ECONOMICS

RECEIVED:
10 April 2022
ACCEPTED:
10 May 2022
RELEASED:
14 June 2022

UDC 330.341.1:004

DOI 10.26661/2522-1566/2022-2/20-01

FOREIGN CONCEPTS OF INFORMATION (DIGITAL) ECONOMY

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Abstract. In modern conditions, the new challenges have emerged in the economy due to the introduction of global competitive digital technologies and, accordingly, the transformation of the economy into a digital format. In industry, digitalization is based on the concept of Industry 4.0, which provides for its end-to-end digitalization and integration into an intelligent technology platform. The analysis of the digital economy is relevant in the light of global challenges, the new economic reality, the development of the theory of digital economy and governance. In today's economic development, an increasing number of industrial-oriented countries are moving to the digital way of the development, as the use of digital results allows to produce competitive products with high added value, to develop related industries (intensifying the multiplier effect) and also it promotes economic progress, what, of course, ensures the emergence of qualitative changes in all industrial production. The purpose of the study is to substantiate the directions of foreign concepts of information (digital) economy. Methodology: the theoretical and methodological basis of the study are the fundamental and analytical foundations of digital economics research, to ensure the conceptual integrity To ensure the conceptual integrity of the research we used post-nonclassical methodology based on the Agile-methodology and Agile-philosophy as a new paradigm of informational (digital) economics, which represents the methodology of complexity, as well as systemic, axiological and informational methods and approaches, which allowed to present the foreign concepts of informational (digital) economics in their entirety. Methods of analysis and synthesis, generalization and systematization, historical and logical and comparative methods were used. The scientific importance of the work is that the world experience of forming the concepts of information (digital) economy, the use of effective mechanisms to ensure the development of a dynamic digital ecosystem capable of long-term benefits, to develop regulatory mechanisms that will be attractive to startups and talented professionals with high potential, which will promote the development of a dynamic digital ecosystem capable of bringing long-term benefits. The value of the study lies in the development of practical recommendations of improving the digital economy based on knowledge and digital technologies, which realize new opportunities for society, business and government.

Keywords: digital economy, concepts, digitalization, Big Data economy, sustainable development.
JEL Classification: A12, G14, M21.

Buhaichuk, O. (2022), "Foreign concepts of information (digital) economy", *Management and entrepreneurship: trends of development*, 2(20), pp.8-19. Available at: https://doi.org/10.26661/2522-1566/2022-2/20-01

INTRODUCTION

In modern conditions, new challenges have emerged in the economy due to the introduction of global competitive digital technologies and, accordingly, the transformation of the economy into a digital format. In industry, digitalization is based on the concept of Industry 4.0, which provides for the end-to-end digitilization of all processes and their integration into an intelligent technology platform. This emphasizes the undeniable relevance and practical importance of digital transformation, justification and formation of digital systems and infrastructure of the digital economy. The analysis of the digital economy is relevant in the light of global challenges, the new economic reality, the development of the theory of digital economy and governance. In today's economic development, an increasing number of industrial-oriented countries are moving to the digital way of development, as the use of digital results allows to produce competitive products with high added value, develop related industries (intensifying the multiplier effect), promotes economic progress and ensures the emergence of qualitative changes in all industrial production.

LITERATURE REVIEW

Analysis of recent research and publications is a combination of a synthesis of many ideas on philosophical and economic issues, the results of authorial research and collaboration of scientists who belong to a certain area of the scientific paradigm of information (digital) economy. These are the works of Donella Meadows, Jorgen Randers Dennis Meadows «Limits to Growth. The 30-Year Update" (2018), whose contribution was fundamental and whose deep concern for the world and inexhaustible faith in humanity inspired us to talk about the prospects of the information (digital) economy. "Growth Limits" models the scenarios of the world economy and answers the question: what can be done to create a digital society that will bring prosperity. An important role for us was played by Appello Jurgen's works "Management 3.0. Agile management. Leadership and Team Management", James Wumek, Daniel Jones "Lean Manufacturing. How Toyota's production system will help prevent material loss and ensure the prosperity of your company", Drucker Peter F. "Challenges for management of the XXI century", which creates the conditions for a new paradigm of information (digital) economy. The article uses O'Reilly Tim's study "Who Knows", Porter Michael`s "Competitive Advantage. How to achieve consistently high results", Kelly Kevin`s "Inevitable. 12 technologies that shape our future ", Spence Michael`s "New Convergence". The Future of Economic Growth in a Multilayered World" and Stadwell Joe`s "Why Asia Succeeded. Successes and failures of the most dynamic region of the world ", which says that the main task is to form a sustainable digital economic development. The article is based on the works of Voronkova Valentyna H., Nikitenko Vitalina A., Teslenko Tatyana V., Bilohur Vlada E., Regina Andriukaitiene, Roman I. Oleksenko, which expand the subject field of research.

