European Journal of Emerging Technology and Discoveries
ISSN (E): 2938-3617
Volume 1, Issue 8, November, 2023.

PROBLEMS AND PROSPECTS OF DIGITAL ECONOMY DEVELOPMENT

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Abstract
The digital economy has become the most dynamic area of technological innovation, service innovation and business innovation in countries around the world. The digital economy is developing rapidly and can bring huge benefits to individuals, organizations and the economy as a whole. However, there are also a number of problems that need to be solved in order to fully realize its potential. One of the main problems is the digital divide, which refers to unequal access of various groups of the population to digital technologies and skills. Another problem is cybersecurity, as the growing dependence on digital technologies makes individuals, organizations and governments vulnerable to cyber-attacks and data leaks. Despite these challenges, the digital economy also provides significant opportunities. One of the main prospects is the potential for innovation and entrepreneurship, as digital technologies create new markets and allow the application of new business models. The digital economy can also increase efficiency and productivity, create new jobs and provide greater access to education, healthcare and other services.

Keywords: digital economy, cybersecurity, new business models, countermeasures, digital technologies, digital payments.

Introduction

Nowadays, digital technologies are necessary for any profound changes. The use of digital technologies in all social, economic, cultural and political systems leads to a dramatic change in the traditional economic environment and economic activity. The basic concept of the digital economy can be defined as a new economic form characterized by digitalization in the fields of production, management and distribution, based on knowledge, information technology and the Internet, the catalyst of which is digital technology. The digital economy has conceptual similarities with, but is not identical to, the information economy, the network economy, and the knowledge economy. The information economy and the network economy feed the knowledge economy, and the interweaving and integration of these three components gradually form the transition to the digital economy [1].

Nowadays, large-scale changes are taking place in the field of communications and information dissemination. All spheres of life are more or less connected with digital technologies. Most countries in their development face the need for digitalization in the fields of politics, economy, culture, social processes and others. At each stage of its formation, the economy was in some sense a digital space: economic terminology is connected with numbers, and it is possible to express the results of doing business only with the help of numbers. For example, terms such as profit, loss, income, expense, tax base, inflation growth (decrease), GDP volume and many others are used. At the same time, we operate with numbers. Any digital data is processed and documented. The results obtained are used to develop and approve the country's socio-

economic policy plan. As a result of the implementation of this plan, the state's finances are developing.

Literature Review

In the last decade of the twentieth century, digital terms began to be widely used in the legislation of a number of countries. By the beginning of this century, regulatory legal acts appeared in connection with the spread of information and communication technologies. For example, the Okinawa Charter for the Global Information Society and the Tunis Commitment Action Plan were adopted. Information technologies occupy one of the first places in the modern business world, which is why the problem of their security is very acute — people want to save their money in the Internet era. Until the XVII century, all of Europe and Russia used metal coins as a unit of exchange, then they were replaced by paper money as a more convenient and cheaper form. At the present stage, humanity has received a new alternative — electronic money. "Digital (electronic) money is the information embodiment of the universal equivalent reflected on electronic (computer) media." This term is changing almost every day, because it is inextricably linked with the developing concept of the digital economy.

Currently, one of the most frequently discussed types of digital currency is cryptocurrency, the creation and control of which is based on cryptographic methods, as one of the varieties of these methods is blockchain technology. Thanks to blockchain technology, the cryptocurrency is encrypted and protected using special algorithms. All transaction data is stored simultaneously on multiple user computers connected to the Internet. In other words, the cryptocurrency does not have a single center or management system — it is controlled simultaneously by a multitude of interconnected devices. At the same time, all participants have equal rights and statuses, and can also maintain anonymity and confidentiality. To date, there are quite a large number of cryptocurrencies. The most famous of them are: Bitcoin, Litecoin, Ripple, Ethereum, etc. A very big plus of cryptocurrencies is that anyone with access to the Internet and the corresponding computer capacities can open an account. It can be paid and transferred to other various currencies.

