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THE ROLE OF TECHNOLOGY IN GLOBAL ECONOMIC INTEGRATION

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Анотація

Видання досліджує вплив технологій на економічну глобалізацію, висвітлюючи як їх трансформаційний потенціал, так і виклики, які вони представляють. У ньому розглядається, як цифрові досягнення, такі як Інтернет, хмарні обчислення та штучний інтелект, сприяли глобальній торгівлі, підвищенню продуктивності та доступності ринку. Хоча ці інновації стимулюють економічну інтеграцію, вони також сприяють нерівності доходів, переміщенню робочих місць, а також занепокоєнню щодо безпеки даних і корпоративної монополізації. Крім того, нові тенденції, такі як шерингова економіка та економіка підписки, переосмислюють традиційні бізнес-моделі. У публікації наголошується на необхідності нормативно-правової бази, ініціатив з цифрової грамотності та стратегічних інвестицій для забезпечення того, щоб технологічна глобалізація сприяла інклюзивному та сталому економічному зростанню.

Ключові слова: глобалізація, економіка, інтеграція, автоматизація, переміщення робочих місць, штучний інтелект, електронна комерція, безпека даних, конфіденційність, шерінг.

Abstract

The publication explores the impact of technology on economic globalization, highlighting both its transformative potential and the challenges it presents. It examines how digital advancements – such as the internet, cloud computing, and artificial intelligence – have facilitated global trade, enhanced productivity, and expanded market accessibility. While these innovations drive economic integration, they also contribute to income inequality, job displacement, and concerns over data security and corporate monopolization. Additionally, emerging trends like the sharing and subscription economies are redefining traditional business models. The publication emphasizes the need for regulatory frameworks, digital literacy initiatives, and strategic investments to ensure that technological globalization fosters inclusive and sustainable economic growth.

Keywords: globalization, economy, integration, automation, job displacement, artificial intelligence, E-commerce, data security, privacy, sharing.

Introduction

In the modern era, technology plays a central role in shaping global economic dynamics. Its widespread adoption has enabled unprecedented levels of connectivity, efficiency, and innovation, facilitating the rapid expansion of economic globalization. While technological progress offers significant opportunities, it also presents notable challenges that must be addressed to ensure inclusive and sustainable development. This document explores the impact of technology on economic globalization, drawing insights from recent research and analyses.

Technology as a catalyst for globalization

Technological advancements have profoundly influenced globalization by enhancing communication, trade, and knowledge exchange. Digital technologies such as the internet, mobile networks, and cloud computing have significantly lowered transaction costs, making international trade more accessible. According to the International Monetary Fund (IMF), globalization has accelerated the spread of knowledge and technology, particularly benefiting emerging markets. The availability of real-time data, digital payments, and artificial intelligence has revolutionized industries, leading to increased productivity and economic integration.

The digital economy has emerged as a transformative force, creating new business models and expanding market reach. E-commerce platforms allow businesses of all sizes to engage in global trade, while digital content creation, cloud services, and fintech solutions have redefined traditional economic structures. Studies show that the adoption of digital technologies is closely linked to globalization indices, demonstrating their critical role in economic convergence.

Challenges and risks of technological globalization

Despite its benefits, technological globalization introduces several challenges. One major concern is the widening economic inequality caused by automation and artificial intelligence. The displacement of workers in traditional sectors leads to job losses and wage stagnation, requiring policy interventions to promote workforce adaptability. Furthermore, the concentration of technological power among a few multinational corporations raises concerns about monopolistic practices and market dominance.

Data security and privacy are also pressing issues. As digital technologies become more integrated into everyday life, the risks associated with data breaches, cyberattacks, and ethical concerns surrounding artificial intelligence increase. Governments and organizations must implement robust regulations to ensure data protection and fair competition in the digital marketplace.

Emerging trends in the digital economy

The rapid evolution of the digital economy is reshaping industries and consumer behaviors. The rise of the "sharing economy" – exemplified by platforms like Uber and Airbnb – demonstrates how technology enables decentralized and peer-to-peer economic models. Additionally, the "subscription economy," where consumers pay for services rather than ownership, is gaining momentum across various industries, from entertainment to software.

Data analytics and machine learning are becoming indispensable tools for businesses, allowing them to optimize operations, personalize customer experiences, and drive innovation. The strategic importance of data underscores the need for regulatory frameworks that balance innovation with ethical considerations and consumer rights.

Conclusion

Technology serves as both a driving force and a challenge in economic globalization. While it fosters global connectivity, trade, and innovation, it also necessitates proactive measures to mitigate its negative impacts. Policymakers, businesses, and civil society must collaborate to create a regulatory environment that promotes competition, protects workers, ensures data security, and supports digital literacy.

By embracing adaptive policies and investing in education, research, and infrastructure, societies can harness the transformative potential of technology to build a more inclusive, equitable, and sustainable global economy.

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