТЕХНОЛОГИЙ В УСЛОВИЯХ ЦИФРОВОЙ (ЭЛЕКТРОННОЙ) ЭРЫ

Актуальность иследования данной проблемы в том, что развитие информационно-цифровых технологий способствует развитию цифрового общества, в основе которого новая волна технологического прогресса. **Цель исследования** - показать, как информационная революция XX1 века способствует становлению концепции развития информационно-цифровых технологий в условиях электронной эры; выявить противоречивые явления, способствующие сокращению рабочей силы в результате прогрессирующей роботизации, которая внедряется за счет цифровых технологий. Технологии, которые используются сегодня, чтобы заменить людей, есть разными, потребность в человеческих ресурсах уменьшается благодаря роботам, автоматизации и компьютеризации и другим высокотехнологическим гаджетам.

Методология. Методы теоретического анализа - дедукции и индукции, исторического и логического, сравнительного и системного анализа, информациологического метода, которые способствуют проникновению в сущность исследуемого феномена как сложного явления и динамического процесса.

Результаты исследования: доказано, что благодаря разнообразным известным разработкам в информационно-цифровых технологиях и робототехнике, много экспертов считают, что общество пребывает на раннем этапе новой индустриальной (постиндустриальной) революции. Данный тип революции в будущем может изменить способ жизни и деятельности людей точно также, как это 200 лет назад сделала паровая машина. Технологическая безработица есть одной из основных причин внедрения концепции развития информационно-цифровых технологий в условиях электронной эры, которая способствовала повышению общего уровня безработицы в странах Запада за последние 30 лет. Развитие информационно-компьютерных технологий, а также других видов автоматизации и Интернета сыграли значительную роль в формировании концепции информационно-цифровых технологий.

Выводы. Цифровое общество делает акцент на развитие человеческих (интеллектуальных) ресурсов, поэтому в связи с внедрением концепции развития информационно-цифровых технологий много рабочих мест с дешевой рабочей силой может исчезнуть. Мир превращается в цифровое общество и миром правит цифра, миром управляют интеллект, разум, алгоритмы, цифровизация. Цифровое общество состоит из множества алгоритмов, которые управляются информационно-компьютерными технологиями, которые проникают в цифровой менеджмент, который базируется на интеллектуально-разумной силе, представленной интеллектуально-креативными человеческими ресурсами. Именно человеческие ресурсы развивают робототехнику, искусственный интеллект, компьютеризацию, автоматизацію, роботизацию, в основе которых деятельность алгоритмов. Эти разновидности цифрового общества ускоряют потенциал долгосрочного увеличения производительности труда за счет интеллектуализации.

Практические рекомендации. Становление концепции развития информационно-цифровых технологий в условиях цифровой (электронной) эры будет способствовать развитию информационных оснований общества, которое базируется на передовых технологиях, развитии малого бизнеса, что держится на сетевых интеллектуальных

платформах, что требует создания рабочих мест в Интернете и поиска новых видов занятости.

Ключевые слова: информационно-цифровые технологии, цифровое общество, технологические инновации, креативность

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