Analysis and Results

The digital economy encompasses a wide range of activities, from e-commerce and digital payments to online advertising and software development. The digital economy has changed the way we do business and interact with each other, but it also brings with it challenges and prospects. One of the modern directions of the digital economy today is smart contracts (smart contracts). They are not particularly popular yet, but this technology in the future will allow you to abandon notaries, lawyers, banks, etc., which requires financial costs and may not always be objective. A smart contract is an algorithm designed to automate the contract execution process. In simple terms, this is a set of rules and a sequence of actions for execution. These rules are stored for discussing the terms of the contract, then they are automatically checked, and then the conditions are fulfilled according to the digital protocol.

Problems arising in connection with the digital economy:

1. One of the main problems is cybersecurity, which can be directed against both individuals and organizations and governments. These threats can take many forms, including

ISSN (E): 2938-3617
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malware, phishing, ransomware, and social engineering attacks. As more businesses move online, the risk of cyber attacks and data leaks increases.

To counter these threats, it is necessary to take effective cybersecurity measures. One of the most important countermeasures is to ensure the security of all devices connected to the network, including computers, mobile devices and IoT devices. This can be achieved by using firewalls, antivirus software, and regular updates of operating systems and applications.

Another important countermeasure is the use of reliable authentication mechanisms, such as two-factor authentication, to prevent unauthorized access to sensitive data and applications. It also helps prevent social engineering attacks that rely on manipulating people to gain access to confidential information. Similarly, encryption is an important network security tool because it prevents data theft and unauthorized access. It is important to encrypt all confidential data, both during transmission and at rest, and use reliable encryption algorithms and protocols.

2. Digital inequality is one of the main problems generated by the digital economy, and refers to the inequality in access to digital technologies and skills between different groups of the population. This may include rural and urban populations, low- and high-income people, as well as different countries. The digital divide can exacerbate existing inequalities and hinder economic growth, as those who do not have access to digital technologies may be excluded from participating in the digital economy.

To address the digital divide, it is important to promote digital integration and ensure that digital technologies are accessible to all. One of the main measures to eliminate digital inequality is to expand access to digital infrastructure, such as broadband Internet, mobile networks and digital devices[2]. This can be achieved through public investment in digital infrastructure and policies that encourage private investment. In addition to expanding access to digital infrastructure, it is also important to provide training and digital skills training to those who do not have access to digital infrastructure. This may include training programs, digital literacy programs, and partnerships with schools, libraries, and community centers. Another measure to bridge the digital divide is to promote the development of digital content and services that take into account the needs and interests of underserved communities. This may include initiatives to promote local content and digital services accessible to people with disabilities or language barriers.

3. The digital economy entails an acute shortage of technical specialists in areas such as cybersecurity, software development, data analysis and artificial intelligence. This deficit is a serious problem for organizations, as it can hinder their ability to innovate and compete in the digital economy.

One of the main measures to address the shortage of qualified workers is the development of education and training in digital skills. Another measure is to promote diversity and inclusivity in digital workforce, as research shows that diverse workforce contributes to the development of innovation and problem-solving skills. This may include initiatives to promote women and underrepresented groups in digital professions, as well as creating a friendly and inclusive workplace culture. To address the shortage of skilled workers in specific areas, such as cybersecurity or data analytics, it may be necessary to create incentives to attract workers to these areas. This may include competitive wages, benefits, and career opportunities.

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In conclusion, it should be noted that the digital economy creates many problems that should be taken seriously. Cybersecurity threats can be directed against individuals, organizations, and governments, and effective countermeasures are needed to mitigate the risks. The digital divide is another major challenge that requires solutions to expand access to digital infrastructure and digital skills training, as well as to promote the development of digital content and services that meet the needs of underserved communities. Finally, the shortage of skilled workers in key areas is a serious problem that requires solutions such as digital skills training and trainings, promoting diversity and inclusiveness of the digital workforce, as well as creating incentives to attract workers to specific areas. By solving these problems, we will be able to ensure that the benefits of the digital economy are accessible to everyone, minimizing risks and disadvantages.

The digital economy is developing rapidly, and it is difficult to predict exactly what the future holds for it. However, there are a number of new trends and technologies that can determine the future of the digital economy.

1.The digital economy can be more efficient, often more efficient than traditional models, because it allows you to speed up and optimize processes. For example, when shopping online, there is no need for physical stores, which reduces overhead costs such as rent and utilities[4]. Digital payments eliminate the need to work with cash, thereby reducing the risk of theft and errors. Online communications allow instant interaction at a distance, reducing the need for physical meetings and trips.