THE PURPOSE OF THE RESEARCH is to substantiate the directions of foreign concepts of information (digital) economy. Objectives of the study: 1) to analyze the concepts of digital transformation of the economy, aimed at making qualitative changes in business processes or ways of doing business (business models) due to the introduction of digital technologies; 2) to explore the concepts of "Big Data economy" as the basis for the development of digital economy based on knowledge and digital technologies, which realize new opportunities for the society, business and government; 3) to reveal the concepts of digital transformation as a factor of sustainable development, which provide companies with unprecedented opportunities to increase profitability and improve customer service, help increase efficiency and increase corporate income.

METHODOLOGIES

The methodological basis is the methods of post-classical methodology, based on Agle-methodology and Agle-philosophy as a new paradigm of information (digital) economy, which is a methodology of complexity. Modern concepts of information (digital) economy include a set of different methods, techniques and generalizations of different approaches, including the development of software based on an information set of values that can identify the principles, methods and approaches of modern management. Modern concepts of information (digital) economy can lead to changes at all stages of improving the search for flexible management tools, based on AGILE-methodologies as a system of flexibility, complexity, adaptation to the environment, problems of a balanced world, uncertainty, multi-alternative, open system, which includes the constant exchange of information with the external environment. It is important for us to have systematic, axiological and synergetic approaches to solving the problems of digitalization, which gave the opportunity to identify the impact of values on the formation of a new model of digital development, the opportunity to outline the problems of digital development. An important role was played by the method of cross-cultural analysis, which helped to compare the problem of global warming in all countries to prevent the devastating effects of climate change, to identify priorities for the formation of digitalization concepts. In our opinion, the axiological approach to solving environmental problems is the use of information and communication technologies to develop innovative solutions that require the expansion of cultural functions. Information approach has provided information on the problems of digital development due to new methods of Big data, data mining, data science. These principles are designed to overlap and complement each other, as the model of digital development of the city is a self-adapting complex system that offers to clarify the causes and consequences and ways to move to the sustainability of society.

ANALYSIS AND DISCUSSION

Concepts of digital transformation of economy

Concepts of digital transformation - a set of views, ideas, principles, methods, techniques for qualitative changes in business processes or ways of doing business (business models) due to the introduction of digital technologies that lead to significant socio-economic effects. The basis of digital transformation is the technological level and digital maturity, which requires the development of new technologies and appropriate restructuring of business processes. The transition to advanced solutions is gradual and possible only in the presence of updated material and technical base. Relatively mature digital technologies and developed infrastructure are already quite widespread in Ukraine. The process of digital transformation is viewed through the prism of the introduction and use of advanced digital technologies - the Internet of Things, artificial intelligence, blockchain, cloud solutions, etc. Particular attention is paid to the collection and analysis of available information (including large data sets), as well as structural changes in demand for digital technologies. In the context of the development of digital transformation concepts, the connection of a broadband connection to data networks remains relevant. The impact of economic transformations on society is assessed by indicators that characterize the concept of digital transformation: 1) structure (organizational, managerial and operational processes); 2) data and information management; 3) innovation (development and implementation of new digital technologies, information technology management); 4) quality of goods and services; 5) environment (enterprise resources, regulation); 6) security of infrastructure and data; 7) financing (costs, return on investment); 8) ethical aspects (attitude to new digital technologies).

