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GLOBALIZATION AND GLOBAL TRENDS: IMPACT OF ARTIFICIAL INTELLIGENCE ON THE ECONOMY

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The article examines the theoretical and practical aspects of globalization and the impact of artificial intelligence on the economy and business. Researching the impact of globalization, technology, and artificial intelligence on the economy is a hot topic that is attracting significant interest among countries and companies. This research makes it possible to understand the current trends in the development of the world economy, predict its future changes and develop strategies that will help companies and countries use new opportunities and reduce possible risks. Today, artificial intelligence has a great impact on various fields of activity, in particular on business and the economy, which has global consequences, therefore, conducting research in this field is of great importance. The modern world is covered by the process of globalization, dynamic changes in technology and the development of the Internet, it needs a tool for the development of business and economy, for this it is possible to use artificial intelligence. The implementation of artificial intelligence opens up new opportunities for companies, such as automation, data analytics, personalization of services, development of innovative products and improvement of management. However, at the same time, it brings new challenges. Researching the impact of globalization, technology, and artificial intelligence on the economy is an important tool for developing strategies and solving problems affecting the economy and society as a whole.

ГЛОБАЛІЗАЦІЯ ТА ГЛОБАЛЬНІ ТРЕНДИ: ВПЛИВ ШТУЧНОГО ІНТЕЛЕКТУ НА БІЗНЕС ТА ЕКОНОМІКУ

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Ключові слова:

глобалізація, штучний інтелект,
бізнес, економіка, автоматизація

У статті розглянуто теоретичні та практичні аспекти глобалізації та вплив штучного інтелекту на економіку та бізнес. Дослідження впливу глобалізації, технологій та штучного інтелекту на економіку є актуальною темою, яка викликає значний інтерес серед країн та компаній. Це дослідження дозволяє зрозуміти сучасні тенденції розвитку світової економіки, прогнозувати її майбутні зміни та розробляти стратегії, які допоможуть підприємствам та країнам використовувати нові можливості та зменшувати можливі ризики. На сьогоднішній день штучний інтелект справляє великий вплив на різні сфери діяльності, зокрема на бізнес та економіку, що має глобальні наслідки, тому проведення дослідження в даній галузі набуває великого значення. Сучасний світ охоплений процесом глобалізації, динамічними змінами технологій та розвитком інтернету, потребує інструменту для розвитку бізнесу та економіки, для цього можливо використання штучного інтелекту. Впровадження штучного інтелекту відкриває нові можливості для компаній наприклад, автоматизація, аналітика даних, персоналізація послуг, розробка інноваційних продуктів та вдосконалення управління. Однак, водночас це несе й появу нових викликів. Дослідження впливу глобалізації, технологій та штучного інтелекту на економіку є важливим інструментом для розвитку стратегій та вирішення проблем, що стосуються економіки та суспільства в цілому.

Formulation of the problem

In recent years, a number of global trends have been observed that shape the modern economic environment, including: digital transformation, technologies, artificial intelligence, an increase in the amount of data and the number of Internet users. Technology and artificial intelligence are bringing significant changes to the field of work and the labor market. The introduction of artificial intelligence can lead to the automation of jobs, which will cause the disappearance of certain professions, which in turn will give rise to the problem of unemployment and the need to retrain the workforce. This leads to the need to find new forms of work, reskilling workers and social protection for those who lose their jobs due to automation. Moreover, with the use of artificial intelligence comes the problem of privacy protection and the possibility of program abuse. Therefore, companies must establish standards and rules for the use of artificial intelligence. Unequal access to artificial intelligence, for example for less developed countries and population groups, can lead to a widening gap between countries and social groups. The general problem is to ensure fair and cost-effective use of artificial intelligence in business and economy in the conditions of globalization.

Analysis of recent research and publications

Research on artificial intelligence receives attention from both domestic and international scholars and practitioners, such as O.I. Pizhuk [3], O.L. Yershova, L.I. Bazhan [2], D. Acemoglu, P. Restrepo [10]. In their works, they considered the role of artificial intelligence in the process of digital transformation of the economy. They study the impact of artificial intelligence on the labor market and changes in job requirements due to the use of new technologies and robots. They emphasize the potential of artificial intelligence to improve the efficiency of business processes, including automation, optimization of decision-making and increased productivity. Scientists also consider the impact of artificial intelligence on the competitive advantage of enterprises and opportunities for creating new business models. They pay attention to issues of transparency and responsibility when using artificial intelligence algorithms, especially in relation to decision-making and the preservation of personal data. Their research highlights the role of artificial intelligence in business and innovation implementation, the potential for using artificial intelligence to improve customer experience, develop new products and services, and forecast and analyze market trends.

Objectives of the article

The purpose of the article is to investigate the relationship between globalization and global trends, as well as their impact on the economy and business, identify potential challenges and prospects associated with the implementation of new technologies and artificial intelligence. The main goals of the article are to reveal the potential of artificial intelligence to support business and increase efficiency in the context of globalization, identify

key challenges related to the use of artificial intelligence, such as employment, social impact and the creation of new opportunities for enterprises.

Presenting main material

In recent decades, due to globalization, the world has become more interconnected and integrated. The strengthening of international connection, the exchange of goods, services and information affected the interdependence of the economies of countries and people. Technologies and artificial intelligence, due to the possibility of automation and data analysis, improve the functioning of various sectors and offer new ways to achieve efficiency.

