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**THE ROLE OF DIGITAL TECHNOLOGIES IN THE FORMATION
OF THE DIGITAL ECONOMY**

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Abstract

This research is devoted to the disclosure of the role of digital technologies in the formation of the digital economy. The paper describes the impact of the digital economy on the formation of new directions in business. This research shows the social and economic benefits of the digital economy, in particular, it examines all the most important areas of the country's economic development. Also, the paper provides an answer to the question "what problems does the digitalization of the economy entail, and what solutions are there for these problems?". Research on the digital economy reveals whether digital technology is affecting economic activity. The article examines the characteristics of the digital services economy, which have begun to rapidly develop and implement everywhere during and after the infamous coronavirus pandemic. Also, the paper examines the possibilities of these digital services and gives forecasts of their development and impact on the development of society.

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1. Introduction

The digital economy has a major effect on business alteration and the formation of new digital businesses. It offers a lot of opportunities to small and medium companies. It is not compulsory that these businesses will be successful in these new conditions and electronic marketplace. The growth of the digital economy means that these businesses will continue to use computers as there is constant international competition.

The best way to be successful is to understand the connection between business risk and the chances that are provided by information technologies (Krivoshlykov et al., 2020). Amazon.com's digital company is an example which used internet or Net in 1996 for brochures, making of the payment, receiving of orders, accepting returns of assets, and helping the customers in using the Internet through business transactions. It delivered an electronic marketplace to a private business. It can therefore be said that if companies invest in information technology infrastructure, then their production and profit rates will be increased.

The use of information technology is important for the growth and development of any business because productivity and efficiency of work are increased as the creativity if people are increased, latest changes are brought about and most important of all, it helps in diffusion and survival in International markets (Zharova et al., 2019).

2. Problem Statement

Since the start of the 21st Century, there has been a fast change from the manufacturing economy to a digital one. This has been done by the use of computers, the internet, and the implementation of human knowledge. In today's world of free trade, there is so much competition, pace of work is crucial in every department. So, the use of Information Technology is very important at all levels whether it is the process of manufacturing, managing, or other industrial processes (Lavrov et al., 2021). Businesses are always in the process of change and with every change in progress and expansion, the level of information should also rise. Information technology and computing systems should support this development, modification, and progress (Rostova et al., 2019). Information Technology has an effect on changing civilization, budget, and corporation. Computing systems present information in a unique way, while the aim of the theoretical structure of the business is to computerize the company.

3. Research Questions

Today digitalization is an integral part of human life. Equipping and awareness of the population is the main task of the government. The transformation of the economy into a digital economy is an important step for any country since such a transformation entails changes in all industries. This study reveals the following questions:

- What are the economic and social benefits facing the digital economy?
- What problems and solutions are associated with the digital economy?

4. Purpose of the Study

This research was carried out to demonstrate the importance of the role of digital technologies in the formation of the digital economy. Also, this work shows the impact of digitalization of the economy on other industries and services.

5. Research Methods

Many countries have faced the economic and social impact of the COVID-19 pandemic. Digital technologies have formed the basis of a wide range of tools to combat the spread of the pandemic and its economic consequences. Key areas include disease monitoring and COVID-19 prediction, diagnostics and telemedicine, education and remote work continuum, collaboration and cooperation support, information and social support (Ahmad & Schreyer, 2016).

The digitalization of the economy is considered a key driver of innovation, economic growth, and societal change (Zhakhov et al., 2020). The digital economy has the following features that distinguish it from the traditional economy: the irrelevance of geographical location, meaning it is no longer a competitive advantage, the key role played by platforms, the importance of network effects, and the use of big data (Magomadov V., 2020). The accelerated digitalization of the economy in response to the pandemic required a symmetrical response. The economic recovery plans of the leading countries focus on financial and institutional support for digital technologies (Kirillova et al., 2020). Leading countries are investing heavily in the recovery to stimulate demand and mitigate the decline in the hardest-hit industries. The structure of public investment reflects the new realities facing the world after the pandemic. Significant support will be given to technological areas that proved their effectiveness during the coronary crisis, such as artificial intelligence, 5G networks, innovative medical technologies, etc. (Dorofeyev et al., 2018).

Businesses are realized the importance and benefits of digital transformation. In 2020, there was a 19% increase from 2018 in the number of companies that went from exploring opportunities to taking practical steps in digital transformation. Twice as many companies are implementing digital transformation in a systematic way, as part of a dedicated strategy.