This assessment is based on indicators that characterize: the involvement of citizens and organizations in the digital transformation, including behavioral and business models and other cross-sectoral value chains; ways and scales of use of advanced digital technologies, including

quantum, artificial intelligence (AI) and other advanced digital technologies, areas, including digital development of advanced technologies.

The digital transformation of the economy includes:

1) starting conditions and priorities of online platforms as a key element of digital transformation; 2) new services and digital channels of interaction of the population with business and the state; 3) the development of the data industry and new practices and demands within economic activities and others. The new round of technological development is the most important catalyst for a new stage of digital transformation, based on growing advances in the development of advanced technological areas, including artificial intelligence, robotics, blockchain, virtual and augmented reality technology and others.

It is worth noting the following promising technological areas of digital transformation, which are not yet in the focus of attention in our country, but at the same time are actively developing abroad: geoinformation and navigation technologies (spatial data); photonics technologies; technologies of cloud, fog, dew calculations; cyberbiological systems (including neurotechnology); authentication and identification technologies (including biometric technologies); supercomputer and grid technologies. In general, regular updating of priorities is needed now, in particular with regard to professional foresight research and big data analysis.

The sharp increase in demand has led to a reduction in the time of "exit of advanced technologies from laboratories." A typical example of digital transformation is the rapid progress of quantum technologies. It is expected that in future (3-5 years) their development will provide a new level of speed and reliability of calculations and data transmission. At the same time, some effective solutions are already being used, including to solve the most pressing problems. For example, research on COVID-19 in Canada has been conducted using D-Wave's cloud quantum computing. Further technological advances will be determined by the ability to form and apply unique knowledge at the intersection of basic research and applied research. Among the developments, is the development of deep technologies in the early stages of the life cycle (DeepTech). The prospect of commercialization increases the attractiveness of this area for venture capital investments that need to be developed.

The new surge of digital transformation - the accelerated creation and entry into the market of products and services is expected to be associated with the combination in one solution of development of different technological areas. Visual illustration - the dynamic development of systems based on "digital duplicates", including elements of artificial intelligence (AI), the Internet of Things, wireless technology, sensors and other technologies, which requires annual growth of this market. Emerging technologies have led to a new breakthrough based on more mature ones. Among the examples of the emergence of promising solutions at the intersection of technologies: quantum Internet of Things, quantum artificial intelligence (AI), etc. The creation of quantum neural networks will significantly reduce the time of implementation of models, which today will take several years. As a result, it will be possible to solve complex problems, such as modeling proteins taking into account their changing structure, to create drugs (including personalized) or optimizing the molecular structure of substances to develop new types of materials and fuels.

The concepts of digital transformation include the development of the following: fifth (5G) and sixth (6G) generation wireless networks due to high speed communication and low latency will dramatically change communication capabilities (up to the implementation of tactile Internet, telepresence and transmission of 3D holograms) and create "Growth points" in different sectors. New areas of application will become widespread: real-time monitoring and control of production processes through immersive audiovisual channels, remote robotic surgery and transmission of tactile sensations to monitor the patient's condition, complete "digitization" of all elements of the farm, routine operations. We estimate that they are most in demand in industry, agriculture, healthcare and the financial sector. The digitalization of energy has led to the proliferation of distributed intelligent energy systems and related patterns of resource consumption. High demand in health care is largely due to the need to address the urgent challenges of combating the COVID-19

pandemic. The active growth of digital technologies by large financial companies contributes to the advanced growth of digital maturity of companies in the financial sector.

In most sectors of the Ukrainian economy and social sphere, the digital transformation is at a relatively early stage. Still in the structure of investments of organizations of various activities, which account for two thirds of the internal costs of the digital economy, appreciates the equipment. In recent years, intangible (digital) assets of companies have become a new driver of digitalization - such as the size and loyalty of Internet audiences, brand recognition and reputation in cyberspace, digital platforms, software products and related intellectual property.