Artificial intelligence (AI) is a broad term that refers to computer systems capable of performing tasks that normally require human intelligence, such as visual perception, speech recognition, decision making, and translation between languages [1].

Technologies and artificial intelligence are significantly changing the state of the economy and the way people live. Technologies speed up and facilitate business processes, reduce production costs, increase productivity and quality of work, which leads to economic growth and development. With the development of technologies and artificial intelligence, new opportunities appear, new types of professions and jobs are created.

According to a PwC report [7], there is a possibility that in the UK from 2017 to 2037 about seven million existing jobs may be displaced by artificial intelligence, but at the same time about 7,2 million new jobs will be created, the number of jobs in the UK will increase by 0,2 million.

However, the implementation of technology and artificial intelligence also has negative consequences for people, as automation can replace jobs that were previously done by humans with robots and software programs. At the same time, it can have significant economic consequences, in particular, a reduced employment and increase inequality between different population groups. Therefore, it is important that the development of technologies is accompanied by social and economic measures to ensure sustainable economic growth and social stability.

According to forecasts by Zippia [8] it is expected that in the United States by 2030, approximately 73 million jobs, which is about 46% of current jobs. Industrial sectors are expected to be the most affected, with the manufacturing sector alone expected to lose up to 20 million jobs.

Therefore, due to the impact of artificial intelligence, jobs are disappearing, but at the same time new ones are being created. The main difference is that low-skilled jobs are disappearing and skilled jobs are increasing instead.

Increasing labor productivity by organizations through the use of artificial intelligence and technologies that automate most processes and tasks will contribute to the growth of GDP.

According to the global artificial intelligence study by PwC [5], artificial intelligence is expected to bring about 15.7 trillion dollars to the global economy by 2030, which is more than the current output of China and India combined. Of this amount 6.6 trillion dollars will come

from productivity gains, and the other 9.1 trillion dollars from consumption side effects.

According to the analysis conducted by PwC (table 1), GDP growth is monitored, which is associated with increased productivity. There will be a significant increase in GDP in China by 26.1% and in North America by 14.5%, accounting for approximately 70% of the global impact. One of the main reasons for their leadership is that these countries have high technological readiness, which will contribute to enhanced productivity.

In the territory of the entire United Kingdom of Great Britain and Northern Ireland, the influence of artificial intelligence is expected to reach at least 5% of GDP. England, Scotland, and Wales have stronger trade ties with Europe and the rest of the world. The implementation of artificial intelligence in trade is likely to increase GDP growth in these countries (table 2).

Companies are forced to perform many operations and tasks every day. Artificial intelligence enables the automation of business operations in various industries, speeding up and facilitating the work process, allowing workers to focus on more important tasks. For example, the use of chatbots in customer service can help reduce the time previously spent on manually typing an answer to each customer, and allow specialists to concentrate on more complex cases. The use of artificial intelligence will also help companies minimize human errors, ensuring accuracy.

According to a study by Harvard Business Review [9], companies that started using artificial intelligence in sales, as a result, received an increase in the number of potential customers by more than 50%, reduced costs by 40–60% and reduced call time by 60–70%. Companies aiming to be leaders in world markets, stay ahead of their competitors

and achieve significantly higher profits, have already started using it in their activities.

As AI becomes increasingly popular in government agencies and sectors, it is important for them to consider the potential impact of AI for cybersecurity compliance. By taking steps to ensure the security, interoperability and ethics of their AI systems, agencies can help protect their systems and data from attackers. Governments and companies must take active to guarantee that employees are not left jobless after technological progress, and to ensure the security of their systems and data from cyber threats.

Conclusions

Therefore, studying the impact of globalization, technology and artificial intelligence on the economy is highly relevant and important, as it provides an opportunity to investigate and timely understand the current trends in global economic development, predict future changes, as well as to develop strategies that help business and countries use new opportunities and reduce the emergence of new risks.

With the emergence of technology and artificial intelligence in the world, new prospects for the development of various industries, startups, business ideas and new jobs are rapidly arising. However, in addition to economic benefits, technology can also lead to significant disruptions for workers, companies and the economy, particularly in terms of labor market costs, especially for workers left behind by new technologies and artificial intelligence.

The development of technology and artificial intelligence is important for the global economy, but its positive or negative impact will depend only on how countries and companies use it and other influencing factors.

Table 1 – Impact of artificial intelligence (AI) on gross domestic product (GDP) worldwide in 2030, by region

| Region | GDP growth due to AI in % | GDP growth due to artificial intelligence in trillions of US dollars |
|-----------------------|---------------------------|--|
| China | 26.1 | 7 |
| North America | 14.5 | 3.7 |
| Southern Europe | 11.5 | 0.7 |
| Developed Asia | 10.4 | 0.9 |
| Northern Europe | 9.9 | 1.8 |
| Latin America | 5.4 | 0.5 |
| The rest of the world | 5.6 | 1.2 |

Source: compiled by the author based on [5]

Table 2 – GDP Growth amid Artificial Intelligence (AI) Implementation in 2030, by regions of the United Kingdom of Great Britain and Northern Ireland

| Region | GDP growth due to AI in % | GDP growth due to artificial intelligence in billion of US dollars |
|------------------|---------------------------|--|
| England | 10,6 | 204,5 |
| Scotland | 8,4 | 16,7 |
| Wales | 9,8 | 7,9 |
| Northern Ireland | 5,4 | 2,6 |

Source: compiled by the author based on [11]

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