In this striking era, when much of the world is quarantined or in voluntary self-isolation, digital services have become exceptionally important. The Internet makes it possible to keep working, play sports, provide food and other necessities, communicate and relax (Banning, 2016).

Rapid digitalization has also exacerbated a number of problems in the IT industry, as well as revealing new ones. With the transition to remote forms of work and online services, the problems of cybersecurity became paramount. Both the authorities and IT companies had to promptly look for solutions to securely connect a large number of new users to corporate networks and platforms (Zhakhov et al., 2020). High-definition video, remote office organization, online learning, etc. have caused a dramatic increase in network traffic, and the transport network must meet the ever-increasing demand for bandwidth.

6. Findings

6.1. Economic and social benefits of the digital economy by using technologies

- Retail: The digital economy has enabled retailers to permit customers to position on-line orders (often consummated from an area store) and has created it easier for retailers to collect and analyze knowledge on customers, to supply personalized service and advertising.
- Transport and Logistics: The supply sector has been reworked by the digital economy, which allows the chase of each vehicle and freight across continents, the supply of knowledge to customers, and facilitates the event of the latest operational processes like simply Time delivery within the producing sector (Magomadov, 2020).
- Financial Services: Banks, insurance suppliers, and different firms, as well as non-traditional payment service suppliers, more and more alter customers to manage their finances, conduct transactions, and access new merchandise online, though they still support branch networks for operations.
- Manufacturing and Agriculture: The digital economy has boosted style and progress, additionally because of the ability to watch production processes in factories and management robots (Amirova et al., 2020). The merchandise being created are more and more knowledge-intensive. within the industry, as an example, it's calculable that ninetieth of the latest options in cars have a big software system part.
- Cash payment solutions: within which a client buys on-line, and pays in money with a barcode or payment code at collaborating outlets or settlement agencies, giving how for purchasers unwilling to use different on-line payment ways to create on-line purchases in a very secure manner.
- E-wallets or cyber-wallets: that are antecedently charged with credits and maybe spent on-line as an alternative to the utilization of a MasterCard.
- Mobile payment solutions: that cover all sorts of technologies that alter payment employing a movable or smartphone, including, among others, mobile card process exploitation card readers connected to smartphones, in-app payments for virtual merchandise, and near-field communications solutions that use short-range wireless technology to exchange data.
- Education: because the digital economy spreads, universities, tutor services, and different education service suppliers square measure able to offer courses remotely while not the requirement for face to face interaction through tools like recorded conferencing and flooding and on-line collaboration portals, that allows them to faucet into world demand and leverage brands in a very method not antecedently doable.
- Healthcare: The digital economy is revolutionizing the aid sector, from facultative remote diagnosing to enhancing system efficiencies and patient expertise through electronic health records
- Broadcasting and Media: The digital economy has dramatically modified the broadcasting and media business, with increasing broadband access especially gap new avenues for delivery of content for ancient media players.

6.2. What are the problems and their solutions associated with new digital economy?

Some problems may also face by using technologies in the economy as well as in the digital economy. The digital economy as a new stage of economic relations is characterized by new opportunities. At the same time, it should be borne in mind that new opportunities opening up for participants in economic relations entail new problems. For many countries, these problems are characterized as lack of access to the latest technology, poor telecommunications infrastructure, low computer literacy, and numerous cultural and socio-economic factors.

The digitalization of the economy dictates new rules of the game in the global market. A country's positioning in the world arena largely depends on its ability to adapt to new conditions. The digital economy brings a new set of benefits that can help reduce the differences that exist between rich and poor countries.

The solution to most of these problems is the development and adherence of clear policies, specific plans and goals that effectively respond to the demands of the world market.

7. Conclusion

Across a variety of fields, economists examine how digital technologies change economic activity. While these papers often have different perspectives and cite different kinds of literature, a core theme is that digitization has reduced the number of specific economic costs. Expansion of economic relations among the leading states of the world, development of information technologies, mobile communications, as well as the need to reduce costs led to the emergence of such a phenomenon as a "digital economy". Under the digital economy, it is customary to understand the result of the transformative effect of the latest general-purpose technology in the field of information and communication. This transformation has affected the formation of numerous sectors of the economy and public activities, such as the economic sector, industry, education, health, etc. In addition, the Internet system has increased people's abilities, allowing them to form and share their thoughts, accompanying the formation of new markets.

This overview highlights that using of technologies in digital economic have some problems but to overcome those problems and issue we can get many benefits in our manufacturing, education, health, business, and many other areas.

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