Today, the digital transformation of the economy is more associated with end-user markets, where an integral requirement of competition is the improvement of consumer experience, including through the personalization of goods and services. It is in these conditions that digital platforms and ecosystems have become widespread, as well as radically new business models based on them, which are associated with the very emergence of the concept of "digital transformation". Recently, however, the importance of the end consumer and the creation of a "value proposition" aimed at him has been growing in most industries. Companies are becoming customer-oriented, developing new services and digital channels of interaction with customers and contractors. This trend is now affecting not only organizations and industries that interact directly with consumers (B2C), but also those that have traditionally focused on the business sector (B2B). Yet for B2B industries, the main benefits of digital transformation are still in terms of economic efficiency and institutional change, such as supply chain optimization. As a rule, they are characterized by high resource intensity and long investment cycles. In this regard, the effects of digital transformation are only felt in comparison in the long run. Even among the leading sectors, no more than 38.5% of organizations use cloud services, 29.6% - ERP systems, 19.6% - electronic sales and only 12% - RFID technologies. At the same time, the level of implementation of these technologies in some areas differs between the leading and lagging sectors, which indicates an increase in the risks of "digital inequality".

2. Concepts of "Big Data" economy as a basis for the development of the digital economy

The digital economy is a global network of economic and social activities supported by the platforms such as the Internet and the development of the Big Data economy, which contributes to the formation of a new economy based on knowledge and digital technologies, in which new digital skills and opportunities for society, business and the state are being formed. The Digital Economy as a Big Data Economy is based on digital technologies used to conduct business in the market based on the Internet and network platforms. It is a complex structure consisting of several levels, interconnected by an ever-increasing number of nodes, an economy that is able to provide high-quality ICT infrastructure and mobilize ICT opportunities for the benefit of consumers, businesses and the state. The Big Data economy is a form of economic activity that results from a billion examples of networking between people, businesses, devices, data, and processes, based on intangible assets, massive data usage, multilateral business models, and is the main source of growth.

"Big Data Economy" as the basis for the development of the digital economy: 1) stimulates competition, investment and innovation that will improve service quality, expand consumer choice, create new jobs, which increases labor efficiency, competitiveness companies, reducing production costs, reducing poverty and social inequality; 2) the economy of the new technological generation, economic activity in which the key factor in production is data in digital form; 3) processing of large volumes of these data and the use of the results of their analysis in accordance with innovative forms of management, which can significantly increase the efficiency of various types of production, equipment, storage, sales, delivery of goods and services; 4) activities for the creation, dissemination and use of digital technologies and related products and services.

Data flows are difficult to measure because they are growing rapidly. COVID-19 pandemic has had a tremendous impact on the Internet traffic, as most businesses and organizations are

increasingly online. In terms of volume, the most commonly used indicator is the total used international Internet bandwidth, which allows you to measure the total amount of data transmitted in bytes. In addition, according to available information, the use of international capacity increased during the pandemic. Distinctive feature of the "Big Data" economy - large imbalances, digital gaps. Only 20% of the population of the least developed countries (LDCs) use the Internet, and access conditions for them are usually relatively low download speeds and relatively high costs. On the other hand, its use is of a different nature. Thus, while in some developed countries up to 8 out of 10 Internet users shop online, in many countries this figure is less than 1 of 10. In addition, there are significant differences within countries. Both raw data and the ability to convert them to digital intelligence are needed to create value and benefit. Creating added value of data is something that helps countries to move towards the development of the big data index. As the digital data economy has evolved, there has been another data gap that has widened the existing digital divide. In this new configuration, developing countries may find themselves in a subordinate position, and data and related benefits will be concentrated in the hands of several global digital corporations and other multinational data control companies. There is a danger that they will simply become raw data providers for global digital platforms. At the same time, they will have to pay for the digital intelligence obtained with their data.

Despite the important role that data plays in the developing digital economy, there is no generally accepted concept of "data", what is confusing and difficult to conduct analytical research. Data is a special resource that has certain features that distinguish it from goods and services. Data is elusive and uncompetitive, while access to data may be restricted by technical or legal means, leading to varying degrees of exclusion. For example, data collected by major global platforms is not always available for use by others, giving platform owners a monopoly that allows them to benefit from this data. In addition, the total cost of data can often be greater than the sum of the value of individual data, especially in combination with other, additional data. In addition, the raw data collected may have a "deferred" value, as it may become valuable if the data can be used to address new issues that did not exist before. The more detailed and detailed the data, the more goals can be served by filtering, aggregating, and combining the different methods used to produce different results.

