

The Role of Technology in Enhancing Economic Productivity

Jamie Walker

PhD

University of Tokyo

Tokyo, Japan

Jesse Walker

Dr.

Sorbonne University

Paris, France

Robin Lopez

Prof.

University of Milan

Milan, Italy

Abstract. This paper investigates the role of technological advancements in boosting economic productivity. By examining trends in automation, digitalization, and innovation, the research evaluates how technology has transformed traditional economic models. The study provides insights into the potential for technology to drive future economic growth, while addressing challenges related to employment and inequality.

Keywords: Technology, Economic Productivity, Automation, Digitalization, Innovation

Introduction

Technological advancements have revolutionized the way economies operate, significantly enhancing productivity across various sectors. This paper explores the impact of automation, digitalization, and innovation on economic growth, highlighting the transformation of traditional economic models. Through an analysis of current trends, the research assesses the potential for technology to drive future growth, while also considering challenges such as employment displacement and increased inequality. The findings suggest that technology can be a powerful catalyst for economic development, provided that policymakers address associated risks.

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References

1. Jeyhun, R., Elshan, R., Naila, A., & Aydin, N. (2025). Effectiveness of Internet of Things migration into hybrid economic projects.
2. Rahimov, J., Rahimov, E., Nasirzade, A., & Yusifli, P. (2025). Economic aspects of projects based on the Internet of Things. *Innovation and Sustainability Articles*, 5(4), 31-44.

3. оғлу Рагимов, Э. Р., & оғлу Искендерзаде, Э. Б. (2023). ЭФФЕКТИВНЫЕ МЕТЕОЛОГИЧЕСКИЕ АСПЕКТЫ ПРИМЕНЕНИЯ НАНОТЕХНОЛОГИЧЕСКОЙ ПРОДУКЦИИ В ТРАНСПОРТНОЙ СФЕРЕ. Сетевое издание «Нефтегазовое дело», (1), 126-142.
4. Rahimov, E., Rahimov, C., & Davudova, S. A. Determining the optimal relationship between speed and acceleration of a vehicle to minimize pollutant emissions into the atmosphere.
5. Talibzade, O. (2022). Organization of expenses in budget management, enterprises and organizations. *Geostrategy*, 71 (5), 112–114.
6. Sipos, D. The role of digital platforms in the transformation of political parties. *Foreign Affairs*, 35(5).