In addition, the digital economy allows for more targeted marketing and advertising, since analytical data allows you to track user behavior and preferences. This allows companies to create more personalized and effective marketing campaigns. The digital economy also promotes automation and artificial intelligence, which can further improve efficiency. For example, machine learning algorithms can analyze large amounts of data and make predictions or make decisions faster and more accurately than a human.

In the field of education, digital technologies have changed the way students study and teachers teach. Online learning platforms and educational applications provide access to educational resources and educational materials from anywhere in the world. This makes education more accessible and inexpensive for those who do not have access to traditional brick-and-mortar schools.

In the field of leisure, digital technologies have revolutionized the ways people consume entertainment and communicate with each other. Streaming services, social media platforms and gaming platforms have made it possible to access and share content from anywhere in the world. It has also created new opportunities for content creators and entrepreneurs to reach a global audience.

2. The digital economy leads to the emergence of new innovative business models. The growth of technology and its integration into every aspect of life is already changing the way businesses work, and this trend is likely to continue in the coming years.

One of the most promising new business models is the resource sharing economy, which is already transforming industries such as transport and hotel business. By connecting people with unused resources to those who need them, sharing platforms can create new value and generate

revenue for both parties. This model is expected to spread to other industries, such as healthcare, retail and even agriculture.

Another new business model that is just emerging is a subscription-based model that provides customers with regular access to products or services[3]. This model is already working successfully in industries such as entertainment and software, and it is expected to spread to other industries such as healthcare, education and transportation.

The digital economy is also expected to open up new opportunities for personalization and personalization. With the help of advanced algorithms and data analytics, enterprises will be able to offer products and services that meet the specific needs and preferences of individual customers. This will not only improve the consumer experience, but will also contribute to increasing customer loyalty and retention.

Finally, the digital economy promises to create new opportunities for enterprises to collaborate and share resources. By using technology to communicate and coordinate with other businesses, companies will be able to reduce costs, increase efficiency and create new values for their customers. This will lead to the emergence of new business models based on cooperation and cooperation, rather than competition.

3.The digital economy and innovation are two interrelated forces that determine the future of business and society. The digital economy is an economic activity generated by billions of online connections between people, businesses, devices, data and processes every day. On the other hand, innovation is the process of creating new ideas, products, services and processes that contribute to growth, productivity and competitiveness.

The combination of the digital economy and innovation creates unprecedented opportunities for businesses and individuals to create value and solve complex problems. The following are some of the ways in which the combination of the digital economy and innovation opens up prospects for the future:

The first is artificial intelligence and machine learning. Artificial intelligence (AI) and machine learning (MO) are changing the way businesses work and are likely to play an even bigger role in the future[5]. By automating routine tasks, predicting customer behavior and providing a new level of personalization, artificial intelligence and machine learning help companies create new values and solve problems in innovative ways.

The second is blockchain technology: blockchain technology is a distributed ledger technology that allows for secure and transparent transactions without intermediaries. Blockchain technology is likely to play an increasingly important role in the future of the digital economy, providing new levels of security, transparency and efficiency.

The third direction is augmented and virtual reality: augmented reality (AR) and virtual reality (VR) provide a new level of interaction between people, businesses and the digital environment. By creating immersive experiences, AR and VR are transforming industries such as gaming, entertainment and education.

The fourth is the Internet of Things: the Internet of Things (IoT) refers to networks of devices, vehicles and other objects that are connected to the Internet and can exchange data[6]. IoT is likely to play a key role in the future of the digital economy, providing new levels of automation, efficiency and connectivity.

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In general, the digital economy offers many advantages in terms of efficiency, allowing you to speed up, streamline and target processes in all spheres of life, including work, education and leisure. The digital economy promises to bring new and innovative business models that will transform industries and create new opportunities for growth and innovation. As technology continues to evolve and become more integrated into all aspects of life, businesses will have to adapt and implement these new models in order to remain competitive and thrive in the digital age. The digital economy of the future, combined with innovation, can create unprecedented opportunities for businesses and individuals to create value and solve complex problems. By introducing new technologies and developing innovative solutions, businesses can stay ahead and thrive in an ever-changing digital environment.

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