Moreover, the data are multifaceted. From an economic point of view, they can bring not only private benefit to those who collect and control data, but also public benefit to the economy as a whole. And the latter cannot be provided by markets alone. In addition, private income from the use of data is distributed very unevenly. As a result, there is a need to develop policies aimed at supporting goals of efficiency and equity. However, non-economic aspects must also be taken into account, as the data are closely linked to privacy and other human rights, as well as national security issues, all of which need attention.

Understanding data and its flows requires looking at them from different points.

First, there has always been data and information that has developed the archetypes of sustainable biotechnology business models and has been proven in practice. Second, raw data collected on certain activities, goods, have no value on their own, but can create value after grouping, processing and monetization or use for public purposes. Third, the conversion of raw data into digital intelligence - in the form of statistics, databases, analytical data, information, etc. - leads to "information goods", which when sold to other countries can be considered in the structure of trade statistics as services. There are also different taxonomies in which data types are classified according to different criteria.

The rationale of biotechnology in this case is similar to industrial applications, to increase the overall efficiency of conversion of agricultural inputs, into products (Peppou, G., 2018). Due to this these organisations are able to compete on the basis of cost.

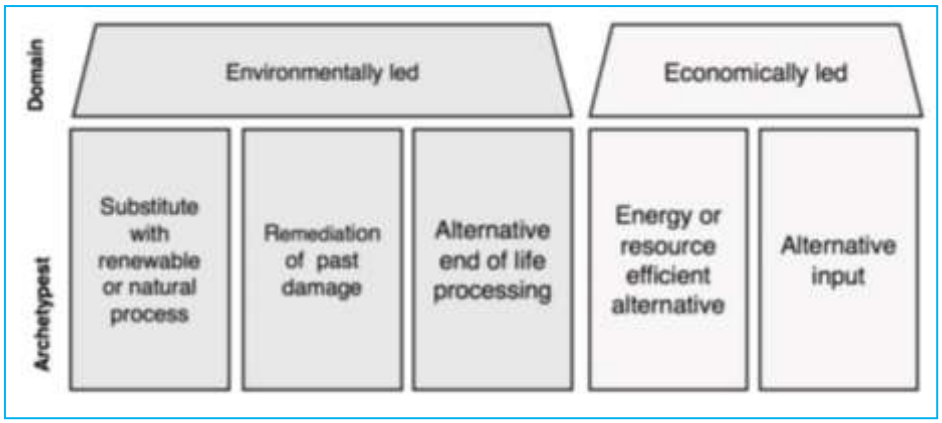

Figure 1. Sustainable biotechnology-driven business model archetypes
Source: Peppou, G., 2018

As the advantage derived is a cost-based advantage this archetype is classified as 'economic-led', the primary advantage of adopting biotechnologies is to reduce costs to be able to compete on price. sustainable biotechnology-driven businesses can reach a sustainable business model through either operating as an environmentally-led archetype or economically-led archetype. Broadly organisations operating an environmentally-led business model archetype facilitate some reconfiguration of the industry value chain they operate in, utilising biotechnology to offer a product or service distinct to those previously available (Peppou, G., 2018).

Some industrial sectors, such as transport logistics. According Kaveckė and Paužuoliene (2021), companies around the world are under pressure to apply sustainable development-based business practices in the value-creation system. The development of the logistics and transport sector leads to increasing freight flows, an increase in the mileage of freight cars and the consumption of diesel fuel, which has an impact on the environment by increasing CO2 emissions. The use of renewable energy sources in the transport sector is still low and the targets have not been met. Companies should therefore step up their efforts to reduce emissions of pollutants harmful to health from vehicles in order to improve these indicators. Organizations seeking to reduce negative environmental impacts should apply green solutions in their activities, thus helping to reduce a wide range of environmental, economic and social problems. In order to move towards more environmentally friendly transport, organizations could implement the following green solutions in their activities: use greener vehicles, alternative fuels, encourage drivers to learn and apply a fuel-efficient driving style, optimize vehicle routes, reduce waste, etc.

