THE IMPACT OF ARTIFICIAL INTELLIGENCE ON GLOBAL ECONOMIC GROWTH

The aim of this study was to investigate the impact of artificial intelligence on global economic growth.

Artificial Intelligence (AI) is reshaping economies worldwide, with estimates suggesting it could contribute up to \$15.7 trillion to global GDP by 2030 (McKinsey Global Institute, 2023). From finance to healthcare, manufacturing to logistics, AI-driven innovations boost productivity, optimizing decision-making, and give businesses a competitive edge [2].

One of AI's biggest contributions to economic growth is its ability to increase productivity. Research suggests AI-powered automation could raise global labor productivity by up to 40% by 2035 (Accenture, 2023) [1]. AI-driven analytics help companies streamline operations, cut costs, and make smarter decisions—whether it's optimizing supply chains, enhancing customer experiences, or improving predictive maintenance. In finance, for example, AI-powered algorithms process transactions 50 times faster than traditional methods, leading to better risk assessment and fraud detection (World Economic Forum, 2024) [5].

AI is transforming the workforce, eliminating some jobs while creating new ones. By 2025, AI is expected to displace 85 million jobs, but it will also generate 97 million new roles in fields like AI development, cybersecurity, and digital marketing (World Economic Forum, 2024) [5]. However, 40% of workers may need retraining by 2030 to stay relevant in an AI-driven world (PwC, 2023). Governments and businesses must invest in education and upskilling programs to help workers transition smoothly [4].

Artificial intelligence is transforming key industries, making them faster, smarter, and more efficient. In the financial sector, AI-driven trading platforms increase market efficiency by 30% (Goldman Sachs, 2023). In healthcare, AI-powered diagnostic systems detect diseases with 95% accuracy, reducing misdiagnosis rates (Harvard Medical School, 2023). In manufacturing, AI-based predictive maintenance cuts equipment downtime by 20% (Deloitte, 2023). In retail and logistics, AI-driven demand forecasting improves supply chain efficiency by 35%, reducing waste and optimizing inventory management (MIT Sloan, 2023) [5].

As AI adoption accelerates, concerns around data privacy, bias, and regulation are growing. Policymakers are working to create ethical AI frameworks to ensure transparency and accountability. The European Union's AI Act aims to standardize AI governance, while the U.S. and OECD are pushing for stronger AI safety measures to prevent biased algorithms and unethical data use (OECD, 2023) [3].

AI is undeniably a powerful engine for economic growth, but its success will depend on responsible deployment, strategic policymaking, and workforce adaptation. While it enhances productivity and drives innovation, tackling ethical, regulatory, and employment challenges will be a key factor in ensuring that AI-driven progress benefits everyone.

REFERENCES

- 1. Accenture. (2023). AI and the Future of Work: Preparing for Economic Transformation. Retrieved from: https://www.accenture.com/il-en/insights/consulting/genai-talent
- 2. McKinsey Global Institute. (2023). The Future of AI in the Global Economy. Retrieved from: https://www.mckinsey.com
- 3. OECD. (2023). Global AI Policy Frameworks: Ensuring Ethical and Responsible AI Deployment. Retrieved from: https://www.oecd.org/en/topics/sub-issues/ai-principles.html
- 4. PwC. (2023). Workforce of the Future: How AI is Reshaping Jobs and Skills. Retrieved from: https://www.pwc.com/gx/en/issues/artificial-intelligence/future-of-work.html
- 5. World Economic Forum. (2024). AI and Job Market Dynamics: Challenges and Opportunities. Retrieved from: https://www.weforum.org