There are important differences in whether data is collected for commercial purposes, whether it is used by companies or the public sector, to which period it belongs - present or past, whether it is confidential or non-confidential, or personal or non-personal. Data classification is important because it is important not only for data management policy and international data flow management, but also for determining the type of access that must be granted to each data type. Due to the special properties of the data, they should be treated differently than ordinary goods and services. In the new context of the digital data economy, concepts such as property rights and sovereignty are becoming blurred. Instead of trying to determine who "owns" the data, it is more important to understand who has the right to access, control and use the data. Digital sovereignty is most often associated with the need to store data within national borders, but the relationship between the geography of data storage and development is not obvious. Assigning territorial affiliation to international data flows is also a difficult task.

Data can be better understood in terms of using, rather than trading or sharing. The information asymmetry inherent in the data economy seems insurmountable because there are no market solutions to correct it. Contradictions in data ethics also play an important role, including between value creation through data use and control of population data, as well as between data

filtering and censorship. As a result, the management of data and its flows is of great importance. Approaches to regulating data flows - and in the digital economy as a whole - differ widely among the major economic and geopolitical players in the digital economy, both regionally and internationally, and with rare exceptions there is no consensus on their interpretation. The three most popular approaches to data management are the most popular in the world: 1) the approach used in the United States, which is to control data from the private sector; 2) in the Chinese model of "data economy" the emphasis is on control over data by the state; 3) while in the European Union - by individuals on the basis of fundamental rights and values.

There is a friction between these centers today, especially between the United States and China. In addition, global digital corporations are seeking to expand their own data ecosystems. The advantage in the field of technological development is being fought for, as its winner will be able to gain economic and strategic advantages by controlling data and technology, especially in the field of artificial intelligence (AI). In these conditions, there is a danger of fragmentation of digital space and the Internet. In general, there is a danger of obstacles in the digital "data economy", which contradicts the original spirit of the Internet as a free, decentralized and open network. The fragmentation of the digital data economy hinders scientific and technological progress, as well as reduced competition, an oligopolistic market structure in some countries, and increased state influence in others. This can have significant negative consequences for all countries, as fragmentation will reduce business opportunities, as access to supply chains for users and companies will be more difficult, and data transfer to other countries will be limited. In addition, there will be more obstacles to cooperation between different countries.

3. Concepts of digital transformation as a factor of sustainable development. Digital transformation as a factor of sustainable development provides companies with unprecedented opportunities to increase profitability and improve customer service. Digitization, which is described as interfering with the DNA of an enterprise, requires a revision of traditional business practices and methods. Artificial intelligence and technology (machine learning, natural language processing, neural networks) have the potential to increase efficiency and increase business revenue.

The positive contribution of these technologies can be applied even outside the private sector, as the development of e-government will also increase the speed and efficiency of administrative processes. As digitalisation grows, similar shortcomings arise in all economies and societies. Recent research shows that automation and related advances in the use of artificial intelligence in manufacturing will result in reduced employment opportunities and higher unemployment (Frey and Osborne, 2017).

Although economic activity, complemented by digital technologies, contributes to value creation, it will not require the same number of workers, and a significant part of the population will lose their jobs. To address the potential and existing employment risks associated with digital technologies, some developed countries are considering a wide range of pilot policies, from the introduction of general wages to the taxation of robots and data centers to understand the different classifications of sustainable business models.

Jacob Agwu, U., & Bessant (2021) investigated the literature to understand different classifications of sustainable business models.

The authors relied on Bocken et al. (2014), who used them to "describe groupings of mechanisms and solutions that may contribute to building up the business model for sustainability" (Bocken et al., 2014, p. 45), Bocken, Weissbrod, & Tennant (2016) and They broke down the broad nature of approaches in sustainable business modeling into a substantial framework. The content of archetypes includes a wide variety of activities. table contains explanations of the content of archetypes.

It should be emphasized that digitalisation, combined with evidence-based policies, can enable the development of digital technologies, complementing the socio-economic prosperity of the nation. According to the study, business investment in digital technologies is positively

correlated with the employment of highly skilled workers and negatively correlated with the employment of low-skilled workers. As low-skilled jobs are at risk in the long run, governments are faced with the need to provide retraining opportunities. The existing level of technological capabilities and the ability of enterprises to successfully integrate them into existing business models, the digital transformation at this stage will mainly help to replace individual tasks, rather than entire jobs. Automation is mainly about simple and repetitive tasks that allow people to pay more attention to creative tasks and devote more time to developing their talents.

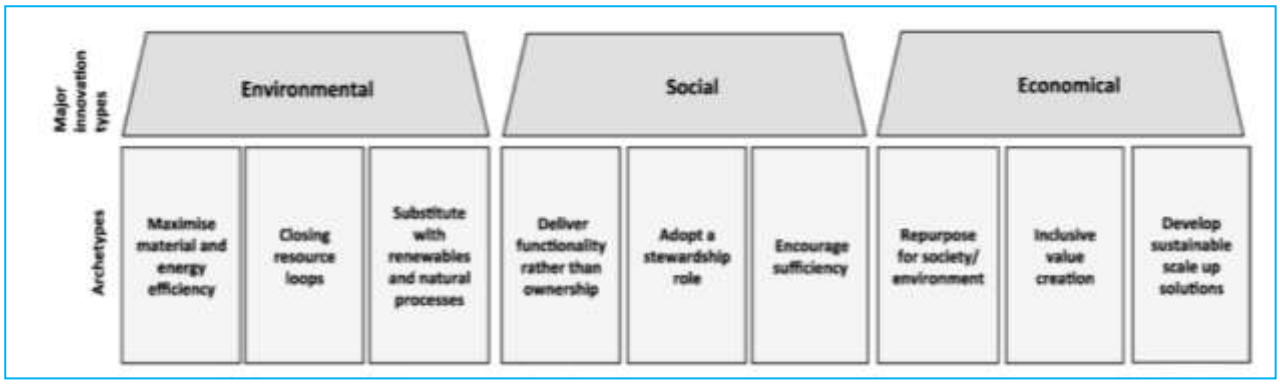

Figure 2. Sustainable business model dimensions and archetypes

Source: Ritala, P., Huotari, P., Bocken, N., Albareda, L., & Puumalainen, K. (2018). Sustainable business model adoption among S&P 500 firms: A longitudinal content analysis study. Journal of Cleaner Production, cit. Jacob Agwu, U., & Bessant, 2021.

The spread of digital technologies in different societies is uneven, leading to a digital divide based on gender, geography and age. On average, the number of women pursuing careers in the ICT sector and improving their skills in programming is much lower. Gender inequality remains a problem in the subregion and is reflected in science, technology and innovation, where men and women have unequal access to technologies and related capabilities.

Rural areas tend to have very limited access to high-quality fixed and mobile broadband infrastructure compared to urban centers. Few older people have the skills and competencies to be competitive in the digital age. Without access to retraining, there is a risk that a significant part of the population will be excluded from the digital economy. Sustainable digital infrastructure combined with digital literacy can help to bridge the gap between urban and rural areas. Inclusive sustainable development is achievable if women, the rural population and the elderly acquire the appropriate skills to work with digital technologies. In order to avoid benefiting from digitalisation opportunities only for certain groups of the population, it is important to ensure a multilateral approach that links the development of inclusive digitalisation with the 2030 Agenda for Sustainable Development.

CONCLUSION

Many national initiatives have demonstrated the viability of digitization, but at the same time have shown that a number of obstacles remain to the full realization of digital potential. These barriers need to be addressed through targeted policies that address specific challenges to ensure that digitization efforts complement the longer-term goals of economic transformation and sustainable development.

In recent decades, the pace of digital economic transformation in most countries has been limited. To address this issue, governments need to develop clear national policies and action plans for the digital economy. The initiative should include consultations with the private sector and civil society, focusing on the initiatives proposed by the Working Group on Innovation and Technology

for Sustainable Development and the recommendations of the Committee on Information and Communication Technologies.

Cooperation between scientific and industrial circles can be stimulated by direct and indirect investments, reform of the management system in the Free Economic Zone and the development of public-private partnerships in this field. In addition, support mechanisms need to be put in place by reviewing tax legislation and the public procurement system. These initiatives can be effectively used to contribute to the Sustainable Development Goals while creating the policy environment and infrastructure for a comprehensive digital economy.

In this regard, it is necessary:

- to ensure compliance of legal requirements with changes in the socio-economic landscape caused by digitalization. Currently, the regulatory framework of many countries does not reflect the requirements and needs of the digital economy; These mechanisms can also attract strategic investment in countries to finance specific sectors for potential development.

- to increase investment in the development of science, technology and innovation, which will allow this sector to make a more significant contribution to the creation of highly skilled jobs and higher incomes. As countries seek for diversifing their economies in order to reduce their dependence on the extractive industries, investment in digitalisation will contribute to sustainable economic transformation. It also indirectly solves the problem of "brain drain", as investment can stimulate the creation of opportunities.

To full fill this task, it must be prepared:

1. Human resources for the digital economy: expanding the supply of skilled labor by reforming secondary and higher education, which will transform the labor market to support the digital economy, create opportunities and incentives for learning.

2. Information infrastructure should be developed and improved in order to further develop ICT infrastructure and data centers.

3. Information security: ensuring digital security and protection of citizens, as well as public and private organizations.

4. Digital technologies: identification of measures to support basic and applied research in the field of digital technologies.

5. Regulatory regulation of the digital environment: development of laws and regulations supporting the development of digital technologies and their application in the public and private sectors.

6. Digital public administration: creating a vision and formulating measures for the digital transformation of the public sector based on new technological approaches.

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ЗАРУБІЖНІ КОНЦЕПЦІЇ ІНФОРМАЦІЙНОЇ (ЦИФРОВОЇ) ЕКОНОМІКИ

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В сучасних умовах в економіці з'явилися нові виклики, зумовлені впровадженням глобальних конкурентоспроможних цифрових технологій та, відповідно, трансформації економіки у цифровий формат. У промисловості цифровізація спирається на концепцію Індустрія 4.0, що передбачає її наскрізну цифровізацію та інтеграцію в інтелектуальну технологічну платформу. Актуальним є аналіз цифрової економіки з урахуванням глобальних викликів, нової економічної реальності, розвитку теорії цифрової економіки та управління. В умовах сучасного економічного розвитку все більша кількість промислово-орієнтованих країн переходить на цифровий шлях розвитку, оскільки використання результатів цифрової діяльності дозволяє виробляти конкурентоспроможну продукцію з високою доданою вартістю, розвивати суміжні галузі (йдеться про активізацію мультиплікативного ефекту), сприяє прогресу економіки, держави, що, безперечно, забезпечує виникнення якісних змін всього промислового виробництва. Метою дослідження є обґрунтування напрямів зарубіжних концепцій інформаційної (цифрової) економіки. Методологія: теоретичною та методологічною основою дослідження є фундаментальні та аналітичні основи досліджень цифрової економіки, для забезпечення концептуальної цілісності якого були використані методи постнекласичної методології, в основі якої Aglile-методологія і Aglile-філософія як нова парадигма інформаційної (цифрової) економіки, що представляє методологію складності, а також системний, аксіологічний та інформаціологічний методи і підходи, що дозволили у всій цілісності представити зарубіжні концепції інформаційної (цифрової) економіки. Були використані методи аналізу і синтезу, узагальнення та систематизації, історичного та логічного та порівняльного методів. Наукова важливість роботи полягає в тому, що досліджено світовий досвід формування концепцій інформаційної (цифрової) економіки, використання ефективних механізмів забезпечення розвитку динамічної цифрової екосистеми, здатної приносити довгострокові вигоди, для чого розвивати регулятивні механізми, які будуть привабливими для стартапів та талановитих фахівців з високим потенціалом, що сприятиме розвитку динамічної цифрової екосистеми, здатної приносити довгострокові вигоди. Цінність дослідження полягає в розробці практичних рекомендацій щодо удосконалення цифрової економіки, заснованої на знаннях і цифрових технологіях, у рамках яких реалізуються нові можливості для суспільства, бізнесу та держави.

Ключові слова: цифрова економка, концепції, цифровізація, економіка «Big Data», сталий розвиток